

SHORTWAVE ONLINE DIGEST

Volume 1, Number 1 Compiled by Al Quaglieri, NN2U April 16, 1991

AFGHANISTAN

Radio Afghanistan, Kabul, now in English at 1830-1930 on 9835 and via URS relay on 15440, 11830. [Wolfgang Buschel/DSWCI/Bruce MacGibbon]

To S&SE Asia English is heard 0930-1030 on new 21750 via URS. Station is announcing 17720, 15350, 9835 & 4940. My guess is that 15350 has been dropped. 17720 is audible. Pushtu/Dari precedes English. [Noel Green/DSWCI/Bruce MacGibbon]

ANTIGUA

DW relays via Antigua are listed as follows for Z91: 01-0150 6040; 02-0250 11810; 02-0555 on 6075; 03-0350 on 9545; 05-0550 on 9670; 08-08 on 11810; 08-0955 on 9890; 09-0950 on 8180; 10-1050 on 11795, 11810, 17880; 10-1150 on 15205; 11-1150 on 11885; 12-14 on 17715; 20-2155 on 17810; 2130-0050 on 15105; 22-0150 on 15410. [Bob Pedula/Australian DX News/Bruce MacGibbon]

ARGENTINA

New Program Sked from RAE, Buenos Aires, valid until May 5 is as follows: (Relay of LRA1 Radio Nacional Buenos Aires on SA-Su local time) 0100-0200 .23456. Portuguese; 0200-0300 .23456. English on 11710; 03-04 .23456. French on 11710; 10-11 12345.. Japanese on 11710; 11-12 12345.. Portuguese on 15345; 12-14 12345.. Spanish on 15345; 18-19 12345.. Arabic on 15345; 19-20 12345.. English on 15345; 20-21 12345.. Italian on 15345; 21-22 12345.. French on 15345; 22-23 12345.. German on 15345; 23-02 12345.. Spanish on 11710 [Gabriel Ivan Barrera/Onda Corta Mar/Bruce MacGibbon]

[Hey folks, I can't figure it out either! Just printing 'em as I get 'em! -AQ]

LR3 Radio Belgrano has been by law privatized on Feb 15. & after 30 days signed this law, in any moment the new owner can take possession of the station and in the future when the station will be privatized, will not broadcast any more on SW, where now beca at 1500-2100 in parallel with 950 kHz. Heard Mar 3 on 11780.9 at 1735-2013 with ID as "Radio Belgrano, desde la Capital Federal en la Republica Argentina". The verification signature on the QSL is Mr Carlos A Tagliapietra, Sub-Gerente Tecnico. [Gabriel Ivan Barrera/Onda Corta Mar/Bruce MacGibbon]

LRA34 Radio Nacional Mendoza, now is off the air, 6080 kHz, by technical problem in the transmitter. [Gabriel Ivan Barrera/Onda Corta Mar/Bruce MacGibbon]

AUSTRALIA

4920 ABC Brisbane at 0820 w/Man announcer and 'Horse Race' results. Program was called "Grandstand". Good signal parallel 9880 also good on March 16. [MacGibbon]

8140 Perth at 1546 with "The Late Show" on ABC Radio. This on March 11. [MacGibbon]

7175 Australia RA-Darwin. NF, Chinese *2200 on March 10. [Bob Pedula, Surrey Hills/Australian DX News/Bruce MacGibbon]

7205 Australia RA-Carnarvon, NF for Indonesian *21-23* x 7240 on March 10 [Bob Pedula, Surrey Hills/Australian DX News/Bruce MacGibbon]

7240 Radio Australia at 0834 in English. Papua New Guinea Service. Good signal via Brandon site on March 16. Also Radio Australia at 0850 heard on 15160, 15240(QRM'd by Radio Tikihy Okean co-channel), and 15320. [MacGibbon]

9505 Australia RA-Carnarvon. NF ex 9645 *21-23* Indo program Xed RFE on March 10. [Bob Pedula, Surrey Hills/Australian DX News/Bruce MacGibbon]

15320 Radio Australia in English at 1031 on top of jammer of China jamming Taiwan co-channel parallel 15160 on April 6. [MacGibbon]

BANGLADESH

Noted this morning 1230 UT on 15607 (ex-15647), announcing 17750 and 15200, with English to Europe. Good signal here. [Tom Sundstrom]

BELGIUM

BRT International has made some program changes for its English service "Brussels Calling" Newscasts now will start every broadcast, including on weekends. "Press Review", a review of the day's papers, expands to six times weekly by adding a Saturday edition. To make room for "Press Review", the Mailbag show "P.O. Box 26" moves from Saturday to Sunday. Here is the new Z91 schedule for "Brussels Calling" effective 31 March-28

September 91:			
0830-0855 Daily	Europe	13675, 8035	
	Australia	11695	
0900-0925 Mon-Sat	Europe	13675, 8035	
	Africa	21815	
1130-1155 Sun	Europe	9925	
	NAm/SE Asia	21810	
1300-1325 Mon-Sat	NAm/SE Asia	21810	
1730-1755 Daily	Europe	13675, 9925	
	Africa	21815	
2100-2125 Daily	Europe	9925, 5910	
	Africa	17560	
2330-2355 Daily	S.America	13675	
	N.America	13720	

[William Dvorak/Bruce MacGibbon]

BRASIL

11785 R.Gusiba, Porte Alegre. Quite OK 0925 w/string of adverts. //6000 vacant on Feb 25. [Craig Seager/Australian DX News/Bruce MacGibbon]

BULGARIA

15385 Sofia. NF for M91. TK service *1830-2000*, x 11870 on March 10. [Craig Seager/Australian DX News/Bruce MacGibbon]

CAMEROON

Cameroon: Radio Cameroon, Doula, currently broadcasts: 0430-0650 on 4795, 0850-1630 7150, 1630-23 on 4795. English News relayed from Yaounde at 0500, 1400, & 1800. [BBCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

CANADA

RADIO JAPAN via Sackville on 5980. Heard in English, from 0300-0400 approximately. I was doing most of my listening on 5980 and when I tuned back to 15325 they seemed to have a different program on there around 0355 so perhaps that relay is only a half hour. 4/7 [Andy Wallace]

11715 Radio Korea in English via Sackville, Canada at 1037. Man w/news on April 6. [MacGibbon]

CHAD

4804 Chad 0502 w/African music then Man in French at 0504 on April 17. [MacGibbon]

CHINA

4990 Hunan PBS at 1438 w/Chinese music on March 14. [MacGibbon]
6040 CPBS-1 at 1623 on top of VOA in Chinese. This frequency not mentioned in WRTH 91 for CPBS-1. [MacGibbon]

7170 (via Soviet Union), so 9740 must have replace it. [Vanderpool-FL/Prodigy/MacGibbon]

7315 China Beijing NF x 11500, English to Europe 2130-2200 //9920 on March 10. [Bob Pedula/Australian DX News/Bruce MacGibbon]

7516 CPBS-2 in Chinese and English, 1430 English lesson (British Petroleum profile), strong signal //8890, 7440, 7770, 9084, 9755, 11810, 11630. Heard on March 19 and March 21. [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

10260 CPBS-2 in Chinese, 1215 Man & Woman w/tearful drama, WRTH 91 lists as inactive. Heard on March 12. [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

11445 Radio Beijing at 1442 in English with different English broadcast than was on 15165//7405 but at 1456 gave sked in Unid language. Seemed the English program on 11445 was repeat of the one on the 19th. English not heard at this time since. 3-20 [MacGibbon]

11610 China, Central People's Broadcasting Station #2 with good signal @1522, parallel 7516 even better signal on April 7. [MacGibbon]

11970 Central People's Broadcasting Station #1 with Chinese music @1519 parallel 7504. The 11870 is probably deliberate interference to VOA. This on April 7. [MacGibbon]

Harlan Seyfer is a Professor at Tsinghua University in Beijing, China. He's been conducting an informal survey of shortwave receivers available in the Beijing area. None of them tune below the 60 meter band (below 4.7 MHz) and only two below 49 meters (5.96 MHz). Curious when one considers the number of domestic stations in this range. None of these would satisfy a DX'er elsewhere in the world. However, most are usable for bringing in the powerhouses. This is primarily what their owners are interested in. The Shitou, Fula, and 6-band Precision World have been sold on the Qinghua campus. Outshining the other two, the Shitou sold out within 10 days of its arrival - 20 sets. Physically, it very closely resembles the Panasonic RF-B10. All three Precision World models and the Globe World set resemble the Cougar H-88 pictured in Passport 91. The Fula is about the size of a pocket calculator and is extremely difficult to tune. The Philips was also made in China.

Harlan Seyfer also provides this monitoring of Chinese broadcasts:

3220 CPBS-1	1330-1600
4480 CPBS-1	1400-1630
4800 CPBS-2	1000-1100 & 1300-1530
5030 CPBS-1	1530
5320 CPBS-1	1330-1600
5880 CPBS-1	1100-1600
5915 Local	1300 & 1600.
6125 CPBS-1	1100-1600
6750 CPBS-1	1100-1600
6840 CPBS-1	0800-1600
6890 CPBS-2	1130-1530
7235 Local	1530
7440 CPBS-2	1100-1530
7504 CPBS-1	0900-1600
7516 CPBS-2	1100-1530
7525 CPBS-2	1230

7770 CPBS-2 1100-1300; Local at 1330; CPBS-2 1400-1600
 7935 CPBS-1 1230-1600
 8064 CPBS-2 1000-1600
 9080 CPBS-1 1500-1600
 9755 CPBS-2 1000-1530
 9775 1000 (Local), CPBS-2 1030-1100; 1200, 1300?(Local); CPBS-2 13-1530
 9800 0900 (Local), CPBS-1 1100-1600
 10260 1230 (Local), 1430(Local)
 11040 CPBS-2 1000-1100
 11330 CPBS-1 0830-1330
 11610 CPBS-2 1000-1230, 1400-1530
 11630 1030-1100 (Local), CPBS-2 1130-1230, 1300 (Local), CPBS-2 1330-1530
 11740 CPBS-1 0930, 1000(Local), 11-13 (Local), CPBS-2 1400 & 1530
 12120 CPBS-1 0800-1300
 15390 0900 (Local), CPBS-2 1000, 1300-1500 (Local)
 15500 CPBS-2 1000-1030
 15560 CPBS-1 0800-1230, 1600(Local)
 17605 CPBS-1 0800-1200, 1230 (Local?), 1300-1330 (Local), 1600 (Local)
 17700 CPBS-2 1000-1030; Frequencies not heard - 3290, 4250, 4905, 5075, 5860,
 6920, 8007, 9390, 9400, 10245, 11605, 12200, 16030.

This year Radio Beijing and the China Tourist Bureau, the Central Aviation Administration of China and Chengde-one of China's tourist cities, are jointly hosting a quiz, called the China Travel contest. To be a winner you must answer 8 questions:

- 1: There are eight most popular tourist areas in China. Name five of them.
2. What are the two greatest ancient wonders of China? Both of these wonders were first built more than two thousand years ago.
3. The Forbidden City in Beijing served as the capital for two different Chinese dynasties. Can you name the dynasties and tell us how many different emperors lived in the Forbidden City?
4. Can you name Tibet's most famous palace? What two different architectural styles does the palace represent?
5. Can you name the city which is the starting point for the Silk Road?
6. What is the name of China's largest imperial garden? How many square kilometers does it occupy?
7. What are the names of the eight primary temples surrounding Chengde? Can you name at least two Chinese famous structures which inspired the temples at Chengde?
8. What is the symbol of Air China?

Tune into our programmes throughout April for information on the questions. The deadline for entries is May 31. All participants will receive a gift and from these, first, second and third prize winners will be chosen. Moreover, five lucky people will win a fully paid return trip to Beijing and Chengde. Please return completed entry form to: English Dept. Radio Beijing, Beijing 100866, China. Good luck!

[Audience Relations, Radio Beijing/Bruce MacGibbon]

****CHINA (TAIWAN)****

15390 Unknown, in Chinese, W w/numbers in groups of 5. Heard on March 21 at 1435; on March 22 at 0908, 1315, & 1333. (Note: These are from Taiwan and have been discussed thoroughly in Glenn Hauser's 'DX Listening Digest', The DX SPREAD, and in NASWA's 'JOURNAL'). [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

WYFR relays via VOFc for Z81 are listed: 1102-1602 5275 Chinese; 1202-1602 on 9280 Chinese; 1302-1517 on 11550 English; 1505-1705 on 9955 Russian; 1517-1602 11550 Hindi; 21-22 on 9955 Chinese; 21-23 on 9280 Chinese; 21-0000 on 6300 Chinese; 22-0000 on 9465 Chinese; 23-0000 11550 Chinese. [Mick Orgrizek/Australian DX News/Bruce MacGibbon]

I received an inquiry just last week about the Chinese number station, New Star Broadcasting. If you have been hearing these broadcasts and didn't know what they were like I did for about 10 years, here is an excerpt from Radio Japan DX Corner from April 22, 1990 thanks to Tetsuya Kondo of the Asian Broadcasting Institute: The New Star Broadcasting makes use of 4 frequencies to send messages by random numbers: 8300, 9725, 11430, 15388, and the transmission on each of these frequencies has its own service name and schedule. The transmission on 11430 is called "New Star Broadcasting Station First Service" and is on the air from 2300-1700. The one on 15388 is "New Star Broadcasting Station 2nd Service and is on the air from 2200-1730. The one on 9725 MHz is the "New Star Broadcasting Station 3rd Service" and is on the air from 2200-1700, and the one on 8300 MHz is "New Star Broadcasting Station's 4th Service and is on the air from 2200-1730. Generally speaking, these transmissions have their own segments although all of them consist of random numbers. However the 1st service and the 3rd service parallel each other for one hour from 0700 and from 1200, and the transmission during the period is simply called "New Star Broadcasting Station" without the service names.

The four frequencies used for random-number broadcasts from Taiwan often vary by a few kilohertz.

****COLOMBIA****

I noticed last night that Radio Caracol (the Colombian network) is now broadcasting on 6075 kHz in the evenings (I listened between 0100 and 0135 UTC on 1991 March 26). The signal is strong enough to almost completely cover the Deutsche Welle on the same frequency. [Serge Gelato/Kirk Baxter]

****COSTA RICA****

9725 AWR/R. Lira. English "The Quiet Hour" at 1015 tune in, quite good xed BBC Kranji. ID 1030, announcing 9725 & 11870. Appears extended schedule on March 10. [Craig Seager/Australian DX News/Bruce MacGibbon]

Excerpts from 'Radio for Peace International Newsletter - Friends of RFPI, April 1991. Engineering Report by James Latham - We have completed construction of the new transmitter building and as of March 4th began broadcasting from the new location. We moved the antennas from our previous tower to a provisional tower (approx. 25 meters high) until construction of the new tower is completed. We were off for a week during the move, several days were spent wiring in the equipment and testing it and moving and testing the antennas took several more days. Monday the 4th of March we started out on 13630 with our regular broadcast and 7375 was put on line just a few hours later. The new antennas, as well as the new tower, are not completed yet and we are currently using our older antennas on the provisional tower system which may cause a slight loss in signal strength until the new system is fully installed. 7375 will be starting on a regular basis at 2300 UTC on USB. 13630 will be used at all times. 21565 will be discontinued for the

time being - we're looking into setting up 13 meter SSB, but this is still in the planning stage, stay tuned for more information! We're planning on adding the new frequency 16030 (note they've done that!). As this goes to press, we're still experimenting with it, so check into RFPI's Mailbag program on 13630 or 7375 for more information if you don't hear us on 16030. [Sked shows RFPI Mailbag at 0000 Wed UTC and 2000 UTC on Saturday.] We expect clearer audio on 7375 sideband transmission due to an improved antenna system. Let us know how it sounds. Within the next three months we expect to finish the new tower (45 meters) outfitted with a high gain cubical quad antenna for 13630 and 16030. All the recent changes, the building of the transmitter building, the up-grade of the tower, etc. are geared toward being able to house and operate one or two 20 KW transmitters. Our highest priority is providing listeners the increased signal strength

****COTE D'IVOIRE****

7215 at 0618 in French w/Man & Woman announcer. Apparently reactivated. Been awhile since I've heard this one. Good signal on March 11, 12. [MacGibbon]

****EGYPT****

Radio Cairo on 9900 parallel 9475 & could not tell if they were also on 9675 (due to QRM) at 0243 in English on March 12. The program was 'Cairo This Week' which ended at 0248 then followed at 0259 by Radio Encyclopedia - a weekly program. At 0315 Woman w/news headlines then into news. They are sked to sign off at 0330. At 0430, they had an open carrier on 9900 and it went off at 0458. 9900 was the best frequency for me to listen too, much better than 9475. (Note: Mike Fern in NASWA's 'Listeners Notebook' for Radio Cairo's English Programs said also check 9900, so it is worth checking.

9927 Egypt Cairo. NF, General Arabic program for Gulf, 2205, sked is 0350-0000. Probably a former ute transmitter on March 10. [Bob Padula/Australian DX News/Bruce MacGibbon]

11805 at 0532, Radio Cairo, Arabic, Two men talking about Kuwait. Presume this is Voice of the Arabs programming and may have been Radio Kuwait via them as mentioned in the February 'Australian Radio DX Club' bulletin. This on March 11. [MacGibbon]

Radio Cairo's Arabic broadcasts have been reorganized, and are listed for M91 as follows:

Foreign Services: 0030-0430 on 9900 to North America; 11-1130 Africa; 1115-1215 on 17745 ME; 20-21 on 9940 Australia; 2345-0045 16220, 17770 Central America/South America. General Programme: 02-06 on 12050; 0350-0000 on 9925.5; 0350-0705 on 9770; 0350-07 on 9620; 0350-18 on 11665; 07-11 on 15115; 07-15 on 11785; 07-1530 on 12050; 11-0000 on 8850; 13-19 on 17670; 1630-0000 on 12050; 18-0000 on 9670. Holy Quran: 02-22 on 9755. Voice of the Arabs: 03-06 on 9850; 03-0030 on 15285; 06-14 on 11980; 18-0030 on 9700; 19-0030 on 11665. [Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****EL SALVADOR****

The Govt. will soon begin operating a station to broadcast, predominantly, to Salvadoreans in the USA. Programming will be in Spanish and English. The aim of the station is to counteract "disinformation" circulated by Salvadorean opposition groups in the USA. [BBCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****ETHIOPIA****

The current daily sked from Addis Ababa, is as follows: Voice of Ethiopia 1200-1300 Somali; Afr 9560, 7165, 990; 13-14 Afr Af 7165, 990; 14-15 Arabic ME, Afr 9560, 7165, 990; 15-16 English Af 9560, 7165, 990; 16-17 Amharic Af 9560, 7165, 990; 17-18 French Af 9560, 7165, 990; 18-1930 English/Vernaculars Af 9565 - Radio Freedom (presented by ANC); Radio SPLA - 1100-1200 & 1300-1400 on 11710, 9550; Radio of the Forces of the National Democratic Alliance 1800-1900 on 11710, 9550. [BBCMS/Japan Shortwave Club's SW DX Guide/MacGibbon]

****FRANCE****

Radio France Internationale has started its Farsi service on March 21. The new service can be heard daily from 1800 to 1900 on 17650 kHz. Although the broadcast is beamed at the Middle East, it can easily be heard here (New York State) under all but the loudest propagation conditions. [Serge Gelato/Kirk Baxter]

****FRENCH GUIANA****

RADIO JAPAN via Montsinery, French Guiana on 15325. Heard in English, from 0300-0400 approximately. I was doing most of my listening on 5860 and when I tuned back to 15325 they seemed to have a different program on there around 0355 so perhaps that relay is only a half hour. 4/7 [Andy Wallace]

****GABON****

The current sked from Africa No. 1, Libreville, is as follows: 0600-0655 French 9580; 0655-1600 French 17630, 9580 (1258-1300 News in English); 1600-1900 French 17630, 9580; 1900-2300 French 9580; [BBCMS/Japan SW Club's SW DX Guide/Bruce MacGibbon]

12035 SWISS RADIO INTERNATIONAL VIA MOYABI, at 2228 on 4/4. After Red Cross Radio broadcast. [Andy Wallace]

****GERMANY****

For M91 DW will be using the following former Radio Berlin International transmitter sites: Nauen: 01-0150 on 8155; 01-0550 on 11890; 02-0450 on 8145; 02-0555 on 11795; 03-0350 on 8650; 04-0555 11810, 13070; 08-10 11885, 17880; 06-14 on 21540; 0730-0820 9680; 0730-0920 on 11785; 0830-1020 on 16390; 0930-1020 on 11835; 11-1320 on 21695; 11-1420 on 17770; 12-14 on 11970, 16390; 1330-1420 on 21590; 14-2150 on 15350; 15-1650 on 8650, 17735; 15-18 on 16145; 16-1650 on 9640; 17-1750 on 15245; 18-22 on 7185, 13610; 1830-1920 on 6015; 19-2120 on 15425; 2130-2220 on 6965, 7170; 22-0155 on 9730; 22-0355 on 11785; 23-0050 on 6040. Leipzig: 01-0750 on 13610; 08-1420 on 21465. Konigs Wusterhausen: 0000-20 on 6115; 01-0350 on 13770; 01-0450 on 15425; 05-0550 on 11765, 13790; 06-0650 on 8615, 13690; 06-0750 on 16205; 06-08 on 17820; 07-0750 on 17715, 21650; 10-14 on 13690; 11-1350 on 17860; 14-1755 on 17755; 15-1750 on 11795; 15-1820 on 7255, 13690; 18-22 on 9840; 1830-2120 on 7130; 19-2050 on 13780; 1930-2020 on 11960; 2030-2120 on 11740; 22-0000 on 13770; 22-0555 on 1360, 15350; 23-0050 on 11890. [Bob Padula/Australian DX News/Bruce

MacGibbon)

11925 New Frequency Radio Deutsche Welle in English @0510 parallel 13610, 11705, 9700, 8670, 8120. Nothing heard on 13770. [MacGibbon] Radio Free Afghanistan via RFE/RL: 0230-0330 Pashtu/Dari 8555H 250kW, 11770B 100, 15370P 250 & 17885P 250; 1300-1400 on 15445 250, 17780P 250, 17835P 250 & 21510P 250. All in Summer Schedule from March 31. Due to short notice changes in policy and transmission times & frequencies, RFE/RL has issued new sched 121 period Z-918 as a second edition on March 8. It went into effect on March 30th. Compared with the first edition Z-91A, there is a cut of at least 51 hours a day. Freq 21455 is deleted while combined 2x250kW via Pals on 11885 & 15290 will use a single 250kW each. 11905 will use H-250kW, 11-14 Kazakh & 14-16 Kirghiz and L-100KW 15-16 Tartar-Bashkir & 16-17 Uzbek. 11925 will be used P-250kW for Romanian 1400-2200. [Wolfgang Busch/DSWCI/Bruce MacGibbon]

****GUINEA****

7202 Guinea R. East Africa, Bats. English religious program 21-2130 drifted from nominal 7190 on Feb 16. [Bob Padula, Surrey Hills/Australian DX News/Bruce MacGibbon]

****HUNGARY****

Due to budget cuts Radio Budapest will cease broadcasts in Italian Spanish & Turkish from June 30, but other languages are also being looked at with the Foreign service being reorganized on June 30. ISWL Digest/B8CMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****ISRAEL****

[Partial transcript of KOL ISRAEL'S "DX CORNER") A. Levi of Broadcast Signal Lab in Cambridge, MA points out that our published frequency of 11605 is actually 11603.5 kHz while the published frequency of 11588 is actually about 11587.5 kHz. These are not accidental inaccuracies but intentional. The published frequency of 11605 kHz was subsequently lowered by 1.5 kHz in order to escape undesirable interference thus bringing you better reception. As we point out in past editions of the DX Corner, these small changes that do not affect the listeners ability to find us on the channel are not announced in order not to unnecessarily drive listeners crazy with inconsequential frequency changes. Also to avoid unnecessary confusion to the listener, the published frequency is always given to the nearest kilohertz. Consequently, when we choose to operate on a split frequency such as 11587.5 kHz, we published the frequency to the nearest kHz such 11587 or 11588 kHz.

****INDONESIA****

4607 RRI Serui at 0903 w/Islamic recitations. At return at 0910 instrumental music on March 16. [MacGibbon] 4753 RRI Ujung Pandang at 1008 into Indo. Woman talk then Man followed by recitations on April 8. [MacGibbon] 4831v RRI Jambi w/Jakarta relay parallel 4831v, 4753, 4000 at 1215 on April 6. [MacGibbon] 8552 Indonesia RRI Ujung Pandang, Indo songs 0120, weak but clear of QRM on Feb 9. [Vitek/Australian DX News/Bruce MacGibbon]

****IRAQ****

8350v Radio Baghdad at 1454 w/recitations on March 14. [MacGibbon]

****JAPAN****

RADIO JAPAN SKED APRIL 1- MAY 4, 1981 General Service: SE Asia: 0000-0030 JP on 17180, 15230; 01-02 EG, 02-03 JP, 03-04 EG, 04-05 JP on 17810; 05-06 EG on 21610, 17810; 06-07 JP, 07-08 EG on 17810; 08-09 JP on 21810, 17810; 09-10 EG on 21810; 10-11 JP, 11-12 EG, 12-14 JP, 14-15 EG on 11815; 16-17 JP on 15230, 11815, 7210; 17-18 EG on 11815; 21-22 EG on 17810, 15230, 11840; 22-23 JP on 17810, 15230; 23-0000 on 17810, 15230. Asian Continent: 0000-0030 JP on 15185, 11815; 01-02 EG on 17835, 15185; 02-03 JP on 17835; 04-05 JP, 05-06 EG, 06-07 JP, 07-08 EG, 08-09 JP on 17765; 09-10 EG, 10-11 JP, 11-12 EG on 11840; 13-14 JP on 9580, 7210; 16-17 JP on 9580, 7140; 17-18 EG on 7140; 20-21 JP, 21-22 EG on 11815; 22-23 JP, 23-24 EG on 15185, 11815. South Asia: 0000-0030 JP on 17845; 01-02 EG on 17845, 11840 (via Ekala, Sri Lanka); 02-03 JP on 17845; 11-14 JP, 14-15 EG on 9535 (via Ekala, Sri Lanka); 18-19 JP on 9535, North America: 02-03 JP on 15185, 5980 (via Sackville, Canada); 03-04 EG on 15185, 5960 (via Sackville, Canada). (Note: From April 8, move to 0100-0300 UTC. (100-0200 EG, 0200-0300 JP); 04-05 JP, 05-06 EG, 06-07 JP on 117825, 15185; 11-12 EG on 6120 (via Sackville, Canada); 12-13 JP on 11865, 6120 (via Sackville, Canada. (Note: From April 7, move to 1000-1200 UTC. 10-11 JP, 11-12 EG); 14-16 EG, 16-17 JP, 17-18 EG on 11865; 18-19 JP on 15185, 11865; 19-1930 EG on 11865; 20-21 JP on 17825. Central America: 02-03 JP on 15325 (via French Guiana). South America: 0000-0030 JP on 21635 (via Moyabi, Gabon); 02-03 JP on 15350 (via French Guiana); 08-09 JP on 11875, 9675 (via French Guiana); 10-11 JP on 15350 (via French Guiana); 22-23 JP on 9685 (via French Guiana). Oceania: 05-06 EG, 06-07 JP, 07-08 EG, 08-09 JP on 17890; 18-19 JP, 18-1930 EG on 15270, 11850; 20-21 JP on 17880, 15270; 21-22 EG on 17890. Europe, Middle East & Africa: 04-0430 on 8645 (via Moyabi, Gabon) to Southern Africa; 04-05 JP on 17820 (via Ekala, Sri Lanka) to Middle East, North Africa); 07-08 EG on 21575 (via Moyabi, Gabon) to Middle East, etc), 15325; 08-0830 JP on 21575 (via Moyabi, Gabon) to Middle East, etc); 08-09 JP on 21840 (via Moyabi, Gabon) to Europe, etc), 15325; 16-17 JP on 21700 (via Moyabi, Gabon) to Middle East, etc); 17-18 EG, 18-19 JP on 15345 (via Ekala, Sri Lanka) to Middle East, North Africa; 18-1930 EG on 7140 (via Moyabi, Gabon) to Southern Africa); 22-23 JP, 23-24 EG on 11735 (via Moyabi, Gabon). Note: JP = Japanese; EG = English. Regional Services: Arabic: Middle East & North Africa: 0330-04 on 17820 (via Ekala, Sri Lanka), 1930-2000 on 15210 (via Ekala, Sri Lanka), 9555. Burmese: SE Asia: 1115-1145 on 17820, 15300. Bengali: S.Asia: 02-0230 on 11840 (via Ekala, Sri Lanka), 1530-18 on 11800, 9535 (via Ekala, Sri Lanka). Chinese: Asian Continent: 03-04 on 21810, 17825, 1130-1230 on 9580, 7210. SE Asia: 1245-1345 on 15300. Asian Continent, SE Asia: 15-16 on 11840, 9580, 7210. English: North, Central, South America, Hawaii: 03-0330 on 21610, 17825. Central America: 03-0330 on 15325 (via French Guiana). Oceania: 08-10 on 17890, 15270. French: Europe: 0630-07 on 21890 (via Moyabi, Gabon), 15325. Middle East & North Africa: 1830-18 on 9555. Europe: 2030-21 on 15355 (via Moyabi, Gabon). German: Europe: 06-0630 on 21690 (via Moyabi, Gabon), 15325, 20-2030 on 15355 (via Moyabi,

Gabon). Hindi: South Asia: 0230-03 on 11840 (via Ekala, Sri Lanka), 18-1830 on 11800, 9535 (via Ekala, Sri Lanka). Italian: Europe: 0545-06 on 21890 (via Moyabi, Gabon), 15325, 2115-2130 on 15355 (via Moyabi, Gabon). Indonesian: SE Asia: 1015-1115 on 17820, 15300, 23-0000 on 17785, 11840. Japanese: North, Central & South America, Hawaii: 02-03 on 21810, 17825, 17825. Korean: Asian Continent: 1030-1130, 14-15 on 9580, 7210. Malay: SE Asia: 1145-1215 on 17820, 15300. Portuguese: South America: 09-0930 on 11875, 9675 (via French Guiana). Persian: Middle East: 18-1930 on 15210 (via Ekala, Sri Lanka), 9555. Russian: Europe: 0430-05 on 15355 (via Moyabi, Gabon), 15325. Asian Continent: 1230-13 on 9580, 7210, 1930-20 on 15355 (via Moyabi, Gabon). Swedish: Europe: 0530-0545 on 21890 (via Moyabi, Gabon), 15325; 21-2115 on 15355 (via Moyabi, Gabon). Spanish: Central America: 0330-04 on 15325 (via French Guiana); South America: 0330-04 on 15350 (via French Guiana); Central & South America: 0330-04 on 21810, 117825; South America: 0930-10 on 11875, 9675 (via French Guiana); Europe: 2130-22 on 15355 (via Moyabi, Gabon). Swahili: Eastern Africa: 1715-1745 on 9535, 7180 (via Moyabi, Gabon). Thai: SE Asia: 1215-1245 on 17820, 15300, 11875. Urdu: South Asia: 03-0330 on 11840 (via Ekala, Sri Lanka); 1830-17 on 11800, 9535 (via Ekala, Sri Lanka). Vietnamese: SE Asia: 1345-1415 on 15300, 11875; 2230-23 on 17785, 11840. [Bruce MacGibbon]

****KAMPUCHEA****

5407v Voice of the National Army of Democratic Kampuchea (I think that is what they call it) at 1441 with Man announcer either in Cambodian or Viet followed by instrumental music on March 14. [MacGibbon]

****KOREA (SOUTH)****

From March 31st, the North American service will be heard from 0600-0700 on 11810 and 15170, and the Sackville relay from 1030-1100 on 11715. [Toru Yamashita, ABU/R. Japan DX CORNER/Bruce MacGibbon]

****LIBERIA****

7275 at 0705, ELBC (but is it coming from Liberia?), in English w/African vocal, but unfortunately Ham Radio QRM and a tad noisy so couldn't get much of it. A man announcer was talking about Liberia and their was an ELBC ID at 0714 on March 15. [MacGibbon] 7275 ELBC at 0659, African vocal then Man in English. Believe I heard on World of Radio this is supposed to be from Sierra Leone. 3-21 [MacGibbon]

****LIBYA****

15435 Tripoli. Has settled here x 15450. Very strong 2055 in Arabic. //15415 on March 3. Also check 17725. [Craig Seager/Australian DX News/Bruce MacGibbon]

****MADAGASCAR****

5009v, Radio Madagasikara(t), 0226 Man speaking in the French language to 0227 then Easy listening music followed by a Woman in French at 0230 but no ID heard due to noisy conditions on April 9. [MacGibbon]

****MONACO****

11685 Monaco R. Monte Carlo. New relay on SW, back on after many years. Very strong 0600 w/news, then promos & ID 0615, all in French. Possibly via TWR-MC transmitter on March 3. [Craig Seager/Australian DX News/Bruce MacGibbon]

****MONGOLIA****

6045 Inner Mongolia PBS, Hohhot, 1406 in Chinese, ID, Woman talk, M and W w/vocals, WRTH 81 lists as inactive. Heard on March 14. [Harlan Seyfer, Beijing, China/Bruce MacGibbon] 6974 Inner Mongolia PBS, Hohhot, 1242 ID, in Mongolian, Man talk, Man vocals, WRTH 81 lists as inactive. Heard on March 14. [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

****MOROCCO****

9575 Radio Medi Un at 0703 in Arabic. Heard in French at 0721. With VOA signing off in English on this freq at 07, signal is pretty good. 3-21 [MacGibbon] 9575 R. Mediteranee Int'l, Nador, Morocco. Arabic news 0800, then continuous music to 0830, when had news in French. Splash from the massive RA on 9580 from 0825 on March 4. [Craig Seager/Australian DX News/Bruce MacGibbon] 17595 English feature on Morocco at fair level 1548 on Jan 30. [Gavin Hellyer/Australian DX News/Bruce MacGibbon]

****NAMIBIA****

The English Service of the Namibian Broadcasting Corp. is now on SW, on the following frequencies:
3270 kHz 1600-1800 UTC weekdays
0400-0600 Saturdays
0500-0600 Sundays
7165 kHz 0600-1600 weekdays
0600-1600 Sat/Sun
"All Night Service":
3270 kHz 2200-0400 UTC weekdays
2200-0600 Sundays
"Channel 2 National Service":
3270 kHz 1800-2200 UTC
Comments on reception would be very much appreciated. The address is: N8C English Service, Box 321, Windhoek 8000, Namibia. [Richard Ginbey/RN MEDIA NETWORK/Michael Rolph]

****NETHERLANDS****

Radio Netherlands sked, 31 March - 29 September 1981:
Start End Lang. Frequencies Target Comment
0030 0125 Engl 15580 6165 6020 E NAm, N SAm
0030 0125 Port 11660 8895 S America
0130 0225 Dutch 15315 8895 6165 6020 E NAm, N SAm
0130 0225 Dutch 15315 S America
0230 0325 Span 15315 8895 8165 6020 E NAm, N SAm
0230 0325 Span 15315 8895 8165 S America

0330 0425 Dutch 13700 9855 Africa, NE
0330 0425 Dutch 13700 Africa, S
0330 0425 Engl 8590 8165 W N America
0330 0425 Engl 9590 8165 E NAM, N SAMer
0430 0525 Span 8590 8165 W N America
0430 0525 Span 9590 8165 E NAM, N SAMer
0630 0825 Dutch 9715 8165 W N America
0630 0825 Dutch 13770 11710 9895 7130 Europe
0630 0625 Dutch 13770 Africa, NE
0630 0725 Dutch 13700 11935 9895 7130 Europe
0630 0725 Dutch 13700 11935 Africa, NW
0630 0725 Dutch 9715 8630 Australia, NZ
0730 0825 Dutch 13700 11935 9895 5855 Europe
0730 0825 Dutch 13700 11935 Africa, NW
0730 0825 Dutch 21745 Africa, NE
0730 0825 Dutch 21485 S Asia
0730 0825 Dutch 21485 SE Asia, Austr
0730 0825 Engl 9715 8630 Australia, NZ
0830 0925 Dutch 9830 Australia, NZ
0830 0925 Engl 21485 17675 S Asia
0830 0925 Engl 21485 17675 SE Asia, Austr
0830 0855 Engl 9770 E NAM, N SAMer
0900 1025 Papua 6020 SE Asia, Austr
0930 1025 Indon 21485 17675 E NAM, N SAMer
0930 1025 Papua 6020 Sundays only
1030 1125 Dutch 9715 Europe
1030 1125 Dutch 21530 Africa, NW
1030 1125 Dutch 21530 Africa, NE
1030 1125 Dutch 21480 17675 S Asia
1030 1125 Dutch 21480 17675 SE Asia, Austr
1030 1125 Engl 11890 E NAM, N SAMer
1030 1125 Engl 11890 Australia, NZ
1130 1225 Engl 9715 5955 Europe
1130 1225 Engl 21520 Africa, NE
1130 1225 Engl 21520 21480 17675 S Asia
1130 1225 Engl 21520 21480 17675 SE Asia, Austr
1130 1155 Span 11660 6020 E NAM, N SAMer
1200 1225 Span 16330 W N America
1200 1225 Span 16330 9775 E NAM, N SAMer
1200 1325 Span 11865 Europe
1200 1325 Span 11865 Africa, NW
1230 1325 Fren 21520 Africa, NW
1230 1325 Fren 21520 Africa, S
1230 1325 Indon 21480 17805 17675 13700 SE Asia, Austr
1330 1625 Dutch 13700 5955 Europe
1330 1625 Dutch 13700 Africa, NE
1330 1425 Dutch 21480 17805 S Asia
1330 1425 Dutch 21480 17605 17675 11955 SE Asia, Austr
1430 1625 Engl 5955 Europe
1430 1625 Engl 13770 Africa, NE
1430 1625 Engl 17605 17675 15150 13770 S Asia
1430 1625 Engl 17605 17675 13770 SE Asia, Austr
1430 1625 Fren 15280 Africa, NW
1530 1625 Arab 17805 15580 13770 Europe
1530 1625 Arab 17805 15580 13770 Africa, NE
1530 1625 Dutch 21480 17675 S Asia
1530 1725 Dutch 17605 15120 E NAM, N SAMer
1630 1725 Dutch 13700 9860 5955 Europe
1630 1725 Dutch 13700 Africa, NE
1630 1725 Engl 16570 6020 Africa, S
1730 1825 Arab 21590 17605 9860 Africa, NW
1730 1825 Arab 21590 17605 9860 Africa, NE
1730 1825 Dutch 21515 Africa, NW
1730 1825 Dutch 15580 13700 Africa, NE
1730 1825 Dutch 21515 15570 15560 13700 Africa, S
1730 1825 Dutch 8020 Africa, S
1830 1925 Engl 21685 17805 15570 Africa, NW
1830 1925 Engl 15570 8020 Africa, S
1830 1925 Fren 17775 13700 8895 Africa, NW
1830 1925 Fren 17775 13700 Africa, S
1830 1925 Span 8855 Europe
1830 1925 Span 8855 Africa, NW
1930 2025 Arab 13700 9895 8020 Europe
1930 2025 Arab 13700 9895 8020 Africa, NW
1930 2025 Fren 21685 17805 17775 15570 Africa, NW
1930 2025 Fren 9860 Africa, NW
1930 2025 Fren 21685 17775 17605 Africa, S
1930 2025 Fren 15570 9860 Africa, S
2030 2125 Dutch 21685 17605 Africa, NW
2030 2125 Dutch 21685 17605 Africa, S
2030 2125 Engl 13700 11660 9895 8880 Africa, NW
2030 2125 Engl 13700 11660 9895 8880 Africa, S
2030 2125 Engl 7285 Africa, S
2030 2125 Span 6020 Europe
2030 2125 Span 6020 Africa, NW
2130 2225 Dutch 15365 11950 E NAM, N SAMer
2130 2225 Dutch 17760 17605 13700 11950 S America
2130 2225 Dutch 8020 Europe
2130 2225 Indon 9590 7285 SE Asia, Austr
2230 2325 Indon 9590 7285 SE Asia, Austr
2230 2325 Papua 11715 9895 E NAM, N SAMer
2230 2325 Port 15580 15315 S America
2230 2325 Span 17895 15155 S America
2330 0025 Dutch 9590 7285 SE Asia, Austr
2330 0025 Span 15315 11715 9895 6020 E NAM, N SAMer
2330 0025 Span 15315 9895 S America

[Kirk Baxter]

****NETHERLANDS ANTILLES****

03 March - 03 November 1991

English to Caribbean & North America

Final M91 (03 Mar - 05 May 91)

Tentative J91 (05 May - 01 Sep 91, S91 (01 Sep - 03 Nov 91)

9535 0300-0430 NAm & Caribbean English
11815 1055-1330 E NAM & Caribbean English
11930 0265-0430 NAm & Caribbean English
15345 1055-1330 E NAM & Caribbean

Simulcast on 9535 & 11930 kHz at 0300 UTC & 11815 & 15345 kHz at 1055 UTC.
[MacGibbon]

****NEW ZEALAND****

RADIO NEW ZEALAND INTERNATIONAL FREQUENCY SCHEDULE, effective 17 March to May 1991

UTC	FREQUENCY
1800-2200 Sun-Fri	15120 kHz
2200-0730 Daily	17770 kHz
0730-1210 Daily	9700 kHz

NOTE: Transmissions beyond 1210 UTC to cover national and international sporting fixtures will be broadcast on 9700 kHz.

OUR PROGRAMMES are primarily for listeners and radio stations in the Pacific, and are planned accordingly. Programmes broadcast between 1800 and 2200 hours UTC cover Pacific Islands and world news, sports news summaries, news in Pacific Islands languages, as well as music, New Zealand news and comment. Between 2211 and 0730 hours UTC some of our programming is drawn from our domestic National Radio, or sport from our AM Network. Sports coverage is dominant at weekends in this time until 0500 hours. Our programming from 0730 is a mix of Pacific Islands and feature programmes, with National Radio offerings from 0900.

Shortwave listeners and DXers are invited to join Tony King and Arthur Cushen for MAILBOX which is now broadcast fortnightly, alternating with TRAVEL PACIFIC. Each programme is broadcast three times during the week - on MONDAYS 0430, THURSDAYS at 0835, and FRIDAYS at 1905 UTC. Air dates for MAILBOX for the duration of the schedule are: April 15, 18, 19, 29, May 2, 3, 13, 16, 17, 27, 30, 31. Air dates for TRAVEL PACIFIC for the period of this schedule are: April 12, 22, 25, 26, May 6, 8, 10, 20, 23, 24.

We welcome reception reports and comments on our programmes. Reception reports should be accompanied by 3 IRC's where possible. Requests for frequency schedules - 1 IRC. Cassettes of reception are not required. Mail to: Broadcast House, P.O. Box 2092, Wellington, New Zealand
[C. Ed Evans/Kirk Baxter]

****NIGERIA****

4770 Radio Nigeria, Kaduna 0458 w/vocal at News in English at 0500.
Co-channel Ute QRM. Poor reception on April 7. [MacGibbon]

****NORTHERN MARIANAS****

KHBI schedule effective 3/31/1991 through 9/29/1991:

UTC	FREQUENCY	REGION
0000*	17555	270 Philippines
	17885	340 Japan
0200	17555	270 Philippines
	17865	340 Japan
0400	*17555	270 Philippines
	17780	340 Japan
0600	17555	270 Philippines
	17780	310 China
0800	15610	165 Australia/New Zeal
	17555	340 Japan
1000	13625	240 Indonesia
	17555	310 China
1200	9475	185 Australia
	13625	285 India/Mid East
1400	9530	310 China
	13625	285 India/Mid East
1600	11580	310 North India/China
	13625	285 India/Mid East
1800	13625	285 India/Mid East, 165 New Zealand
2000	9455	340 Japan/Korea
	13625	180 Australia
2200	13625	240 Indonesia
	15405	310 China

* = Saturday and Sunday only

Program information under Christian Science Monitor listing in UNITED STATES section.

****NORWAY****

Radio Norway International - Schedule March 31 - September 28, 1991

All broadcasts are 30 min long.

ENGLISH SCHEDULE (Saturday and Sunday only)

UTC	Target sector	freq
1200	Middle East, India	17820
	South Asia, India, Australia	21695
1300	Europe	9590
	Eastern Europe	11880
1600	North America	15305
	" "	17790
1800	Africa, Middle East	21705
1700	Europe	9555
1800	North America	17755
1900	Europe, Africa	15175
	Far East, Australia, New Zeal.	17730
2000	Greenland, North America	15185
2200	S. America, Australia, New Zeal.	21705
0100	North and Central America	11925

15380
 0200 North America 15360
 400 North America 11865
BROADCASTS IN NORWEGIAN (Daily):
 UTC Sektor-område Frekv
 0600 Europa 9590
 Afrika 17765
 Midt-Osten, Afrika 21705
 Europa 9590
 Ost-Europa 11735
 Ost-Europa 15165
 Vest-Afrika, SØr-Europa 17765
 0700 SØr-Asia, India, Australia 17740
 Fjerne Osten, New Zealand 21730
 0800 Fj Østen, Australia, New Zeal. 21730
 SØr-Asia, India, Australia 25730
 1000 Nord-Atlanten, Grønland 15165
 SØr-Europa, Vest-Afrika 21610
 SØr- og Mellom-Amerika 17780
 SØr-Amerika 25730
 1200 Nord- og Mellom-Amerika 17780
 Midt-Osten, Asia 17820
 SØr-Asia, India, Australia 21895
 Nord- og Mellom-Amerika 21705
 1300 Europa 9590
 Ost-Europa 11860
 Nord- og Mellom-Amerika 17780
 Asia, Australia 21710
 1400 Nord- og Mellom-Amerika 17780
 Nord- og Mellom-amerika 21705
 SØr-Asia, India, Australia 21710
 1500 Nord-Amerika, Stillehavet 15305
 Nord-Amerika 17780
 Midt-Osten, Afrika 21705
 1600 Midt-Osten 15230
 Nord-Amerika, Stillehavet 17765
 Nord-Amerika 17780
 Midt-Osten, Afrika 21705
 1700 Europa 9565
 Europa, Midt-Osten 15220
 Nord-Amerika 17760
 Vest-Afrika, SØr-Amerika 21705
 1800 Europa, Midt-Osten, Afrika 15220
 Afrika 17730
 Nord-Amerika 17755
 1900 Europa 15175
 Fj. Østen, Australia, N. Zeal. 17730
 S.-Europa, Afrika, S.-Amerika 21705
 2000 Nord-Atlanten, Grønland 15165
 S.-Europa, Afrika, S.-Amerika 21705
 2100 Fj. Østen, Australia, N. Zeal. 17740
 SØr-Amerika, N. Zealand (lr) 21705
 2200 SØr-Amerika 17730
 SØr-Amerika, N. Zealand (lr) 21705
 2300 Nord- og Mellom-Amerika 15185
 - - - - 17765
 0000 Nord- og Mellom-Amerika 11780
 Asia, Australia 15180
 Nord- og Mellom-Amerika 15380
 SØr-Asia, Australia 17755
 0100 Nord- og Mellom-Amerika 11925
 - - - - 15360
 0200 Nord-Amerika 11925
 - - - - 15380
 0300 Nord-Amerika 11885
 Midt-Osten, Asia 15175
 0400 Nord-Amerika 11885
 Midt-Osten, Asia 11870
 Midt-Osten, Afrika 15170
 0500 Europa 9590
 Nord-Amerika, Stillehavet 11885
 Afrika 15175
 Midt-Osten, Afrika 17765

[Bevans-Internet/Kirk Baxter]

****PAKISTAN****

Radio Pakistan frequency schedule effective until May 4th reads: Home Services from Islamabad. API-1: 0045-0215 on 5085; 03-04 & 08-12 on 9495; 13-16 on 6070; English News 1300. API-2: 0045-0403 on 8070; 0430-0530, 06-1145 & 12-1330 on 9645; 14-1805 on 5085; API-3: 0630-0634 on 9495; 1103-1113 on 7325. API-5: 0320-0327 on 7280. API-7: 01-0110 on 7095; 02-0215 on 9460; 0230-0245 (Link for SS Bulletin to SEAs), 03-0327 & 04-0403 on 11570; 05-0503, 06-0607, 07-08 (Link for Myanmar/Burma), 08-10 (Link for Indonesian), 1230-13 & 14-1403 all on 15190; 15-1530 on 11600; 16-1630 (Link for English news & Slow Speed Bulletin) on 9460 and 17-18 on 6070 (Link for Turkish)...English news also 0330, 0500 & 1300. Regional Services: Quetta: 0045-0430 (F 0345), 08-1215 (F 04-0820 & 10-1215) and 1230-1603 all on 7170. Peshawar: 13-15 on 7095. Rawalpindi III (Azad Kashmir): 0045-0405 on 4790, 0930-1315 on 7265 and 1430-1808 on 4790. External Services (Changes to D-90 sched only): Hindi 0030-0130 on 7010, 9370; Mitani 01-02 on 17800, 15190. World Service to Gulf & ME 0430-0630 on 15580 parallel 17555, 21580. World Service to W. Europe 08-1115, SS Bull 1105-1120 on 17595 parallel 21520. World Service to Gulf & ME 1330-1530, English News/SS Bull 16-1830 on 15515 parallel 13655, 17555, 11570. World Service to W. Europe 17-18 on 9370, 11570. [Noel Green/DSWCI/Bruce MacGibbon]

****PAPUA NEW GUINEA****

3385 Radio East New Britain at 0823. W announcer in Pidgin on March 16.

****PERU****

Chris Lobdell says try for Radio Satellite, Peru, on 8724 around 0130 when the utility is off. [Andy Wallace]
 New 6858.7kHz Radio Cajabba, Pomabamba, heard Feb 13 at 2355-0130.
 Address given: Jr. Cuzco 264, Pomabamba. [Pedro F. Arrunategui/Onda Corta/Bruce MacGibbon]

****PHILIPPINES****

15140 Radio Veritas Asia in English. Tony Velasquez(sp?) reading the news. At 1530 said "This is the English Service of Radio Veritas Asia" & sign off was 1530, but on March 22 tuned in at 1501 to the Filipino Service of Radio Veritas Asia with a bulletin of English News at 1523 ending at 1530 saying "This is the Filipino Service of Radio Veritas Asia". On March 25 heard the English News at 1522-1528 with closing announcement that "This is the Filipino Service of Radio Veritas Asia". So what I heard on the 21st must have been a slip of the tongue. 3-21[MacGibbon]
 At approximately 1515 on Feb 21, Radio Veritas was observed broadcasting what appeared to be an external service in Tagalog on 15140. Prior to s/off at 1530 the following announcement in English was carried: "Before we end this transmission of the Filipino service from Radio Veritas Asia, here is a bulletin of world news in English." This was followed by 5 minutes of English news & a closing announcement in Tagalog indicating the broadcast begins at 1500 on 15140 only. [BBCMS/Japan Short Wave Club "SW DX Guide"/MacGibbon]
 15110 Radio Veritas Asia, Philippines at 1028. "Please stay tuned for the Broadcast in Russian" followed by music then same announcement again. 1030 church bells then Man and Woman talking in Russian on April 6. [MacGibbon]

****PORTUGAL****

William Dvorak, Madison, WI reports to the Prodigy System that Radio Portugal International has not changed frequencies for its 0230 English broadcast to the Americas. 9555 to ENAm (but announcing 9765), 9705 to WNAm, 11840 and 9800 to Brazil. Some other broadcasts have been retimed or frequencies have changed, however. The balance of the English schedule:
 1600-1630 Mon-Fri on 15425 to Middle East; 1900-1930 Mon-Fri on 11740 to Europe; 2000-2030 Mon-Fri on 15250 to Africa; This is per station frequency announcement on April 2. [MacGibbon]
 11750 Lisbon. NF Portuguese to Europe/Africa 2040, xed BBC on March 13. [Bob Padula/Australian DX News/Bruce MacGibbon]
 15425 Lisbon. NF Sa/Su to India/Middle East 2030-2100* xed Perth and DW on March 9. [Bob Padula/Australian DX News/Bruce MacGibbon]

****ROMANIA****

15250 Radio Romania Int'l at 1500 sign-on in English and this frequency not given when they announced frequencies. 3-21[MacGibbon]

****SINGAPORE****

9635 Chinese service w/rock music 0340-0350. Only heard for 10 minutes then gone on Feb 2. [Vitek/Australian DX News/Bruce MacGibbon]
 11929 Easy listening music at 1420/5052 & 5010. Good signal on Feb 10. [Vitek/Australian DX News/Bruce MacGibbon]

****SOLOMON ISLANDS****

5020 Solomon Islands Broadcasting at 0821. Man w/news in Pidgin. Good signal on March 16. [MacGibbon]
 5020 at 0724 w/Choir singing religious songs parallel 9545. 5020 was best on March 10. [MacGibbon]

****SOUTH AFRICA****

Radio RSA heard in English on March 11 at 1740-1750 sign off on 17835; fair signal; African music, "Historogram", news in brief; parallel 7270NF and 15210 weak. 17835 is beamed to W. Africa, giving it a better chance to reach N. America. [3-13 Dvorak-WI/Prodigy/MacGibbon]
 All regional stations of the SABC now close down at 2200 UTC, and this means that Radio Oranje, the only regional station on SW continues transmission on 3215 kHz after 1930, instead of closing down. The Afrikaans service is using only one transmitter at the moment, 4810 kHz, local mornings & evenings; and 11770 during the day. After close down, which is now at 1900 instead of 1930, Radio Allegro comes on the air and continues through until 2300 on 4810. [Richard Ginbey/RN MEDIA NETWORK/Michael Rolph]

Radio RSA Definitive Frequency Schedule, effective from 3rd March 1991 to 4th May 1991:

Time UTC	Target Area	Language	Frequencies & Direction
0400-0500	East & Central Africa	English	+11920 KHz 7 deg
	Southern Africa		7200 7
0400-0700	Central & West Africa	French	+15385 350
	Indian Ocean Islands		17815 340
			15210 76
0500-0600	Angola/Mocambique	Portuguese	11920 328
			7230 76
0800-1000	Southern Mocambique	Tsonga	9585 76
1100-1200	East & Central Africa	English	17835 7
	Namibia		+11800 5
	Southern Africa		11805 300
			9555 7
1400-1700	East & Central Africa	Swahili	15385 7
1500-1800	Caprivi & Zambia	Lozi	7270 340
1600-1800	East & Central Africa	English	+15210 5
1700-1800	Southern Africa		7230 5
	West Africa		+17835 340
1800-1800	Malawi, Zambia, Mocambique	Chi-Chewa	5960 7
1800-1900	Mocambique	Portuguese	7230 76
1800-2000	West & North Africa	French	17765 340
	and Central Africa		15385 352

1900-2100 Angola & Cape Verde Portuguese + 11950 320
 + Indicates 500 KW; Other Frequencies 250 KW
 Schedule of Domestic Shortwave Services - SABC - [Note: All times are SAT,

UTC + 2]:

Target Area	Shortwave Station	Day of Week/Time of Transmission	Frequencies
		(Daily)	
NorthWest Cape/Namibia	Radio Suid-Afrika	0500-0625	4810 KHz
	[The Afrikaans Language service of the domestic Radio South Africa]	0630-0855 0900-1555 1800-1855 1900-2100	9885 11770 9885 4810

Target Area	Shortwave Station	Day of Week/Time of Transmission	Frequencies
		(Daily)	
NorthWest Cape/Namibia	Radio Allegro [Classical Music]	2100-0100	4810

Target Area	Shortwave Station	Day of Week/Time of Transmission	Frequencies
		(Daily)	
NorthWest Cape/Namibia	Radio Orion	0100-0500	4810

Target Area	Shortwave Station	Day of Week/Time of Transmission	Frequencies
		(Daily)	
NorthWest Cape	Radio Oranje	0500-0705	3215
		0710-1840	7285
		1845-2400	3215

[And, the one you've all been waiting for folks:]

Target Area	Shortwave Station	Day of Week/Time of Transmission	Frequencies
		(Tuesday-Friday)	
Market Reports and Meat Prices		1815-1835	9885
Mark Berigte en Vleispryse			
[Brian Crawford/Kirk Baxter]			

****SAUDI ARABIA****

From Feb 25, 8SKSA commenced a program in Urdu from 1230-14 on 9705 & 9720. The service is a relay of a service intended for Urdu speakers in the country. [8BCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****SEYCHELLES****

BBC, Seychelles Relay: 4/7 0405-0435 on 15420. Special broadcast directed at Africa with a roundtable discussing African/American influences at 0430. SIO 343, pretty much in the clear. [Andy Wallace]

****SOMALIA****

Since the recent revolution in Somalia, the former clandestine Radio SNM is now identifying as "Radio Hargeisa". It is heard 16-17 on 6320v (varies between 6200-6521). This is not a reactivation of the former government station by the same name that closed down in 1988. [8BCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****SPAIN****

9620 Madrid. NF, Spanish 2145 on March 10. [Bob Padula/Australian DX News/Bruce MacGibbon]
 11775 Madrid. Apparent additional frequency for Spanish to North America to 0456**/listed 9630 & 11880 on March 3. [Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****SWAZILAND****

TWR for M91 is listed for the following tropical band frequencies:
 3200 03-0330 Ndebele, 17-21 English
 3240 03-0345 Shona, 117-18 Zulu, 18-1830 Ndebele, 1830-19 Xhosa, 19-2115 EE
 3275 1750-1835 Portuguese
 4760 1530-1615 Tahwa, 1630-17 German, 17-1730 Tswana, 1730-1745 (Sat/Sun) Pedi/Tswana.
 4790 18-1845 Shona
 5055 04-0430 German, 0430-05 English
 5965 04-0430 German, 0430-05 English (Direct)
 [Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****TUNISIA****

12005 at 2315/15450. Nothing on 17500. Program was in Arabic w/Man announcer. Sign-off was 2341 on March 11. [MacGibbon]

****TURKEY****

Target Area	Frequency	Day of Week/Time of Transmission	Programme
		TRT: Voice of Turkey schedule as of May 4, 1991:	
Europe:	9680	04-09	Turkish 500kW
	15485	09-16	Turkish 500kW
	9460	16-22	Turkish 500kW
	9885	22-23	English 250kW
	9885	23-03	Turkish 250kW
	15265	05-09	Turkish 250kW
	15265	10-15*	Turkish 250kW
	9795	1630-1730	German 250kW
	9795	1930-2000	German 250kW
	9795	2000-2100	English 250kW
	9795	2100-2200	French 250kW
Balkans:	8140	03-05	Turkish 250kW
	11875	0930-10	Hungarian 500kW
	11875	10-1030	Rumanian 500kW
	11875	1030-11	Serbo-Croat 500kW
	11875	11-1130	Albanian 500kW
	7180	1430-15	Greek 250kW
	7110	1730-1830	Greek 250kW
	5980	1800-17	Bulgarian 250kW
	5980	1700-21	Turkish 250kW
	5980	2100-22	Bulgarian 250kW

Target Area	Frequency	Day of Week/Time of Transmission	Programme
MidEast:	7170	06-07	Arabic 500kW
	11955	08-09	Arabic 500kW
	11955	09-10	Arabic 250kW
	11955	10-15	Turkish 250kW
	11955	15-18	Arabic 250kW
	11955	16-18	Arabic 500kW
N.Africa:	15180	09-10	Arabic 250kW
	15180	10-15**	Turkish 250kW
	15180	15-16	Arabic 250kW
	11775	16-22	Turkish 250kW
NW Asia:	11925	04-09	Turkish 250kW
	11735	14-1430	Russian 500kW
	11925	15-18	Azerbaijani 500kW
SW Asia:	15405	04-09	Turkish 250kW
	15365	07-08	Azerbaijani 500kW
	9675	12-1230	Urdu 500kW
	9675	1230-13	English 500kW
	9675	13-14	Persian 500kW
	9685	15-16	Azerbaijani 250kW
Australia:	17880	22-23	English 500kW
	17880	23-03	Turkish 500kW
	17880	03-04	English 500kW
NE Am.:	9445	22-23	English 500kW
	9445	23-03	Turkish 500kW
	9445	03-04	English 500kW
Far East:	9710	1130-12	Chinese 500kW

* = Except Fridays
 ** = Fridays Only

English language sked, extracted:

UTC	kHz	Target Area
0300-0400	9445	NE America
0300-0400	17880	SE Asia
1230-1300	17785	SW Asia
2000-2100	9795	Europe
2300-0000	9445	NE America
2300-0000	9885	Mid East
2300-0000	9795	Europe
2300-0000	17880	SE Asia

Address: Voice of Turkey

P.O. Box 333 - 06.443

Yenisehir, Ankara, Turkey

[Paul Blumstein/Kirk Baxter/Phillip Dampier/Bruce MacGibbon]

****USSR****

USSR, OBLAST HUNTERS TAKE NOTE. OBLAST 020 HAS BEEN DIVIDED AGAIN, REINSTATING OBLAST 179 EFFECTIVE AUGUST 17, 1990. UL-O REMAINS OBLAST 020, WHILE UL-A IS THE NEW OBLAST 179, MANGISTAUSKAYA. [unknown] Radio Station Peace and Progress at 1630 in English on 15545 parallel 17580 on March 10. [MacGibbon]

7320 USSR Magadan R. Yakutsk in Russian, 1200 time pipe, ID, Man and Women with news, 1215 Woman w/music/9600 Okhotsk/9530 Magadan?. Heard on March 18. [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

6120 USSR Yerevan program. Rearranged sked, expanded service to Europe *2100 (ex *2130), //9480, Xed Helsinki on Feb 23. [Bob Padula, Surrey Hills/Australian DX News/Bruce MacGibbon]

7335 USSR Radio Moscow Khabarovsk in Russian, 1243 Woman w/rock vocal, weak to medium signal. Heard on March 14. [Harlan Seyfer, Beijing, China/Bruce MacGibbon]

A new independent station commenced broadcasts earlier this year on SW, it is called Radio Station DVR (Dainiy Vostok - Rossiya) beasting from Khabarovsk, Asiatic RSFSR. The station announces that it uses 5965 & 9560 09-12 from Tue-Sat. Programming is in Russian. Prior to 09 5965 was carrying Khabarovsk Kray's 2nd program//6005(NF) & 4810. [8BCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

Current sked from Murmansk Radio, Murmansk is from 0200-2200 in Russian on 5930 (Local programs: Mon-Thu 0330-0400. Friday 0430-0500, Daily 0515-0545. Saturday 0715-0800, Sunday 1000-1100, Mon-Fri 1500-1520, Mon-Fri 1520-1540. Radiostaniya Atlantika: Tue & Fri 1010-1100; Sat 1215-1300; Others are relay of All Union Radio 1 in Moscow. [8BCMS/Japan SW Club's "Shortwave DX Guide"/Bruce MacGibbon]

A radio amateur from the Novosibirsk oblast asks us to announce that relays of the programs of the American-Soviet "Novaya Vola" radio on 6115 & Long Wave have been stopped. The station can now be received in stereo only on VHF/FM. [RMWS/BBCMS/Japan SW Club/MacGibbon]

According to information received from the Ministry of Communications of Tadjik, SSR, the following shortwave frequencies are active from Tadjikistan:

Frequency	Site	Programme
4635	Yangi-Yul'	1 republican
7245	Yangi-Yul'	2 republican

[Valery Ostroverkh, Karaganda, Kazakh SSR/Bruce MacGibbon]

According to information received from the Ministry of Communications of Azerbaijan SSR, the following shortwave frequencies are active from Azerbaijan:

Frequency	Site	Programme
4785	Gyandzha	1 republican
4957.5	Baku	2 republican
6110	Gyandzha	1 all-union, 1 republican foreign service

6135 Gyandzha foreign service
 6195 Baku "Mayak"

Note: Gyandzha is former Kirovobad.

[Valery Ostroverkh, Karaganda, Kazakh SSR/Bruce MacGibbon]

Radio Vilnius' English transmissions can be heard according to the following schedule: 2130-2200 on 9675 and 9710; and from 2200-2230 on 9710, 11770, 11880,

15180, 17890 and 17720. [R. Japan DX CORNER/Bruce MacGibbon]

The only two frequencies I could hear Radio Vilnius at in English at 2300 were 17720 w/QRM from Libya making Vilnius hard to hear and 17890 which was badly QRM'd by the utility. This on April 1. [MacGibbon]

After Europe's switch to DST, Radio Vilnius via USSR transmitters remains on at 2300 instead of making its annual move to 2200. Frequencies heard on 2 April were: 17720, 17890, 11880 and 11770. [William Dvorak/Bruce MacGibbon]

R. Perm & R. Kudymkar (European RSFSR) share the same SW transmitter, their broadcasts are sked - Radio Perm: 0000-0230, 0615-0654, 13-1415, 1445-20; R. Kudymkar: 0230-0340, 1415-1445 - only Mon-Fri. 8185 is used 0000-1415 & 11770 at other times. [BBCMS/Mick Ogrizek/Australian DX News/Bruce MacGibbon]

All Union Radio has reorganized its HS as follows: 1st Programme remains the same, 2nd Programme is the former 3rd Programme (a cultural & classical music program), Mayak (a 24 hr info & music service) remains the same but can no longer be described as the 2nd program, Former 4th programme has been renamed Radio Orfey (Orpheus) (classical music service). It is heard 03-21 and on weekends 06-21. [BBCMS/Mick Ogrizek/Australian DX News/Bruce MacGibbon]

Radiotaniya Tikhiy Okean (Radio Pacific Ocean) in Russian at 0815 on 4485, 7210, 9780, 12010, 12050, 12070, 13885 and 15240 on April 1. [Bruce MacGibbon]

Russia's Radio, the radio of the RSFSR, has been transferred from Mayk to the 2nd program of All Union Radio. It goes to air (standard time): 11-14 & 19-21 on a selection of the following frequencies: 5815, 7265, 7240, 9550, 9670, 9585, 11890, 11830, 11840, 11990, 15830, 15750. [BBCMS/Ian Stanley/Australian DX News/Bruce MacGibbon]

Radio Taskest (Uzbekistan) was observed with an external service in Pashto on Feb 8. According to the opening announcement, on 5955, the bcst can be heard daily at 0200-0230 in the 26, 41 & 50 mba.

The station's Middle East Service has been observed since Mar 3 as follows:

1520-1550 Dari	9540, 7325, 7305, 5945
1550-1630 Uzbek	11880(1600-), 9540, 7325, 7305, 5945
1630-1700 Persian	11890, 9540, 7325, 7305, 5945
1700-1730 Arabic	11890, 9540, 7325, 7305, 5945
1730-1830 Uzbek	11890, 9540, 7325, 7305, 5945
1830-1900 Persian	11890, 9540, 7325, 7305, 5945
1900-1930 Arabic	11890, 9540, 7325, 7305, 5945

INDXC/Japan SW Club's Shortwave DX Guide/MacGibbon]

Loggings from Valery Ostroverkh, Karaganda, Kazakh SSR -

4400 New Frequency 0014 R. Alma-Ata, HS-2 on March 8, Kazakh, music, Women w/ID & time, music ex 4395 parallel 3955, 5980.

5035 New Frequency R. Alma-Ata, HS-2 on Jan 28, Kazakh, Kazakh classical songs, not used for foreign service now.

5915 1430-1439 R. Tashkent on Jan 28, Uzbek, IS, ID by Woman & Man, music, sked, news/900, 8135, not 5035, QRM: RM-2

7240 New Frequency 1120-1140 R. Alma-Ata, HS-2 on Jan 23, Russian, classical music, Man talk, songs//7235, 8505.

7325 1200-1215 R. Tashkent on March 9, English, ID, frequencies, ann 5945 parallel 9540, 9800, 15470.

21750 New Frequency R. Afghanistan via USSR on March 7, Vernacular, Afghan song, M w/frequency, address, ID, commentary. Parallel 17720.

[MacGibbon]

Since March 3, relays of Radio Beijing external service over USSR transmitters has been observed as follows: 1800-1700 Arabic on 21750, 1830-1927 Arabic on 11895, 2030-2127 French 15640 (instead of 9550), 2200-2257 English 9740. [INDXC/Japan Short Wave Club's 'SW DX Guide'/Bruce MacGibbon]

UNITED ARAB EMIRATES

UAE Radio has left 13875 during the 23-0100 period, leaving BRT International, Belgium, in the clear for English 0030-0055. Checking other known UAE frequencies, I find nothing during this aforementioned timeframe. So perhaps the special Persian Gulf broadcasts from the UAE have ended. [3-13 Dvorak-W/Prodigy/MacGibbon] 25690 Abu Dhabi. Here at 1143 w/Arabic speech, //21735 on Feb 15. Also in use at 0530 for Arabic to Australia/Far East//17855 also new on March 3. [Mick Ogrizek/Australian DX News/Bruce MacGibbon]

UNITED KINGDOM

Some of you may be wondering where the BBC's morning broadcast to North America on 5985 and 9515 kHz has gone. If you haven't found out the answer already, try tuning to 15220 kHz (1100-1345 UTC). [Serge Gelato/Kirk Baxter]

Via April "London Calling" BBC World Service - At A Glance

World News - broadcast daily every hour: 9 min: 03, 05, 07, 08, 11, 18, 20, Mon-Fri 09.

5 min: 17, 22, 23, Mon-Fri 14, 19; Tues-Sat 01; Sat-Sun 09.

1 min: News Summary: Sun, Mon 01; daily 10; Sat-Sun: 14, 19; Sun: 12.

Newsdesk (30 min)

including World News and despatches from overseas and UK correspondents daily 0000, 02, 04, 06, 18

NewsHour (60 min)

A comprehensive look at the major news topics of the day, plus up-to-the-minute international and British news daily 13, 21.

Newsreel (15 min)

News of events as they happen and despatches from BBC correspondents all over the world daily 12(ex Sun), 15.

News About Britain (5 min) Daily 0309, 1109, 1809. There is more news about Britain in Newsdesk approx 20 min into the programmes and NewsHour, usually 40 min into the programme.

Twenty-Four Hours (20 min) Analysis of the main news of the day daily 0509, 0709

The World Today (15 min) Examines thoroughly one topical aspect of the international scene Mon-Fri 1845 rep 2009, Tues-Sats 0315, 0545, 0915.

Outlook (25 min)

An up-to-the minute mix of conversation, controversy and colour from around the world, plus the latest developments here in Britain Mon-Fri 1405, 1905, Tues-Sats 0105

World Business Report (5/9 min)

The latest news from the markets in the Far East, Europe and the USA. Mon-Fri 0909, 1705; 2305 rep Tues-Sats 0530. You can hear more financial news at approx 25 min past the hour in Newshour and most Newsdesks.

World Business Review (9 min)

A look back at the previous week's business and a preview of upcoming events.

Suns 0530 rep 0905, 1705, 2305

Worldbrief (15 min)

A 15-minute roundup of the week's news head-lines, plus everything from sport and finance to best-sellers and weather Fri 2315, Sats 0445, 1115.

A Jolly Good Show (45 min) Dave Lee Travis presents your record requests and dedications in his own unique way. Sats 0815, rep 2315, Tues 1515.

Andy Kershaw's World of Music (15 min) Mon 0445 rep 0930, Weds 1730.

Anything Goes (30 min) A variety of music and much more with Bob Holness Sun 1430 rep Mon 0330, 0830.

Assignment (30 min) Weekly examination of a topical issue Weds 2030 rep Thurs 0230, 1001.

Book Choice (5 min) Short Book review every week. Sats 2310 rep Tues 1125, Thurs 0140.

Business Matters (15 min) Weekly survey of commercial and financial news Tues 2205 rep Weds 0815, 1445

Country Style (15 min) With David Allan Weds 0145 rep 0445, 1115

Development '91 (30 min) Aid and development issues Tues 1930 rep Weds 0230, 0730

Discovery (30 min) In-depth look at scientific research Tues 1001 rep 1830, Weds 0330

Europe's World (15 min) Magazine programme reflecting life in Europe and its links with other parts of the world Mon 2205 rep Tues 0445, 0930.

Focus on Faith (30 min) Comment and discussions on the major issues in the worlds of faith Thurs 1830 rep Fri 0330, 1001

From Our Own Correspondent (20/15 min) BBC correspondents comment on the background to the news Sats 1830 rep Sun 0330, 0730; Weds 2205 rep Thurs 0445, 1115.

From The Weeklies (15 min) Review of the British weekly press Sats 0030 rep 0730, 1945

Good Books (15 min) Recommendation of a book to read Mon from 22nd 0315 rep Weds 2315 rep Thurs 0815

Global Concerns (15 min) Update on environmental issues. Thurs 2205 rep Fri 0145, 1115

Health Matters (15 min) Keeps track of new developments in the world of medical science, as well as ways of keeping fit Mon 0815 rep 1115, 1945, Tues 0145

Here's Humph! (15 min) All that jazz Sats 0145 rep 0430, 1001

In Praise of God (30 min) Weekly programme of worship and meditation Sun 1030 rep 1715, Mon 0030.

Jazz for the Asking (30 min) Sats 2220 rep Sun 0630, Weds 1030.

Jazz Now & Then/Folk in Britain(15 min) Jazz one week, folk the next Fri 0445 rep Sun 2009, Tues 0130.

John Peel (30 min) Tracks from newly released albums and singles from the contemporary music scene Sats from 6th 1715 rep Tues 0330, Thurs 0830.

Letter From America (15 min) With Alistair Cooke Sats 1015, rep Sun 0545, 1845, 2315.

Megamix (30 min) Compendium of music, sport, fashion, health, travel, news and views for young people Tues 1130 rep 1815, 2220.

Meridian (30 min) Three topical programmes weekly about the world of the arts. Sats 0830 rep 1130, 2030; Tues 2030 rep Weds 0630, 1130; Thurs 2030 rep Fri 0630, 1130.

Multitrack (30 min) (1) World Service Top 20 Mon 1830 rep 2330, Tues 1215; (2) New Pop records, interviews, news and competitions Weds 1830 rep 2330, Thurs 1215; (3) The latest developments on the British music scene Fri 1830 rep 2330, Sats 1215.

Music For A While With Richard Baker (45 min) Sun 0815 rep 2205, Thurs 1515.

Music Review (45 min) News and views from the world of music Thurs 2315 rep Fri 0815, 1515.

Network UK (30 min) Issues and events affecting the lives of people throughout the UK Thurs 0730 rep 1815, 2220.

New Ideas (20 min) Window on the world of technology, innovation and new products Mon 1815 rep Tues 0730, Weds 1215.

Off The Shelf (15 min) Daily readings from the best of world literature. Mon-Fri 0430 rep 1430.

Omnibus(30 min) Each week a half-hour programme on almost any topic under the sun. Weds 0030 rep 1001, 1930, Thurs 0830.

People and Politics(30 min) Background to the British political scene Fri 2220 rep Sats 0230, 1030.

Personal View (15 min) Topical issues in British life. Sats 0930 rep 1701, 2009.

Recording of The Week (15 min) A personal choice from the new releases Sats 0045 rep Sun 0315, Mon 0545, Thurs 1445

Science in Action (30 min) Fri 1815 rep 2030, Sun 1001

Seven Seas (15 min) Weekly programme about ships and the sea, with Malcolm Billina Thurs 1930 rep Fri 0130, 0930

Sports International (30 min) Mon 2220 rep Fri 0230, 1030

Sports Roundup (15/10 min) Daily 0945, 1245 (ex Sun), 1745, 2250

Sports World (160 min) Weekly sports magazine Sats 1401, 1515, 1615.

The Farming World (15 min) Thurs 0145 rep 0930, 1945

The Ken Bruce Show(30 min) Sun 0030 rep 1130, 1830

The Vintage Chart Show (30 min) Past Top 20 hits with Paul Burnett Sats 0330 rep Mon 1030, 2030

Waveguide (10 min) How to hear World Service better. Sats 0905 rep
 Mone 0530, Tues 1115, Thurs 0130.
 Words of Faith (5 min) People of all faiths share how their
 scripture gives authority and meaning to their lives daily 0540
 rep 0809, 2205, 2305 (Sats only)
 Write On...(10 min) Air your views about World Service: Write to
 PO Box 78, Bush House, Strand, London WC2B 4PH.
 Sats 1850 rep Suns 0350, 0750.
 World of Music(15 min) Mone 0445 rep 0830, Weds
 1730.
 [MacGibbon]

**** UNITED STATES ****

On Saturday March 16 on World Wide Christian Radio at 1800 on 15690, I
 heard a religious program instead of 'World of Radio' with Glenn Hauser as listed in Tom
 Sundstrom's English Skeds column in March NASWA. [MacGibbon]
 WRNO will broadcast to this sked from April 7: 0000-0300 on 7355; 03-08
 on 6185; 08-12 on 6185 (Sun only); 12-14 on 9715 (Sun only); 14-15 on 15420 (Sun
 only); 15-21 on 15420; 16-0000 on 15420; 21-0000 on 13720; 23-0000 on 7355 (freq
 used occasionally). [George Jacobs & Associates/Australian DX News/Bruce MacGibbon]
 KCB1 for Z91 will broadcast: 0230-14 on 9815; 14-0230 on 15375. [George
 Jacobs & Associates/Australian DX News/Bruce MacGibbon]
 KTBN Sked from April 7: 01-15 on 7510, & 15-01 on 15590. [George Jacobs
 & Associates/Australian DX News/Bruce MacGibbon]
 WHRI Z91 Sked: 0000-11 on 7315; 08-11 on 7355; 11-14 on 11790; 11-15
 on 9465; 14-16 on 15105; 15-17 on 9465 (Mon-Fri); 15-17 on 21840 (Sat/Sun); 18-17
 on 13760 (Mon-Sat); 18-17 on 15105 (Sun only); 17-18 on 15105; 17-0000 on 13760;
 18-23 on 17830; 23-08 on 9485. [George Jacobs & Associates/Mick Orgrizek/Australian
 DX News/Bruce MacGibbon]

Christian Science Monitor schedule effective 3/31/1991 through 9/29/1991:

WCSN	045.08.06N	069.33.35W	UTC FREQUENCY	REGION
0000	9850	90 W.Africa/Mid E		
0200	9850	75 E.Africa/Mid E		
0400 +	9840	105 S.Africa/Mid E		
0600	9840	60 Europe		
0800	11705	60 Europe		
1000*	15810	60 Europe		
1200*	15810	45 Europe		
1400 +	21870	45 Europe/Mid E.		
1600	21840	75 East Africa		
1800	21840	105 S. Africa		
2000	15810	60 Europe/Mid E.		
2200	15300	90 W. Africa		

WSHB	032.41.02N	081.07.51W	UTC FREQUENCY	REGION
0000	7395	25/173 E. N.Am/Car.		
	13760	167 S. America		
0200	9455	245/315 W. N. Am/Mex		
	13760	167 S. America		
0400	9455	315 West. No. America		
	13760	230 Mexico		
0600	9455	315 West. No. America		
	11705	245 West. Mexico		
0800	9455	152 Cent. So. America		
	13760	260 Australia		
1000	9455	152 Cent. So. America		
	9495	25 East. No. Am.		
1200	9495	25 East. No. Am.		
	13760	182 Central America		
1400*	13760	245/315 W. N. Am/Mex		
	15810	173/25 ENAm/Carr.		
1600*	15810	173/25 ENAm/Carr.		
	17555	245/315 W. N. Am/Mex		
1800	15810	173/25 ENAm/Car/Eu		
	*17555	245/315 W. N. Am/Mex		
2000	13770	173/25 ENAm/Car/Eu		
	17555	137 Brazil		
2200	9465	173/25 ENAm/Carr.		
	17555	152 Cent. So. America		

*** = SATURDAY/SUNDAY ONLY**

New World Service programs start every weekday at 1600 UTC and are broadcast in
 two-hour segments on different azimuths. The daily two-hour transmission offers a varied
 schedule of programs in English. Our broadcasts to South And Central America are half in
 English and half in Spanish. The times shown below denote hours and minutes into the
 standard two-hour transmission.

- 0:00 Station Opening
- 0:01 News (The news at the top of the hour to South and Central America
 is in Spanish from 0101 UTC through 0706 UTC.)
- 0:06 Monitor Radio Worldwide (Part 1): News and news features.
 Espanol - El Monitor de Hoy
- 0:31 News Headlines (In English for all azimuths.)
- 0:36 Monitor Radio Worldwide (Part 2)
- 1:01 News Headlines (The news at the top of the hour to South and
 Central America is in Spanish from 0101 UTC
 through 0706 UTC.)
- 1:06 Monitor Radio Worldwide Features
 Espanol - El Monitor de Hoy (Viernes - Perfiles: Entrevistas
 con Invitados)
- 1:31 News Headlines
- 1:34 Letterbox: Response from listeners all over the world, including
 recorded telephone calls.
- 1:48 Daily Religious Article read from The Christian Science Monitor
 newspaper.

1:52 Frequency announcements.
 (Michael Batchelor, WSHB/Kirk Baxter)
 KNLS, Alaska English Sked announced on April 1, 1991:
 0800 11715
 1500 9615
 1800 11945
 2000 11910
 [Bruce MacGibbon]

Broadcasting Corporation of China with its FM Service simulcast by WYFR in
 Florida heard quite well at sign on 2200 on 15440/11855, and 11775 not heard. Signal
 last week was weak on 11855, but now quite strong. This on April 1. [Bruce MacGibbon]
 Voice of Free China via WYFR in English at 2200 sign on, on 17750, 21720
 on April 1. [Bruce MacGibbon + Tom Sundstrom]

11580 WYFR in English @0520 parallel 15566, 11580, 5985. Only Spanish
 heard on previously listed 13760 and probably WYFR on April 9. [MacGibbon]
 VOICE OF AMERICA TRANSMISSION SCHEDULE, 31 MARCH 1991 TO 28
 SEPTEMBER 1991. All times are Coordinated Universal Time (UTC), more traditionally
 known as Greenwich Mean Time (GMT). Days of the week refer to local time in the
 listening area. Frequencies are given in kilohertz (kHz).
 Abbreviations: MF - Monday through Friday. MS - Monday through Saturday.
 SS - Saturday and Sunday.

ALBANIAN to Europe	1600-1630	5985	9650	15180	15280
	1830-1900	5985	9650	15280	17705
AMHARIC to Africa	1800-1900	9690	11740	11880	15165 17755
ARABIC to the Middle East and North Africa	0330-0430	1260	5965	9715	15180 15195 17705 17865
	0430-0445	1260	5965	7160 7255	9715 9740 15160 15195 17705 17865
	0445-0530	1260	5965	7160 7255	9715 9740 11805 15160 15195 17705 17865
	0530-0630	1260	5965	9715	15180 15195 17705 17865
	0630-0700	1260	5965	15180	15195 17705 17865
	0700-0730	1260	5965	15180	15195 17705 21670
	0730-0800	1260	5965	6150 9565	9580 9770 11840 11875 15160 15195 15235 17705 21670
	1330-1500	1260	11915	15255	15405 21500 21720
	1500-1600	15435	17885	21535	21720
	1600-1700	1260	6095	15315	15435 17885 21535 21695
	1700-1800	1260	6095	9530 9745	15305 15435 17885 21535 21695
	1800-1900	1260	6095	9530 9745	15145 15245 15305 17885 21535 21695
	1900-2000	1260	1350	6095	9530 9745 15145 15245 15305 17740 17885 21535 21695
	2000-2100	6095	15145	15305	17885 21535 21695
	2100-2130	6095	6160	9745	11805 15245 15255 15405 17740 17885 21535 21695
	2130-2200	792	6095	6160	9745 11805 15245 15255 15405 17740 17885 21535 21695
ARMENIAN to the U.S.S.R.	1400-1500	9565	15195	15225	17855 21570
AZERBAIJANI to the U.S.S.R.	1900-2000	7280	9680	11805	11835
BANGLA to South Asia	0130-0230	15150	17785	21475	
	1600-1700	1575	9590	11880	15185
BULGARIAN to Europe	0300-0330	1197	3980	6080	6125 7125 9605
	1630-1700	5965	9650	15160	15280
	1900-1930	5965	9650	17705	
BURMESE to Southeast Asia	0000-0030	9670	11840	15215	
	1130-1200	9505	11895	15250	
	1200-1230	1575	9505	11895	15250
CANTONESE to East Asia	1500-1600	1143	6030		
CHINESE (Mandarin) to East Asia	1000-1100	5955	11965	15410	17790 17890 21585
	1100-1200	1143	5955	11965	15410 17790 17890 21585
	1200-1300	5955	11965	15410	17790 17890 21585
	1300-1330	5955	11965	15410	17790 17890
	1330-1400	1143	5955	11965	15410 17790 17890
	1400-1500	5955	11965	15410	17790 17890
	1500-1600	11965	15410	17790	17890
	2000-2100	7200	9545	11925	15395 17765
	2100-2200	1575	7200	9545	11925 15395 17765
	2200-0100	7200	9545	11925	15395 17765
CREOLE to the Caribbean	1630-1645	11890	13740	17710	
	2200-2230MF	9670	11890	15120	
	2230-2300SS	9670	11890	15120	
CZECH/SLOVAK to Europe	0400-0430	1197	3980	6080	7295 9605 9615 11785
	1630-1700	1197	3980	9530	11865 17855
	1900-2000	1197	3980	6080	6150 7175
	2000-2100	6060	6150	7175	
DARI to the Middle East	0215-0300	9540	9705	11780	15105 17830
	1515-1600	9680	11855	15125	17875
ENGLISH to Africa	0300-0430	621	6035	9575	11835 15115 17715 21600
	0430-0500	6035	9575	15115	17715 21600
	0500-0600	6035	9575	15115	17715
	0600-0700	6035	6125	9530	9575 15115 17715

1600-1730 9575 11920 15410 15580 17800 21625
 1730-1800 821(SS) 9575 11920 15410 15580 17800 21625
 1800-2000 821 9575 11920 15410 15580 17800 21625
 2000-2100 821 9570 15410 15580 17800 21485 21625
 2100-2200 821 15410 15580 17800 21485 21625
 ENGLISH to the Caribbean and the American Republics
 CR - programs for the Caribbean. AR - programs for the American Republics.
 CA - medium wave (AM) to Central America.
 0000-0100CR 8130 9455 11895
 0000-0030AR 5995 9775 9815 11580 15205
 0030-0100AR 1530(CA) 1580(CA) 5995 9775 9815 11580 15205
 0100-0200 930 5995 8130 9455 9775 9815 11580 15205
 0200-0230MF 5995 9775 9815 11580 15205
 0400-0500AR 1530(CA) 1580(CA)
 1000-1030 930 9590 11915 15120
 1030-1100 9590 11915 15120
 1100-1200 930 9590 11915 15120
 ENGLISH to East Asia/Southeast Asia/Pacific
 1000-1100 5985 11720 15425
 1100-1200 5985 8110 9780 11720 15155 15425
 1200-1230 1143 8110 9780 11715 15155 15425
 1230-1330 8110 9780 11715 15155 15425
 1330-1400 8110 9780 15155 15425
 1400-1500 1143 8110 9780 15180 15425
 1900-2000 9525 11870 15180
 2100-2200 11870 15185 17735
 2200-2400 7120 9770 11780 15185 15290 15305 17735 17820
 0000-0100 1575 7120 9770 11780 15185 15290 17735 17820
 ENGLISH to the Middle East/North Africa/Europe
 0000-0300 782 1260 1350
 0300-0330 782 1260 8095 15160 15195 17810 17885
 0400-0430 782 5995 8040 8140 7170 7200 11825 15205
 0430-0530 782 3980 5995 8040 8140 7170 7200 11825 15205
 0530-0800 782 3980 5995 8040 8080 8140 7170 7200 11825 15205
 0800-0700 782 3980 5995 8040 8080 8095 8140 7170 7325 11805
 11825
 1000-1100 11740 15160 15195 21570 21815
 1500-1600 1260 1350 9700 15205 15280
 1800-1830 782 1197 1350 3980 9700 15205 15280
 1830-1700 782 1350 3980 8040 9700 11740 15205 15245 15280
 1700-1800 1350 3980 8040 9700 9780 11780 15205 15245 15280
 1800-1900 1350 3980 8040 9700 9780 11780 15205 15245
 1900-2000 3980 8040 9700 9780 11780 15205 15245
 2000-2100 1350 3980 8040 9700 9780 11780 15205 15245
 2100-2200 1260 1350 3980 8040 9700 9780 11780 15205 15245
 2200-2230 782 1350 8095 15215 15255 17810 17885
 2230-2400 782 1260 1350 8095 15215 15255 17810 17885
 ENGLISH to South Asia
 0100-0300 7115 7205 11705 15180 15250 17740 21550
 1400-1500 7125 9645 15205 15395
 1500-1800 7125 9645 9700 15205 15395
 ENGLISH VOA Europe
 0530-0700 1197(MS)
 0700-0800 1197
 0800-0900 1197 1260 11740 15180 15195 21570 21815
 0900-1000 1197(MS) 11740 15180 15195 21570 21815
 1000-1200 1197(MS)
 1200-1800 1197
 Also 24 hours a day on FM stations and cable systems in many cities of Europe. For more information, write to VOA Europe, Box 221 220, 8000 Munich 22, Germany.
 ESTONIAN to Europe
 0330-0345 8040 7105 9505
 1500-1530 9530 11885 15270 17855
 1700-1730 7270 11855 15255
 FARSI to the Middle East
 0300-0430 9740 11805 15105 17830
 1700-1900 7280 9880 11835
 2300-2330 8180 7110 9870
 FRENCH to Africa
 0530-0700 8020 8180 9585 11835 11875 11890
 1830-2000 15195 17640 17785 21485
 2000-2030 15195 17640 17785
 2030-2100SS 15195 17640 17785
 2100-2200 15195 17640 17785
 GEORGIAN to the U.S.S.R.
 0215-0230 8180 9605 9760 11805
 1900-1930 7105 7205 9585
 GREEK to Europe
 1800-1830 5985 7270 9650 15115
 HAUSA to Africa
 0500-0530 8020 8180 9585 11835 11890
 2030-2100MF 15195 17640 17785
 HINDI to South Asia
 0030-0100 8010 7105 9635 11780 15160 17785 21475
 1600-1700 7280 9880 11845 15125
 HUNGARIAN to Europe
 0430-0500 8080 7285 9805 9615 11785
 1700-1900 1197 3980 8080 7180 11945 17855
 INDONESIAN to East Asia
 1100-1230 9620 11930 15125
 2200-2330 9620 11805 15205
 KHMER to East Asia
 1330-1500 1575 9575 11930 15285
 2200-2230 1575 7260 9510 11785
 KOREAN to East Asia

2130-2200 6110 7120 9755 11855
 1300-1330 11930 15195 17720
 LAO to East Asia
 1230-1300 1575 9610 11930 15125
 1300-1330 1575
 LATVIAN to Europe
 0300-0315 8040 7105 9505
 1430-1500 7245 9585 11865 15270
 1600-1830 9530 11855 11865 15270 17855
 LITHUANIAN to Europe
 0315-0330 8040 7105 9505
 1530-1600 9530 11865 15270 17855
 1730-1800 7270 11855 15255
 PASHTO to the Middle East
 0130-0215 9540 9705 11780 15105
 1430-1515 11855 15125 17875 21810
 POLISH to Europe
 0430-0530 1197 8080 8160 7130
 2000-2100 1197 3980 11915 15235
 2100-2300 1197 3980 8160 11915 15235
 PORTUGUESE to Africa
 0430-0500 8020 8180 9775 11835 11890 21550
 1730-1800 821(MF) 15330 17740 21485
 1800-1830 15330 17740 21485
 2200-2300 15580 17785 17800
 PORTUGUESE to Brazil
 2300-2400 9455 11880 15330 17740
 ROMANIAN to Europe
 0330-0345 792 8080 8125 7125 9605
 1700-1800 792 5985 9650 15280 17705
 1800-1830 792 15280 17705
 1830-1900 792
 RUSSIAN to the U.S.S.R.
 E - to eastern U.S.S.R. C - to central U.S.S.R. Other transmissions directed to the western U.S.S.R.
 0200-0300 1197 8090 8180 7240 7270 9585
 0700-1000E 11930 11985 15325 15410 17885
 1100-1300C 15235 15270 15280 17855 17865 21625
 1500-1600 11710 11945 11960 15195 15235
 1600-1700 11710 11960 15195 15235
 1700-1800 7105 11710 11805 11980 15195 15235
 1800-1900 11710 11805 11855 15215 15225
 1900-2000 8140 11710 11855 15215 15255
 2000-2100 8140 7105 7270 7280 9585 11710
 2100-2200 8080 8140 7105 7270 7280 9585 11710 11855
 2200-2300 8080 7105 7130 9530 9670
 SERBO-CROATIAN to Europe
 0345-0400 792 8080 8125 7125 9605
 1930-2030 792 5985 9650 17705
 SLOVENE to Europe
 0330-0400 1197 3980 5995
 SPANISH to the American Republics
 C - transmission directed primarily to Central America and northern South America.
 0100-0300 1530C 1580C 8190 9465 9870 9840 11895 13740 15400
 0300-0400 1530C 1580C 9465 9870 9840 13740
 0930-1100MF 8040 9525 11580 11935 13740 15285 17810 21490
 1100-1130MF 8040 9525 11580 11935 13740 15285 17810
 1200-1300MFC 11890 11945 13775 21580
 1200-1400SS 11890 11945 13775 15265 17730 17830 21490 21580 21610
 1400-1500SS 11890 11945 13775 15265 17730 21580 21610
 1700-1730MF 15185 17710 17730 21745
 2130-2200MF 11895 11890 15120 17730
 SPANISH Radio Marti to Cuba
 0800-1200 1180 8030
 1200-1400 1180 9590
 1400-2300 1180 11930
 2300-0800 1180 9525
 (Radio Marti does not broadcast UTC Monday 0300-0830.)
 SWAHILI to Africa
 1630-1730MF 15150 15320 15330 17705 17740 17785 21485
 TIBETAN to East Asia
 0130-0145 15430 17705 21570
 TURKISH to Europe/Middle East
 2000-2100 1260 8160 9575 11805 15405
 UKRAINIAN to the U.S.S.R.
 0300-0500 8150 7270 9585 11715
 1800-1700 7245 9660 11805 15255
 2000-2100 11780 11855 15215 15255
 URDU to South Asia
 0100-0130 8010 7105 9540 9705 11780
 0130-0200 7120 9530
 1330-1430 11805 15125 17875 21520
 UZBEK to the U.S.S.R.
 0000-0100 7210 9715 9740 11705 15195
 1400-1600 15235 17885 17885
 VIETNAMESE to Southeast Asia
 1230-1330 1143 9620 11835 15250
 2230-2330 7260 9510 11785
 [E. Allen Brown, VOA/Kirk Baxter]

VATICAN
 William Dvorak, Madison, WI reports he is hearing English from Vatican Radio at new 0250-0310 on 9615 and 7305. This broadcast is now the only English to the Americas from Vatican Radio. The 0050 and 0310 transmissions have been dropped.

According to "Radio Vaticana Programmes" 2-91 (April-June 1991), English is now scheduled as follows: Africa: 0600 on 21850, 17730, 17710; 0830 on 21650, 17730, 11620; 1730 on 21850, 17730, 117710; 2100 on 117730, 17710, 11620. Australia/Asia: 0145 on 16090, 11890; 1345 on 17880, 16090, 11830; 1545 on 17880, 16090; 2245 on 15106, 11830.
 Europe: 0500 on 7250, 8248; 1345 on 11740, 9845, 8248; 1950 on 7250, 8248.
 The "Four Voices" service (brief news summaries in four languages including English) is now heard as follows: 0800 on 15210, 11740, 9845, 7250, 8248; 1030 on 15210, 11740, 9845, 8248; 1600 on 15210, 11740, 9845, 7250, 8248. [MacGibbon]
 11620 Vatican Radio in English @0516 with Man talking about Lesotho then Women talking about South Africa parallel 21860(weak) and 17730.[MacGibbon]

****VENEZUELA****

The current sked from Radio Nacional de Venezuela, Caracas on 9540 is as follows: 11-12 Spanish and rebroadcasts from 14-15, 18f-19, 21-22, 0000-01 & 03-04. All bcasts begin with a 10 minute newbulletin in Spanish and end with 5 minutes each in English and French. [BBCMS/Japan Shortwave Club's Shortwave DX Guide/Bruce MacGibbon]
 4940 R. Continental, Berinas at 1001 w/M announcer saying "Venezuela" into music on April 6. [Bruce MacGibbon]

****VIETNAM****

Radio Lai Chau was heard in Japan on March the 8th from the sign-on at 1130 to the sign-off at 1330 on 8378. Reception was poor. The language used was minority languages from the region until 1300 UTC, then it switched to Vietnamese. [R. Japan DX CORNER/Bruce MacGibbon]

****ZAMBIA****

17895 kHz has been an interesting frequency lately. At 2010 UTC heard a strange broadcast from R. Zambia International. Poor quality, sometimes inaudible under a heterodyne. Repetitive instrumental music with periodic announcements. Only 1 ID heard clearly enough to identify. At 2032 UTC Zambia was clobbered by sign-on of Radiodifusion Nacional de Colombia (chimes) and powerful signal. Based on a broadcast of theirs heard a few days earlier, they program pop music and news. [Bob Landau]

****ZIMBABWE****

Currently the Zimbabwe Broadcasting Corporation's Radio 1 & Radio 4 services are relayed on SW as follows: Radio 1: 03-0630 on 5012; 0630-18 on 7283, 16-22 on 5012. Programming all in English. Radio 4: 08-1545 (Mon-Fri) 7175; 1545-20 (Mon-Fri) 4828. Programming in Shona, Ndebele, English, Tonga, Kalanga & Shangaani. English news: 1130 & 1800. [BBCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

****UTILITY****

Australian time and frequency station VNG, currently broadcasting on 5, 10, and 15 MHz, will soon begin operations on 18 MHz as well. According to Radio Australia, VNG will hit 18 MHz at 0000 UTC on the 8th of May, at which time their 15 MHz transmission will be increased at 0700. Identification is given at the 15th, 30th, 45th, and 60th minute. [MacGibbon]

PPR, EMBRATTEL, TIME STATION BRAZIL: heard 2127 (sign on is 2125) to 2130 sign-off on 17194, 18984, 22352, and 22420 kHz 4/8 with time pipe. Use USB, LSB, or CW to hear them; there is no carrier. Good signals. They DO QSL - sent me a computer-generated letter in English and Portuguese. [Andy Wallace]

11660USB at 0829 telephone conversation between Wellington and Chatham Island. I believe that's the route they go on this one. Heard on March 14. [MacGibbon]

I noted with interest last week your loggings of Castle 1 etc. for Corps of Engineers in Kuwait. Anyone interested in trying for a QSL might try the following address:

Communications Chief
 KERO
 U.S. Army Corps of Engineers
 APO New York, NY 09618 I work for the Corps, and if anyone wants me to pursue finding a more complete address, I'll be glad to make some calls. [Poque]
 US Corps of Engineers in Saudi Arabia is on 9130 and 11426; call signs are CASTLE 1 through CASTLE 8. [PLAY-DX]

Copied this last night (3-29-91) from WOO, 8051.6 KHz, FEC, N100R, 0430. What with the pending change in frequencies, I thought this would be of interest.

CQ CQ CQ DE WOO WOO WOO
 GM/GE. WX AND STATION INFO ARE SENT AT 20 PAST EVEN UTC HOURS.
 + + + + +
 + NEW FREQUENCIES FOR WOO AS OF 0000 UTC JULY 1, 1991 +
 + + + + +

CHAN	COAST-TX	SHIP-TX	CHAN	COAST-TX	SHIP-TX	
232	2568.0	2188.0	1203	13083.0	12238.0	+
242	2460.0	2386.0	1210	13104.0	12267.0	+
			1211	13107.0	12280.0	+
410	4384.0	4092.0	1228	13168.0	12311.0	+
411	4387.0	4095.0				
416	4402.0	4110.0	1805	17254.0	18372.0	+
422	4420.0	4128.0	1820	17299.0	18417.0	+
			1826	17317.0	18436.0	+
808	8740.0	8216.0	1831	17322.0	18450.0	+
811	8749.0	8226.0				
815	8781.0	8237.0	2201	22896.0	22000.0	+
826	8794.0	8270.0	2205	22708.0	22012.0	+
			2210	22723.0	22027.0	+
			2238	22801.0	22106.0	+

+ + + + +

TRAFFIC LISTS ARE TRANSMITTED IN VOICE (SSB) ON CHANNELS 411 (4388.4 KHZ) AND 811 (8749.0 KHZ) EVERY 2 HOURS STARTING AT 0000 UTC.
 TRAFFIC LISTS ARE TRANSMITTED IN MORSE CODE (CW) ON 8749.9 KHZ,

AND 13107.0 KHZ EVERY 5 MINUTES. TRAFFIC LISTS ARE TRANSMITTED IN TELE (SITOR FEC) ON 8051.6 KHZ CONTINUOUSLY. WEATHER FORECASTS FOR THE NORTH ATLANTIC ARE TRANSMITTED IN VOICE (SSB) ON CHANNELS 411 (4388.4 KHZ) AND 811 (8749.0 KHZ) AT 1200 AND 2200 UTC. WEATHER FORECASTS FOR THE NORTH ATLANTIC ARE TRANSMITTED IN TELE (SITOR FEC) ON 8051.6 KHZ EVERY 2 HOUR STARTING AT 0020 UTC.
 WE NOW OFFER AUTOMATIC SELECTIVE SIGNALING SERVICE. FOR ADDITIONAL INFORMATION ABOUT ANY OF OUR SERVICES OR A FREE BROCHURE ABOUT AT + T'S HIGH-SEAS RADIO-TELEPHONE STATIONS (KMI, WOM AND WOO) PLEASE CONTACT US VIA RADIO, LAND LINE OR LETTER AT:
 AT + T, STATION WOO
 OCEAN GATE RADIO
 POST OFFICE BOX 650
 MANAHAWKIN, N.J. 08050 U.S.A.
 + 1-809-697-2201 PHONE (COLLECT VIA A.T. + T. ONLY)
 + 1-809-697-8294 FAX
 THANKS FOR YOUR INTEREST AND SUPPORT.
 [Tim Johnson]

It's called the Flight Information Handbook, published by the Defense Mapping Agency 3200 S. Second Street, St. Louis MO 63118-3399. It covers all the global freqs. for HF and has maps, formats and other goodies in it. It's published every sixteen weeks, but the freqs. don't change too often. You might check the nearest AF or Army Reserve or Guard installation that has Aviation Assets - check with their base or flight operations people and see if they can give you a recent copy. If not - I'll be glad to get you one through my buddies here in Wichita. I'll take some time here in the next few days and draw up a list of freqs that are little known - my logs are up to date. As far as CAP freqs - try out 2371, 2374, 4582, 7920, 11975, 14902, 20873, and 26820 for HF nets. [unknown]

****CLANDESTINE****

8067 V. of Democracy. *1100 in Chinese, ID repeated several times, distorted audio to 1127*. Somewhat irregular on this spot, on Feb 18. [Craig Seager/Australian DX News/Bruce MacGibbon]

Here is a run-down of Middle East Clandestines courtesy of Media Network & BBC Monitoring: Gulf Forces Radio is a new station on SW, noted 18-19 on 8982 USB. V. of the People of Kurdistan bcasts in Arabic & Kurdish on 3985v 03-0430 & 18-2015. The anti-iranian station, believed to becast via Egypt, 'Iran's Flag of Freedom Radio' is heard: 0330-0620 on 9045 & 15100; 0845-0730 on 15100; 14-1445 on 15100; 1630-1820 on 15100 & 15485. All transmissions in Persian. The pro-Communist anti-iranian V of the Feda'i broadcasts: 0230-0315 on 4108 & 4160; 0330-0415 on 8643-5v; 09-0945 on 4108 & 4180v; 10-1045 on 8643-5v; 17-1745 on 4108; 18-1845 on 8643-5. The address of the station is: ACA, B.P. 43, 94210 Fontenay-sous-Bois, FRANCE. V of the Struggle of Iranian Kordestan broadcasts in Kurdish on 7435 0930-1036 & 1430-1530. V of the Iranian Kordestan uses 3875, 4086, & 4650 0325-0430, 0856-1030; & 1426-1530 on 3875, 4650; 1626-18 on 4086. Programs in Persian and Kurdish. "Sadai Hurriyat-e Kashmir", which is believed to broadcast from Pakistan Kashmir (Azad Kashmir), is heard on 5000 to this schedule: 0230-0330, 07-08, 11-12, 1430-1530, & 1830-1730. Programmes are in Urdu & Kashmiri. The station also announces an address for correspondence: P.O. Box 102, Muzafferabad, Azad Kashmir, V. Pakistan. (Kanwarjit Sandhu). [BBCMS/RN MEDIA NETWORK/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

Radio station of the Government for the Liberation of the Lao Nation has resumed broadcasts. It is heard 01-03 & 07-09 on 10200 via a 100w transmitter. It is located in a mountainous region of Northern Laos. Languages are Laotian & H'mong. [BBCMS/Mick Orgrizek/Australian DX News/Bruce MacGibbon]

Radio Echo of Hope, a clandestine station transmitting from South Korea, has expanded its service by 2 hours. The station can now be heard for 16 hours a day, instead of 13 hours as previously. Sked: 2000-2100 on 3985; 2300-0100, 0300-0700, 0800-1200 on 6348; finally from 1300-1700 on 3985. [R. Japan DX CORNER/Bruce MacGibbon]

The location of Voice of Free Iraq was reported in a New York Times (Wire) Service article in the Miami Herald 8-Apr (Saturday): (extracted w/o permission): "A Kurdish expatriate, [Dr. Firid Hiwaizil], in London says he was recruited by Saudi intelligence ... to record broadcasts at [the Voice of Free Iraq] clandestine radio station in which he urged fellow Kurds inside Iraq to overthrow President Saddam Hussein. [more] ... At the time he made the tape recordings for broadcast, he said, the station, on the outskirts of Jidda, the Saudi capital, was managed by 40 Iraqi expatriates and protected by armed Saudi guards. ... Other Kurdish dissidents and some American government officials maintained in interviews this week that the station was probably created by the CIA under a secret authorization signed by President Bush late last year. NBC News also reported this week that the station was a CIA-backed operation. [CIA officials have neither confirmed nor denied the agency's involvement]." [Richard Sikoraki/Bruce MacGibbon]

****PIRATE****

RADIO TOWER, HOLLAND 4/7 on 16060.0 USB from 0135 to 0255 GMT with MUCH BETTER SIGNALS than the previous time I heard them. In English, with various pop and rock songs including Bob Seger and a heavy metal version of a Fleetwood Mac tune.... Even mentioned my letter (and those of other DXers)! Hope this means a QSL is in the mail. Address: Radio Tower, P. O. Box 19074, 3501 DB Utrecht, NETHERLANDS. [Andy Wallace]

At last weekend's 4th Annual Winter SWL Fest in Kulpsville, PA, I came across a photocopied information sheet/schedule for RADIO MARABU, an (apparent) pirate operating from the Federal Republic of Germany.

RADIO MARABU
 Postfach 220342
 5800 WUPPERTAL 22
 [Federal Republic of Germany]
 Radio Marabu's transmissions for the coming weeks:
 14.04.1991: between 1100 and 1300 UTC on 7484 kHz
 14.04.1991: between 1100 and 1300 UTC on 11401 kHz
 28.04.1991: between 1100 and 1300 UTC on 11401 kHz
 *** Additional[ly] we are using the transmitter of Radio Europa/ Italy on 7292 kHz on Sunday mornings starting at 0900 UTC.
 Now back in stock are the famous Marabu T Shirts!

Now back in stock are the famous Marabu T Shirts!

White printing on a black shirt with the Marabu logo on it.

Price: # 10 / \$ 20 / DM 25,- (Available in the size XL)

"What other station do on their late night free form shows
is what we do all day."

[Ben Krepp]

****COMMENTS****

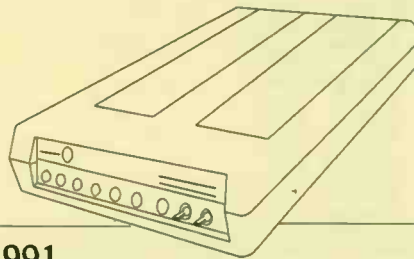
On your next trip to the supermarket, pick up a copy of "WEEKLY WORLD NEWS;" the latest issue bears the riveting headline, "Scientists Plan to Blow Up the Moon!" Now turn to page 8 and check out the ad for the \$29.95 WORLDBAND SHORTWAVE RADIO. Yes! It offers not 4, not 8, but 10 different kinds of listening adventure! And crystal-clear reception - no matter what station you're listening to!

Accompanying this baloney is a totally bogus listing of shortwave countries and frequencies...for example:

China (Taipei) 7270 9 pm EST
Israel (Tel Aviv) 9625 noon
Japan (Tokyo) 11750 24 hours
Saudi Arabia 7240 3am
Thailand (Bangkok) 7165 4am
Zambia (Lusaka) 7220 11 pm

This, of course, is just what the hobby needs - another incredibly shoddy piece of junk to turn off newcomers before they even get started. So batten down the hatches, mates, and brace yourselves for the inevitable, pointless debate and discussion which will soon ensue concerning this equally pointless excuse for a receiver. [Al Quaglieri]

Shortwave Online Digest



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Compiled by Al Quaglieri, NN2U
P.O. Box 888, Albany, NY 12201-0888

****ALBANIA****

Radio Tirana noted on new 7245 (ex-7216) at 2130 and new 9580 (ex-9760) at 0230 and 0330. [Tom Sundstrom]

****ALGERIA****

6145 0657 Algeria Brass band then time signal 6 seconds early at 0600 in French with rough modulation. [Dave Onley/DX AUSTRALIA/ Bruce MacGibbon]

****ANGOLA****

3376.8 2050 Angola Luanda noted in Portuguese with talks and rock music at a good level on March 31. [Dave Onley/DX AUSTRALIA/Bruce MacGibbon]

****ANTARCTICA****

R. Nacional Arcangel Gabriel on 16476 is inactive due to transmitter problems. They are trying to obtain a new transmitter from R. Nacional. [Gabriel Ivan Barrera/"Onda Corta"/Australian Radio DX Club/Bruce MacGibbon]

****ARGENTINA****

4600 0001 Argentina LS4 Radio Continental heard in Spanish on March 19-23 heard parallel 9116 & 4588 LSB. Sports program and ID. [Gabriel Ivan Barrera, Buenos Aires/DX AUSTRALIA/Bruce MacGibbon]

****AUSTRALIA****

16530 Radio Australia via Darwin, 4/12 at 2157 UTC in Indonesian. SINPO was 23323 but got worse as time went on. [Andy Wallace]
21730 Radio Australia with music request program @2343. Something must have been amiss at the Shepparton site. First time I've ever heard them off frequency as they are listed for 21740. Heard this on April 20. At 0120 on April 21, found them back on their listed frequency of 21740. [Bruce MacGibbon]

****AUSTRIA****

RADIO AUSTRIA INTERNATIONAL Schedule: 3/91-10/19

UTC	FREQ	TARGET
ENGLISH LANGUAGE		
0130-0200	9870 9876 13730	Americas
0530-0600	6015	Americas
0730-0800	6155 13730	Europe
1130-1200	6155 13730	Europe
	21490	Americas
1430-1600	6155 13730	Europe
	21490	Europe & Africa
1630-1700	6155 13730 21490	Europe
1930-2000	5495 6155	Europe
	13730	Africa
FRENCH LANGUAGE		
0630-0700	6015	Americas (via RCI)
	6155 13730	Europe
1030-1100	6155 13730	Europe
1630-1800	6155 13730	Europe
	11780	Asia
	21490	Europe & Africa
1830-1900	5945 6155	Europe
	13730	Africa
2130-2200	5945 6155	Europe
	9870	Europe & Africa
SPANISH LANGUAGE		
0030-0100	9870 9876 13730	Americas
0230-0300	9870 9876 13730	Americas
1320-1400	6155 13730 21490	Europe
2030-2100	5945 6155 9870	Europe
2230-2300	5945 6155	Europe
	9870 13730	Africa
GERMAN LANGUAGE		
0000-0030	9870 9876 13730	Americas
0100-0130	9870 9876 13730	Americas
0200-0230	9870 9876 13730	Americas
0300-0400	9870 13730	Americas

0400-0630	6155 13730
0600-0630	6015
0600-0630	6015
0700-0730	6155 13730
0800-1030	6155 13730
	15459 21490
1100-1130	6155 13730
	16430
	21490
1200-1300	6155 13730
	21490
1200-1330	5430
1300-1330	6155 13730
	21490
1400-1430	6155 13730
	11780
	21490
1600-1630	6155 13730
	11780
	21490
1600-1630	6155 13730
	11780
	21490
1700-1830	5495 6155
	13730
1900-1930	5495 6155
	13730
2000-2030	5495 6155 9870
	9870 13730
2100-2130	5495 6155
	9870
2200-2230	5495 6155
	9870 13730
2300-0000	9870 13730

Europe
Americas (via RCI)
Americas
Europe
Europe
Australasia
Europe
Mid East
Americas
Europe
Americas
Mid East
Europe
Europe & Africa
Europe
Mid East
Europe & Africa
Europe
Mid East
Europe & Africa
Europe
Mid East
Europe & Africa
Europe
Africa
Europe
Africa
Europe
Africa
Europe
Africa
Europe
Americas
Americas

ESPERANTO

Sundays at 0405 on: 6155, 13730 & 15410 kHz
Sundays at 1305 on: 6155, 13730, 21490, 15430 kHz

ARABIC

Sundays at 0505 on: 6015, 6155, 13730, 15410 & 21490 kHz
Sundays at 1905 on: 6155, 12010 & 13730 kHz

Notes: 1) The frequencies for Esperanto & Arabic were not explicitly given. I listed those frequencies that were being broadcast at the times given. 2) "Austrian shortwave panoramas" (a look at developments in communications/DX news) is at Sun 1030, 1130, 1430 UTC. Address: Radio Austria International, A-1136 Wien, AUSTRIA. [Kirk Baxter]

Thanks for posting the schedule and to add to that: Austrian Coffetable: Entertainment-mainly music of all styles but also the other; airs Saturday 1030, 1130, 1430. [Bruce MacGibbon]

New times/targets for "Austrian SW Panorama": 1030 on 15450, 21490 to Australia; 1130 on 6155, 13730, 15430, 21490 Eur/Asia; 1430 on 6155, 11780, 13730, 21490 to Eur/Asia/Africa. Only on Sunday. [Don Rhodes, Victoria/Australian Radio DX Club/Bruce MacGibbon]

****BELGIUM****

The summer schedule from Belgische Radio en Televisie Wereldomroep (BRT; now announcing "Belgian Radio International") finally came in the mail yesterday. As usual, it is a bit difficult to decipher, I know of one frequency change already (13676->13655 for S. America after 2130 UTC), and there are some internal contradictions. In the latter case, at some places they list 9925 in use for Europe while at others they list only either 6035 or 5910 at those times. Here is the schedule of their English broadcasts. All programs begin with news and usually a press review (newspapers are not published Sundays in Belgium). Following this are various news and features programs usually related to Belgium and Europe. Of particular interest to radio hobbyists is "Radio World" during the following broadcasts: Saturdays 1730, 2100, and 2330 and Mondays at 0630, 0900, and 1300.

Start	End	Lang.	Freq.	Target	Comment
0630	0700	Engl	11695	Australia	Daily

0630	0700	Engl	6035 13676	Europe	Daily
0900	0930	Engl	21815	Africa	M-Sa
0900	0930	Engl	9925 13676	Europe	M-Sa
1130	1200	Engl	9925	Europe	Sunday
1130	1200	Engl	21810	N. America	Sunday
1130	1200	Engl	21810	S.E. Asia	Sunday
1300	1330	Engl		Europe	M-Sa
1300	1330	Engl	21810	N. America	M-Sa
1300	1330	Engl	21810	S.E. Asia	M-Sa
1730	1800	Engl	21815	Africa	Daily
1730	1800	Engl	9925 13676	Europe	Daily
2100	2130	Engl	17560	Africa	Daily
2100	2130	Engl	6910 9925	Europe	Daily
2330	0000	Engl	13720	N. America	Daily
2330	0000	Engl	13655	S. America	Daily

Look for something to happen with the 13720 broadcast at 2330. WRNO sometimes is on the same frequency, making both stations unlistenable at my QTH in Ann Arbor, MI. Strangely, this has not been true every night. I don't know if WRNO is continuing to have problems with their hardware. [Philip Yant]

BRT Brussels now on new 13655, apparently replacing 13675, with Dutch from 2200 sign on. Parallel with 13720, but that frequency badly QRM'd by co-channel WRNO. 13 April. Also found on 21815, on new frequency at 0950 with French, into Dutch 1000, 11 April. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

Belgium's French broadcaster RTBF is resuming on shortwave. This will cause some changes in BRT's schedule. I don't think any of these affect North American transmissions, but did anyone catch the details this weekend during Radio World? By the way, Frans Vossen is back. The only one I caught was 6035 changing to 9925 at 0630, with RTBF using 6035 at that time. [Philip Yant]

****BOLIVIA****

4739.2 2335 Bolivia Radio Memore during March with irregular transmissions. [Gabriel Ivan Barrera, Buenos Aires/DX AUSTRALIA/Bruce MacGibbon]

****BOTSWANA****

3356 2107 Botswana Gaborone heard in Setswana (presumed) parallel 4830 at an equal level on March 30. Ezi pops and 2020 ID. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****BRASIL****

DXing Brazil by Mick Ogrizek and Bob Padula of the Australian Radio DX Club in the 'Australian DX News' March 1991. Here is a list of all home service stations currently listed on shortwave from the 60mb up. The last column refers to the times they were heard during 1990 in Australia.

Freq	Station/Location(State)	Sked	Heard
4118v	R Difusora, Sena Madureira (Acre)	10-0230	-
4755	R Educacao Rural, Campo Grande (Mato Grosso do Sul)	08-0500	-
4785	R Integracao, Cruz. do Sul(Acre)	08-0300	09-1135
	R Rural, Santarem (Para)	08-0300	-
4775	R Portal de Amazonia Cuiaba (MatG)	08-0300	-
	R Dif de Congonhas (MinG)	09-2300	-
4785	R Caiari, Porto Velho (Rondonia)	08-0500	-
	R Ribamar, Sao Luiz (Maranhao)	08-0300	-
	R Brasil, Campinas (Sao Paulo)	07-0500	-
4795	R Difusora Aquidauana (MG dul Sul)	08-0200	-
4805	R Dif do Amazonas, Manaus (Amaz)	09-0300	09-1400
	R Itatiaia, Belo Horizonte (MinG)	08-0300	-
4815	R Cabocla, Tabatinga (Amazonas)	08-0300	0845-0950
	R Difusora, Lendrina (Parana)	08-0300	-
4825	R Educadora do Braganca (Para)	0830-02	-
	R Cancao Nova, Cachoeira Paulista (Sao Paulo)	08-0300	-
4845	R Cabocla, Manaus (Amazonas)	08-0300	08-1115
	R Meteorologia Paulista, Ibitinga (Sao Paulo)	08-2200	-
4855	R Aruana, Barra do Garças (MatG)	09-0300	-
4865	R Verdes Florestas, Cruz.Sul(Acre)	11-0300	-
4875	R Difusora de Roraima, Boa Vista	09-0300	-
4885	R Dif Acreana, Rio Branco (Acre)	09-0530	0855-1105
	R Clube do Para, Belem (Para)	08-0300	-
	R Caraja, Anapolis (Goias)	0730-03	-
4895	R Bare, Manaus (Amazonas)	0800-05	08-0935
	R IPB AM, Campo Grande (MG Sul)	0700-04	-
4905	R Relogio Federal, Rio de Janeiro	0730-0330	0845-0940
	R Anhanguera, Araguaina (Tocant.)	08-0300	-
4915	R Difusora, Macaps (Amapa)	08-0300	-
	R Anhanguera, Goiania (Goias)	24 hrs	-
4925	R Difusora, Taubate (Sao Paulo)	0630-0330	-
4935	R Difusora del Jatai, Jatai(Goias)	09-0200	-
	R Capixaba, Vitoria (Esp. Santo)	24 hrs	-
4945	R Progresso, Port Velho (Rondonia)	09-0200	09-1010
	R Difusora, Pocos de Caldas (MatG)	08-0300	-
	Emis Rural A Voz de Sao Francisco, Petrolina (Pernambuco)	0755-03	-
4955	R Marajoara, Belem (Para)	0830-03	-
	R Clube, Rondonopolis (MatG)	08-0300	-
	R Cultura, Campos (Rio de Janeiro)	07-0330	-
4965	R Alvorada, Parintina, (Amazonas)	09-0300	-
	R Poti, Natal (Rio Grande Norte)	07-0300	-
4975	R Super Tupi, Sao Paulo (SP)	09-0300	-
	R Timbira do Maranhao, Sao Luiz	08-0300	-
4985	R Brasil Central, Goiania (Goias)	24 hrs	0630-0925
5015	R Brasil Tropical, Cuiaba (MatG)	24 hrs	-
	R Pioneira, Teresina (Piau)	07-0300	-
	R Copacabana, Rio de Janeiro	08-0400	-
5025	R Jornal de Transamazonica,		

	Altamira(Para)	08-0200	-
	R Morimoto, Ji-Parana (Rondonia)	06-	-
5035	R Aparecida, Aparecida (Sao Paulo)	08-0300	08-1015
	R Educacao Rural, Coari (Amazonas)	09-0100	-
5045	R Cultura do Para, Belem (Para)	07-0300	-
	R Difusora, Presidente Prudente (Sao Paulo)	08-0300	07-0935
5055	R Difusora, Caceres (Mato Grosso)	08-0400	-
5955	R Gazeta, Sao Paulo (Sao Paulo)	07-0300	-
5965	R Transamerica, Santa Maria (Rio Grande do Sul)	07-0400	-
5980	R Guarujá, Florianopolis (Santa Catarina)	08-0300	08-1115
6000	R Guaiba, Porto Alegre (RG Sul)	0830-04	08-0920
6010	R Inconfidencia, Belo Horizonte (Minas Gerais)	24 hrs	0835-0935
6020	R Gaucha, Porto Alegre (RG do Sul)	0830-0330	06-0840, 2130
6030	R Globo, Rio de Janeiro	09-0300	09-0940
6040	R Clube Paranaense, Curitiba(Par.)	08-0300	08-0930
6050	R Guarani, Belo Horizonte (MatG)	08-0300	-
6060	R Universo, Curitiba (Parana)	24 hrs	-
6070	R Capital, Rio de Janeiro	08-0300	-
6080	R Anhanguera, Goiania (Goias)	24 hrs	07-0730
	R Novas de Paz, Curitiba (Parana)	08-0300	-
6090	R Bandeirantes, Sao Paulo	07-0500	09-0940
6105	R Cultura, Foz do Iguaçu (Parana)	11-0000	-
	R Cancao Nova, Cachoeira Paulista (Sao Paulo)	08-0300	-
6120	R Globo, Sao Paulo (Sao Paulo)	09-2200	-
6135	R Aparecida, Aparecida (Sao Paulo)	08-0300	08-0910
6150	R Record, Sao Paulo (Sao Paulo)	10-2200	-
6160	R Rio Mar, Manaus (Amazonas)	08-0000	-
	R Nova Esperanca, Porto Alegre (Rio Grande do Sul)	08-0300	-
6170	R Cultura, Sao Paulo (Sao Paulo)	08-0400	08-0910
6180	R Nacional da Amazonia, Brasilia	08-2200	08-1015, 21-2315
9505	R Record, Sao Paulo (Sao Paulo)	10-2200	-
9515	R Novas de Paz, Curitiba (Parana)	08-0300	2230-2300
9540	R Educadora da Bahia, Salvador	08-0300	-
9550	R Pampa, Porto Alegre (RG do Sul)	08-0300	-
9565	R Universo, Curitiba (Parana)	09-2230	0350-1210, 2220-2300
9585	R Excelaior (Globo), Sao Paulo	09-2200	-
9615	R Cultura, Sao Paulo (Sao Paulo)	08-0400	-
9630	R Aparecida, Aparecida (Sao Paulo)	08-0300	08-0910
9645	R Bandeirantes, Sao Paulo	07-0500	22-2305
9665	R Marumby, Florianopolis(Sta Cat.)	0930-0000	1110
9675	R Cancao Nova, Cachoeira Paulista (Sao Paulo)	08-0300	09-0950, 2115-2320
9685	R Gazeta, Sao Paulo (Sao Paulo)	10-0300	-
9695	R Rio Mar, Manaus (Amazonas)	12-2000	09-1015
9705	R Nacional, Rio de Janeiro	08-0315	-
9725	R Clube Paranaense, Curitiba(Par.)	08-0300	09-0935
11780	R Nacional da Amazonas, Brasilia	09-2300	08-1015, 2130
11785	R Guaiba, Porto Alegre (RG do Sul)	0830-04	08-0925
11805	R Globo, Rio de Janeiro	09-0300	-
11815	R Brasil Central, Goiania (Goias)	08-0300	09-0945
11830	R Anhanguera, Goiania (Goias)	??	07-0940, 2215-2130
	R Araguaia, Araguaia	??	-
11855	R Aparecida, Aparecida (Sao Paulo)	08-0100	08-0845
11895	R Nova Esperanca, Porto Alegre (Rio Grande do Sul)	08-0300	-
11905	R Universo, Curitiba (Parana)	09-2200	-
11915	R Gaucha, Porto Alegre (RG do Sul)	0830-0330	-
11925	R Bandeirantes, Sao Paulo	07-0500	-
11935	R Clube Paranaense, Curitiba (Par)	09-0300	-
11950	R MEC, Rio de Janeiro	irregular	-
11965	R Record, Sao Paulo (Sao Paulo)	10-2200	-
15135	R Record, Sao Paulo (Sao Paulo)	10-2200	-
15190	R Inconfidencia, Belo Horizonte (Minas Gerais)	07-0300	-
15445	R Nacional da Amazonas, Brasilia	09-2300	-
17815	R Cultura, Sao Paulo (Sao Paulo)	08-0400	-

It should be noted that all stations are required to carry the Radio Bras programmes "A Voz do Brasil" (Information programme) 2200-2300 Monday-Friday, and "Projeto Minerve" (educational programme) 2230-2300 Saturday/Sunday. In the last couple of years the government broadcasting organisation, RadioBraz has sold many of the home service stations that it used to operate (Usually designated as "Radio Nacional"). The organisation however also operates an external service. Current schedule is: 1700-1800 Portuguese to Africa on 15230; 1800-1900 English to Europe on 15265; 1900-2000 German to Europe on 15265; 0200-0300 English to North America on 11745 (thought that broadcast had been dropped - Bruce); 0500-0600 Portuguese to Europe on 9780. RadioBraz has also been active in leasing transmitting time, via its high-power transmitters located in Brasilia (250 kW), to other international broadcasters. Here is a summary of stations currently hiring airtime: Radio Suriname International Broadcasts in Dutch and English to Europe (Monday-Friday) on 17755 1700 - 1745 (ITU registration for Z91 shows 17750). Deutsche Welle 2300-0050 in Spanish to CA/LA on 11810; 0100-0300 in German to LA on 8075 and 9545 (same schedule for Z91). Swiss Radio International Broadcasts to North and Central America on 17730 0115-0300 in French, English & Spanish. Radio Beijing has concluded an agreement to hire time for the relay of two hours of Spanish programming daily to South and Central America. QSLing - The home service stations have variable verification policies, with the larger stations usually being more responsive. A report in Portuguese is best but English has been known to work on many occasions (especially to the larger stations). The foreign service has traditionally been a good verifier but not many QSLs have been noted from Radio Nacional do Brasil in recent times. Acknowledgements: World Radio TV Handbook 1991, Passport to World Band Radio 1991, Play-DX, Brazilian Shortwave Mediumwave and FM Station List (Antonio Riberto de Motta & Claudio Retulo

e Moraes), Shortwave News (DSWCI), Guide to DXing (Bob Padula). [Bruce MacGibbon]
3385 0030 Brazil R. Educacao Rural. Catholic Mass in Portuguese on Feb 18 then ID
Radio Educacao Rural de Tefe ZYH 282 e ZYF 271, 1270 e 3385 kHz Onda Media e
Tropical. [Antonio Ribeiro da Motta, San Jose dos Campos, Brazil/DX AUSTRALIA/Bruce
MacGibbon]

Arthur Cushen mentioned a frequency change for R. Inconfidencia in Brazil. He says
it's heard on 8010 kHz now. (WRTH 1991 list this as 6009.9 kHz, but the frequency list
on page 312 shows it out of order with another station on the list.) [Elton Byington]

****CAMEROON****

4000 1732 Cameroon Bafoussam at a fair level with news in English on March 30.
[Dave Onley/DX AUSTRALIA/Bruce MacGibbon]

****CHILE****

To get a QSL from Radio Nacional de Chile, you must send your reception reports to
- Senor Carlos Toledo Verdugo, Casilla 296, San Fernando, VI Region, Chile. Please DO
NOT mention "Radio Nacional de Chile" on the envelope. Also, don't forget to send 3 IRCs
as return postage. [Kanwarjit Sandhu/Univerdal DX League/Bruce MacGibbon]

****CHINA (PRC)****

4990 Hunan PBS, M with News @1203 on April 20. [Bruce MacGibbon]
6974 Nei Menggu PBS, Lite music @1121 on April 20. [Bruce MacGibbon]
7105 Nei Menggu PBS, Chinese @1233, Woman w/D on April 20. [Bruce
MacGibbon]

****CHINA (TAIWAN)****

The BCC Home Service relay is noted on 7105, opening at 2155 carrying the
Second Network, Chinese. This outlet is rarely heard here, operating for daytime reception
on the Chinese mainland. Audible until about 2230 fade-out, as on 12 April. [Bob
Padula/Australian Radio DX Club/Bruce MacGibbon]

11725 at 1500 Broadcasting Corporation of China - FM Service. This is the same
station I am picking up at 2200 on 15440, 11855 and sometimes 17805. This gives me
two different times to tape this station for the Taiwan Students at Portland State. The
11725 is direct from Taiwan. Excellent signal with no jammer or deliberate interference
like the CBS transmissions directed to China from Taiwan. [Bruce MacGibbon]

15320 1B18 CBS Network 1, Taiwan at 1818, Good signal parallel 11905 which
was jammed heavily by China on April 10. This station signs off at 1800. 4-11[Bruce
MacGibbon]

****COSTA RICA****

11870 Adventist World Radio @042B with soft music, ann @ 0430 "Transmitte
Radio Mundial Adventista," more tk & TC's over schmaltzy music. Deep QSB. SIO 242 on
April 28. [Al Quaglieri]

<ported from PEACENET > Radio for Peace International (RFPI) has had some new
developments since we last entered anything on PeaceNet. 1) A transmitter building has
been built with little money and lots of muscle power and 2) a new 5 room building with
radio studios and an office is in process right now, hopefully to be finished in a couple of
months. This is all still on the campus of the UniveUniversity for Peace in Costa Rica. This
makes RFPI a supranational global community radio station. It is independent,
non-commercial and not connected to any country (since the University for Peace was
created by a resolution of the United Nations). It has been on the air since 1987 and as
you can see, is developing. 3) Beginning as soon as May 1, hopefully, RFPI will be having
an hour of women's programming 5 days a week, to increase to 3 hours a day as soon as
is feasible. We will be wanting news by and about and for women internationally as soon
as and as much as possible. How to do this is yet to be worked out in detail, but do get in
touch if you want to participate and its going to need lots of participation. In fact, there is
still air time available for more programs in English so if you are interested get in touch
with Max Loffler, the Program Director at RFPI. You can write to RFPI, APDO. 88, Santa
Ana, Costa Rica, or call at (506) 49-18-21 between 2:00 and 9:00 pm Central Standard
time or FAX at (506) 49-18-29. Spanish programming will be recommencing as soon as
the new building is finished as the Spanish Programming coordinator is also busy doing
the building. However, it's not too soon to get in touch with programs. There are two half
hours of German programming at this point also - produced at RFPI and about Central
America. The frequencies are 15.030 MHz, 13.630MHz and 7.375MHz. This last is upper
sideband and best after sundown. The programs are repeated every 6 hours and the
station broadcasts 17 hours a day during the week and 18 on weekends. Most of the
programming is in English at this point, but we don't want it to stay that way. We really
want it to be international, but that will depend on your participation. Our greatest need
right now is still the 20 kw transmitter or, better yet, 2 20 kw transmitters. Then RFPI
could reach a million or more people around the world (now the estimated listenership is
35,000 at any given broadcast hour, 40% of whom are estimated to be in North America
and 40% of whom are estim. to be in Europe with the remaining 20% in the rest of the
world). Help RFPI to grow so that the whole world can have access to the information that
so few of us have now. Oh, I think I never said that it's shortwave. A great deal for the
dollar at this time when most media is so controlled and so expensive. Participate with
programs, listening, donating equipment and spreading the word about this global
community radio station. We can be reached on PeaceNet with RFPI and for talking call
Sue Supriano at (415) 540-8850 or write to 2707 College Ave, Berkeley, Ca. 94705. I'd
be glad to give you details about what you can do to help support this exciting and unique
radio station.

13630 Radio for Peace Int'l, English, Promo for RFPI T-Shirt @1133 on April 20.
[Bruce MacGibbon]

15030 Radio For Peace International, Costa Rica, English, @1117 W with ID. At
1118 'UNESCO' program. Heard on April 20.
[Bruce MacGibbon]

Last night April 24 UTC, I heard Radio for Peace announce they were using these
frequencies but not all at one time: 15030, 13630, 7375USB but AM Saturday and
Sunday 21460USB Mon-Friday. So at 2026, I tuned to 21460 and sure enough they are
putting in a good signal here in Gresham, Oregon in USB Mode. This is a new frequency
and replaces 21565. [Bruce MacGibbon]

Radio for Peace International has added 21460 USB between 2000 and 0030, when
they drop that and add 7375 USB. [Philip Yant]

****ECUADOR****

Here is a list of tropical band Ecuadorians heard in
Quito in March:

3220 HCJB (Indian langs)
3270 Ecos del Oriente
3280 Voz del Napo
3285 Voz del Rio Tarqui
3290 R. Centro
3331 R Cumanda
3395 R Zaracay
4271 R Gonzanama (irregular)
4680 R Nac Espejo
4795 Voz delos Caros
4800 R Popular Independiente
4820 R Paz y Bien
4840 R. Interocania
4851 R Luz y Vida
4870 R. Rio Amazonas
4890 R Saquisilí
4920 R Quito
4960 R Federacion
5011 R Escuelas Radiofonicas
5030 R Catolica Nacional
5040 La Voz del Upano
5050 Jesus del Gran Poder
5059 R Nacional Progreso
5865 La Voz del Upano
[Don Rhodes, Victoria/Australian Radio DX Club/Bruce MacGibbon]

Program Notes: HCJB Voice of the Andes' "DX Partyline" - Hosted by Rich McVicar
each Saturday with updates on the world of shortwave: May 4 - We begin celebrating
DXPL's 30th year on the air with the 1991 interval signal contest! Neil Carleton's "Radio
Stamps" also airs this weekend. May 11 - The Byelorussian Soviet Socialist Republic is the
destination of our travels this weekend. We'll show you how to hear Radio Minsk. May 18
- Portishead Radio, a famous coastal station in England, is one of the weekends topics.
Also, DX tips from New Zealand with Arthur Cushen's "DX World". May 25 - DXPL/HRT
call-in program at the usual DXPL times. During the other DXPL broadcasts, we'll have our
regular SPARC and EDXC reports. June 1 - Neil Carleton's "Radio Stamps" airs. We also
go to Singapore and learn about Shortwave Broadcasting from this very interesting place.
June 15 - We travel to Swaziland for a look at shortwave radio in this country in southern
Africa, and hear Arthur Cushen's "DX World."

****EQUATORIAL GUINEA****

One of the curiosities of the shortwave world is Radio Africa and its alter-ego, Radio
East Africa, which broadcast syndicated US evangelical programs via a 50 kW transmitter
located near Bata. Bob Padula of Melbourne reports that Radio Africa has shifted frequency
to 7202.5 kHz in lieu of nearby 7189 kHz. Reception has been in the period from
2100-2130 UTC, with English programming featured. The domestic service from Equatorial
Guinea is also noted, using 6004 kHz, peaking at 2030 UTC. Programs are in Spanish and
are occasionally heard on Radio Nacional's alternate shortwave frequency of 4926 kHz.
[Craig Seager/AMATEUR RADIO ACTION/Bruce MacGibbon]

****FRENCH GUIANA****

15325 Radio Japan via French Guiana @0308, Ian McFarland reading the news.
April 22. [Bruce MacGibbon]

****GABON****

15355 Radio Japan via Moyabi: 4/13 at 2000-2030 in German. Fair signals, and
French after 2030. [Andy Wallace]

****GERMANY****

Deutsche Welle's new "DX Club" program comes on during the English
transmissions to North America on the last UTC Sunday of the month (not the first as
reported on World of Radio this week). That was last weekend, when it was on
0113-0134 and presumably was rebroadcast at 03 and 05 UTC. [Philip Yant]

****GHANA****

3388 2107 Ghana GBC Accra at a poor level in English with news police forces,
nations economy and ID at 2110.29/3 [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****GREECE****

Athens found on 15650 parallel 11845 with Greek to Australia 2100-2150 sign off
on 12 April. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

****GUAM****

Arthur Cushen said he received a letter from KHBN on Guam saying that the 9820
kHz frequency listed in WRTH Downlink will "probably not be in service before the end of
1991" due to government red tape. He says the station claimed it may be forced to move
to private land. [Elton Byington]

****INDIA****

All India Radio, Gorakhpur is finally on air. It is located in northeastern Uttar Pradesh.
It began testing on 1st January 91 which went unnoticed. The transmitter began regular
operations 3rd March 91 as per following sked relaying the External Service in Nepali:
0130-0228, 1345-1445 on 3845 & at 0700-0900 on 7110. This transmission is also
partly relayed until 0730 by the 20 kW HF transmitter in Kuresong in northern West Bengal
on 7230. At other times, when the Gorakhpur transmitter is not relaying the Nepali
service, it carries the Home News Service from Delhi. [Manosij Guha, New Delhi/Universal
DX League "DX POST"/Bruce MacGibbon]

All India Radio, Shillong - There have been some schedule
adjustments for AIR's North East Integrated Service via the 50 kW HF transmitter in
Shillong: 4790 is used at 0120-0225, replacing 3255. In the local afternoons, 7190 has
been dropped due to co-channel interference with SLBC's home service. Instead 3255 is
used as the evening frequency continuously at 1100-1720. [Manosij Guha, New
Delhi/Universal DX League "DX POST"/Bruce MacGibbon]

All India Radio, Kohima has been upgraded to 50 kW replacing the older 2 kW
transmitter. The sked continues to be unchanged: 1315-1630 on 3268; 0025-0215,
0228-0400, 1000-1300 on 4850; 0630-0941 on 8065. The Superintending Engineer, Mr.
G.C. Tyagi, is promising a QSL. [Manosij Guha, New Delhi/ Universal DX League "DX
POST"/Bruce MacGibbon]

All India Radio has made several changes for their Foreign Service - some of them are new timings on new channels: Burmese: 0045-0115 on 9550, 9910, 11880 & 1215-1315 (ex 1115-1215) 11715, 15420. Chinese: 1145-1315 on 15120, 17705 (dropped 2145 transmission). Thai: 1115-1200 on 17830 & 21735. Nepali: 0130-0230 504E, 7210, 9550 & new Gorakhpur transmitter on 3945; 0700-0800 on 7110 (Gorakhpur), 9610, 11735, 15165; 1345-1445 on 3945(Gorakhpur), 6140, 7412, Tibetan: 0130-0200 (ex- 0215-0229) on 9630, 11910; 1215-1330 on 7412, 9575. General Overseas Service in English - to SE Asia: 2315-0115 on 11745 (Bangalore), 15110, 17830 & 1330-1500 on 11780 & 15120; NE Asia: 2315-0115 on 11715, 15135 & 1000-1100 on 15050, 17895, 21735; Australia/New Zealand: 2045-2230 on 9910, 11715, 15265 (Bangalore) & 1000-1100 on 15335, 17387; E.Africa: 1800-2000 on 11930, 15380; W & NW Africa: 1830-1930 on 9950, 11860, 11860; Europe: 1845-1945 & 2045-2230 on 7412, 9950(at 2045), 11620(Bangalore) [Alok Dasgupta, Calcutta/Australian Radio DX Club/Bruce MacGibbon]

Delhi on new 15135 and 17830 opening at 2315 with General Overseas Service, as on 13 April. Also on new 15815 with French to Europe, closing at 2030 - that service retired. 8 April. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

****INDONESIA****

2489.3 1658 Celebes RRI Ujung Pandang. Good in Indo on March 31 with group vocals, local ID, song of coconut isles, news. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

3205v RRI Bandung @1339 with Women talking. Real poor due to noise. April 24. [Bruce MacGibbon]

3215 RRI Manado, Indonesia. 2 Men talking @1048 on April 20. [Bruce MacGibbon]

3265 1853 Sumatra RRI Bengkulu. Good although varying down to 3264.7. Indo program with full ID and lagu pops. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

3274.8 1815 Java RRI Jakarta in Indo at a fair level with local music to 1817, female talks until 1823 on April 4. [Harry

Weatherley/DX AUSTRALIA/Bruce MacGibbon]

3324v RRI Palangkaraya @1341 on April 24 with Man talking. [Bruce MacGibbon]

3343.1 2020 Moluccas RRI Ternate in Indo on April 1 with Islamic type vocals, 2030 ID. [Dave Onley/DX AUSTRALIA/Bruce MacGibbon]

3935 RRI Semarang noted @1342 on April 24. [Bruce MacGibbon]

3976v RRI Surabaya, Woman talking @1343 on April 24. Poor due to Ham QRM. [Bruce MacGibbon]

4000 RRI Kendari, M & W talk in Indo @1226 on April 20. [Bruce MacGibbon]

4607 RRI Serui, Indo pop @1151 on April 20. [Bruce MacGibbon]

4753 RRI Ujung Padang, Indo, Man talk on @1050 April 20. [Bruce MacGibbon]

4856v RRI Palembang in Indonesian @1336 on April 24 with what sounded like a play. Excellent signal with clear ID at 1400. [Bruce MacGibbon]

4927 RRI Jambi, Indonesia, Women with talk @1136 on April 20. [Bruce MacGibbon]

5046 RRI Yogyakarta, @1256 W announcer, Indo pop song on April 20. [Bruce MacGibbon]

Here is an update of Indonesian news from Craig Tyson: V. of Indonesia: 11752 0030-0400, 0800-1300 (langs as per WRTH); 11752 & 9675 1730-2100 (langs as WRTH), 7125, 7225 & 11785 are not in use. RRI Jakarta: 15155 inactive for HS. 3277 & 4775 are still operating to WRTH Sked. 9680/11780 H is now 0500-1800 (ex 0600). RRI-Cirebon: 2390 now 09-18 (ex 17-2145). RRI-Ambon: 3241 now 1145-1400. RRI-Dili: 3308 now 1810/1845 s/off ex 1800. RRI-Kupang: 3385 no longer has English Saturday 1330-1400 & 2200-2230. RRI-Pontianak: 3447 now 1000-1630 (ex 1615). RRI-Banda Aceh: 3905 now 1100-1810 (ex 1715). RRI-Sorong: 4875 now 0800-1245 (ex 1310). RRI-Yogyakarta: 5047 now 0930-2100 ex 1200 s/on. RRI-Sibolga: 5256 1000-1530 (ex 1700). RRI-Pekanbaru: 5984 now 1000-1800 (ex 1400). RRI-Ujung Padang: 9552 still 0000-0700 despite WRTH Sked. [Craig Tyson/WRTH Newsletter/ Bruce MacGibbon]

****ISRAEL****

Kol Israel English Schedule effective 5 May - 31 August:

0400-0415	NA/W Eu	15640	11605	9435
	Aus/As	17675		
	WNA/E Eu	11675		
1000-1030	W Eu	21710	17575	17545
	Aus/As	15650		
	E Eu	17590		
1700-1715	W Eu	11588		
	E Eu	11675		
1900-1930	W Eu	17885	15640	11605
	Afr	17630		
2130-2200	NA/W Eu	17885	15640	11588
	WNA	15100		
	E Eu	11604		
	LA	17675		
2300-2330	NA	15640	11604	9435
0000-0030	NA	15640	11604	9435
0100-0130	NA	15640	11604	9435

****KAMPUCHEA****

V. of Democratic Kampuchea is currently heard: 0400-0500 on 15110 & 17880; 0900-1000 on 11780 & 11835; 1300-1400 on 8025 & 9440; 2330-0030 on 7360 & 9440. All programming in Khmer. [BBCM/Bruce MacGibbon] Note: My Cambodian Friends prefer you call the language Cambodian. (Bruce, OR)

V. of the National Army of Democratic Kampuchea uses 5408v from 0400-0500, 0900-1000, 1100-1530, 1530-1800 Vietnamese, 2315-0200. [BBCM/Bruce MacGibbon]

****LUXEMBOURG****

15350 0810 RTL International, Luxembourg, English with pop song. At 0612 Man w/ID and gave time: "8:12 now and 7:12 in UK. At 0816 Man w/"The Radio of the 21st Century is here today, RTL International". Heard with good signal on April 11. [Bruce MacGibbon]

****MADAGASCAR****

3232 1740 Madagascar RVT Malagasy at a fair level in French with announcements and local music on March 30. [Dave Onley/DX AUSTRALIA/Bruce MacGibbon]

****MAURITANIA****

4845 ORTM, M with recitations @0633 on April 22. [Bruce MacGibbon].

****MOZAMBIQUE****

3210.3 2031 Mozambique Emissao Nacional in Portuguese on March 29 at a good level with easy listening music, xylophones and ID at 2102. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****NEW ZEALAND****

Tony King announced a frequency change for RNZI, effective May 12th, on the Mailbag program today:

1800-2200	13785	replacing 15120
2200-0730	17770	no change
0730-1210	9700	no change

Tony said they'd had reports that 15120 was fading rapidly in Northern Europe and that they hoped the new frequency would be better. [Elton Byington]

3935 0904 New Zealand ZLXA with religious service at an excellent level when full MW/SW ID to 0906 sign off on March 31. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****PAPUA NEW GUINEA****

3905 Radio New Ireland, Kavieng, @1110 with local music vocal on April 20. [Bruce MacGibbon]

****PERU****

4820.8 0846 R. Atahualpa in Spanish at a fair level on March 30 with lively OA music. Buenos Dias announced & ID also at 0855 on March 13 at a fair level with Andean music at s/on with freq., news items, 0904 with "Atenciona" announcer then references to Cajamarca. [Harry Weatherley/DX AUSTRALIA/Bruce MacGibbon]

4915 Radio Cora del Peru. Just signing on @1051 with Peruvian Anthem to 1053 then rooster crowed followed by Man with prayer. Vocal from 1055-1058 then Man talk and Woman talk at 1059 followed by brief music then W with ID & freq info then ID "Radio Cora del Peru" then Man talk. Another ID at 1105. (Note: WRTH 91 shows them signing on at 0930). Heard on April 20. [Bruce MacGibbon]

6115 Radio Union @0914 in Spanish w/vocal music, program promo, eds, ID "...para todo de Peru..en Radio Union," more music. Atop poss Tansa? No QRM until LV Llano crash s/on at 0920. Fair. April 27 [Al Quaglieri]

****PHILIPPINES****

11685 FEBC, Philippines, English @1435. Women with News. Interference from Radio Pyongyang on 11680 on April 20. [Bruce MacGibbon]

****POLAND****

Radio Polonia noted on new 9875 at 2230 and 2305, parallel to 7270; the other winter frequencies are vacant. I checked other WRTH-listed frequencies to no avail, but probably another two or three are in use. [Tom Sundstrom]

****RWANDA****

3330.2 1840 Rwanda Kigali heard at a fair level in French with talks on March 31. Heard parallel 6055. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****SENEGAL****

4890 0803, Senegal, Man w/recitations on April 11. [Bruce MacGibbon]

****SINGAPORE****

11940 Radio Singapore, English @1141 w/Pop Song, Man announcer, parallel 6052 on April 20. [Bruce MacGibbon]

****SOLOMON ISLANDS****

9545 SIBS very tentative but probable; at 0744 bits M tik in English interspersed with music; ad @0759, M poss ID, then tik (hx?) until sign-off at 0814. Too weak, but may be possible on a better night. SIO 252/1. [Al Quaglieri]

****SPAIN****

Schedule for Radio Exterior de Espana effective till May 5:

To Europe	Times	Freq	Lang
	0500-0700	9875	Spanish
	0500-0700	12035	Spanish
	0600-2145	11920	Spanish
	0700-1800	11790	Spanish
	0700-1800	15395	Spanish
	0905-0920	11920	Catalan
	0905-0920	15395	Catalan
	0905-0920	11790	Catalan
	0920-0935	11920	Gallego
	0920-0935	11790	Gallego
	0920-0935	15395	Gallego
	0935-0950	15395	Basque
	0935-0950	11790	Basque
	0935-0950	11920	Basque
	1000-1800	12035	Spanish
	1000-1800	15240	Spanish
	1600-1800	9885	Spanish
	1700-1730M	9875	Russian
	1700-1730	11790	Russian
	1700-1730M	9765	Russian
	1730-1800M	9875	German
	1730-1800	11790	German
	1730-1800M	9765	German
	1800-1900	9875	French
	1800-1900	11790	French
	1800-2145	9820	Spanish
	1900-2000	11790	English
	1900-2000	9875	English
	1900-2145	7105	Spanish
	2000-2100	9875	French

	2000-2100	11790	French
	2100-2115	9620	Catalan
	2100-2116	11920	Catalan
	2100-2115	7105	Catalan
	2100-2200	9875	English
	2100-2200	11790	English
	2115-2130	11920	Gallego
	2115-2130	9620	Gallego
	2115-2130	7105	Gallego
	2130-2145	7105	Besque
	2130-2145	11920	Besque
	2130-2145	9620	Besque
To Middle East	0500-0700	21595	Spanish
	1000-1700	21595	Spanish
	1700-1900	15395	Arabic
	1700-1900	11890	Arabic
	1800-1830	17770	Sephardi
	1900-2000	15395	English
To No. Africa	2000-2200	9580	Arabic
	2000-2200	11790	Arabic
	2000-2200	15395	Arabic
	2104-2200	11890	Arabic
To Eq. Africa	1000-2000	17890	Spanish
To Eq. Guinea	1800-1800	17890	Spanish
To Africa	1900-2000	15375	English
	2000-2100	15375	French
To Australia	0500-0700	9650	Spanish
	0500-0700	11730	Spanish
To Japan	1000-1100	9620	Spanish
	1200-1300	9620	Spanish
To Philippines	1100-1200	11810	Spanish
	1200-1400	11910	Spanish
To South America	0017-0020Tu	11775	Quechua
	0017-0020	11815	Quechua
	0017-0020	17715	Quechua
	0020-0023	11815	Guarani
	0020-0023	11775	Guarani
	0020-0023	17715	Guarani
	0200-0215	11815	Sephardi
	0900-1900	21570	Spanish
	0900-1900	21555	Spanish
	0900-1900	17815	Spanish
	0905-0920	21555	Catalan
	0905-0920	21570	Catalan
	0905-0920	17815	Catalan
	0920-0935	21570	Gallego
	0920-0935	21555	Gallego
	0920-0935	17815	Gallego
	0935-0950	21570	Besque
	0935-0950	21555	Besque
	0935-0950	17815	Besque
	1050-1055	21570	Portuguese
	1050-1055	21555	Portuguese
	1050-1055	17815	Portuguese
	1150-1155	21570	Portuguese
	1150-1155	21555	Portuguese
	1150-1155	17815	Portuguese
	1250-1255	21570	Portuguese
	1250-1255	21555	Portuguese
	1250-1255	17815	Portuguese
	1350-1355	21570	Portuguese
	1350-1355	21555	Portuguese
	1350-1355	17815	Portuguese
	2200-0200	11815	Spanish
	2300-0200	17715	Spanish
	2300-0500	11775	Spanish
To Central America	0017-0020	11775	Quechua
	0017-0020	9380	Quechua
	0020-0023	11775	Guarani
	0020-0023	9380	Guarani
	0317-0320	11775	Quechua
	0317-0320	9380	Quechua
	0320-0323	9380	Guarani
	0320-0323	11775	Guarani
	0900-1900	21570	Spanish
	0900-1900	17815	Spanish
	0905-0920	21570	Catalan
	0905-0920	17815	Catalan
	0920-0935	21570	Gallego
	0920-0935	17815	Gallego
	0935-0950	21570	Besque
	0935-0950	17815	Besque
	1930-2245	17845	Spanish
	2300-0500	9380	Spanish
	2300-0500	11775	Spanish
To North America	0000-0200	11880	English
	0000-0200	9630	English
	0200-0500	9630	Spanish
	0200-0500	11880	Spanish
	0415-0430F	9690	Sephardi
	0455-0552	9630	English
	1930-2245	17870	Spanish
	1930-2330	15110	Spanish
	2245-2300	15110	Catalan
	2300-2315	15110	Gallego
	2300-2400	9630	French

2315-2330 15110 Besque
[Richard Urene]

****SWAZILAND****
3200 1940 Swaziland TWR Mpangela Range. Good in English on March 30 with preaching. [Craig Edwards/DX AUSTRALIA/Bruce MacGibbon]

****SWITZERLAND****
Swiss Radio International, Broadcasts in English, 31 March 1991 - 28 September 1991:
UTC Language Frequencies Target
0200-0230 English 6125 6135 9650 9885 12035 17730 Americas
0400-0430 English 6135 9650 9885 12035 Amer., ME
0630-0700 English 15430 17670 21770 Africa
0830-0700 English 3985 6165 9535 Europe
0830-0900 English 9560 13685 17670 21695 SEA, Aus.
1000-1030 English 9560 13685 17670 21695 SEA, Aus.
1100-1130 English 13635 15570 17830 21770 * * + In
1200-1230 English 6165 9535 12030 Europe
1330-1400 English 7480 11895 13635 15570 17830 21695 Asia
1515-1600 English 11995 EEur
1530-1600 English 13685 15430 17830 21630 Afr, ME
1830-1900 English 9885 11955 Afr, ME
1900-1930 English 3985 6165 9535 Europe
2100-2130 English 9885 12035 13635 15525 Afr, ME
2130-2200 English 9680 6035 6190 Europe
The radio hobby program "Swiss Shortwave MerryGoRound" is broadcast in the second quarter hour of their Saturday (local time) broadcasts. [Philip Yant]

****SWEDEN****
11705 Radio Sweden, 4/13 at 0200 in English. Good reception... Had a story about a Swedish radio (!) show called Late Sex. Woman hostess of that show gave brief excerpts and told us that one show spotlighted a man who enjoyed urinating on people and having the same done to him...[Andy Wallace]

****THAILAND****
9655 Radio Thailand, @1412 Thai vocal. At 1420 Man with English ID saying "that ends our Japanese Broadcast," followed by music which ended at 1424 followed by interval signal then Man with ID giving SW frequencies of 11905, 9655. At 1425 Burmese language broadcast. April 20. [Bruce MacGibbon]

****TOGO****
3221.2 2040 Togo Kara (tentative). Heard with local language on March 31 at a poor level. [Dave Onley/DX AUSTRALIA/Bruce MacGibbon]

****TUNISIA****
7478v Tunisia in Arabic with Man announcer @0445. Listed frequency is 7475. Parallel 12005 on April 23. [Bruce MacGibbon]

****UNITED ARAB EMIRATES****
Effective from 1st Ramadan 1411, a special schedule was put into place for the UAE Radio from Abu Dhabi, for the month of Ramadan. It is:
9695 04-0630 India
16-20 India
9780 16-01 Europe
11965 21-01 N.America
13-16 N.America
11980 15-01 Europe
13605 21-01 N.America
16315 16-21 N.America
06-1030 Middle East
17645 06-1030 Middle East
17820 09-13 North Africa
17855 16-21 North Africa
04-06 Australia
06-09 Europe
21515 04-06 Far East (Japan)
1030-16 Europe
21735 06-15 Europe
04-06 Europe
All programmes are in Arabic. The Ramadan schedule makes no reference to English programmes, which appear to have been discontinued for this period. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

****UNITED KINGDOM****
BBC-Skelton on new 15135 with Serbo Croatian, 2015 sign on to 2100 sign off, 10 April. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

****USA****
Note from John Vodenik, engineer at VOA Bethany site, about imminent testing of new xmtrs: "I am planning to be running a QSL service of the testing and commissioning of the rigs. A list of test freq. is coming along soon. Most of the early testing will be into a dummy load, but the lines between the transmitters and the load are about 2 wavelengths at 6 MHz., so I expect some radiation. Probably will be high angle. QSLs have been ordered. ID will be by either CW or voice synth. as BY1,2 etc. 73 for now. John WB9ASUJ/WPE9IQF"
On April 29, CSM World Service changed 15610 to new 21780 @1800. It was said that this change pertains to North America and Europe. [Edward Piecawicz]
WRNO back on 13720, big signal in period 2200-2300, inviting listeners to write in to the Louisiana Tourist Board for special QSLs, for 2 IRCs. Background QRM from co-channel BRT, 13 April. [Bob Padula/Australian Radio DX Club/Bruce MacGibbon]

****USSR****
Radio Tashkent at 0100-0130 is announcing 11975, I think 7265, 7190, and 5955 kHz. These are different than those announced by Rich McVicar on HCJ8's DXPL last

weekend. I hear 11975 most of the time under the stop from R Moscow in Spanish to LA, matched audio bits and pieces on 7190 and less on 5955, but 7265 (if that is the frequency) is covered by someone else. The frequencies are announced at the opening of the transmission but I haven't caught a good night where I can hear all four frequencies with certainty. [Tom Sundstrom]

4610 1450 USSR Fergana with music theme, Russian dialect heard on March 30. [Dave Onley/DX AUSTRALIA/Bruce MacGibbon]
11770 Radio Station Peace and Progress, English parallel 17720, 15180, 11860. @0152 on April 22. [Bruce MacGibbon]

****VANUATU****

7280 Radio Vanuatu @0659, Pidgin, Man with closing announcements and off at 0700 on April 26. WRTH 91 shows them to 1115. Too early for their other frequency 3945. Does anyone know if they are still using that frequency? [Bruce MacGibbon]

****VIETNAM****

8000 Hoang Lien Son, Vietnam @1250 with music parallel 5585 on April 20. [Bruce MacGibbon]

****CLANDESTINE****

A Voz da Resistencia do Gelo Negro is the UNITA station via facilities in South Africa. Heard in Portuguese and vernaculars on 9700 at 0500-0900; 11830 at 1100-1500; 7100 and 7145 at 1800-2215v. Reports to Jaime de Azevedo Villa Santa, Information Director of Free Angola, Information Service, Washington DC USA. [Craig Edwards/Bruce MacGibbon]

Iran's Flag of Freedom - ID: "Injo Radio Darferah Kaviani". Language: Farsi. Current monitored sked is: 0330-0530 on 9045, 15685; 1630-1830 on 15100, 15565. At the beginning of transmission, ID in English and French are also given. Transmitter is shared with "VO Unity" in Egypt. Address for verification: c/o Sazman Darferah Kaviani, Post Box 103, DK-2670 Greve Strand, Denmark. [Universal DX League "DX POST"/Bruce MacGibbon]

La Voz de Sahara uses R. Algeria against Morocco control in western Sahara at 2200-2300 on 9480 & 15215. [Craig Edwards/Bruce MacGibbon]

National Unity Radio programs are prepared by the Moral Guidance branch of the General Command of the Sudanese Peoples Armed Forces - English at 1430-1500 on 9535. [Craig Edwards/Bruce MacGibbon]

Radio Freedom broadcasts the voice of the ANC via Lusaka at 1700-1800 in English on 9505. [Craig Edwards/Bruce MacGibbon]

Radio Iran Toilers - ID: "Radio-ye Zahmatkeshane Iran". Language: Farsi. Current monitored sked is: 0230-0330, 1530-1730 on 6230, 10870, 4776. Only 8230 is audible clearly. Address is: P.O. Box 49034, S-10028 Stockholm, Sweden. [Universal DX League "DX POST"/Bruce MacGibbon]

Radio SPLA originally called for Independence for the southern Sudanese People, but it now seems more concerned with changing things within Sudan. The broadcasts emanate from Ethiopia and it is believed the Ethiopians have much influence on its transmissions. They have English at 1300-1330 on 11710. [Craig Edwards/Bruce MacGibbon]

Sadal Hurriet-E Kashmir - Language: Urdu/Kashmiri. Current monitored sked is: 0230-0300, 07-0730, 11-1130, 1430-15 & 1630-17 on 5000. QRM by Time Signal Station ATA Delhi and Radio Nepal on 5005. Contents of the programming are highly anti-India. Location of the transmitter is believed to be in Azad Kashmir. Address announced for correspondence is: PO Box 102, Muzaffarabad, Azad Kashmir, Pakistan. [Universal DX League "DX POST"/Bruce MacGibbon]

Voice of the Broad Masses of Eritrea are operated by the Eritrean Liberation Front. They support independence for that Ethiopian state. It is believed to be operated from Orotta in Northern Eritrea on 7492. [Craig Edwards/Bruce MacGibbon]

Full sked for Voice of Ethiopia on the Path to Democracy: ("Ye Ethiopia Finote Democracy Dimtel") is 0400-0445 & 1530-1615 on 7010. It broadcasts in Amharic. The station is run by the Ethiopian People's Democratic Party (EPRP). EPRP gives the following address for listeners' letters: ESPIC, PO Box 710358, Dallas, Texas 75371 USA; ESPIC, 48 Rue de Vaugirard, Paris 75006, France; R IHAPA, Box 73387, Washington DC 20058-3357 USA. [BBCM/Bruce MacGibbon]

Voice of the Ethiopian People for Peace, Democracy & Freedom operate at 0430-0530 and 1700-1800 on 7886 & 9316. Language is Amharic. These two frequencies also carry programs of V of the Broad Oromo Masses at 0400-0430 & 1500-1530 and V of the Tigre Revolution at 0530-0815 and 1530-1615. [Craig Edwards/Bruce MacGibbon]

Voice of the Guerrillas ("Seda-ye Cherikha") broadcasts in Persian on 4357v at 0300-0400 & 1730-1830.

Voice of the Oromo Masses is an anti-Sudanese station on 9540, 1500-1545, 1900-1945. [Craig Edwards/Bruce MacGibbon]

A new station is Voice of Rebellious Iraq (Sawt al-'Iraq al-Tha'ir) on 7097 at 0430-0730, 1230-1550 & 1730-2030 in Arabic. The station supports the uprising in Iraq & is believed to be representative of the rebels in southern Iraq. [BBCM/Bruce MacGibbon]

Another anti-Iranian communist station is V. of Sarbedaran on 4207 at 1730-1830. [BBCM/Bruce MacGibbon]

Voice of Unity - ID: "De Wahdat Ghazh". Language: Pushto/Dari. Current monitored sked: 0115-0225 on 17540, 12230, 15685; 12-1255 on 12230, 15685 & 1515-1630v on 17540, 15685, 12230. Transmitter location is in Egypt. Verifies by QSL card from: Postfach 2805, D-2000 Hamburg 60, Germany. [Universal DX League "DX POST"/Bruce MacGibbon]

****PIRATES****

Here is the latest pirate news from usenet:
.....
***** 7415 ***** 7415 ***** 7415 *****
.....

28 April 91 Circulation 233

A short issue to let you know that the list is still alive. To steal a line from KNBS "... is there anybody OUT there..."

Station activity seems to be at a steady pace. I have logged KNBS, Hope, WYMN, He-Man, WHO and several others in the past month or so, with Hope R. International topping the list with numerous 15.050 loggings. 15.05 is becoming a frequency to keep an ear on, as activity from a variety of stations has been appearing there.

According to some posts in the A.C.E. section of the ANARC BBS, KUSA was visited by the Federal Communication Cops, so that loud USB signal on 41m is not likely to appear again, but who knows?

And along THOSE lines... there has been some FCC > < Hope Radio dialog recently as well, although the station is still intact as of a phone conversation last night. There are some interesting developments taking place and no NAL has been issued (as apparently DF-ing of the signal was not the primary reason for the initial visit to an individuals' residence). Keep posted to this and other sources for updates. The new transmitter is operating at 1 kW carrier but is currently silent, although last weekend's operations were anything but. I logged at least 5 separate programs on 19 and 41m. HRI can be contacted via POB 109, Blue Ridge Summit PA 17214, and I am certain that MJ would appreciate your comments on his operations.

What are you all hearing? I get lots of requests for the list but little loggings or news recently. If stations are copyable in NM they are hearable almost ANYWHERE east of here! ... which is an interesting point... Why is it that Pirate R. activity seems to be an east-coast/midwest phenomenon only? Certainly the weight of loggings and operations indicates that the Left Coast has little or no station activity. Anyone care to venture a guess why???

All for now.... warm up those transistors this weekend and let us all know what you hear. 73 and DX.... /john
The Internet Pirate SWL Digest
Posting or Subscription info to: brewer@anarkynet.dec.com
[Dave Marthouse]

****UTILITY****

From listening to Marian Leiba (of VNG Users Consortium) talk to Jonathon Marks on Media Network on April 12, the 18 MHz frequency has replaced the 15 MHz frequency.

12123USB @0658 Nancy on Sailboat Goodwin in conversation with Rodger on Cook Islands and Marty in Honolulu, Hawaii. They signed off at 0804 on April 26 and said they would be on tomorrow. I didn't get in on the first part of the conversation, but apparently all these people are going to ultimately meet on the Cook Islands. [Bruce MacGibbon] Several noted very weak in New York @0545 4/29 leditor]

18710USB Wellington Radio @1916 in conversation with Pitcairn Island on April 28. Only heard about a minute of the conversation. Just caught the tail end. If you are interested in hearing them start checking 18710USB around 1830. These people do alot of chatting, so it's kind of interesting. [Bruce MacGibbon]

****OTHER STUFF****

1991/92 Dates for Daylight Savings Time:

FROM	TO	COUNTRY
19 January 91	01 July 91	Costa Rica goes to UTC -5
17 March 91	13 October 91	Cuba to UTC -4
24 March 91	24 August 91	Israel is UTC +3
30 March 91	28 Sept 91	Greenland except Thule and Scoresbysund changes to UTC -2. Thule remains on UTC -4. Scoresbysund is on UTC from 31 March to 29 September.
31 March	29 Sep 91	Albania, Andorra, Austria, Azores, Belgium, Canary Islands, Cyprus (Erca), Czechoslovakia, Denmark, Faroe Islands, Finland, France, Germany, Greece, Hungary, Italy, Liechtenstein, Luxembourg, Madeira, Malta, Melilla, Monaco, Netherlands, Norway, Poland, Portugal, Roumania, San Marino, Spain, Sweden, Switzerland, Turkey, Yugoslavia.
31 March 91	27 October 91	Great Britain & Ireland UTC +1
1 April 91	1 October 91	Iraq is UTC +4, Syria is UTC +3.
7 April 91	27 October 91	Bahamas, Bermuda, Haiti to UTC -4, Canada, all areas except Eastern Quebec, Western Ontario, Saskatchewan, and some towns in Northeast British Columbia and Alberta go to DST. Mexico (Baja California only) goes to UTC -7. St Pierre et Miquelon goes to UTC -2. USA, including Alaska - all change except East Indiana, Arizona and Hawaii.
14 April 91	15 Sep 91	China changes to UTC +9.
19 April 91	15 Sep 91	Jordan to UTC +3
1 May 91	30 Sep 91	Egypt changes to UTC +3
1 May 91	15 October 91	Lebanon to UTC +3
8 Sep 91	18 April 92	Falkland Islands UTC -3
15 Sep 91	7 March 92	Chile UTC -3, Easter Island UTC -5
22 Sep 91	21 March 92	Vanuatu to UTC +12
8 October 91	15 March 92	NZ to UTC +13, Chatham Islands to UTC +1345
20 October 91	February 92	Brazil - SE Coast area including Bahia, Goias & Brasilia changes to UTC -2. Mato Grosso & Mato Grosso do Sul changes to UTC -3. No change to daylight saving for the remainder of Brazil.
20 October 91	February 92	Argentina (Eastern) including La Pampa, Chubut, Santa Cruz changes to UTC -2. Balance of country permanently on UTC -3. Uruguay to UTC -2.
27 October 91	1 March 92	Australia goes to DST in Lord Howe Island, NSW, Queensland, South Australia, Tasmania*, Victoria and Australian Capital Territory only. * Note: Tasmania stays on DST until 29 March 92.
1 January 92	11 April 92	Peru changes to UTC -4.

[Craig Edwards/Southern Cross DX Club/Bruce MacGibbon]

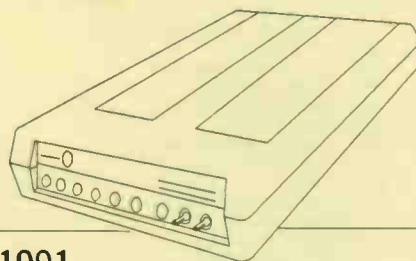
There is still no sign of the International Listening Guide, now 6 months overdue and it would seem that the Publisher is in serious trouble or possibly no longer in business. We strongly recommend that DXAers send the ILG no further money in subscriptions. [Australian Radio DX Club] (Note: I will second that also, even though I received a form letter from Bernd, telling me how many copies he owed me. Too bad, it was an excellent publication and will let you know if it is revived. [Bruce MacGibbon])

Much of the information provided in this edition come from three excellent bulletins: "DX Australia", P.O. Box 285, Mt. Waverley, Victoria 3149, Australia; "Australian Radio DX Club", 258 Dandelion Drive, Rowville, Victoria 3178, Australia; and "Universal DX League," c/o Kanwarjit Sandhu, 408 Krishna Nagar, Ludhiana - 141 001, Punjab, India. Write them for further information, and tell them you heard about their excellent publications via Bruce MacGibbon and the Shortwave Echo.

Shortwave Online Digest

Volume 1, Number 3

July 29, 1991



Compiled by Al Quaglieri, NN2U
P.O. Box 888, Albany, NY 12201-0888

AUSTRALIA

Radio Australia English Language Schedule, June 2, 1991 - September 15, 1991

kHz	UTC
25750	0900-1100
21775	0100-0900
21740	2130-0730
21720	1100-1330
21525	0100-0800
17795	2000-0700
17750	0000-0330 0600-0700 0800-0900
17715	2200-0530
17630	0000-0330 (0330-0430 Sa/Su) 0430-0900 1330-1800
16530	(0330-0430 Sa/Su) 0430-0600
15365	0600-0700 0800-1200
15320	2100-0730
15240	2200-0930
15170	1000-1100
15160	2130-0700 0800-1100
13745	1430-2100
13705	2100-2300
13605	1000-1100 1600-2130 2200-0100
12000	1430-2100
11930	1100-1300 2000-0800
11910	1600-2030
11880	2100-0800
11800	1000-1230
11720	1300-1530
9860	1800-2100
9770	1230-1330 1430-1530
9710	0800-0930 1100-1530
9580	0830-1930
7240	1100-2100
7140	1000-1100
6080	1100-2100
6060	1600-2130
5995	1130-2100

Note that Radio Australia does NOT specifically target the US & Canada, although many of these freq's can be picked up here. The best freq's and times for the US and Canada are:
21740 (2200-0400 UTC) 17795 (0200-0400 UTC) 15160 (0400-0600 UTC)
13605 (1600-1800 UTC) 9580 (0830-1600 UTC)

For a copy of the R. Australia guide, write to: Radio Australia, PO Box 755, Glen Waverly VIC. 3160, Australia. Telephone 81-3-881-2222, Fax 61-3-881-2346 (Bill Oxner/SW ECHO)

Radio Australia English Language Programs: NEWS: Australia, Asia, the Pacific and the world at large. INTERNATIONAL REPORT: Analysis, background and interpretations. AGRINEWS: News about agriculture in the Asian/Pacific region. AT YOUR REQUEST: Write or call in for record requests. AUSTRALIAN COUNTRY STYLE: Australian country music. BACK PAGE: Sports issues in the Asian/Pacific region. BUSINESS HORIZONS: Business/trade review. COMMUNICATOR: The latest news in media and communications. CONNEXIONS: Education issues in the region. FINE MUSIC AUSTRALIA: Australian classical music performances. INNOVATIONS: Inventions and innovative practices. INTERACTION: The experiences of multicultural Australia. JUST OUT: Recent Australian music releases. LANE'S COMPANY: Interviews with local Australians. MATTERS OF FAITH: Doctrines & beliefs in Asian/Pacific regions. MONITOR: Impact of science & technology on society. ONE WORLD: Environmental issues. PACIFIC SUNRISE: Business & export developments. PACIFIC WOMEN: Conversations with Pacific women. POINTS OF LAW: Law & society in the region. SCIENCE FILE: Science, medicine and technology reports. SOUNDABOUT: Contemporary music from Australia & the world. SPORTS RESULTS: From Asian/Pacific region and international events. THIS AUSTRALIA: Documentaries about life Down Under. WOMEN IN POLITICS: Interviews with women in politics. WORLD OF COUNTRY MUSIC: Hits & albums from around the world. (Bill Oxner/SW Echo)

Radio Australia Daily Programming Schedule June 2, 1991 - September 15, 1991 SUNDAYS

0000	International Report	1227	Tattslotto Results
0030	Book Reading	1230	Soundabout
0100	World & Australian News	1300	World & Australian News
0130	At Your Request	1313	Sports Report
0200	International Report	1330	Fine Music Australia
0230	Fine Music Australia	1400	International Report
0300	World & Australian News	1430	COMMUNICATOR
0313	Back Page	1500	World & Australian News
0330	Music/Information	1513	Music of Radio Australia
0400	International Report	1530	Connexions
0430	This Australia	1600	International Report
0500	World & Australian News	1630	Music of Radio Australia
0513	Back Page	1645	Sports Report
0530	Interaction	1700	World & Australian News
0600	World & Australian News	1713	Music/Information
0630	Fine Music Australia	1745	Book Reading
0700	World & Australian News	1800	World & Australian News
0713	Music of Radio Australia	1830	Music/Information
0730	World of Country Music	1900	World & Australian News
0800	International Report	1913	Sports Report
0830	Sports Report	1930	Music/Information
0850	Tattslotto Results	2000	International Report
0900	World & Australian News	2030	Just Out
0913	Music of Radio Australia	2100	World & Australian News
0930	Matters of Faith	2113	Music/Information
1000	International Report	2130	Business Report
1030	Arts Roundabout	2145	Music/Information
1100	World & Australian News	2200	International Report
1113	Music of Radio Australia	2230	Music/Information
1130	One World	2300	World & Australian News
1200	International Report	2313	Sports Report
		2330	Business Report

MONDAYS

0000	International Report	1300	World & Australian News
0030	Just Out	1313	Sports Report
0100	World & Australian News	1330	Music of Radio Australia
0130	Music/Information	1400	International Report
0200	International Report	1425	Stock Exchange Report
0230	Music/Information	1430	Music of Radio Australia
0300	World & Australian News	1445	Word of Mouth
0313	Sports Report	1500	World & Australian News
0330	Music/Information	1513	Pacific Service
0400	International Report	1530	Points of Law
0430	Matters of Faith	1600	International Report
0500	World & Australian News	1630	Music of Radio Australia
0513	Music of Radio Australia	1645	Sports Report
0530	Music/Information	1700	World & Australian News
0600	International Report	1713	Pacific Service
0630	This Australia	1730	Music/Information
0700	World & Australian News	1745	Pacific Women
0713	Pacific Service	1800	International Report
0730	COMMUNICATOR	1830	Music/Information
0800	International Report	1900	World & Australian News
0825	Stock Exchange Report	1913	Sports Report
0830	Sports Report	1930	Music/Information
0850	Music of Radio Australia	2000	International Report
0900	World & Australia	2025	Stock Exchange Report
0913	Back Page	2030	Music/Information
0930	Connexions	2100	World & Australian News
1000	International Report	2113	Pacific Service
1025	Stock Exchange Report	2130	Business Report
1030	Interaction	2145	Music/Information
1100	World & Australian News	2200	International Report
1113	Music of Radio Australia	2230	Music/Information
1200	International Report	2300	World & Australian News
1230	Soundabout	2313	Sports Report
		2330	Business Report

****AUSTRALIA (continued)****

TUESDAYS

0000	International Report	1200	International Report
0030	Music/Information	1230	Soundabout
0100	World & Australian News	1300	World & Australian News
0130	Music/Information	1313	Sports Report
0200	International Report	1330	Music of Radio Australia
0230	Music/Information	1400	International Report
0300	World & Australian News	1425	Stock Exchange Report
0313	Sports Report	1430	Lane's Company
0330	Music/Information	1500	World & Australian News
0400	International Report	1513	Music of Radio Australia
0430	World of Country Music	1530	AgriNews
0500	World & Australian News	1600	International Report
0513	Music of Radio Australia	1630	Music of Radio Australia
0530	Points of Law	1645	Sports Report
0600	International Report	1700	World & Australian News
0630	Music of Radio Australia	1713	Music/Information
0700	World & Australian News	1800	International Report
0713	Music of Radio Australia	1830	Music/Information
0730	Monitor	1900	World & Australian News
0800	International Report	1913	Sports Report
0825	Stock Exchange Report	1930	Music/Information
0830	Sports Report	2000	International Report
0850	Music of Radio Australia	2025	Stock Exchange Report
0900	World & Australian News	2030	Music/Information
0913	Music of Radio Australia	2100	World & Australian News
0930	AgriNews	2113	Interaction
1000	International Report	2130	Business Report
1025	Stock Exchange Report	2145	Interaction
1030	Innovations	2200	International Report
1100	World & Australian News	2230	Interaction
1113	Music of Radio Australia	2300	World & Australian News
1130	Business Horizons	2313	Sports Report
		2330	Business Report

WEDNESDAYS

0000	International Report	1230	Soundabout
0030	Music/Information	1300	World & Australian News
0100	World & Australian News	1313	Sports Report
0130	Music/Information	1330	Just Out
0200	International Report	1400	International Report
0230	Book Reading	1425	Stock Exchange Report
0300	World & Australian News	1430	Innovations
0313	Sports Report	1500	World & Australian News
0330	Music/Information	1513	Music of Radio Australia
0400	International Report	1530	Matters of Faith
0430	Music of Radio Australia	1600	International Report
0500	World & Australian News	1630	Music of Radio Australia
0513	Music of Radio Australia	1645	Sports Report
0530	Connexions	1700	World & Australian News
0600	International Report	1713	Tattalotto Results
0630	Pacific Women	1730	Music/Information
0700	World & Australian News	1800	International Report
0713	Music of Radio Australia	1830	Word of Mouth
0800	International Report	1900	World & Australian News
0825	Stock Exchange Report	1913	Sports Report
0830	Sports Report	1930	Interaction
0850	Music of Radio Australia	2000	International Report
0900	World & Australian News	2025	Stock Exchange Report
0913	Music of Radio Australia	2030	Music/Information
0930	Interaction	2100	World & Australian News
1000	International Report	2113	Sports Report
1025	Stock Exchange Report	2130	Business Report
1030	Points of Law	2145	Pacific Women
1100	World & Australian News	2200	International Report
1113	Music of Radio Australia	2230	Music/Information
1130	Science File	2300	World & Australian News
1200	International Report	2313	Sports Report
1227	Tattalotto Results	2330	Business Report

THURSDAYS

0000	International Report	1200	International Report
0030	Music of Radio Australia	1230	Soundabout
0100	World & Australian News	1300	World & Australian News
0130	Music/Information	1313	Sports Report
0200	International Report	1330	Music of Radio Australia
0230	Music/Information	1400	International Report
0300	World & Australian News	1425	Stock Exchange Report
0313	Sports Report	1430	Monitor
0330	Music/Information	1500	World & Australian News
0400	International Report	1513	Music of Radio Australia
0430	Music of Radio Australia	1530	Business Horizons
0500	World & Australian News	1600	International Report
0513	Music of Radio Australia	1630	Music of Radio Australia
0530	AgriNews	1645	Sports Report
0600	International Report	1700	World & Australian News
0630	At Your Request	1713	Music/Information
0700	World & Australian News	1800	International Report
0713	Music of Radio Australia	1830	Music/Information
0730	Science File	1900	World & Australian News
0800	International Report	1913	Sports Report
0825	Stock Exchange Report	1930	Music/Information
0830	Sports Report	2000	International Report
0850	Tattalotto Results	2025	Stock Exchange Report
0900	World & Australian News	2030	Music/Information

THURSDAYS (continued)

0913	Music of Radio Australia	2100	World & Australian News
0930	Arts Roundabout	2113	Music/Information
1000	International Report	2130	Business Report
1025	Stock Exchange Report	2145	Music/Information
1030	Lane's Company	2200	International Report
1100	World & Australian News	2230	Music/Information
1113	Music of Radio Australia	2300	World & Australian News
1130	AgriNews	2313	Sports Report
		2330	Business Report

FRIDAYS

0000	International Report	1200	International Report
0030	Music/Information	1230	This Australia
0100	World & Australian News	1300	World & Australian News
0130	Music/Information	1313	Sports Report
0200	International Report	1330	Music of Radio Australia
0230	Music/Information	1400	International Report
0300	World & Australian News	1425	Stock Exchange Report
0313	Sports Report	1430	Science File
0330	Music/Information	1500	World & Australian News
0400	International Report	1513	Music of Radio Australia
0430	COMMUNICATOR	1600	International Report
0500	World & Australian News	1630	Music of Radio Australia
0513	Music of Radio Australia	1645	Sports Report
0530	Lane's Company	1700	World & Australian News
0600	International Report	1713	Music/Information
0630	Music of Radio Australia	1800	International Report
0700	World & Australian News	1830	Music/Information
0713	Music of Radio Australia	1900	World & Australian News
0730	Innovations	1913	Sports Report
0800	International Report	1930	Music/Information
0825	Stock Exchange Report	2000	International Report
0830	Sports Report	2025	Stock Exchange Report
0850	Music of Radio Australia	2030	Music/Information
0900	World & Australian News	2100	World & Australian News
0913	Australian Country Style	2113	Music/Information
0930	Women in Politics	2200	International Report
1000	International Report	2230	Music/Information
1025	Stock Exchange Report	2300	World & Australian News
1030	COMMUNICATOR	2313	Music/Information
1100	World & Australian News		
1113	Music of Radio Australia		

SATURDAYS

0000	International Report	1230	Women in Politics
0030	Word of Mouth	1300	World & Australian News
0100	World & Australian News	1313	Sports Report
0130	Music/Information	1330	Music of Radio Australia
0200	International Report	1400	International Report
0230	This Australia	1430	Interaction
0300	World & Australian News	1500	World & Australian News
0313	Music/Information	1513	Music of Radio Australia
0330	Women in Politics	1530	One World
0400	International Report	1600	International Report
0430	Business Horizons	1630	Music of Radio Australia
0500	World & Australian News	1645	Sports Report
0513	Music of Radio Australia	1700	World & Australian News
0530	Arts Roundabout	1713	Tattalotto Results
0600	World & Australian News	1730	Music/Information
0630	Just Out	1800	World & Australian News
0700	World & Australian News	1830	Music/Information
0713	Music of Radio Australia	1900	World & Australian News
0730	One World	1913	Sports Report
0800	International Report	1930	At Your Request
0830	Sports Report	2000	International Report
0850	Music of Radio Australia	2030	Word of Mouth
0900	World & Australian News	2100	World & Australian News
0913	Music of Radio Australia	2113	Music/Information
0930	Points of Law	2130	Book Reading
1000	International Report	2145	Music/Information
1030	Monitor	2200	International Report
1100	World & Australian News	2230	Interaction
1113	Music of Radio Australia	2300	World & Australian News
1130	Matters of Faith	2313	Back Page
1200	International Report	2330	At Your Request
1227	Tattalotto Results		

****BAHRAIN****

Here's a new SW radio country for you - and it's in ENGLISH! WRTH co-editor Henrik Klemetz broke this story and deserves the credit: Radio Bahrain has started broadcasting on 8010kHz. Henrik found them shortly after 2000 UTC on July 15th. The station had a news summary at 2100 and closed at 2103. Reference to the IFRB frequency registrations shows a 80kW transmitter listed at 0300-2100 for omnidirectional service. Henrik called the telephone number announced on the air, and the person he spoke to knew nothing about the SW service! (Henrik Klemetz/Andy Sennitt/SW ECHO)

****BANGLADESH****

Radio Bangladesh is now back on the air after those terrible storms earlier this month [May]. At 1230, the frequency is 15208 (much closer to the announced 15200 and ex-15607, ex-15847). Reception is relatively decent here. 17750 is covered by, among others, WYFR but I can hear the IS under the other audio. (Tom Sundstrom/PINELANDS RBBS)

****BELGIUM****

Belgian Radio and Television (BRT) Schedule (All Languages), 31 March - 28

Start	End	Lang	Frequency	Target	Comment
0400	0500	Dutch	9865 11895	Africa	Daily
0400	0600	Dutch		Europe	Daily
0600	0600	Dutch	16515 17550	Africa	Daily
0600	0630	Dutch	11895	Australia	Daily
0600	0630	Dutch	6035 11695 13675	Europe	Daily
0630	0700	English	11695	Australia	Daily
0630	0700	English	6035 13675	Europe	Daily
0700	0730	French	6035 11695 13675	Europe	Daily
0730	0830	Dutch	6035 11695 13675	Europe	M-Sa
0730	0800	German	6035 11695 13675	Europe	Sunday
0800	1130	Dutch	21815	Africa	Sunday
0800	1130	Dutch	6035 9925 13675	Europe	Sunday
0830	0900	German	6035 11695 13675	Europe	M-Sa
0900	0930	English	21815	Africa	M-Sa
0900	0930	English	9925 13675	Europe	M-Sa
0930	1000	French	21815	Africa	M-Sa
0930	1000	French	9925 13675	Europe	M-Sa
1000	1130	Dutch	21815	Africa	M-Sa
1000	1130	Dutch	6035 9925 13675	Europe	M-Sa
1130	1200	Spanish	21815	Africa	M-Sa
1130	1200	Spanish	9925 13675	Europe	M-Sa
1130	1200	English	9925	Europe	Sunday
1130	1200	English	21810	N. America	Sunday
1130	1200	English	21910	S.E. Asia	Sunday
1200	1300	Dutch		Europe	M-Sa
1200	1300	Dutch	21810	N. America	M-Sa
1200	1230	Dutch	21810	N. America	Sunday
1200	1230	Dutch	6035 9925	Europe	Sunday
1200	1300	Dutch	21810	S.E. Asia	M-Sa
1200	1230	Dutch	21810	S.E. Asia	Sunday
1230	1600	Dutch	21815	Africa	Sunday
1230	1600	Dutch	6035 9925 13675	Europe	Sunday
1300	1330	English		Europe	M-Sa
1300	1330	English	21810	N. America	M-Sa
1300	1330	English	21810	S.E. Asia	M-Sa
1330	1400	French		Europe	M-Sa
1330	1400	French	21810	N. America	M-Sa
1330	1400	French	21810	S.E. Asia	M-Sa
1400	1600	Dutch	21815	Africa	M-Sa
1400	1600	Dutch	13675	Europe	M-Sa
1600	1630	Dutch	21815	Africa	Daily
1600	1630	Dutch	5910 9925 13675	Europe	Daily
1630	1700	French	21815	Africa	Daily
1630	1700	French	9925 13675	Europe	Daily
1700	1730	Dutch	21815	Africa	Daily
1700	1730	Dutch	5910 9925 13675	Europe	Daily
1730	1800	English	21815	Africa	Daily
1730	1800	English	9925 13675	Europe	Daily
1800	1830	German	17550	Africa	M-F
1800	2000	Dutch	17550 9925	Africa	Sa, Su
1800	1830	German	5910 9925	Europe	M-Sa
1800	2000	Dutch	5910 9925	Europe	Sunday
1830	1930	Dutch	17550 9925	Africa	M-F
1830	1930	Dutch	5910 9925	Europe	M-Sa
1930	2000	French	17550	Africa	M-F
1930	2000	French	5910 9925	Europe	M-Sa
2000	2030	Dutch	17550 9925	Africa	Daily
2000	2030	Dutch	5910 9925	Europe	Daily
2030	2100	Spanish	17550	Africa	Daily
2030	2100	Dutch	5910 9925	Europe	Daily
2100	2130	English	17550	Africa	Daily
2100	2130	English	5910 9925	Europe	Daily
2130	2200	French	13710	N. America	Daily
2130	2200	French	13655	S. America	Daily
2200	2300	Dutch	13710	N. America	Daily
2200	2300	Dutch	13655	S. America	Daily
2300	2330	Spanish	13710	N. America	Daily
2300	2330	Spanish	13655	S. America	Daily
2330	0000	English	13710	N. America	Daily
2330	0000	English	13655	S. America	Daily

Most broadcasts are also on 1512 kHz medium wave. (Tom Sundstrom/update by Philip Yant/PINELANDS RBBS)

****CANADA****

Radio Canada International ENGLISH LANGUAGE SCHEDULE May 5-Sept 28 1991

UTC (days)	FREQS	TARGET
0100-0200 a-s	9535 9755 11845 11940 13720	L. America
0200-0230	6035d 6125a 7230s 7260d 8650s	Europe
0200-0300 m-f	9535 9755 11845 11940 13720	L. America
0400-0430	15275m	Mid East
0515-0600 m-f	8050d 6150 7295d 9750 11775d 17840d	Africa & Europe
1200-1300 m-f	9635 11855 17820	US & Caribbean
1300-1600 s	11855 17820	US & Caribbean
1330-1367	6095k 9535x 9700k 11795x	E. Asia
1400-1430	11935d 15305 15315a 15325d 17795 17920a 2154E	Europe
1600-1630	11935d 15305 15325d 17820 21545	Europe
1600-1630	11935d 15305 15325d 17820 21545	Europe
1630-1657	7150x 8555x	S. Asia
1700-1800	7235d 9555d 15325 17820 21545	Europe
1800-1830	13670 15260 17820	Africa
1830-1900 a-s	13670 15260 17820	Africa
1900-1930 m-f	13670 15260 17820	Africa

RCI ENGLISH LANGUAGE SCHEDULE May 5-Sept 28 1991 (continued)

1900-2000	5995d 6170d 7235d 8650y 9670d 13650 15325	Europe
	17875 21675	Europe
2100-2130	5995d 7235d 13650 15325 17875	Europe
2130-2200	15325 17875	Europe
2130-2200	11880 13670 15150 17820	Africa
2200-2230	11705y	E. Asia
2200-2230 m-f	5960 9755 11905 13670	US
2300-2330	9755 11730 13670	Caribbean
2300-2330	11940 15235	L. America
2330-2400 a-s	11940 15235	L. America
2330-0030 m-f	5960 9755 13670	US
2330-0100 a-s	5960 9755	US

Days: m = monday; f = friday; a = saturday; s = sunday. (blank = everyday)

Relays: x = Xian, China

y = Yamata, Japan

w = Wertachtal, Germany

m = Moosbrunn, Austria

d = Daventry, UK

s = Sines, Portugal

(Paul Blumstein/USENET/Kirk Baxter/SW ECHO)

Canada has a new Minister of Communications: Perrin Beatty. All letters in support of getting back RCI to full strength should be sent to: The Right Honourable Perrin Beatty, House of Commons, Ottawa, Canada. (Scott Stevens/PINELANDS RBBS)

The 1200-1300 broadcast in FRENCH for Canadians abroad is a relay of CBF Montreal (Mon/Wed/Fri), CBOF Ottawa (Tues) and CBV Quebec (Thurs). I presume that these are regional breakfast shows. All other home service relays are indicated as "Programmation nationale". Frequencies are 9650 and 15425. Maybe one of you guys in Canada can clarify whether these are regional shows, or are they studios producing for the network? If the former, I guess that gives you a chance to log some new shortwave stations! Unfortunately the parallel English transmission at 1200-1300 on 9635 11955 and 17920 is just indicated as "CBC domestic programming" which could cover a multitude of sins. (Andy Sennitt/SW ECHO)

****CHINA****

Since June 1st, Radio Beijing is on 15285 and 17705 both from Mali at 0000, the 0300 is on 8690 via Spain and 11715 and 15295 the last two from Mali...They announce 11840 at 0400...that would be from Sackville, but I haven't checked as yet...The 0300 is announced as 15100, and the other channels. 17885 is announced for the 1200 direct. (Lou Josephs/PINELANDS RBBS)

****CZECHOSLOVAKIA****

Radio Prague English to North America schedule:

0000-0027	11890 9540 7345
0100-0130	9540 7345 5930
0300-0330	9540 7345 5930
0400-0430	9540 7345 5930

(BBCMS/Andy Sennitt)

****DOMINICAN REPUBLIC****

During my recent visit to Santiago in the Dominican Republic I was able to contact the folks at FM radio station N-103. The story is as follows: Radio Norte has been sold by its owner, Sr. Antonio Perez. The shortwave frequency (4800 KHz) was not part of the deal, however, and it is still registered to Mr. Perez. He is now the owner of the FM station N-103 in Santiago, and they are using the (formerly) Radio Norte shortwave transmitter to simulcast the FM station 24 hours a day. This confirms essentially the same story which I heard a couple of months ago on Media Network.

I spoke with the station's director, Sr. Hector Castillo, and he is delighted to have received several reception reports from Europe already. He says he's very interested in receiving more reports and to learn how is the signal getting 'out there'. He told me that they may have a batch of pennants made to send along with their replies to reception reports. He promises to reply and/or QSL all reports (we'll have to see if this turns out to be true). I asked him about IRCs, and his reply was that people should use their best judgement about how many to send. He said that at least one IRC would be welcome, more if the listener deems it necessary.

It turns out that the offices of N-103 are in the same building as those of Radio Norte (even though the stations are not linked in any other way.) That explains why reports sent to the published R. Norte address have found their way to Sr. Castillo's desk. He suggested that from now on, reports should be addressed to N-103's address, as follows:
Sr. Hector Castillo
Radio N-103
Pedro Fco. Bono # 58
Santiago
Dominican Republic

Since this is a street address, not a P.O. Box, the letters might take a couple of extra days to get there. This is my personal opinion, not Sr. Castillo's. (Richard Urena/SW ECHO)

****ECUADOR****

Here [are highlights from] HCJB's new English schedule, received 6/27/91. Days are local, times UTC.

To North America on 9745 or 15155:
Dateline 90 - Mon 0100,0300,0530
Ham Radio Today - Wed 0100,0300 and 0530
HCJB Today - Sun 0200,0600
Music from the Mountains - Wed 0630
Musica Del Ecuador - Fri 0100,0300 and 0530
Musical Mail Bag - Sat 0130,0330,0600
News, current affairs, features and interviews 0040,0240,0510
Saludoe Amigos - Sun 0030,0230,0500
Studio Nine - Mon to Fri 0030,0230,0500
World and Latin American news - 0030,0230,0500
(Rob Harrington, NONNI/SW ECHO)

****ECUATORIAL GUINEA****

I'm hearing Africa 2000 on 8907 until 2130 close, no ID (static is murder) but it's definitely SP and definitely the unmistakable Eq. Guinea anthem at close. Is this just another "program," or a purchase of time, or a new station with its own transmitter? Do you have an address? Is it Malabo or Bata? (Jerry Berg/PINELANDS R88S)

Finland's "Air Mail" programme reported Tues., July 2nd that their transmitter was down in half recently. The explanation was drowned out by heavy interference and the radio Finland is now barely audible on the East Coast and practically inaudible on the West Coast. (Scott Stevens/PINELANDS R88S)

Sender at Deutsche Welle says that in the English transmission at 0100-0150 kHz has been replaced by 11810 kHz. (Brian Johnson/SW ECHO)

Icelandic National Broadcasting Service transmits news in English daily at 0730 kHz on 9266 kHz. (Simon Hamer - Wales, UK/WRTH/RN MEDIA NETWORK/Patrick McDonald/SW ECHO)

****INDIA****

Just received India broadBASE (India broadcasting dataBASE) which is a Universal DX League publication. It is a non-profit publication to promote Indian broadcasting by providing the most accurate information on a voluntary basis. The schedules are determined by actual monitoring. An update will appear at the end of May and September reflecting the changes in scheduling for M and S/D frequency periods.

If you have ever seen the Bob Palmer computer generated schedules of All India Radio in excellent graphic format, this is one segment of the publication. This publication is 30 pages including a map of the All India Radio Shortwave Stations including those under construction right now. Also in the publication are the addresses of all the All India Radio Stations plus info on the Time Signal Stations. Also future plans plus ID's in Arabic, Bahasa Indonesia, Dari, Dogri, Sindhi, Punjabi, Farsi, French, Hindi, Kashmiri, Nepali, Pushto, Russian, Sinhala, Swahili, Tamil, Telugu. There is of course much more and for the person that enjoys listening to AIR Domestic or External Services I highly recommend this publication.

The cost is only \$10.00 (Overseas Airmail) or equivalent payable by International Money Order/Bank Draft drawn in favor of Kanwarjit Sandhu, or 30 International Reply coupons. Overseas remitters are advised to use registered airmail. Please allow 2 weeks for delivery.

The address is: Universal DX League
408 Krishna Nagar
Ludhiana - 141 001
India

And then know you saw this on the SW Echo. Also, please alert your shortwave Club and your friends. It is an excellent publication.

Take care, Bruce in Gresham, Oregon, who leaves for Beijing on July 28 with an Open Return Ticket (thanks to Air China). (Bruce MacGibbon/SW ECHO)

****ISRAEL****

Beginning June 30th, Kol Israel has dropped all broadcasts between 2200 and 1300 hrs. The only remaining English broadcasts on shortwave are at 1800 and 2130 hrs. (Kol of Israel via BBC Monitoring/SCDX/PINELANDS R88S)

****ITALY****

RAI - Radio Televisione Italiana Schedule 31st March - the September 1991

5990	1500-1550 Serbo-Croatian, Slovene, German
	1555-1635 Italian
	1750-1825 German
	2135-2155 Rumanian
7235	1430-1455 Italian
	1500-1800 Turkish, Greek, Bulgarian
	1805-1825 Russian
	1830-1855 French
	1700-1745 Italian
	1750-1810 Arabic
	1935-1955 Hungarian
	2000-2020 Albanian
	2025-2045 English
	2135-2155 Rumanian
7275	0330-0345 Russian
	0350-0410 Ukraine
	0415-0440 Italian, English
	0445-0505 Lithuanian
	0510-0530 Rumanian
	0535-0555 Russian
	1750-1825 German
	1910-1930 Serbo-Croatian
	1935-1955 English
	2000-2020 Swedish, Danish, Esperanto
	2025-2045 Arabic
	2050-2130 Spanish, Portuguese
	2135-2225 Czech, Slovak, Polish
7290	1430-1455 French
	1500-1550 Serbo-Croatian, Slovene, German
	1555-1835 Italian
	1815-1905 Czech, Slovak, Polish
9575	0140-0325 Italian, Spanish
	0330-0345 Russian
	0350-0410 Ukraine
	0415-0440 Italian, English
	0445-0505 Lithuanian
	0510-0530 Rumanian
	0535-0555 Russian
	1430-1455 French
	1500-1550 Serbo-Croatian, Slovene, German
	1555-1835 Italian

RAI Schedule 31st March - 29th September 1991 (continued)

9575	1750-1825 German
	1910-1930 Serbo-Croatian
	1935-1955 Hungarian
	2000-2020 Albanian
	2025-2045 English
	2050-2130 Spanish, Portuguese
	2135-2225 Czech, Slovak, Polish
	2230-0135 Italian, English, French
9710	0330-0345 Russian
	1410-1730 Italian(Sunday)
	1430-1455 Italian
	1500-1800 Turkish, Greek, Bulgarian
	1805-1825 Russian
	1830-1855 French
	1700-1745 Italian
	1750-1810 Arabic
	1815-1905 Czech, Slovak, Polish
	1910-1930 Arabic
	1935-1955 English
	2000-2020 Swedish, Danish, Esperanto
	2025-2045 Arabic
	2135-2155 Rumanian
	2200-2225 English
11800	0140-0325 Italian, Spanish
	0535-0555 Arabic
	1910-1930 Arabic
	1935-1955 English
	2000-2020 Swedish, Danish, Esperanto
	2025-2045 English
	2200-2225 English
	2230-0135 Italian, English, French
11805	0140-0325 Italian, Spanish
	0330-0345 Russian
	1430-1455 French
	2230-0135 Italian, Spanish, Portuguese
15245	0140-0325 Italian, Spanish
	2230-0135 Italian, Spanish, Portuguese
15330	0330-0345 Russian
	0415-0530 Amharic, Italian, Somali
	0535-0555 Arabic
	2200-2225 English
15340	1910-1930 Arabic
15385	1840-1855 Somali
	1700-1745 Italian
17780	1840-1855 Somali
	1700-1745 Italian
	1830-1905 Italian
17795	0415-0530 Amharic, Italian, Somali
	0535-0555 Arabic
17800	1400-1425 Italian
	1410-1730 Italian (Sunday)
21515	1410-1730 Italian (Sunday)
21535	1410-1730 Italian (Sunday)
21560	0415-0530 Amharic, Italian, Somali
	1400-1425 Italian
	1830-1905 Italian
21690	1410-1730 Italian (Sunday)
	1840-1855 Somali
	1700-1745 Italian

National networks - ND (Italian)

Roma - (12 E 31' 41 N 48') 3995 kHz 1500-2120 UTC; 6060 kHz 2130-0400 UTC.

Caltanissetta - (14 E 04' 37 N 30') 6060 kHz 8515 kHz 0400-2130 UTC.

Supporto Tecnico - PA/OC

Via Cernaia, 33 - 10121 Torino

Telex: 221035 RAI to I

(Gordon Darling - Papua New Guinea/Bruce MacGibbon/SW ECHO)

****LUXEMBOURG****

R. Luxembourg English programming is right now a bit like this (Monday-Thursday):

0400-0700 UTC: Morning show (currently Bob Stewart)

0700-1200 UTC: Music Jam (non-stop music)

1200-1530 UTC: Afternoon show (curr. Jodie Scott (from Canada))

1530-1900 UTC: Early evening show (curr. Mika Hollis)

1900-2230 UTC: Evening show (curr. Shaun Tilley)

2230-0200 UTC: Late night show (curr. Peter Antony)

0200-0400 UTC: Music Jam (non-stop music)

On other days the evening show is different, on Saturdays and Sundays there is no afternoon show and Sunday even no morning show. At these times they broadcast the Music Jam service. The people at Radio Luxembourg are VERY INTERESTED in reports on reception quality in the USA and Canada, so please send reports to:

RTL International or Radio Luxembourg
2808 Luxembourg 74 Newman St.
Luxembourg London W1
Great Britain

(Jens Fallesen/SW ECHO)

STATEMENT OF PURPOSE

SHORTWAVE ONLINE DIGEST exists to disseminate info found on various computer "bulletin boards" and the Shortwave Echo to print editors, and through them to the general public. I produce SOD on my own time, at my own expense (although stamps/exchanges are appreciated), and issue it on my own schedule. At this time, I have neither the means nor the desire to offer subscriptions or otherwise expand the scope of SOD. - AQ

****MALAYSIA****

Voice of Malaysia SW Schedule (VOICE OF MALAYSIA, P.O. Box 11272, 60740 Kuala Lumpur, Malaysia)

Sorted by Time

UTC	LANGUAGE	FREQUENCIES	TARGET
0655-0825	English	6175 9750	Indonesia
		16295	Australia/NZ, Indonesia
0630-1030	Malay	9750	Indonesia
		16295	Australia/NZ
0900-1600	Indonesian	6175 9750	Indonesia
1030-1230	Mandarin	11885	China, Japan, HK, Taiwan
		16295	Indonesia, Australia/NZ
1300-1430	Thai	6100	Thailand
1430-1530	Myanmar	6100	Myanmar
1630-1700	Arabic	16295	W Asia, N Africa
1700-1900	Malay	6175 9750	Indonesia
		16295	W Asia, N Africa
2200-2400	Indonesian	6100 6175	Indonesia

Sorted by Language

UTC	LANGUAGE	FREQUENCIES	TARGET
1530-1700	Arabic	16295	W Asia, N Africa
0655-0825	English	16295	Australia/NZ, Indonesia
		6175 9750	Indonesia
0900-1600	Indonesian	6175 9750	Indonesia
2200-2400	Indonesian	6100 6175	Indonesia
1700-1900	Malay	6175 9750	Indonesia
		16295	W Asia, N Africa
0830-1030	Malay	9750	Indonesia
		16295	Australia/NZ
1030-1230	Mandarin	11885	China, Japan, HK, Taiwan
		16295	Indonesia, Australia/NZ
1430-1630	Myanmar	6100	Myanmar
1300-1430	Thai	6100	Thailand

(Paul Blumstein/USENET/Kirk Baxter/SW ECHO)

****NAMIBIA****

Namibian Broadcasting Corporation (Shortwave Section, P.O. Box 321, Windhoek 9000, Namibia) schedule:

Transmitter 1
100 KW Omnidirectional

UTC/DAYS	SERVICE	FREQUENCY
0400-0405 M-F	News	3290
0400-0600 A-S	Damara>Nama	3290
0405-0600 M-F	National	3290
0600-0700	Tswana	7190
0700-0800 A-S	Damara>Nama	7190
0700-0830 M-F	Herero	7190
0800-0830 A-S	Afrikaans	7190
0830-1100	Afrikaans	7190
1100-1200	Tswana	7190
1200-1330 A-S	Damara>Nama	7190
1200-1400 M-F	Damara>Nama	7190
1330-1600 A-S	Herero	7190
1400-1600 M-F	Herero	7190
1600-1600 M-F	German	7190
1600-1700	German	3290
1900-2000	National (CH 1)	3290
2000-2200	Nat'l (Combined)	3290

Transmitter 2 (English Service)
100 KW North/South Antenna

UTC/Days	Service	Frequency
0400-0405 M-F	News	3270
0400-0600 A	English	3270
0405-0500 S	National	3270
0405-0600 M-F	National	3270
0600-0600 S	English	3270
0600-1600	English	7165
1600-1900	English	3270
1900-2000	Nat'l (CH 2)	3270
2000-2200	Nat'l (Combined)	3270
2200-0600	All Night Serv.	3270

Days: M = Monday; F = Friday; A = Saturday; S = Sunday

Note: Damara, Nama, Tswana, Herero, Afrikaans are names of languages.
(Paul Blumstein/USENET/Bruce MacGibbon/SW ECHO)

****NEW ZEALAND****

Radio New Zealand Int'l Program Sked to August 1991: Some excerpts first on 13785 which hardly makes it to NAM: 1815 UTC Mon-Thu & Sat news in Maori. 1820 UTC Wed/Fri/Sat news in Cook Island Maori. 1815 UTC Tuesday news in French. 1835 news in Samoan, 1840 news in Niuean both UTC Mon-Sat. 1845 Coastal Weather Forecast and 1855 News in Tongan both UTC Sunday-Friday except 1855 Friday Tokelauan. 1935 Destination Pacific & 1940 Air-Sea Travel Bulletin, UTC Sunday-Thursday. 1945 news: Sunday Hindi; 1945 & 1950 news: Mon, Fijian, Solomons Pidgin; Tue I-Kiribati, Bislama; Wed Hindi, Solomons Pidgin; Thu Fijian, Bislama. 1955 UTC Sunday-Thursday Tena Koe-listeners' letters/in EG7/. 2015 news: Sunday Papua New Guinea Pidgin & Motu; Mon Maori; Tue French; Wed Maori; Thu French. 2135 Discover NZ, 2140 Air-Sea Travel Bulletin both UTC Sun-Thu. On 17770: 0205-0425 Mon-Friday In Touch with New Zealand, 0425 Discover New Zealand. 0608-0630 Mana News—Maori news and issues of the day, Monday-Friday. 0630-07 Monday-Friday Ears—for children of all ages. 07-0730 Monday-Friday Pacific Islands News Magazine. Sat 0105 Saturday Magazine; Sat 0205 same or sports. Saturday 0500 Change of Pace: Jazz -0630. Saturday 0617-0730 Pacific requests. Sunday 0600-0730 Totally Kiwi Music Show. On 9700: Monday 0810 Calling Cook Islands, 0835 Calling Tonga. Tue 0905 + ? Pacific Review/Calling

Solomons/Kiribati/French Pacific/Vanuatu/Papua New Guinea. Wed 0810 Calling Samoa. 0835 Niue. Thursday 0810 Pacific Press Review. Friday 0905 Calling Fiji. Saturday 0730-1210 Saturday Scrapbook (Monitoring Times/DX Listening Digest/Bruce MacGibbon/SW ECHO)

****NIGERIA****

I just received a Voice of Nigeria schedule for May and June 1991. The following is the VON Frequency Schedule for the West African Service. From 0500-0700 UTC in English, from 0700-0800 UTC in French, from 0800 to 0900 UTC in Hausa, from 0900-1100 UTC in English, from 1100-1200 UTC in French, from 1200-1400 UTC in Hausa, from 1400-1600 UTC in Ki-Swahili, from 1600-1700 UTC in English, from 1700-1800 UTC in Arabic, from 1800-1900 UTC in French, from 1900-2000 UTC in English, from 2000-2100 UTC in French and from 2100-2200 UTC in Hausa. All transmissions are on 7265 Khz. in the 41 meter band. Close Down is at 2300 UTC. The address to send reception reports and requests for station frequency and program schedules is Voice of Nigeria, Broadcasting House, P.M.B. 40003 Falomo, Ikoyi, Lagos, Nigeria. Telephone number is (01) 603010-4. (Brian Johnson/SW ECHO)

****PAKISTAN****

RADIO PAKISTAN CURRENT SCHEDULE

ENGLISH LANGUAGE	UTC	FREQ	TARGET (see below)
	0800-0850	17585 21620	W Africa
	1700-1800	9370 11670	W Africa

SLOW SPEED ENGLISH NEWS BULLETINS

0230-0245	9545 16115 17725 17640 21730	SE Asia
1100-1120	17595 21620	W Europe
1800-1630	11670 13665 16516 17655	Mid East
1600-1630	17725 21480	E Africa

OTHER LANGUAGES

UTC	LANG	FREQ	TARGET
0030-0130	Hindi	7010 9370	S & SE Asia
0100-0200	Mitali	16190 17800	S & SE Asia
0100-0200	Urdu	17640 21730	S & SE Asia
0330-0630	Farsi	16380 17710	Afg,Iran, Turk, ME, N&W Afr
0400-0600	Swahili	17725 21675	E & SE Africa
0430-0630	Urdu	16606 17655 21580	Afg,Iran, Turk, ME, N&W Afr
0630-0630	Gujrati	17735 21575	E & SE Africa
0700-0800	Myanmar	17785 21475	S & SE Asia
0900-1000	Indonesian	17785 21475	S & SE Asia
0900-1100	Urdu	17595 21620	W Africa
1030-1130	Tamil	13665 16515	S & SE Asia
1200-1300	Hindi	13665 16515	S & SE Asia
1200-1800	Mitali	16295 17802	S & SE Asia
1324-1367	Sylheti	16295 17895	S & SE Asia
1330-1630	Urdu	11670 13665 16065 17655	Afg,Iran, Turk, ME, N&W Afr
1430-1630	Turkish	8010 7215	Afg,Iran, Turk, ME, N&W Afr
1700-1800	Turkish	11612 13665	Afg,Iran, Turk, ME, N&W Afr
1700-1900	Arabic	11670 15445	Afg,Iran, Turk, ME, N&W Afr
1800-1900	Urdu	9370 11670	W Africa
1930-0230	French	11670	W Africa
1930-0230	French	17710	Afg,Iran, Turk, ME, N&W Afr

Note: The schedule was the M-91 schedule which technically expired, but mentioned that it was also the tentative J-91 schedule. (Paul Blumstein/USENET/Kirk Baxter/SW ECHO)

****SAO TOME****

Sao Tome has expressed interest in having the VOA build a relay station to replace the one in Liberia, which was destroyed in the recent civil war. The VOA can't afford to evaluate this offer. A temporary relay station is being built in Botswana to replace the site lost in Liberia. (Internews, via Kauto Hupio, Finland/SCDX/PINELANDS RBBS)

****SPAIN****

RNE's English to NA at 00, 01 and 05 has been reduced to the one frequency of 9630. In today's "DX Spot" an interview with the head of the Foreign Service explained that RNE started July 1 a 24-hour Spanish language World Service. The programming each hour will consist of 40 minutes of news and features followed by the last 20 minutes of programs targeted to particular regions. (Probably similar to what R Moscow now does in folding the UK and Africa and Pacific programming into the WS.) 11880 is now carrying Spanish. (Tom Sundstrom/SW ECHO)

On Radio Japan's "DX Corner" there was a mention that Radio Espana has gone to 24 hour world service in Spanish. Two "new" frequencies were given for Far East transmissions: 1000-1155 UTC on 9620 to Japan, 1200-1355 UTC on 11910 to the Philippines. (Bill Oxner/SW ECHO)

****SWITZERLAND****

Swiss Radio International
31 March 1991 - 28 September 1991

UTC	UTC	Lang.	FREQ	TARGET
Start	End			
0000	0030	French	9810 9885 12035 16570	S. America
0030	0100	Spanish	9810 9885 12035 16570	S. America
0115	0130	various	6125 6135 9650 9885 12035 17730	Americas
0130	0200	French	6135 9650 17730	Americas
		Italian	6125 9885 12035	Americas
0200	0230	English	6125 6135 9650 9885 12035 17730	Americas
0230	0300	German	9885 12035	Americas
		Spanish	6125 6135 9650 17730	Americas
0315	0330	various	6135 9650 9885 12035	Americas, Mideast
0330	0400	Italian	6135 9650 9885 12035	Americas, Mideast
0400	0430	English	6135 9650 9885 12035	Americas, Mideast
0430	0600	German	6135 9650 9885 12035	Americas, Mideast
0600	0630	French	6135 9650 9885 12035	Americas, Mideast
		Italian	3985 6165 9635	Europe

****SWITZERLAND (continued)****

0630 0600	German	3985 6165 9535	
0545 0800	German	15430 17570 21770	
0600 0630	French	15430 17570 21770	
	Italian	3985 6165 9535	
0630 0700	English	15430 17570 21770	
	English	3985 6165 9535	
0700 1000	French	3985 6165 9535	
	0730 Italian	15430 17570 21770	
0745 0800	various	9560 13685 17670 21695	
0800 0830	Italian	9560 13685 17670 21695	
0830 0900	English	9560 13685 17670 21695	
0900 0930	German	9560 13685 17670 21695	
0930 1000	French	9560 13685 17670 21695	
1000 1030	English	9560 13685 17670 21695	
	1100 French	6165 9535 12030	
1045 1100	various	13635 15570 17830 21770	
1100 1130	English	13635 15570 17830 21770	
	German	6165 9535 12030	
1130 1200	French	13635 15570 17830 21770	
	Italian	6165 9535 12030	
1200 1230	English	6165 9535 12030	
	German	13635 15570 17830 21770	
1230 1330	German	3985 6165 9535	
	German	3985 6165 9535	
	1300 Italian	13635 15570 17830 21770	
	1245 various	3985 6165 9535	
1300 1600	Italian	3985 6165 9535	
1315 1330	various	7480 11695 13635 15570 17830 21695	
1330 1400	English	7480 11695 13635 15570 17830 21695	
1400 14	French	7480 13635 15570	
	Italian	11895 17830	
1430 1500	German	7480 11695 13635 15570 17830 21695	
1515 1600	English	11895	
	1530 various	13685 15430 17830 21630	
1530 1600	English	13685 15430 17830 21630	
1600 1630	French	13685 15430 17830 21630	
	1830 German	3985 6165 9535	
1630 1700	German	13685 15430 21630	
	Italian	17830	
1715 1730	various	9885 11955 15525 17830 21770	
1730 1830	Arabic	9885 11955 15525 17830 21770	
1830 1900	English	9885 11955	
	French	3985 6165 9535	
1900 1930	English	3985 6165 9535	
	German	9885 11955 12035 13635 15525	
1930 2000	French	9885 11955 12035 13635 15525	
	1950 Italian	3985 6165 9535	
2000 2030	Italian	12035 13635 15525	
2030 2100	Portuguese	9885 12035 13635 15525	
	Portuguese	9885 6035 6190	
2100 2130	English	9885 12035 13635 15525	
2130 2200	English	9880 6035 6190	
	Spanish	9885 13635 15525	
	Spanish	9880 6035 6190	
2215 2230	various	9810 9885 12035 15570	
2230 2300	Portuguese	9810 9885 12035 15570	
2300 2330	Italian	9810 9885 12035 15570	
2330 0000	German	9810 9885 12035 15570	

(Tom Sundstrom/PINELANDS R88S)

SRI has instituted a new RTTY newscast service. The schedule is 1830-1930 on 17530 kHz to Africa; 2000-2100 on 10515 kHz to Asia; 0030-0130 on 10515 kHz to South America; and 0200-0300 on 10515 to North America. It's at 50 bauds, normal sense, narrow (170 Hz) shift. (Elton Byington/SW ECHO)

****UNITED KINGDOM****

A part of radio history is about to come to an end. The BBC shortwave transmitter station at Daventry is to close at the end of this year. The transmissions currently broadcast from Daventry will be transferred to Woolferton, which now has spare capacity, as the Voice of America has cut back on its transmissions with the end of the Cold War. Daventry was acquired by the BBC in 1925, and the first shortwave overseas broadcasts were transmitted from there in 1932. (Richard, G3VGV/SCDX/PINELANDS R88S)

Day to Day BBC Programs for July (all times & days UTC):

SUNDAYS	
0000 Newsdesk	1200 News Summary
0030 The Ken Bruce Show	1215 Play of the Week
0100 News Summary	1300 Newshour
0115 Play of the Week	1400 News Summary
0200 Newsdesk	1415 Making of the Middle East
0230 Taking Issue in the UK	1430 Anything Goes
0300 World News	1500 World News
0315 Recording of the Week	1515 Concert Hall
0330 From Our Correspondent	1600 World News
0345 Write On	1615 Taking Issue in the UK
0400 Newsdesk	1645 LETTER FROM AMERICA
0430 Stuart Coleman's Record Hop	1700 World News
0445 The Learning World	1715 In Praise of God
0500 World News	1745 Sports Roundup
0515 24 Hours	1800 Newsdesk
0530 World Business Review	1830 The Ken Bruce Show
0545 LETTER FROM AMERICA	1900 News Summary
0600 Newsdesk	1915 Play of the Week
0630 Jazz for the Asking	2000 World News
0700 World News	2015 Folk/Jazz music
0715 24 Hours	2030 BRAIN OF BRITAIN 1991
0730 From Our Correspondent	2100 Newshour

SUNDAYS (continued)

0745 Write On	2200 World News
0800 World News	2215 Music with Matthew
0815 Music with Matthew	2245 Sports Roundup
0900 World News	2300 World News
0915 Short story	2315 LETTER FROM AMERICA
0930 Stuart Coleman's Record Hop	2330 Making of the Middle East
0945 Sports Roundup	
1000 News Summary	
1015 Science in Action	
1030 In Praise of God	
1100 Newsdesk	
1130 The Ken Bruce Show	

MONDAYS

0000 Newsdesk	1200 World News
0030 In Praise of God	1215 BRAIN OF BRITAIN 1991
0100 News Summary	1245 Sport Roundup
0115 various features	1300 Newshour
0145 Mastersingers	1400 World News
0200 Newsdesk	1415 Outlook
0230 Composers of the Month	1430 Off the Shelf
0300 World News	1445 Your Questions of Faith
0315 Good Books	1500 World News
0330 Anything Goes	1515 various features
0400 Newsdesk	1600 World News
0430 Off the Shelf	1615 New Ideas
0445 Kershaw's World of Music	1630 Writers in a Nutshell
0500 World News	1645 The World Today
0515 24 Hours	1700 World News
0530 WAVEGUIDE	1715 Panel Game: Jazz Score
0545 Recording of the Week	1745 Sports Roundup
0600 Newsdesk	1800 Newsdesk
0630 Making of the Middle East	1830 Multitrack 1: Top 20
0700 World News	1900 World News
0715 24 Hours	1915 Outlook
0730 Taking Issue in the UK	1930 Your Questions of Faith
0800 World News	1945 Health Matters
0815 Health Matters	2000 World News
0830 Anything Goes	2015 The World Today
0900 World News	2030 Vintage Chart Show
0915 The Learning World	2100 News Hour
0930 Kershaw's World of Music	2200 World News
0945 Sports Roundup	2215 Europe's World
1000 News Summary	2230 Sports International
1015 Making of the Middle East	2245 Sports Roundup
1030 Vintage Chart Show	2300 World News
1100 Newsdesk	2315 Artists at Work
1130 Composers of the Month	2330 Multitrack 1: Top 20

TUESDAYS

0000 Newsdesk	1200 World News
0030 Jazz Score	1215 Multitrack 1: Top 20
0100 World News	1245 Sports Roundup
0115 Outlook	1300 Newshour
0130 Jazz/Folk Music	1400 World News
0145 Health Matters	1415 Outlook
0200 Newsdesk	1445 Mastersingers
0230 Sports International	1430 Off the Shelf
0300 World News	1500 World News
0315 The World Today	1515 A Jolly Good Show
0330 John Peel	1600 World News
0400 Newsdesk	1615 Megamix
0430 Off the Shelf	1645 The World Today
0445 Europe's World	1700 World News
0500 World News	1715 Composers of the Month
0515 24 Hours	1745 Sports Roundup
0530 World Business Report	1800 Newsdesk
0545 The World Today	1830 Pop Science
0600 Newsdesk	1900 World News
0630 music features	1915 Outlook
0700 World News	1930 Development '91
0715 24 Hours	2000 World News
0730 New Ideas	2015 The World Today
0745 Writers in a Nutshell	2030 Meridian
0800 World News	2100 Newshour
0815 Concert Hall	2130 [Calling the Falklands]
0900 World News	2200 World News
0915 Your Questions of Faith	2215 Your Questions of Faith
0930 Europe's World	2230 Megamix
0945 Sports Roundup	2245 Sports Roundup
1000 News Summary	2300 World News
1015 Pop Science	2315 Concert Hall
1030 Sports International	
1100 Newsdesk	
1130 Megamix	
"Calling the Falklands" is ONLY on 13660. All other freq's are normal Newshour program.	

WEDNESDAYS

0000 Newsdesk	1200 World News
0030 Omnibus	1215 New Ideas
0100 World News	1230 Writers in a Nutshell
0115 Outlook	1245 Sports Roundup
0130 various features	1300 Newshour
0145 Country Style	1400 World News
0200 Newsdesk	1415 Outlook
0230 Development '91	1430 Off the Shelf

UK (continued)

WEDNESDAYS (continued)

0300 World News
 0315 The World Today
 0330 Pop Science
 0400 Newsdesk
 0430 Off the Shelf
 0445 Country Style
 0500 World News
 0515 24 Hours
 0530 World Business Report
 0545 The World Today
 0600 Newsdesk
 0630 Meridian
 0700 World News
 0715 24 Hours
 0730 Development '91
 0800 World News
 0815 Artists at Work
 0830 Jazz Score
 0900 World News
 0915 Country Style
 0930 various features
 0945 Sports Roundup
 1000 News Summary
 1015 Omnibus
 1030 Jazz for the Asking
 1100 Newsdesk
 1130 Meridian

1445 Good Books
 1500 World News
 1515 Artists at Work
 1530 Comedy
 1600 World News
 1615 various features
 1645 The World Today
 1700 World News
 1715 various features
 1730 Kershaw's World of Music
 1745 Sports Roundup
 1800 Newsdesk
 1830 Multitrack 2
 1900 World News
 1915 Outlook
 1930 Omnibus
 2000 World News
 2015 The World Today
 2030 Assignment
 2100 Newshour
 2200 World News
 2215 Music
 2245 Sports Roundup
 2300 World News
 2315 Good Books
 2330 Multitrack 2

THURSDAYS

0000 Newsdesk
 0030 Comedy
 0100 World News
 0115 Outlook
 0130 WAVEGUIDE
 0145 The Farming World
 0200 Newsdesk
 0230 Assignment
 0300 World News
 0315 The World Today
 0330 BRAIN OF BRITAIN '91
 0400 Newsdesk
 0430 Off the Shelf
 0445 From our Correspondent
 0500 World News
 0515 24 Hours
 0530 World Business Report
 0545 The World Today
 0600 Newsdesk
 0630 Omnibus
 0700 World News
 0715 24 Hours
 0730 Network UK
 0800 World News
 0815 Good Books
 0830 John Peel
 0900 World News
 0915 From our Correspondent
 0930 The Farming World
 0945 Sports Roundup
 1000 News Summary
 1015 Assignment
 1030 Comedy
 1100 Newsdesk
 1130 Drama

1200 World News
 1215 Multitrack 2
 1245 Sports Roundup
 1300 Newshour
 1400 World News
 1415 Outlook
 1430 Off the Shelf
 1445 Recording of the Week
 1500 World News
 1515 Music with Matthew
 1600 World News
 1615 Network UK
 1645 The World Today
 1700 World News
 1730 Drama
 1745 Sports Roundup
 1800 Newsdesk
 1830 Focus on Faith
 1900 World News
 1915 Outlook
 1930 Seven Seas
 1945 The Farming World
 2000 World News
 2015 The World Today
 2030 Meridian
 2100 Newshour
 2200 World News
 2215 Network UK
 2245 Sports Roundup
 2300 World News
 2315 Music Review

FRIDAYS

0000 Newsdesk
 0030 The Musician's Musician
 0100 World News
 0115 Outlook
 0130 Seven Seas
 0145 Global Concerns
 0200 Newsdesk
 0230 Drama
 0300 World News
 0315 The World Today
 0330 Focus on Faith
 0400 Newsdesk
 0430 Off the Shelf
 0445 Folk/Jazz music
 0500 World News
 0515 24 Hours
 0530 World Business Report
 0545 The World Today
 0600 Newsdesk
 0630 Meridian
 0700 World News
 0715 24 Hours
 0730 Birth of a Nation
 0800 World News
 0815 Music Review
 0900 World News
 0915 Global Concerns
 0930 Seven Seas

1200 World News
 1215 Birth of a Nation
 1245 Sports Roundup
 1300 Newshour
 1400 World News
 1415 Outlook
 1430 Off the Shelf
 1445 The Learning World
 1500 World News
 1515 Music Review
 1600 World News
 1615 Science in Action
 1645 The World Today
 1700 World News
 1715 The Musician's Musician
 1745 Sports Roundup
 1800 Newsdesk
 1830 Multitrack 3
 1900 World News
 1915 Outlook
 1930 Birth of a Nation
 2000 World News
 2015 The World Today
 2030 Science in Action
 2100 Newshour
 2130 [Calling the Falklands]
 2200 World News
 2215 Stuart Coleman's Record Hop

FRIDAYS (continued)

0945 Sports Roundup
 1000 News Summary
 1015 Focus on Faith
 1030 The Musician's Musician
 1100 Newsdesk
 1130 Meridian
 "Calling the Falklands" is ONLY on 13660. All other freq's run normal Newshour programming.

2230 People & Politics
 2245 Sports Roundup
 2300 World News
 2315 Worldbrief
 2330 Multitrack 3

SATURDAYS

0000 Newsdesk
 0030 From the Weeklies
 0045 Recording of the week
 0100 World News
 0115 Outlook
 0130 Short story
 0145 Here's Humphl
 0200 Newsdesk
 0230 People & Politics
 0300 World News
 0315 The World Today
 0330 Vintage Chart Show
 0400 Newsdesk
 0430 Here's Humphl
 0445 Worldbrief
 0500 World News
 0515 24 Hours
 0530 World Business Report
 0545 The World Today
 0600 Newsdesk
 0630 Meridian
 0700 World News
 0715 24 Hours
 0730 From the Weeklies
 0745 Mastersingers
 0800 World News
 0815 A Jolly Good Show
 0900 World News
 0915 WAVEGUIDE (0905)
 0930 Personal View
 0945 Sports Roundup
 1000 News Summary
 1015 LETTERS FROM AMERICA
 1030 People & Politics
 1100 Newsdesk
 1130 Meridian
 (Bill Oxner/SW ECHO)

1200 World News
 1215 Multitrack 3
 1245 Sports Roundup
 1300 Newshour
 1400 News Summary
 1415 Sportsworld
 1500 World News
 1515 Sportsworld
 1600 World News
 1615 Sportsworld
 1700 News Summary
 1715 John Peel
 1745 Sports Roundup
 1800 Newsdesk
 1830 From Our Correspondent
 1845 Write On
 1900 News Summary
 1945 From the Weeklies
 2000 World News
 2015 Personal View
 2030 Meridian
 2100 Newshour
 2200 World News
 2215 Jazz for the Asking
 2245 Sports Roundup
 2300 World News
 2315 A Jolly Good Show

USA

The presidential advisory commission for public diplomacy has said that Radio Free Europe should stop broadcasting to Poland, Czechoslovakia, and Hungary. Instead, the commission says the US should focus on programs to Asia and Africa. (BBC Monitoring/SCDX/PINELANDS RBBS)

CSMS SCHEDULE: Well, we are making a few changes to our frequencies again. Here is the new schedule. It is effective today July 15, 1991 and should remain in effect until the fall: THE WORLD SERVICE OF THE CHRISTIAN SCIENCE MONITOR Z-91 SHORTWAVE FREQUENCY SCHEDULE - 0100 UTC 3/31/1991 to 0100 UTC 9/29/1991. Effective 7/15/1991

WCSN 045.08.08N 068.33.35W

UTC	FREQ	REGION
0000	9850 kHz	90 W.Africa/Mid E
0200	9850 kHz	75 E.Africa/Mid E
0400 +	9840 kHz	105 S.Africa/Mid E
0600	9840 kHz	80 Europe
0800	11705 kHz	60 Europe
1000*	15610 kHz	80 Europe
1200*	15610 kHz	45 Europe
1400 +	21670 kHz	45 Europe/Mid E.
1600	21640 kHz	75 East Africa
1800	21545 kHz	105 S. Africa
2000	15665 kHz	80 Europe/Mid E.
2200	15665 kHz	75 Eur/N. Africa

WSHB - 1 032.41.02N 081.07.51W WSHB - 2 032.41.02N 081.07.51W

UTC	FREQ	REGION	FREQ	REGION
0000 +	13760 kHz	167 S. America	7395 kHz	25/173 E. N. Am/Carr.
0200	13760 kHz	167 S. America	+ 9455 kHz	245/315 W. N. Am/Mex
0400	13760 kHz	230 Mexico	9455 kHz	315 West. No. America
0600	11705 kHz	245 West. Mexico	9455 kHz	315 West. No. America
0800	13760 kHz	280 Australia	9455 kHz	152 Cent. So. America
1000	9495 kHz	25 East. No. Am.	9455 kHz	152 Cent. So. America
1200	9495 kHz	25 East. No. Am.	13760 kHz	182 Central America
1400*	15610 kHz	173/25 ENA/Car.	13760 kHz	245/315 W. N. Am/Mex
1600*	15610 kHz	173/25 ENA/Car.	17555 kHz	245/315 W. N. Am/Mex
1800	21780 kHz	25 ENAm/Europe	17555 kHz	245/315 W. N. Am/Mex
2000	13770 kHz	ENA/Car/Eu	17555 kHz	137 Brazil
2200	9465 kHz	173/25 ENA/Car.	17555 kHz	152 Cent. So. America

KHBI - 1 015.07.20N 145.41.37E KHBI - 2 015.07.20N 145.41.37E

UTC	FREQ	REGION	FREQ	REGION
0000*	17885 kHz	340 Japan	17555 kHz	270 Philippines
0200*	17885 kHz	340 Japan	* 17555 kHz	270 Philippines
0400	17780 kHz	340 Japan	* 17555 kHz	270 Philippines
0600	17780 kHz	310 China	17555 kHz	270 Philippines
0800	17555 kHz	340 Japan	15610 kHz	185 Australia/New Zeal
1000	17555 kHz	310 China	13825 kHz	240 Indonesia

••USA (continued)••

13625 kHz 285 India/ME 9425 kHz 195 Australia
 13625 kHz 285 India/ME 9530 kHz 310 China
 13625 kHz 285 India/ME 11580 kHz 310 North India/China
 13825 kHz 285 India/ME 13825 kHz 185 New Zealand
 JJC 9455 kHz 340 Japan/Korea 13825 kHz 180 Australia
 JCO 16405 kHz 310 China 13825 kHz 240 Indonesia
 + = CRASH START * = SATURDAY/SUNDAY ONLY

(Michael ? CSM/USENET/Kirk Baxter/SW ECHO)

SHORTWAVE STATIONS OF THE CHRISTIAN SCIENCE MONITOR:

WCSN Scotts Corners, Maine, USA 045.08.06N/088.33.35W
 One 500 Kw ABB SW transmitter
 One TCI dual band curtain antenna, 4 X 4 dipole array, horiz. slewable.
 Bearings 045,080,075(boresight),090,105 deg.

Program feeds from THE WORLD SERVICE OF THE CHRISTIAN SCIENCE MONITOR in Boston, Massachusetts via Satcom 2R, tp 1.
 Construction begun in 1985, WCSN was on-air in March of 1987, with service to Europe, Africa, and Middle East. The station is "ski lodge" in design, with 10,000 SFT. Station has one 750 Kw stand-by generator, and employs 13 people.

KHBI Agingan Point, Saipan, Marianas Isl. 015.07.20N/145.41.37E

Two 100 Kw Continental SW transmitters
 Three TCI curtain antennas, 4 X 4 dipole array, horiz. slew.
 A-1 Bearings 310,325,340(boresight),355,010 deg.
 A-2 Bearings 240,255,270(boresight),285,300 deg.
 A-3 Bearings 185,180,195(boresight),210,225 deg.
 Program feeds from THE WORLD SERVICE OF THE CHRISTIAN SCIENCE MONITOR in Boston, Massachusetts, via Satcom F2R, tp1 to Pt. Reyes, Calif; then via Intelsat 174 to Saipan.

KHBI, originally KYOI Super Rock, was built in 1981 to broadcast commercial R&R format to Japan, originally using one 100 Kw transmitter and one TCI antenna. Purchased by The Christian Science Monitor Syndicate in 1987, the station was expanded to its present configuration in 1989. Station broadcasts to USSR, China, Japan, Korea, India, Middle East, Indonesia, Australia, and New Zealand. The station is "pill box" in design, with 3200 SFT, and one Kw stand-by generator. KHBI employs 9 people.

WSHB Cypress Creek, South Carolina 032.41.02N/081.07.51W

Two 500 Kw ABB transmitters
 Five TCI dual band antennas - one 4 X 4 dipole array, horiz. slewable (A1/A2), two 2 X 2 dipole array, non-slewable (A3/A4 & A5/A6), and two 2 X 2 dipole array, horiz. slewable (A7/A8 & A9/A10).
 A1/A2 Bearings 122,137,152(boresight),167,182 deg.
 A3/A4 Bearing 025 deg.
 A5/A6 Bearing 315 deg.
 A7/A8 Bearings 230,245(boresight),260 deg.
 A9/A10 Bearings 173,188(boresight),203 deg.

Program feeds from THE WORLD SERVICE OF THE CHRISTIAN SCIENCE MONITOR in Boston, Massachusetts, via Satcom F2R, tp 1.
 WSHB began construction in December, 1987, and was on-air on March 27, 1989. The station serves Eastern and Western North America, Europe, the Caribbean, Mexico, Central America, South America, and Australia. WSHB is neo-metropolitan in design, with 19,000 SFT on 360 acres, and operates 3x750 Kw generators in peak load sharing with its power supplier. The station employs 18 people, including a Rigger, Computer System Engineer, and Senior Station Manager for all three SW sites. (C. Ed Evans, Senior Station Manager, CSM/USENET/Kirk Baxter/SW ECHO)

••USSR••

One logging from last night, actually the last few nights, that generated a question. Heard the All-union first program sign-on last night (UTC June 8 at 0300) on 15520. The broadcast began with the Soviet national anthem, and begins at 6AM Moscow time, which may be a standard sign-on time. They've been on for at least one week, propagation (sheesh!) permitting. One question. What's the difference between the broadcast identified as the Domestic Service (Severnaya Sluzhba Moskovskaya Radio) and the All-union first program (don't remember the exact words, but the Russian translated to first program)? This has bothered me for a while. I've heard Mayak often, but this was the first time I ever heard anything ID'd as the All-union first service. Any help from the multitudes would be greatly appreciated. (Joe Stepanak, KQ3F/PINELANDS RBBS)

On a follow up to MN's observation that Radio Station Peace and Progress closed up shop last weekend, I listened at 0130 to 11790 (where I heard P&P on May 8). Looks like Russian language programming filling the slot. (Tom Sundstrom/SW ECHO)
 Radio Vedo, the new shortwave commercial station from Volgograd, has been traced on 13710kHz. The radio was observed signing on in Russian at 1800 GMT on 25th June. (BBCMS/Andy Sennitt/SW ECHO)

First the Good News - Radio Georgia in Tbilisi has started an English service I so far, broadcasts have been monitored at 1700-1730 UTC on 12070kHz, repeated at 2000-2030 on 11760kHz. Now the Bad News - The modulation is so muffled that the transmission is virtually unreadable. You can just about make out the ID and part of the schedule, but the rest is useless. Jonathan and I listened to it at 1700 on Wednesday evening - the signal here in Holland was strong, but Jonathan remarked "she sounds like she's talking in SSB...". However, hopefully they'll replace the vacuum cleaner hosepipe with a more conventional audio feed before long. Good listening - even if you can't understand it! (RN MEDIA NETWORK/Andy Sennitt/SW ECHO)

Here is the monitored schedule of Radio Moscow :

0000-0100 As/Au/Am
 21845 21790(from 0030) 21710 21690 17890 17860(from 0030) 17850
 17730 17875 17820 17600(from 0030) 16190(USB) 15595 15590
 15580 15570 15650 15480 15425 15410(from 0030) 15365 15290
 15140 13775 13605 12050 12005 11985 11850(Cuba) 11780 11730
 11710(Cuba) 11690 9480

0100-0200 As/Au/Am
 21845 21790 21690 21635(from 0130) 17890 17860 17850 17730
 17820 17600 16190(USB) 15595 15590 15580 15550 15480 15425
 15410 15315 15290 15140 13775 13605 12050 12005 11980(from 0130) 11920 11850(Cuba) 11780 11710(Cuba) 11690 9480

0200-0300 As/Au/Am
 21845 21790 21690 21635 17890 17860 17850 17730 17620 17600
 16190(USB) 15595 15590 15580 15550 15480 15425 15415
 15410 15320 15315 15290 15140 13605 12050 12005(to 0230)
 11980 11850(Cuba) 11835 11780 11710(Cuba) 11690 4895

0300-0400 Eu/ME/At/As/Au/Am
 21845 21790 21740 21690 21635 17890 17860 17850 17730 17710
 17620 17600 17580(from 0330) 16190(USB) 15595 15590 15580
 15550(to 0330) 15540 15480 15450 15425 15415 15410 15320
 15315 15280 15140 13605 12050 12035 11980 11850(Cuba) 11800
 11780 11710(Cuba) 11690 11675 9720 4895

0400-0500 Eu/ME/At/As/Au/Am
 21845 21790 21740 21725 21690 21630(from 0430) 21625 21565
 21475 17890 17860 17850 17730 17710 17640 17635 17620 17600
 17560 15590 15550 15540 15535 15525 15480 15450 15415 15315
 15280 15210 15140 13775 12055 11995 11980 11850(Cuba) 11780
 11710 11690 11675 11630

0400-0500 WNA
 16190(USB) 15595 15580 15455 15425 15410 15180 13645 13605
 12050 9835

0500-0600 Eu/ME/At/As/Au/Am
 21845 21790 21740 21725 21690 21645(from 0530) 21635 21630
 21625 21475 17890 17860 17850 17730 17710 17640 17635 17625
 17620 17600 17590 15590 15550 15545 15540 15535 15525 15450
 15415 15320 15315 15280 15210 15140 13775 11995 11980 11850
 11690 11675

0500-0600 WNA
 16190(USB) 15595 15455 15425 15410 15180 31645 13605 12050
 9835

0600-0700 Eu/ME/At/As/Au/Am
 21845 21790 21785 21740 21725 21690 21645 21630 21625 21475
 17890 17860 17850 17730 17710 17640 17635 17625 17620 17600
 17560 15590 15550 15545 0500-0800 <MI> continued <D>
 15535 15450 15415 15280 15210 15140 31775 11980 11775 11730

0600-0700 WNA
 17605 16190(USB) 15595 15455 15425 15410 15180 13645 13605 12050
 9835

0700-0800 Eu/ME/At/As/Au/Am
 21845 21790 21785 21740 21725 21690 21655 21645 21630 21625
 21615 21475 17890 17860 17850 17835 17785 17730 17710 17635
 17625 17620 17600 17570 17560 15590 15550 15545 15540 15535
 15450 15415 15375 15360 15340 15320 15280 15205(from 0730)
 15140 13775 12010 11995 11980 11775 11730 7315

0700-0800 WNA
 17605 16190(USB) 15595 15425 15410 15180 13645 13605 12050
 9835

0800-0900 Eu/ME/At/As/Au
 21845 21790 21785 21740 21725 21715 21655 21645 21630 21625
 17850 17830 17815(from 0830) 17810 17755(from 0830) 17730
 17710 17690 17680 17635 17615 17600 17570 17560 17550 15590
 15580(from 0830) 15550 15545 15540 15450 15375 15280 15205
 15155(from 0830) 15140 12030 12010 11980 7315

0900-1000 Eu/ME/At/As/Au
 21845 21800 21790 21785 21740 21725 21715 21690 21655 21645
 21630 21625 17960 17940 17895 17875 17850 17815 17810 17775(from 0930)
 17765 17760 17755 17690 17680 17635 17625 17615 17600
 17570 17560 17550 15590 15580 15550 15540 15535 15500 15450
 15415 15405 15375 15320 15205 15155 15140 12030 12010 11850
 7315

1000-1100 Eu/ME/At/As/Au/Am
 21845 21800 21790 21785 21740 21725 21715(from 1030) 21690
 21655 21645 21630 17890 17850 17815 17810 17775 17765 17760
 17765 17690 17680 17655 17635 17625 17615 17600 17580 15590
 15580 15560 15550 15540 15535 15500 15450 15415 15405 15375
 15320 15155 15140 12030(from 1030) 12010 11850 11840(Cuba)

1100-1200 Eu/ME/At/As/Au/Am
 21845 21800 21790 21785 21740 21715 21690 21655 21630 17890
 17830 17815 17810 17805(from 1130) 17775 17765 17760 17755
 17680 17615 17600 17570 17560 15590 15580 15550 15540 15535
 15500 15480(from 1130) 15450 15405(to 1130) 15375 15320 15155
 15140 11850 11840(Cuba)

****USSR (continued)****

1200-1300 Eu/ME/Al/As/Au/Am
21845 21900 21790 21785 21740 21715 21690 21655 21645 21630
17830 17815 17810 17805 17785 17760 17655 17615 17570 15695
15580 15550 15540 15500 15480 15375 15205 15155 15140 15110
12025 11840(from 1230) 11850 11840(Cuba)

1300-1400 Eu/ME/Al/As/Am
21845 21790 21785 21740 21715(from 1330) 21645
21630 17940 17890 17830 17815 17810 17805 17760 17655 17635
17630(to 1330) 17670 17580 15595 15590 15580 15560 15540
15500 15480 15405 15375 15205 15155 15110 12070 12030 12025
11860 11840(Cuba) 11685 9885 9795 7370 7315 7175

1400-1500 Eu/ME/Al/As/Am
21845 21790 21785 21740 21690 21645 21630 21505 17990 17815
17810 17870 17855 17835 17570 15560 15375 15205 15180 15140
12050 12030 12025 11995 11870 11850 11840(Cuba) 11765 9785
7370

1500-1800 Eu/ME/Al/As/Am
21845 21790 21785 21740 21690 21645 21625 21615 17815 17810
17795(from 1530) 17775 17755 17670 17655 17600 17570 17560
15595(from 1530) 15580(from 1530) 15560 15540 15500 15480
15465 15375 15205 15190 15140(from 1530) 12070 12050 12030
12025 12015(from 1530) 12005(from 1530) 11995 11900 11890
11840(Cuba) 11695 9865 7315 6065

1600-1700 Eu/ME/Al/As/Am
21845 21790 21740 21690 21645 21615 21490(from 1630) 21480(from
1630) 21475(from 1630) 17850(from 1630) 17785 17775 17765 17670
17655 17680(from 1630) 15595 15560 15525 15505(from 1630)
15500 15480(to 1630) 12015 12005 11995 11940 11900 11890
11840(Cuba) 11765 11730(from 1630) 11630(from 1630) 9885 9480
7370 7330(from 1630) 7305(to 1630) 5065

1700-1800 Eu/ME/Al/As/Am
21845 21790 21740 21690(to 1730) 21645 17850(from 1730) 17785
17775 17720 17710 17670 17655(from 1730) 17600 15640 15500
15375 15185 12050 12035(from 1730) 12015 12005 11995 11860(from
1730) 11940 11890 11840(Cuba) 11630 7305(from 1730)

1800-1900 Eu/ME/Al/As/Am
21845 21750(to 1830) 21740 21585 17670 17655 17600 15595
15540 15535 15520 15415 15375 15335(from 1830) 15330 15230
12050 11895 11800 11950(from 1830) 11840(Cuba) 11765(from 1830)
11655 6065

1900-2000 Eu/ME/Al/As/Am
17695 17670 15595 15580 15560(from 1930) 15540 15375 15330
15185 13605(from 1930) 11890 11840(Cuba) 11765 11630 7305

2000-2100 Eu/Al/Au/Am
21740 17695 15595 15580 15560 15540 15500(from 2030) 15330 15185
13605 12060(from 2030) 12050 11860 11890 11840(Cuba) 11765
11630 11520(from 2030) 7330 6000(to 2030) 1143

2100-2200 Eu/Al/Au/Am
21630 21585 17735 17655 15595 15580 15560 15535 15500 15455
15385 15355 15130 12060 12050 11890 11850 11840(Cuba) 11745
11885 11675 11630 11520 9800 9740 7330 7300 1494 1143

2200-2300 Eu/Au/Am
21690(from 2230) 17655 15595 15580 15560 15425 15355 12060
12050 11985 11710(Cuba) 11675 11520 9800 1494

2300-2400 As/Au/Am
21690 17890 17850(from 2330) 17735 17655(to 2230) 16190(US
from 2330) 15595 15590 15580 15560 15550(from 2330) 15490(from
2330) 15425 15355 15140 13605 12050 11985 11780(from 2330)
11710(Cuba) 11690
(BBCMS/Andy Sennitt/SW ECHO)

According to a schedule just issued by BBC Monitoring, the weekly English broadcast from Radio Tallinn, Estonia, at 2030-2100 UTC Mondays, is currently being heard on an additional shortwave frequency of 9560kHz. The previously scheduled frequencies of 5925 and 1035kHz remain in use. (BBCMS/Andy Sennitt/SW ECHO)

****VATICAN CITY****

To India/SE As (the schedule says As/Aus/NZ) there are new frequencies. At 0145 on 15090 and 11935 (ex-11890) and at 1545 on 17865 (ex-17880) and 15090. At 0145 I can hear both frequencies quite well. Other languages precede and follow the English segment. (Tom Sudstrom/PINELANDS RBBS)

****VIETNAM****

THE VOICE OF VIETNAM shortwave schedule:

SORTED BY LANGUAGE

LANGUAGE	UTC	FREQUENCIES (kHz)
Cantonese	1230-1300	10010 12035
	1330-1400	10010 12035
	1430-1500	7416 9732
	1630-1800	9840 12020 15010
English	2230-2300	9840 12020 15010
	1000-1030	9840 12020 15010
	1100-1130	7416 9732
	1230-1300	9840 12020 15010
	1330-1400	9840 12020 15010

French	1600-1630	9840 12020 15010
	1800-1830	9840 12020 15010
	1900-1930	9840 12020 15010
	2030-2100	9840 12020 15010
Indonesian	2330-2400	9840 12020 15010
	1300-1330	9840 12020 15010
	1830-1900	9840 12020 15010
	1930-2000	9840 12020 15010
Japanese	2100-2130	9840 12020 15010
	0930-1000	9840 12020 15010
	1030-1100	9840 12020 15010
	1430-1500	9840 12020 15010
Khmer	1200-1230	9840 12020 15010
	1400-1430	9840 12020 15010
	2130-2200	9840 12020 15010
	0000-0030	7416 9732
Mandarin	1200-1230	10010 12035
	1300-133	10010 12035
	1500-1530	7416 9732
	2200-2230	9840 12020 15010
Russian	1130-1200	9840 12020 15010
	1300-1330	7416 9732
	1430-150	10010 12035
	1630-1700	9840 12020 15010
Spanish	1100-1130	9840 12020 15010
	2000-2030	9840 12020 15010
	1130-1200	7416 9732
	1400-143	10010 12035
Thai	1500-1530	9840 12020 15010
	2300-2330	9840 12020 15010
	0000-0100	9840 12020 15010 (to N America)
	1700-1800	9840 12020 15010 (to Europe)

SORTED BY TIME

UTC	LANGUAGE	FREQUENCIES (kHz)
0000-0030	Khmer	7416 9732
0000-0100	Vietnam	9840 12020 15010 (to North America)
0030-0100	Leo	7416 9732
0830-0930	Mandarin	9840 12020 15010
0930-1000	Indonesian	9840 12020 15010
1000-1030	English	9840 12020 15010
1030-1100	Indonesian	9840 12020 15010
1100-1130	English	7416 9732
1130-1200	Spanish	9840 12020 15010
	Russian	9840 12020 15010
1200-1230	Thai	7416 9732
	Japanese	9840 12020 15010
1230-1300	Khmer	7416 9732
	Mandarin	10010 12035
1230-1300	Cantonese	10010 12035
	English	9840 12020 15010
1300-1330	Leo	7416 9732
	French	9840 12020 15010
1330-1400	Mandarin	10010 12035
	Russian	7416 9732
1330-1400	Cantonese	10010 12035
	English	9840 12020 15010
1400-1430	Khmer	7416 9732
	Japanese	9840 12020 15010
1400-1430	Leo	7416 9732
	Thai	10010 12035
1430-1500	Cantonese	7416 9732
	Indonesian	9840 12020 15010
1500-1530	Russian	10010 12035
	Mandarin	7416 9732
1530-1600	Thai	9840 12020 15010
	Cantonese	9840 12020 15010
1600-1630	English	9840 12020 15010
1630-1700	Russian	9840 12020 15010
1700-1800	Vietnamese	9840 12020 15010 (to Europe)
1800-1830	English	9840 12020 15010
1830-1900	French	9840 12020 15010
1900-1930	English	9840 12020 15010
1930-2000	French	9840 12020 15010
2000-2030	Spanish	9840 12020 15010
2030-2100	English	9840 12020 15010
2100-2130	French	9840 12020 15010
2130-2200	Japanese	9840 12020 15010
2200-2230	Mandarin	9840 12020 15010
2230-2300	Cantonese	9840 12020 15010
2300-2330	Thai	9840 12020 15010
2330-2400	English	9840 12020 15010

****YEMEN****

BBC Monitoring reports that Republic of Yemen Radio inaugurated a daily half hour English broadcast on July 1st. It is on the air at 1800-1830 on 7190 and 5970 as well as mediumwave 792 and 1188kHz. They use the strange announcement (monitored twice): "This is Yemen programmed to English service from Aden". (Andy Sennitt/SW ECHO)

••YUGOSLAVIA••

RADIO YUGOSLAVIA WORLD SERVICE SCHEDULE STARTING March 04,1991 [adjusted for summer time by AQ-ed.]

UTC	SERVICE	FREQ	TARGET 1	FREQ	TARGET 2
0000-0045	English	9620	(e)CINA	11735	(w)JNA
0045-0115	Maced.*	9620	(e)CINA		
0700-0800	Yugo.	9620	(w)EU	Saturdays only	
1130-1200	Maced.*	17725	AU		
1200-1230	English	17725/17740?	AU	21635	(se)AS
		21715	(e)CINA		
1400-1445	Russian	7185	(n)CJUSSR	9620	(C)USSR
1445-1630	Bulgarian	5995	(se)EU		
1630-1800	Albanian	5995	(s)EU		
1800-1830	French	7215	(w)EU	9620	(nw)AF
1830-1715	German	9620	(w)EU		
1700-1730	Greek	7220	(sw)EU		
1715-1800	Arabic	7250	(ne)AF,AR	9620	(nw)AF
1800-1830	Russian	6005	(n)CJUSSR	7185	(s)CJUSSR
1830-1900	English	6165	(w)EU	15165	(s)AF
1900-1930	Maced.*	6150	(w)EU		
	Spanish	7220	(sw)EU		
1930-2000	German	5995	(w)EU		
	Italian	7220	(sw)EU		
2000-2100	Yugo.	8100	EU **	9720	AU **
2030-2100	French	5995	(w)EU	15165	(sw)AF
2100-2145	English	5995	(w)EU	6100	EU
2300-2330	Spanish	7220	(nw)SA	11835	(s)SA
2330-2400	Yugo.	9620	(e)CINA		
EU - Europe	NA - North America	e - East			
AF - Africa	SA - South America	n - North	* R.T. Skopje		
AS - Asia	AR - Arabia	s - South	R.T.G. ** Sat. Only		
AU - Australia	C - Central	w - West	R.B.G. ** Sun. Only		

(Allen Courtney/USENET/Kirk Baxter/SW ECHO)

Now calling itself "Croatian Radio Zagreb," and heard at 0035 on July 11th, switching from a program in Croatian to one in English. Continued with brief news and commentary, interspersed with interval signal, until 0055. Gave ID and frequencies in Croatian and English, then signed off with national (and I mean national, as in Croatia) anthem. Transmission relayed via WHRI; excellent sound. (Barry Brenesal/SW ECHO). According to Glenn Hauser in DX Listening Digest issue 34, Radio Croatia's opening and closing announcements are in English, and there are often English segments but at unpredictable times. This of course refers to the 0000-0100 transmission via WHRI on 7315. (Hauser/Andy Sennitt/SW ECHO)

A good source of information from Yugoslavia is TANJUG. 13440.0 is active at this time and the signals into the Southeastern U.S. have been exceptional. All transmissions are 425/50. I believe the sked on 13440.0 starts at 0400 UTC. (Mark Burkart/SW ECHO). Check out 7808 around 0000 UT and you may see TANJUG in English. About 0100 or so they move up to 7998. They tend to have long pauses between traffic, so don't be too surprised if all you hear on the freq is an open (space) carrier. (Mike Agner, KA3JJZ/SW ECHO)

••THIS AND THAT••

AMENDING THE ECPA (from Robert Horvitz)

A "Privacy and Technology Task Force," assembled by Sen. Patrick Leahy, has recommended that the Electronic Communications Privacy Act of 1986 (ECPA) be amended to add penalties for the intentional interception of radio signals from cordless phones, wireless data communications, personal communications networks, radio PBXs, advanced Mobile Radio systems, and CT2/Teletop radiotelephones.

The Task Force also recommends that the ECPA's penalties for intentional interception be adjusted to focus on "targeted surveillance of specific communications"; that manufacturers be encouraged to put warning labels on "customer premises telephone equipment"; and that Congress examine "encryption technology and its potential impact on enhancing the privacy, security, and authenticity of electronic communications."

In addition, the Task Force's report (delivered to Sen. Leahy on May 28th) discusses Caller ID, ID blocking, automated dossier-building, protection for personal electronic transaction data, and government monitoring of data networks. But consensus recommendations were not offered on amending the ECPA in these areas.

According to Cathy Russell, counsel for the Senate Subcommittee on Technology and the Law, Sen. Leahy has not decided how to respond to the report. No hearings are scheduled yet, and recommendations have not been translated into draft legislation. However, something will surely be done to show that Congress cares about electronic privacy.

Here is a long excerpt from the radio part of the 23-page report. Capitalized words were set in boldface in the original:

"...Computer companies are experimenting with, and seeking FCC licenses for, 'wireless' modems which can transmit data between computers without the computers being wired together, either directly or through phone lines. Such modems will have applications in several environments including the transmission of data from remote sites (a kind of cellular laptop computer) as well as within an office environment (wireless local area network or LAN)... Under current FCC proceedings, there is a likelihood that such communications will not be protected unless the user goes to the expense of full data encryption. THE TASK FORCE RECOMMENDS APPROPRIATE AMENDMENTS TO LEGALLY PROTECT DIGITAL COMMUNICATIONS OF THIS TYPE FROM UNAUTHORIZED INTERCEPTION.

"...Cordless phones have reduced the transmission power so that the phenomenon of having calls blast through on an FM radio receiver has been eliminated. Cordless phones also have begun to utilize technology which permits the call to be carried between the

handset and base unit on more than one frequency. This feature can and is available to add security and privacy to the phone call. The next generation of phones will utilize digital transmission technology which will make interception more difficult.

"Perhaps the most important change since 1986, though, is not technological but societal. The cordless phone, far from being a novelty item used only at 'poolsides,' has become ubiquitous. A leading telephone equipment supplier now sells as many cordless telephone units as wired sets. It is projected that cordless phones will be in use in 68% of American households by the end of the decade. More and more communications are being carried out by people in private, in their homes and offices, with an expectation that such calls are just like any other phone call. Given such technological changes and under such societal circumstances, the task force concluded that to relieve the government of the duty to obtain a warrant before monitoring such communications is to vitiate much of the protection which should be afforded to communications privacy by the federal wiretap law and the Fourth Amendment. THEREFORE, THE TASK FORCE RECOMMENDS THAT CONSIDERATION BE GIVEN TO ELIMINATION OF THE EXEMPTION FOR CORDLESS PHONES, WHILE PRESERVING AN EXCEPTION FOR UNINTENTIONAL OR ACCIDENTAL PRIVATE PARTY INTERCEPTION.

"In recommending both the maintenance and extension of legal protection for 'wireless' radio communications, the task force is aware that inexpensive, widely available scanners and other devices are available that make it possible to intercept radio communications. The task force strongly believes that such technologies should not defeat citizens' reasonable expectation of privacy against government intrusion and that government agents should conduct electronic surveillance of the technologies described above only under appropriate court authorization. At the same time, criminal sanctions could be overboard in criminalizing inadvertent and unintentional interceptions of radio communications by persons with access who legally possess and use scanner and other devices that intercept radio communications. The existence of monitoring devices makes it difficult to rely solely on legal protections against third-party eavesdropping. The task force is aware that legal protections may not go far enough in affording citizens real privacy protection against intentional but undetected private surveillance. For example, concerns were expressed by a number of task force members that technical privacy enhancing features for radio-based systems should be more rapidly deployed by manufacturers and service providers.

"To rectify this situation, the task force does not want to overcriminalize in this area, i.e., penalize unintentional conduct. THE TASK FORCE IS OF THE VIEW THAT THE RIGHTS OF PRIVATE CITIZENS USING RADIO SCANNERS CAN APPROPRIATELY BE ADDRESSED BY CLEARLY SETTING FORTH INTENT REQUIREMENTS IN THE ACT, BY TYING THE CRIMINAL PENALTY TO TARGETED SURVEILLANCE OF SPECIFIC COMMUNICATIONS AND BY FURTHER ADJUSTING THE CIVIL AND CRIMINAL PENALTY STRUCTURE OF THE ACT, RATHER THAN EXEMPTING WHOLE CATEGORIES OF TELEPHONE TECHNOLOGIES AND THUS MAKING THEM FAIR GAME FOR MONITORING BY GOVERNMENT AGENTS WITHOUT A WARRANT, CORPORATE SPIES, OR JUST PLAIN SNOOPS.

"Second, in order to ensure that citizens both understand the vulnerability of particular radio technologies to private, intentional, illegal interception and to encourage industry to develop and market communications devices that are less vulnerable to intrusion, THE TASK FORCE ENDORSES THE CONCEPT THAT ECPA SHOULD BE AMENDED IN SUCH A WAY AS TO ENCOURAGE THE PLACEMENT OF WARNINGS AND NOTICE OF THE VULNERABILITY OF CUSTOMER PREMISES TELEPHONE EQUIPMENT ON SPECIFIC [CUSTOMER PREMISES EQUIPMENT] AND THAT MANUFACTURERS BE ENCOURAGED TO MAKE CONSUMERS AWARE OF THE TECHNICAL LEVELS OF PRIVACY ON DIFFERENT TYPES OF EQUIPMENT. The task force believes this will encourage industry to compete with each other in developing devices which are more secure. THE TASK FORCE BELIEVES CONGRESS SHOULD WORK WITH THE FCC, INDUSTRY, AND TECHNICAL EXPERTS TO FURTHER EXPLORE WAYS TO ENHANCE THE SECURITY OF DIFFERENT TYPES OF EQUIPMENT AND TO FURTHER EXPLORE WAYS TO ENHANCE CONSUMER AWARENESS OF THE SECURITY OF DIFFERENT TYPES OF EQUIPMENT AND LAWS PERTAINING TO COMMUNICATIONS PRIVACY. IN PARTICULAR, THE TASK FORCE RECOMMENDS THE EXAMINATION OF ENCRYPTION TECHNOLOGY AND ITS POTENTIAL IMPACT ON ENHANCING THE PRIVACY, SECURITY, AND AUTHENTICITY OF ELECTRONIC COMMUNICATIONS. THE TASK FORCE FURTHER ENCOURAGES COMMUNICATIONS SERVICE PROVIDERS TO CONTINUE TO EXPLORE THE INCORPORATION OF ENCRYPTION AND OTHER PRIVACY ENHANCING FEATURES IN NEW COMMUNICATIONS SERVICES, SO AS TO IMPROVE COMMUNICATIONS PRIVACY..."

If you would like to express your views on the report, or suggest possible amendments to the ECPA, you can write to:

John Podesta
Chairman, Privacy & Technology Task Force
424 C Street NE
Washington, DC 20002

or

Senator Patrick Leahy, Chairman
Subcommittee on Technology and the Law
815 Hart Senate Office Building
Washington, DC 20510
(Robert Horvitz/Kirk Baxter/SW ECHO)

INTERNATIONAL RADIO CONFERENCE (info from John Ross)
The June 3 issue of "Broadcasting" magazine (pp 57-58) contains an account of the recent "Turning up the Volume on International Radio" conference in Washington, sponsored by the Center for Strategic and International Studies (CSIS). If you can find it, I commend it to your attention.

According to the article, panelists from VOA, RCI, Radio Japan and Radio Moscow all complained of heavy budget cuts resulting in equipment cutbacks and reduced hours of operation in fewer languages. Commercial broadcasters are "a greatly expanding

♦♦THIS AND THAT (continued)♦♦

phenomenon," but some panelists doubted the existence of a large marketplace for international shortwave programming.

The director general of Radio Japan observed that NHK (Radio Japan's parent) "is more interested in establishing an international video news service to compete with CNN than expanding its shortwave services."

There is much more of interest in the article, and I suspect that CSIS may publish a report about the conference. Many of the issues raised are of serious concern to the participants in this echo as "consumers" of shortwave radio services. You ought to be able to find the magazine at your library, or your friendly local broadcaster. (John Ross/SW ECHO)

A SELECTIVE LIST OF BOOKS ON BROADCASTING HISTORY from the library of John Ross: I have limited this list to general histories, and I have not included histories of individual stations (with one major exception), collections of scripts, or books concerned exclusively with programming. I don't claim that this is a complete list, but it is a partial list of the things on my shelf.

Banning, William Peck. "Commercial Broadcasting Pioneer: The WEAJ Experiment, 1922-1926." Harvard University Press, Cambridge, 1946.

Barnouw, Erik. "A History of Broadcasting in the United States." Oxford University Press, New York. Three volumes:

- I. A Tower in Babel (to 1933) New York, 1966
- II. The Golden Web (1933 - 1953) New York, 1968
- III. The Image Empire (from 1953) New York, 1970

Barnouw, Erik. "Tube of Plenty - The Evolution of American Television." Oxford University Press, New York, 1976.

The three-volume set is the standard reference on the history of American Broadcasting. Tube is a one-volume condensation and update by the same author. I've found a number of minor factual errors in both books, but Barnouw is still the best overview of the development of the broadcasting industry in this country.

Briggs, Asa. "The Birth of Broadcasting (Volume I of the History of Broadcasting in the United Kingdom)." Oxford University Press, London, 1961.

Douglas, Susan J. "Inventing American Broadcasting 1899 - 1922." Johns Hopkins University Press, Baltimore, 1987.

Ellis, David. "Evolution of the Canadian Broadcasting System - Objectives and Realities, 1928-1968." Government of Canada, Ottawa, 1979.

Emery, Walter B. "National and International Systems of Broadcasting, Their History, Operation and Control." Michigan State University Press, East Lansing, 1969.

Erickson, D.H.V. "Armstrong's Fight for FM Broadcasting: One Man vs. Big Business and Bureaucracy." University of Alabama Press, University, Alabama, 1973.

Fowler, Gene and Crawford, Bill. "Border Radio." Texas Monthly Press, Austin, 1987.

Gorham, Maurice. "Forty Years of Irish Broadcasting." Talbot Press, Dublin, 1967.

Lichty, Lawrence and Topping, Malachi, editors. "American Broadcasting: A Source Book on the History of Radio and Television." Hastings House, New York, 1975.

-This is a 700+ page collection of 93 articles, papers, and memoirs. It's full of good stuff.

MacDonald, J. Fred. "Don't Touch That Dial: Radio Programming in American Life, 1920-1960." Nelson-Hall, Chicago, 1979.

McNeil, Bill and Wolfe, Morris. "Signing On, The Birth of Radio in Canada." Doubleday Canada, Toronto, 1982.

Milam, Lorenzo. "The Radio Papers." Mho & Mho Works, San Diego, 1986.

Nichols, Richard. "Radio Luxembourg, The Station of the Stars." Comet Books, London.

Richardson, David. "Puget Sounds, A Nostalgic Review of Radio and TV in the Great Northwest." Superior Publishers, Seattle, 1981.

Slate, Sam J. and Cook, Joe. "It Sounds Impossible." MacMillan, New York, 1963.

Stewart, Sandy. "From Coast to Coast, A Personal History of Radio in Canada." CBC Enterprises, Montreal, 1985.

Vyvyan, R.N. "Marconi and Wireless." EP Publishing, East Ardsley, Wakefield, 1974. (First published in 1933 as "Wireless Over Thirty Years")

The preceding list includes many books that are long out of print, and others that will not be on the shelf at your local B. Dalton. My best suggestion is to put your local library to work finding them. If they don't have them on their own shelves, they can get them through "interlibrary loan." (John Ross/SW ECHO)

♦♦PIRATES AND SUCH♦♦

RADIO NEWYORK INTERNATIONAL UPDATE - Progress can be reported in the settling of differences at RNI. Talks were held this week between Pirate Joe and Johnny Lightning and L.F. Midwood concerning the return of the 11L network to RNI. I was also in attendance for part of this meeting at the Yonkers facility, where I also stated my conditions for return including a method of doing it. In the meantime, Randi Steele is also coming up with his own plan for his return, and that of Dan Lewis, to the airwaves via RNI. As requested by Allan Weiner last week, Randi would be given his program back but would give up management position at the operation. He is willing to do this now and is also offering to

sell his share of the RNI assets back to the remaining partners. He will also sell his part ownership of the PAMS jingle package to either myself and/or Johnny Lightning as we are already co-owners.

On another front, I delayed this report until I could get confirmation, but I will be taking the program to the QSO AMATEUR RADIO Satellite Network. Same time on Sunday nights. Hopefully they will have all the technical installation done by this weekend for the July 7th broadcast. Logistical problems and other situations have to be worked out and they are dependent upon the resolution of the problem at RNI. The Satellite version of the program will be on weekly.

Here are some excerpts from the E-Mail we have received:

... the few hours RNI broadcasts per week are a respite from the hum-drum documentary/news of the VOA and money hungry ecclesiarchs. ...I believe that for all the struggling RNI has been through in the past, finally landing on success with WWCR, there must be an amiable solution for both parties. RNI, in itself, is a hallmark to the First Amendment. The only losers in this instance would be the listeners and the credibility of the RNI staff, whether separate or whole. Remember your purpose. There is nothing that is so broken that can't be fixed. To this I simply state: Settle Your Differences! NOW! - Mark J. Fine

...You know, it is a shame that there must be so much animosity between people. Here is a great opportunity to do well for everyone: an alternative medium not burdened by the Muzak mentality - and instead of everyone trying to become a team and ignoring each other's warts, there is an escalation of personal agendas. I know that I am being idealistic & possibly naive, but I hate to see good turn to mush. There is a saying: a teaspoon of sewage ruins a whole barrel of wine. Maybe some good will come out of all this. It looks like a small chance, but it is still a chance. ...be a Moses. Get them all to shake hands and sit down together! Lead the radio people to the promised airwaves! (Am I being overly optimistic?). - Paul Blumstein

Thanks to all those who have written in their support. As for those who are not listeners to RNI, do not criticize that what you know nothing about. (Steve Coletti/SW ECHO)

♦♦UTILITY♦♦

Vietnam News Agency - Hanoi (RTTY)				
UTC	Frequency	Call	Language	Target
0515-0645	15744	XVN36	French	SE Asia
0515-0845	18264	XVN48	French	E Europe
0645-0830	15744	XVN36	English	SE Asia
0645-0830	18264	XVN48	English	E Europe
1200-1330	9330	XVN28	French	SE Asia
1200-1330	10600	XVN37	French	E Europe
1330-1530	9330	XVN28	English	SE Asia
1330-1530	10600	XVN37	English	E Europe

(John Spragens/GENIE/Allan Courtney/USNET/Kirk Baxter/SW ECHO)

The so-called feeder stations are reportedly available on SSB as follows: Radio Moscow on 19311, 18193, 10770, 7680, and 7462 KHz. Radio AFRTS, American Forces Radio and Television Service on 19480, 18041, 15650 and 9923 KHz. Radio Beijing, Chinese People's Republic on 8660, 6550 and 5295 KHz. Deutsche Welle, Germany, on 7919 and 6887 KHz. Radio BSKSA, Saudi Arabia, on 15884 and 10990 KHz. Radio Free Europe/Radio Liberty, USA, on 13690, 9170 and 6970 KHz. Voice of America, USA, on 19480, 15650, 7651 and 6873 KHz. All India Radio, India, these transmissions are on 8 (sic) and 9950 KHz.

NEW VNG FREQ

As nearly everyone must know by now, on 8 May 1991 VNG, the Australian standard time and frequency station, moved its 15 MHz transmissions to 16 MHz. I recently received a letter from Dr. Marion Leiba, Honorary Secretary of the VNG User's Consortium, reporting that on 1 May VNG was issued a license to operate on 12.984 MHz. The letter says that the frequency is on loan from the Royal Australian Navy and that they [they Navy] reserve the right to take back the frequency at any time, should they need it. The transmissions on 12.984 MHz will be double sideband at 10 kW power, but that the bandwidth will be restricted to 3 kHz at the Navy's request. Because of international spectrum allocations, VNG will not be permitted to transmit voice IDs on 12.984 MHz. Instead, the callign "VNG" will be transmitted in Morse Code, probably with a frequency of 400 Hz. The letter also went on to say that operation on 12.984 MHz was expected to commence "around the end of June", and that until then, "the 5 and 10 MHz transmissions will continue as before, and 16 MHz will be broadcast from 2200-1100 UTC each day".

According to a handwritten personal note from Dr. Leiba accompanying the letter, operation on 12.984 MHz is now expected to begin on July 3, 1991. No time was given. In addition, it's not clear from the material I received whether 12.984 MHz will *replace* 5, 10, or 16 MHz or *supplement* them. My personal hunch is that no matter what, 16 MHz won't be replaced, because VNG re-cut its old 16 MHz transmitting antenna to operate 16 MHz on or about 6-8 May, and I'd doubt that they'd want to "throw away" all that work. I *think* that VNG actually has four transmitters, the 4th currently serving as a backup, so that there may be a chance that 12.984 MHz will be added to 5, 10, and 16 MHz. (Ben Krepp/USNET/Kirk Baxter/SW ECHO)

♦♦EQUIPMENT♦♦

USER COMMENTS ON DRAKE'S NEW RB RECEIVER:

I have been able to get my hands on a new RB, for testing at the Bethany Relay Station. I can say that we have tried an 8000 dollar Harris Mil spec. receiver, and it didn't do any better than the RB. When you have 850 Kw of RF running, there isn't any receiver that will take that kind of punishment. Now, when we only have 1 or 2 transmitters on, the radio works very well, with 20dB attenuation ahead of it. I am going to bring it home, and try it from here. I live 2 miles off the end of our African antennas. I would expect that it will work very well here, after I get out of the high RF level at the station. I am planning to buy one, soon as I can get the bucks. Maybe the R-500 from Kenwood would do as well, BUT I want an AMERICAN radiol I have had Drake all my hamming career, and don't see any reason to change to a rice burner now. From what I have been able to see, the RB is worth every cent of the money. (John Vodenik WB9AUJ/WVPE0IQF//SW ECHO)

First impressions of the Drake RB:

- o - This is a serious receiver, not a toy.
- o - The sensitivity is quite astounding, especially when the preamp's engaged.
- o - The selectivity is also quite good; indeed at the 500 Hz setting there's some evidence

EQUIPMENT (continued)

- of ringing, but only when the passband tuning is in use.
- o - Performance of the synchronous detector is a little iffy: the thing tends to lose lock and wander about a bit, but it's only noticeable when listening to music.
- o - SSB performance on 20 meters seems outstanding. I was also amazed that I was able to copy several hams in the 40 meter band, in among the broadcast signals.
- o - The audio section is very good and drives a Radio Shack Minimus 7 speaker with ease. The tone control, however, seems to have little effect.
- o - The RB's passband tuning is outstanding! Blows the NRD-525 right away in that regard. Works in all modes, too.
- o - There's quite a bit of "chuffing" when tuning the radio; sounds more like "clicks" though. Annoying.
- o - The cabinet is flimsy as hell.
- o - The manual leaves much to be desired.
- o - The receiver runs pretty warm (but, then, so does the NRD-525.)

I have borrowed a Rhode & Schwartz antenna multicoupler from work and am feeding four receivers from it using the same antenna. The radios: the Drake RB, a JRC NRD-525, a Drake R-4B, and a Lowe HF-225. I tuned in Radio New Zealand on three of the four receivers at 0130 UTC Friday night. Using the same antenna (although not with the multicoupler), the RB edged out the 525 in sensitivity, leaving the HF-225 in the dust. This was on 17770 kHz. In audio quality, however, there was no comparison: the new Drake wins, hands down, due to its synchronous detector. I think I'm gonna like this radio. (Elton Byington/SW ECHO)

First, I have not had time to give it a full "on the air" test but results so far are very good. Filters have sharp skirts and the IF shift seems to be working very well. It has a good rejection of strong signals. I operated my ham rig 20K away and it did not seem to bother it. The controls seem to be easy to learn and are not so complicated that you have to have a copy of the manual on hand at all times. The very extensive SCAN options are very nice. The audio quality, even on internal speaker, is good. The terminal interface works well but maybe the one thing that kind of bothers me is that all front panel controls are deactivated when the computer is turned on and plugged into the RS232 jack in the back of RB. This may be because I am using a 9 pin to 9 pin (computer to radio) straight cable (no null modem cable needed) and at least one of the pins in the 9 pin socket may not be standard. Especially pin 1, which is +5 volt squelch output for remotely watching squelch. I am going to talk to Drake about this after the holiday. (Bill Taylor, KD4IL/SW ECHO)

I finally did it: I called up Drake on Monday 7/1 and ordered the RB. Despite being told that it would likely take 10 days to ship (they're apparently getting a lot of orders as a result of recent ads in QST and other magazines), it was shipped Tuesday and received on Friday 7/5. What follow are some initial impressions of the receiver. Of course, this is going to be a pretty subjective review and the opinions expressed are solely my own and more than likely don't reflect those of my employer!

I immediately connected the R-8 to about a 10-foot length of wire strung in the shack and set it next to my JRC NRD-525 (not exactly a terrific antenna arrangement). It appears to be reasonably easy to operate and the manual is well-written, at least compared to the NRD-525 manual, though it doesn't compare with the outstanding manual from my Hammarlund HQ-180A (regretfully sold some years back) or the military R-390A.

Initial Complaints

A real mixed bag. There are some MAJOR problems here. The first thing that became apparent is that it is not possible to display the frequency to finer than 100 Hz when in AM mode. This is utterly unacceptable. The fact is that you're tuning in 10 Hz increments and when you switch to USB or LSB (where the full frequency is displayed) you can be way off where you thought you were tuned. Also, every time that you change mode (from, for example, AM to USB or whatever) the AGC and Bandwidth are reset to Drake's 'default' settings, regardless of what you had previously entered. You may then reset them to what you really wanted, but this is a major pain.

How annoying was this? Almost enough for me to throw the unit back in the box and ship it back for a refund. It's clear that both of these problems could be solved with a couple of easy software fixes if Drake were so inclined. I'm going to talk to their service people on Monday about this and some other problems.

Synchronous Detection

When it's locked, it's easily as good as a Sony ICF-2010, though I haven't yet had my friend's 2010 in for a side-by-side comparison. The real problem is that it can take a very long time for the internal carrier to lock with the received one. You can hear the whistle 'homing in'. This can be hastened by depressing the sync button several times - not exactly stellar engineering! Whether this is unique to my set remains to be seen. Also, when using pass-band tuning (PBT) while in sync mode, the sync is lost when you turn the knob quickly and, again, it takes a few seconds to re-sync on the received signal.

Once, the sync is locked, it does indeed work very well. The difference on weak/faded signals is very noticeable.

Sensitivity

I have no lab instruments, so all I could do was tune in some very weak stations on both the Drake and the NRD-525 and see what the difference was. With the preamp on, the Drake did do somewhat better than the NRD on very weak signals (like a few out-of-band Chinese domestic stations this morning). So, the edge goes to Drake.

Selectivity/PBT

Drake's published specs on their filters are not that exceptional. Shape factors appear to be about 1:2 (6 and 60 db down) which isn't that good. However, in a comparison with the NRD (with stock 6 and 2 kHz filters and a Collins 3.8 kHz mechanical filter), the edge goes to Drake under tough signal conditions. Combined with a dramatically better PBT than the NRD, the Drake did a significantly better job on a signal on 15171 kHz this morning (presumably Tahiti in French?) which had a tough heterodyne and lots of 15170/15175 QRM.

Audio

No comparison! The Drake is far better than the very poor, hissy audio produced by the

NRD-525. The internal speaker is quite good. A Minimus-7 connected externally sounds a bit better. The tone control is reasonably effective.

Keypad/Ergonomics

The buttons look nicer than those on the NRD, but it's difficult to get good contact on them. The logic of entering a frequency is far inferior than that of the NRD. There's also no clear key - a major drawback.

The menu operation is definitely an acquired taste. The tuning knob is not as nice as the NRD's and it's too small and close to other buttons. Also, it's too easy to hit the knob and deactivate the sync mode unintentionally.

The tuning steps are not as flexible as the NRD and the display has got some real problems (as described above) with regard to frequency resolution.

Frequency Accuracy

Zero beating to WWV on 15 MHz showed that the display was about 30 Hz off of nominal 15.0000 MHz. This is not nearly as good as the rock solid accuracy on the NRD.

MW Performance

This is the first solid state unit that I can connect my two-foot amplified Sarsarino loop antenna to without overload problems. This perhaps means that the dynamic range is better than that of the NRD. The published specs, at least, seem to confirm this. Conditions last night on MW were terrible - typical summer thunderstorm static and little in the way of high-latitude paths open. However, I was able to get a carrier on 684 kHz, likely from Seville at around 0400 UT. It's going to take a lot more work on MW to see how well this unit works. The preamp cannot be enabled below 1.8 MHz (revised from the original 5 MHz published figure).

Otherness

There seem to be rogue whistles that appear randomly on received stations which manifest themselves as increasing or decreasing in tone. Kind of like the sync locking slowly, but this is with the sync OFF. This isn't particularly the mark of a \$1K receiver. I hope that this may be unique to my sample. I'll let you know when I talk to Drake.

I also noticed a spurious signal on 10675 kHz, source unknown. It was definitely not heard on the NRD.

The instruction manual contained a complete description of the RS-232 interface and commands. It should be trivial for anyone with a PC to write some programs to control this radio.

Summary

After just a few hours of tests, this unit has a lot of pluses, and unfortunately, a number of annoying minuses. Some of them could be as simple as software bug fixes, if Drake is interested.

Will I keep it? I'm still not sure. I'd like to, but it depends a bit on what Drake has to say next week. In any event, I've got another 10 days or so to play around and see how well it does!

It will be interesting to see some real lab measurements of this unit from Larry Magne's RDI. Also, I'd be interested in any other comments from R-8 owners.

More on the Drake RB:

Following up on my initial impressions posting on the RB, I called Drake customer service this morning and received the following information.

1) In regard to my 'rogue whistle' problem which appears to be a spurious internally generated carrier sweeping across the HF region and manifesting itself as a whistle particularly on stronger signals, this is definitely not normal and they suggest that I return it for them to look at it.

2) In regard to my concerns about the frequency display in AM mode and the default bandwidth/AGC settings that I mentioned in my first posting, the customer service person basically agrees with me that he doesn't like these 'features'. However, he said that it's an engineering decision and he's made it known to them that he's unhappy with it. He recommended that I write directly to the head of engineering, Steve Koogler. He also mentioned that this is a 'software' problem, so presumably it could be remedied easily if a decision at Drake were made to do so.

3) Slow synchronous detection lock on - this is apparently normal. I couldn't get a definite answer on how, exactly, the Drake synchronous detection works. I had received an e-mail message from another DXer who was concerned that the method that Drake employs is not as good as that used in the Sony ICF-2010. I can't shed any additional light on this issue.

My feeling at this point is that the customer service person was responsive to what appears to be a defect in my sample and I can certainly send it back under warranty. However, I'm also still in the 15-day money back guarantee period. Although I've never taken advantage of such an offer in the past, I believe that I will return the unit for refund with a lengthy letter detailing my unhappiness with some of the 'features' and a request that the letter be forwarded to Engineering for a reply. I personally believe that Drake really blew it on the frequency display limitation/BW-AGC defaults issue. These problems continue to annoy me and limit the effectiveness of this radio as a serious DX instrument.

As mentioned earlier, I'd be interested in hearing from any other RB owners as to whether they have found similar problems and/or find some of my complaints justified.

Richard Eckman
NASA Langley Research Center
Hampton, VA
(Richard Eckman/USENET/Kirk Baxter/SW ECHO)

Bill, after spending another couple of days working on it I have decided not to pursue the Drake RB software development at this time. On the second machine, merely connecting

••EQUIPMENT (continued)••

the cable to the PC locked up the RB's front panel controls. In playing with a breakout box the only way to undo it was open the DTR line. From my perspective, Drake missed the boat on the computer interface. My philosophy in software development is to either do it well or don't do it at all...(Tom Sundstrom/SW ECHO)

Well, on the Drake interface. I went ahead and tied rts lead high on the interface and then moved the DTR lead over to RTS. This works fine. Drake is in the growing stages. I have serial #48. One of the reasons Drake gave the 15-day send back option was to get those users who just could not take the problems a chance to send it back. I think there will be an upgrade in about 8 months to change a lot. ALL circuits on ROM and boards so it would be quite easy for those of us who can read instructions to make major modifications if necessary. I will be talking to them in several weeks to see what they are doing. In the meantime, use their 800 number to send them feedback on your thoughts. (Bill Taylor KD4IL/SW ECHO)

I've had my Drake RB for three days now, and here are some of my initial impressions. I had the opportunity to compare it side-by-side for an entire evening with a Drake R7 and a JRC NRD-515.

PHYSICAL/ERGONOMICS

At first I was really bugged by the itty-bitty rubbery push buttons... what is this, a Spark-O-Matic \$99 car stereo??! Over the days, however, I grew to like their soft-touch feel. It remains to be seen if they can stand up to continued use, especially the lettering on the buttons and the internal switch contacts. Call it old-fashioned, but I gravitate toward real he-man switches that have a solid mechanical feel to them... something you can squirt contact cleaner into if it begins to act up. The only switches of the "modern era" I respect are like the quality, high-MTBF contacts used in the FET switches on the Kiwa Electronic's MAP unit.

I have a MAJOR dislike of the tuning knob; it would be the first thing I'd replace. Perhaps I was spoiled by the classy, custom tuning knob on my old NRD525 (even the stock '525 knob is a dream compared to the RB's). Anyway, it is too small, lightweight, and easily bumped when adjusting other nearby controls. I would have liked the RB in a case 10% larger to give better spacing between controls. However, I REALLY like the implementation of variable-rate tuning on this radio. When you spin the knob with zest, it doesn't go off into turbo-space; the higher tuning rate is sufficiently faster for my liking, but not TOO fast.

Although on the small side, I'm impressed with the feel of the dual-function knobs like the VOL/RF GAIN, SQUELCH/PBT, and TONE/NOTCH.

Now, let's talk about the RB's pitiful excuse for a metal case! I can't believe Drake would sell any of their products with a cabinet so flimsy. Just a slight press on the top flexes it a surprising amount. It is VERY thin! I'd be willing to pay \$35 more to Drake just for a metal cabinet worthy of the name Drake. The bottom and rear panels of the receiver are of decent thickness, however.

The green, back-lit LCD display initially reminded me of a cheap-o clock radio, but I'm now used to it. It DOES give the operator a lot of information in an easy-to-read fashion. It's taking some adjustment getting used to frequency entry and display in MEGAHERTZ rather than kilohertz! I'd like to see a second decimal point shown between the 1 and .1 kHz spots like the NRD-525's display.

Some other ergonomic/operational difficulties include the default selection of bandwidths and AGC settings based on MODE. I'd rather chose my own combinations all the time rather than have the receiver do it for me. This is something easily remediable in the next version of the ROM chip if the Drake engineers so desire. Fortunately, all settings are independently selectable now, but you still have to start out with whatever Drake thinks you ought to be using.

Along these lines, I don't like having to cycle through all modes just to get to the one I want. It would be nice to have a future ROM chip revision that allows the user to "lock out" seldom used modes, such as FM (which really blasts your ears with distorted audio when you cycle through it while listening to an AM or SSB station). I have the same gripe about having to cycle through the OFF AGC setting when all I want to do is go from FAST to SLOW. (The NRD525 has the same problem, too.)

The point to all this is: when DX is really hopping, and that sought-after ID may be coming up at any moment, cycling through unwanted modes and settings takes up precious moments that may distract from or obscure a bit of audio at a critical time. Nit-picky? Yes, but I don't like the receiver to get in the way of my DXing.

PERFORMANCE

OK, now we're to the best part! In a nutshell, this radio really cooks, and the audio quality smells great, to boot! Here's a receiver that will easily equal the R5000's audio, I'm sure. It simply sounds great; the R7 and the NRD-515 audio can't even come close. The RB's built-in speaker is the best internal type I've ever heard, and when connected to an external speaker like the Kiwa MAP's or a Radio Shack Minimus series it is even better. The RB essentially equalled the DX performance of the R7 and the NRD-515. We tried the trio against all sorts of tough-signal situations. There were isolated cases where one receiver had an edge, but generally they were neck-and-neck in the DX race (The 515 was occasionally at a disadvantage because it lacks a notch control).

I really like the performance of the RB's Pass Band Tuning (PBT) control... it can make a dramatic difference in signal intelligibility. In my opinion it is at least equal and likely superior to the R7's vaunted PBT (except the R7 allows to user to "slide" easily from one side band to the other; it takes the mode key to accomplish this on the RB).

The RB is a very quiet receiver, continuing the Drake R7 tradition. I suspect this is due to the inherently quiet LCD display, very good internal shielding and the EXTENSIVE ground plane grids found on EVERY circuit board in the RB. To me, the RB's internal construction quality looks excellent in all regards.

The five bandwidth filters perform very well, especially in conjunction with the PBT. The widths of 6.0, 4.0, 2.3, 1.8, and .5 are well chosen.

The RB's synchronous detector is at least as good as SONY's ICF-2010 synchronous detector. It can change a muddled signal into a clearer, less distorted one. It has surprised me by being able to lock onto quite weak DX signals. Only once do I recall that the detector lost lock on a weak signal, resulting in a wandering het as it tried to regain lock. I feel the RB's AGC characteristics are well-chosen for AM mode signals. It does not blank the receiver for 2-3 seconds as the NRD-525 does in SLOW AGC.

For me, the bottom-line on the RB's performance will be decided next weekend when I take it to the Washington Coast for a few hours of seeking out international MW DX and tropical band SW DX with the RB connected to a 1000+ ft. Beverage antenna. If the RB's filters can dig out the MW DX like my NRD-525 did with its 1.8 kHz Collins filter, then I'll be truly impressed, and very likely won't take advantage of Drake's 15-day return policy. (Guy Atkins/SW ECHO)

POMTRESX RADIO REVIEW (USENET)

Background: I bought a couple of these for young friends, and then thought, what the heck, why not one for old dad too? Since nobody has posted a "real" review, herewith the result of six weeks of playing around.

Summary: Best toy I ever bought for thirty bucks. Good first SW for a seventh grader.

Description: The unit is about the size of a large paperback, black, with a telescoping whip antenna, a dc in jack, earphone jack, and a carrying strap. The earphone jack is 1/8" monaural, so you need a stereo/mono adapter to get sound out of both sides of Walkman-style earphones. Battery compartment in the back holds 4 AAs in a pretty awkward arrangement; running off a seven buck Radio Shack dc converter is handier, and gives somewhat better reception. Front panel is 1/2 speaker grille and 1/2 controls/display. Controls are on/off, SW/LW/AM/FM select, SW 1-6 band select, volume, and hi/lo treble control. An analog tuning knob sticks out the side.

Displays are a tuning led that lights up for strong signals and a slide rule frequency display which is both crude and nearly unreadable; but it doesn't matter (see Method of Operation).

Frequency coverage is as follows: FM: 88-108 MHz; AM: 530-1800kHz; LW: 150-280kHz; SW1: 5.85-6.20mhz; SW2: 7.10-7.50mhz; SW3: 8.45-9.90mhz; SW4: 11.50-11.95mhz; SW5: 15.10-15.55mhz; SW6: 17.45-18.00mhz. The above numbers are nominal and not actual; WWW is detectable most times at the high end of the SW3 band.

Method of Operation: Takes a little getting used to. The selector switches have about 1/16" movement between detents and their position is best detected by feel (i.e., click to one end and then count the clicks to where you want to be). Tuning requires a fair bit of old-fashioned analog fingers (the kind that grew up tweaking pots); the tuning knob is relatively slop-free and lends itself to this kind of treatment. Easiest mode is to dial slowly through the bands searching for something interesting. If you want to find a specific station, the best way is to think of the dial as divided into 18 zones (e.g., SW1 high, SW1 middle, SW1 low, etc.); put the slider in the zone and tune slowly around until you find what you're looking for or give up. With earphones on the volume control is "very" sensitive.

Performance: (Note: this report is based on tests in a laboratory whose sole equipment is one pair of ears.) I listen with earphones and using the dc adaptor, which gives a ground; when listening casually I use the telescoping antenna and when I want to do some serious dx'ing :-)) I string a Radio Shack portable SW antenna from the top of a door to the top of a window in a second story room in the residential section of Minneapolis.

Over the past six weeks I have logged the following English-language SW stations: Australia, Austria, both Chinas, Japan, BBC, VOA, WWCR, WRNO, HCJB, Moscow, Germany, France, Israel, Netherlands, Switzerland, Spain, Moscow, Canada, Monitor Radio, something in the Caribbean that I didn't listen to long enough to identify, a bunch of religious stations that I can't stand to listen to long enough to identify, Cuba, and a couple of numbers stations. Plus a ton of stuff in Spanish. Most nights, just tuning through and counting readable signals in all languages, I get 30 to 50 stations. Strong stations will "splatter"; on some nights Monitor Radio occupies just about all of the SW3 band. Yet if you tune slowly and carefully enough, the receiver will "lock" onto even relatively weak stations in the middle of the "splatter." Relatively little drift; turn it off when tuned to a station, turn it on the next night and the signal is right there. All in all, pretty amazing for thirty bucks.

AM and FM are more than adequate; nothing but noise on the LW band.

Final Evaluation: Just the thing to get kids of all ages started in SW. Reminds me of the old Heathkit I built in the 1950s, except a lot smaller and cheaper. May even get me motivated to string some wire from a tree and see what that brings in! Anybody for a very low cost dx club? (No receivers over thirty bucks allowed!)(Earl Boebert/USENET/Kirk Baxter/SW ECHO)

...NOW FOR THOSE AMONG YOU STILL CLUTCHING TO YOUR OLD BARLOW-WADLEYS: The company that built the Wadley went out of business about eight years ago and my enquiries about a tech manual were fruitless. However, there is one guy who was involved in that business who is regarded as an expert on the Wadley. He is RAYMOND HODSON. I only have telephone numbers. They are: Work (07:00 - 14:00 UTC): (0336) 34-1298 Home : (0336) 34-1440. He lives in a place called Ixopo (pronounced e-kopo) in Natal, which is near where the hero of Alan Paton's book "Cry, the Beloved Country" lived. You will have to figure out the codes to reach South Africa yourself! I guess that this guy might be able to copy a manual for you. (Ken Ironside ZR6ARB - Sandton, South Africa/SW ECHO)

...THE JPS NIR-10 DSP UNIT:

A couple of months ago I posted the results of some tests I did on the JPS Communications model NIR-10 digital signal processing unit. This morning's mail brought news of an EPROM change for the NIR-10 that adds an automatic multi-notch filter as well as other enhancements. From the description in the letter, the new NF mode will eliminate multiple heterodynes within the unit's passband, when the NIR-10 is in its "NIR" mode. It uses the gizmo's BANDWIDTH switch (not normally used in the NIR mode) to select the notch filter.

****EQUIPMENT (continued)****

For background, the NIR-10 is a true DSP device that digitizes the audio you feed into it, then uses DSP to eliminate noise spikes and accentuate voice frequencies. It also has a very sharp audio bandpass filter mode that has band edges like the face of a cliff.

The new EPROM - which costs \$15 by mail or \$30 if you want JPS to install it - widens the WIDE filter to 1800 Hz from 1500 Hz, making it more useful for voice listening. (The original, 1500 Hz, bandwidth was a little too narrow for voice, but serves beautifully for RTTY reception.) The letter goes on to say JPS is planning to introduce a new product, the NF-80, which will incorporate the MultiNotch filter. No price is given for this unit.

Info from: JPS Communications, Inc., Box 97767, Raleigh, NC 27624-7767. Phone: (919) 790-1011 (info), (800) 533-3819 (orders). Fax: (919) 790-1456. (Elton Byington/SW ECH-J)

..AND FOR ALL TUBE-RADIO FREAKS:

Hollow State Newsletter #26 just arrived, and it has some valuable info about the Collins 51J-4 receiver. Previous issues have discussed the R-390 (in depth), the entire Hammarlund line (including mods), and other glow-in-the-dark boat anchors. Subscriptions are \$6 for 4 issues, nominally 3 or 4 issues per year, from Ralph Senerino, Publisher, 11300 Magnolia #43, Riverside, CA 92505.

A collection of the best of HSN from issues #1-4 has also been reduced in price, and is now available for \$1.25. That's less than a cheeseburger and Coke, and a lot better for you. (Al Quaglieri/SW ECHO)

****HAM DX****

The Ontario DX Association, station VE3ODX, has a SWL net Sundays at 1600 UTC on 7089 KHz LSB. There is also the National Radio Club Net on Sundays around 0000-0100 on or near 3840. (attribution misplaced...sorry/SW ECHO)

ARRL DX BULLETIN 30, FROM ARRL HEADQUARTERS, NEWINGTON CT JULY 12, 1991 THANKS TO JOE SAND, K2GX, ALLEN SINGER, N2KW, AND THE TRISTATE DX PACKET CLUSTER NETWORK, FOR THE FOLLOWING DX INFORMATION.

AFGHANISTAN, YA. THE YA0AS/T6AS EXPEDITION IS DUE TO START JULY 13. WATCH 3780, 7080, 14180, 21280, 28680 KHZ FOR SSB. THE CW OPERATION WILL BE 1 KHZ ABOVE LOWER BAND LIMITS. THIS EXPEDITION ENDS JULY 29.

BOTSWANA, A22. A22JP IS OFTEN FOUND AROUND 28495 KHZ AT 1700Z.

BRUNEI, VB. VB5PG IS STILL A GOOD CATCH ON 14290 KHZ AT 1100Z.

CENTRAL AFRICAN REPUBLIC, TL. TL8FD LIKES CW ON EITHER 7 OR 14 MHZ FROM 2200 TO 0000Z, AND AT 0400Z. PAT USED TO OPERATE FR4FD.

DJIBOUTI, J2B. J2BFO IS VERY ACTIVE ON 21 MHZ CW. QSL TO F8FNU.

GABON, TR. TR8GH WORKS RTTY AT 0300Z. TR8CA IS ON SSB AT 0430Z. BOTH STATIONS HAVE BEEN ALL OVER THE 20 METER BAND THIS PAST WEEK.

JUAN FERNANDEZ, CE0Z. CE0ZIS HAS BEEN TAKING ADVANTAGE OF EXCELLENT CONDITIONS ON THE LOWER BANDS DURING HIS WINTER MONTHS. HIS SIGNAL HAS BEEN EXCELLENT ON BOTH 3795 AND 7168 KHZ WELL INTO THE WEE HOURS.

LEBANON, OD. WALID, OD6ZZ SHOWS UP ON 21230 KHZ AFTER 2000Z.

MALAWA, 7Q. 7Q7JH WAS REPORTED ON 21024 KHZ. QSL VIA K7UP.

MAYAGUE, FH. FH6EJ HAS A GOOD SIGNAL ON 18 MHZ AT 0400Z. HE ALSO LOOKS FOR WEST COAST STATIONS ON LONG PATH AT 1230Z ON 14226 KHZ.

OGASAWARA, JD. JD1AMA HAS BEEN WORKED ON 14 MHZ CW AT 1130Z, AND 18 MHZ SSB AT 2200Z. THE DURATION OF THIS OPERATION IS NOT KNOWN.

PAPUA NEW GUINEA, P29. P29NJ AND P29BF ARE ON 18 MHZ FROM 1200 TO 1500Z WHILE P29DX PREFERS EARLIER OPERATION. ALSO TRY 7168 KHZ AT 0830Z.

ROTUMA, 3D2. ANTOINE, 3D2AG, OPERATES FROM 0700 TO 1200Z DAILY. HE STARTS ON 7 MHZ, MOVES TO 10 MHZ, AND THEN 14 MHZ. QSL TO 3D2AG.

RODRIGUEZ ISLAND, 3B9. 3B9FR IS OFTEN FOUND ON 14030 KHZ AT 1100Z. ROBERT ALSO LIKES 21020 KHZ AT 0300Z, WITH SOME SSB AS WELL.

ST. PAUL ISLAND, CY9. CY9CW WILL BE ACTIVE WITH SEVEN OPERATORS FROM AUGUST 2 THROUGH 8, IN AN ALL BAND, CW AND SSB OPERATION. QSL TO CLUB STATION VE2CWI.

ST. PIERRE AND MIQUELON, FP. DURING THE SECOND WEEK OF SEPTEMBER AN ACTIVITY NEVER SEEN BEFORE ON THIS TINY FRENCH ENCLAVE WILL OCCUR. FP9SPI WILL BE OPERATING ON ALL BANDS AROUND THE CLOCK, WITH BOTH LOCAL TALENT AND VISITING OPERATORS FROM SEVERAL DX COUNTRIES.

SINGAPORE, 9V. 9V1JY AND 9V1YC OPERATE CW, AND 9V1XQ AND 9V1YQ ON SSB, PUT 9V-LAND ON 14 MHZ FROM ABOUT 1100Z. ALL HAVE FINE SIGNALS.

SNAKE ISLAND, 4K6ZI. THIS RUSSIAN ISLAND IN THE BLACK SEA IS THE OBJECT OF A CURRENT DXPEDITION BY RB5FF, RC2AR, AND FRIENDS. OPERATIONS BEGAN AT 1900Z JULY 10 AND WILL CONTINUE TO JULY 18. QSL THIS OPERATION VIA K4RRI. THE ISLAND'S DXCC STATUS IS NOT CLEAR.

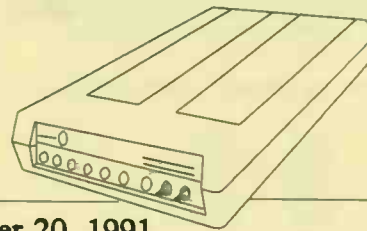
SOUTH SANDWICH ISLAND, VP8. THE BOAT HAS BEEN CHARTERED, CONTRACT SIGNED, AND THE EIGHT MAN TEAM HAS ALL GEAR READY FOR A DECEMBER OPERATION FROM THIS MUCH-NEEDED OUTPOST. AA8BB WILL HANDLE SSB QSLs. KA8V WILL OK AFTER QSL CHORES FOR CW AND RTTY CONTACTS.

(Copied "off-the-air" by WB8BDY/RADIOSPORT BBS)

Many thanks to all those who took the time and trouble to share their information with the online SWL community!

A NOTE CONCERNING USAGE AND ATTRIBUTION: Full attribution for each item appears in the last line of same. The quoting or reprinting of any material contained herein must be credited to its initial source and all intermediate steps, exactly as listed. Editors, DX publications, or broadcasters who fail to fairly credit material will be removed from the SOD mailing list.

Shortwave Online Digest



Volume 1, Number 4

September 20, 1991

Compiled by Al Quaglieri, NN2U
P.O. Box 888, Albany, NY 12201-0888

A big howdy all DX editors and sundry shortwave poobahs clutching this missive in their sweaty, trembling hands. I thought I'd drop in for a few lines in normal-sized type before driving you all blind and batty with the 6-point stuff.

If, after four issues, you still haven't figured out what this is about, you aren't reading closely enough. The official-sounding statements and disclaimers are buried in there somewhere, I guarantee. The gist of it all is that the info herein is being sent you to be shared via the print and broadcasting media at your command. If you hoard the enclosed info or otherwise treat this freebie like some weasly exclusive private newsletter, you will stop receiving it pronto. Cabeesh?

Also, since I want to be beholden to no one, this will remain a freeb. This way I don't have to deal with angry, "where's those other 4 issues I paid my good money for?" letters or the like.

Now since I started sending SOD out blind, I have had feedback from some of you and no response at all from others. So, in the best interests of the moolah I should really be paying my bills with instead of doing this, I'll be whittling down the 30-name mailing list beginning with the next issue (whenever that is). IF YOU WANT TO CONTINUE TO RECEIVE SOD FREE OF CHARGE, I NEED TO HEAR FROM YOU!! Just a simple "keep it coming" note, you know? Maybe tell me what you like and what you don't if you please. Hell, a few stamps wouldn't hurt either.

One more thing...you needn't credit SOD when reproducing anything contained herein. Matter of fact, I'd prefer you didn't. And I'm sorry to be a pain in the ass with all these caveats, but you know how it is. -AQ

ALBANIA

88C Monitoring reports that from 1st August, Radio Tirana cut its English service from 10 transmissions a day to just 5. The new schedule is as follows: 1530-1800 Africa

9585 11835
1730-1800 Europe 7155 9480 1395
2130-2200 Europe 7245 9480 1395
0230-0300 No.America 9580 11825
0330-0400 No.America 9580 11825
(08-Aug-91/Andy Sennitt/SW ECHO)

ARGENTINA

Due to the national elections, R. Libertad, Buenos Aires was heard on 11781 with election returns September 8th between 1500-0300. Even though private shortwave stations are not permitted in Argentina, this one continues, perhaps because it supports the Menem government. (Juan Carlos Codina-PERU via Dario Monferini- ITALY/Glenn Hauser's WORLD OF RADIO 14-Sep-91/Al Quaglieri/SW ECHO)

AUSTRALIA

Radio Australia Schedule S91 v1.2

With the end of daylight saving in China on the weekend of 14 September, Radio Australia's Darwin station reverts to normal shifts involving a later start and finish for that station. Some schedule changes will take place from 2200 UTC on 14/9/91, mainly affecting Asia, the Middle East and parts beyond. Carnarvon also has dropped 17630 at 1430 and 13755 is replacing 13745 at the same time.

The English service will operate to the following schedule (format shown for each transmitter in the network is station/power - C=Carnarvon, D=Darwin (all 250kW), B=Brandon (all 10kW), S=Shepparton (all 100kW); UTC, & antenna bearing in brackets after frequency:

C300 0900-0100 17630(347); 0100-0400 17630(325); 0400-0900 17630(347);
0900-1000 & 1100-1200 13805(009); 1430-2100 13755(325); 2100-2300
13705(347).
C100 0600-0100 15240(347); 1430-2100 12000(347).
C250 0100-0900 21775(325); 0900-1000 & 1100-1200 7140(347).

AUSTRALIA (cont.)

D 0000-0400 17750(340); 0400-0600 15170(340); 0600-0700 & 0800-0900
17750(317); 0900-1000 & 1100-1200 15170(340).
D 0000-0100 13805(318); 0100-0800 21525(340); 0900-1100 25750(303);
1100-1430 21720(318).
D other languages only
B 2100-0800 11880(010); 0800-2100 7240(010).
B 2000-1300 11930(080).
S 2000-0100 0540(10); 1000-1230 9580(308); 1430-1530 9770(308); 1600-2330
13805(085).
S 2130-0700 17795(063); 0830-2100 9590(063).
S 2200-0700 15365(073); 0830-1100 11800(355); 1130-1530 11720(073);
1600-2130 6080(063).
S 2130-0730 21740(063); 0800-2100 6080(005).
S 2100-0730 15320(355); 0800-1530 9710(355); 1600-2030 11910(073).
S 2130-1100 15160(063); 1130-2100 5995(053).

Note that I have included Pacific English and Pidgin English services in the above. On weekdays furthermore, Chinese (English by radio I think) is carried 0400-0500 on 17630 and 15170. On Saturdays and Sundays between 0200 and 0700 the Sporting service is carried on 21775, 21525, 15240, and 21740. (12-Sep-91/Jerome Van Der Linden/SW ECHO)

2RSR (Radio Skid Row) are looking for any interesting articles for the station's magazine "Off Yer Dial". If anyone would like to write about Public/Community/ Alternative Radio in your part of the world - stuff about interesting events, record reviews, licensing, technical - just about anything! I am also interested in DEMO TAPES, interesting interviews, info, etc. Please send them to -

Michael Dagn
19/59 Whaling Road
North Sydney, 2060
NSW AUSTRALIA

(Michael Dagn/INTERNET)

[NOTE: My el cheapo computer chewed up this bit of data, which I'll guess is 0200-1130 on 15240..your guess beats mine on the beam....AQ]

****AUSTRIA****

Starting September 30th, Austrian Shortwave Panorama will be carried on the Canadian Relay at a new time: UTC Mondays at 0630 on 8015; that's a bit late except on the West Coast, but reception should be excellent throughout North America. Previously occupying that time slot was a broadcast in Spanish. (GH/Gienn Hauser's WORLD OF RADIO 14-Sep-91/AI Quagliari/SW ECHO)

RADIO AUSTRIA INTERNATIONAL Frequency Schedule Effective 9/91 - 4/92
Daily Broadcasts

Destination	Time	Language	Freq	Schd	Eff 9/91	Eff 4/92
To Europe						
	0400-0530	German	8155	13730		
	0530-0800	English	8155	13730		
	0800-0730	German	8155	13730		
	0730-0800	French	8155	13730		
	0800-0830	German	8155	13730		
	0830-0900	English	8155	13730		
	0900-1130	German	8155	13730		
	1130-1200	English	8155	13730		
	1200-1230	German	8155	13730		
	1230-1300	French	8155	13730		
	1300-1330	German	8155	13730		
	1330-1400	Spanish	8155	13730		
	1400-1530	German	8155	13730		
	1530-1800	English	8155	13730		
	1800-1830	German	8155	13730		
	1830-1700	French	8155	13730		
	1700-1930	German	5945	8155		
	1830-1900	English	5945	8155		
	1900-1930	German	5945	8155		
	1930-2000	French	5945	8155		
	2000-2030	German	5945	8155		
	2030-2100	Spanish	5945	8155		
	2100-2130	German	5945	8155		
	2130-2200	English	5945	8155		
	2200-2230	German	5945	8155		
	2230-2300	French	5945	8155		
To SW Europe						
	1400-1530	German	21490			
	1530-1800	English	21490			
	1800-1830	German	21490			
	1830-1700	French	21490			
	2000-2030	German	9870			
	2030-2100	Spanish	9870			
	2100-2130	German	9870			
	2130-2200	English	9870			
To North America						
	0000-0030	German	9875	13730		
	0030-0100	French	9875	13730		
	0100-0130	German	9875	13730		
	0130-0200	English	9875	13730		
	0200-0230	German	9875	13730		
	0230-0300	Spanish	9875	13730		
	0300-0330	German	13730			
	0330-0400	English	13730			
	0500-0530	German	8015			
	0530-0800	English	8015			
	0800-0830	German	8015			
	0830-0700	English	8015			
	1100-1130	German	13730			
	1130-1200	English	13730			
	1200-1230	German	13730			
	1230-1300	French	13730			
To Cent. America						
	0200-0230	German	9870			
	0230-0300	Spanish	9870			
	0300-0330	German	9870			
	0330-0400	English	9870			
To So. America						
	0000-0030	German	9870			
	0030-0100	Spanish	9870			
	0100-0130	German	9870			
	0130-0200	English	9870			
	2200-2230	German	9870	13730		
	2230-2300	Spanish	9870	13730		
	2300-2400	German	9870	13730		
To W. Africa						
	1400-1530	German	21490			
	1530-1800	English	21490			
	1800-1830	German	21490			
	1830-1700	French	21490			
	2000-2030	German	9870			
	2030-2100	Spanish	9870			
	2100-2130	German	9870			
	2130-2200	English	9870			
To So. Africa						
	1700-1830	German	13730			
	1830-1900	English	13730			
	1900-1930	German	13730			
	1930-2000	French	13730			
	2000-2030	German	13730			
	2030-2100	Spanish	13730			
To the MidEast						
	0400-0530	German	15410			
	0500-0530	German	21490			
	0530-0800	English	15410	21490		
	0800-0730	German	15410	21490		

****AUSTRIA (continued)****

0730-0800	French	15410	21490
1700-1830	German	12010	
1830-1900	English	12010	
1900-1930	German	12010	
1930-2000	French	12010	
To Far East			
1100-1130	German	11780	15450
1130-1200	English	11780	15450
1200-1230	German	11780	15450
1230-1300	French	11780	15450
1300-1330	German	11780	15450
1330-1400	English	11780	15450
To S/SE Asia			
1400-1530	German	11780	
1530-1800	English	11780	
1800-1830	German	11780	
1830-1700	French	11780	
To Australasia			
0800-0830	German	15450	21490
0830-0900	English	15450	21490
0900-1100	German	15450	21490

Non-daily broadcasts (25 min. long)

ESPERANTO: Sundays at 0405 and 1305 (on the European, African, South and SE Asian, Middle and Far East frequencies)

ARABIC: Sundays at 0505 and 1905 (on the European, African and Middle Eastern frequencies)

(18-Sep-91/Richard Urena/SW ECHO)

RADIO AUSTRIA day by day program schedule - valid until Oct 1991
English programs capitalized - Spanish (S) French (F); all other programs in German

MONDAYS

0000	Nachrichten	1200	Nachrichten
05	Zu Gast in Osterreich	05	Osterreich-Journal
30	Buzón Internacional (S)	30	Gruß und Wunschkonzert
0100	Nachrichten	1300	Nachrichten
05	Wochenchronik	05	Horizonte
30	REPORT FROM AUSTRIA	30	Noticiero de Austria (S)
0200	Nachrichten	1400	Nachrichten
05	Die Musik allein	05	Made in Austria
30	Buzón Internacional (S)	30	REPORT FROM AUST
0300	Nachrichten	1500	Nachrichten
05	Die Wochenchronik	05	Osterreich-Journal
30	Hörerbrieffasten	30	Journal d'Autriche (F)
0400	Nachrichten	1600	Nachrichten
05	Horizonte	05	Gruß und Wunschkonzert
30	Gruß und Wunschkonzert	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Made in Austria	05	Made in Austria
30	REPORT FROM AUSTRIA	30	Horizonte
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Journal d'Autriche (F)
0700	Nachrichten	1900	Nachrichten
05	Blue Berets	05	Gruß und Wunschkonzert
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Made in Austria	05	Made in Austria
30	Gruß und Wunschkonzert	30	Noticiero de Austria (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Horizonte	30	Journal d'Autriche (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Gruß und Wunschkonzert
10	Ferienjournal	30	Noticiero de Austria (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Made in Austria	05	Osterreich-Journal
30	REPORT FROM AUSTRIA	30	Made in Austria

TUESDAYS

0000	Nachrichten	1200	Nachrichten
05	Horizonte	05	Osterreich-Journal
30	Noticiero de Austria (S)	30	Blasmusik einst und jetzt
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Das Kulturthema
30	REPORT FROM AUSTRIA	30	Noticiero de Austria (S)
0200	Nachrichten	1400	Nachrichten
05	Gruß und Wunschkonzert	05	Bundesländermagazin
30	Noticiero de Austria (S)	30	REPORT FROM AUSTRIA
0300	Nachrichten	1500	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Made in Austria	30	Journal d'Autriche (F)
0400	Nachrichten	1600	Nachrichten
05	Osterreich-Journal	05	Blasmusik einst und jetzt
30	Made in Austria	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Bundesländermagazin	05	Bundesländermagazin
30	REPORT FROM AUSTRIA	30	Das Kulturthema
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Journal d'Autriche (F)
0700	Nachrichten	1900	Nachrichten

****AUSTRIA (cont.)****

05	Blue Berets	05	Blasmusik einst und jetzt
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Bundesländermagazin	05	Bundesländermagazin
30	Blasmusik einst und jetzt	30	Noticiero de Austria (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Das Kulturthema	30	Journal d'Autriche (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Blasmusik einst und jetzt
10	Ferienjournal	30	Noticiero de Austria (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Bundesländermagazin	05	Osterreich-Journal
30	REPORT FROM AUSTRIA	30	Bundesländermagazin

WEDNESDAYS

0000	Nachrichten	1200	Nachrichten
05	Das Kulturthema	05	Osterreich-Journal
30	Noticiera de Austria (S)	30	Austropop-Parade
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Städte- u. Landportrait
30	REPORT FROM AUSTRIA	30	Noticiero de Austria (S)
0200	Nachrichten	1400	Nachrichten
05	Blasmusik einst und jetzt	05	Politische Perspektiven
30	Noticiero de Austria (S)	30	REPORT FROM AUSTRIA
0300	Nachrichten	1500	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Bundesländermagazin	30	Journal d'Autriche (F)
0400	Nachrichten	1800	Nachrichten
05	Städte- u. Landportrait	05	Austropop-Parade
30	Austropop-Parade	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Politische Perspektiven	05	Politische Perspektiven
30	REPORT FROM AUSTRIA	30	Städte- u. Landportrait
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Journal d'Autriche (F)
0700	Nachrichten	1900	Nachrichten
05	Blue Berets	05	Austropop-Parade
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Politische Perspektiven	05	Politische Perspektiven
30	Austropop-Parade	30	Noticiero de Austria (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Städte- u. Landportrait	30	Journal d'Autriche (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Austropop-Parade
10	Ferienjournal	30	Noticiero de Austria (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Politische Perspektiven	05	Osterreich-Journal
30	REPORT FROM AUSTRIA	30	Politische Perspektiven

THURSDAYS

0000	Nachrichten	1200	Nachrichten
05	Städte- u. Landportrait	05	Osterreich-Journal
30	Noticiera de Austria (S)	30	Musikland Österreich
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Kulturspiegel
30	REPORT FROM AUSTRIA	30	Noticiero de Austria (S)
0200	Nachrichten	1400	Nachrichten
05	Austropop-Parade	05	Soll und Haben
30	Noticiero de Austria (S)	30	REPORT FROM AUSTRIA
0300	Nachrichten	1600	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Politische Perspektiven	30	Journal d'Autriche (F)
0400	Nachrichten	1800	Nachrichten
05	Kulturspiegel	05	Musikland Österreich
30	Musikland Österreich	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Soll und Haben	05	Soll und Haben
30	REPORT FROM AUSTRIA	30	Kulturspiegel
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Journal d'Autriche (F)
0700	Nachrichten	1900	Nachrichten
05	Blue Berets	05	Musikland Österreich
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Soll und Haben	05	Soll und Haben
30	Musikland Österreich	30	Noticiero de Austria (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Kulturspiegel	30	Journal d'Autriche (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Musikland Österreich
10	Ferienjournal	30	Noticiero de Austria (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Soll und Haben	05	Osterreich-Journal
30	REPORT FROM AUSTRIA	30	Soll und Haben

****AUSTRIA (cont.)****

0000	Nachrichten	1200	Nachrichten
05	Kulturspiegel	05	Osterreich-Journal
30	Noticiera de Austria (S)	30	Musikgalerie
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Ex Libris
30	REPORT FROM AUSTRIA	30	Noticiero de Austria (S)
0200	Nachrichten	1400	Nachrichten
05	Musikland Österreich	05	Zeitlupe
30	Noticiero de Austria (S)	30	REPORT FROM AUSTRIA
0300	Nachrichten	1500	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Soll und Haben	30	Journal d'Autriche (F)
0400	Nachrichten	1600	Nachrichten
05	Ex Libris	05	Musikgalerie
0430	Musikgalerie	1630	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Zeitlupe	05	Zeitlupe
30	REPORT FROM AUSTRIA	30	Ex Libris
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Journal d'Autriche (F)
0700	Nachrichten	1800	Nachrichten
05	Blue Berets	05	Musikgalerie
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Zeitlupe	05	Zeitlupe
30	Musikgalerie	30	Noticiero de Austria (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Ex Libris	30	Journal d'Autriche (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Musikgalerie
10	Ferienjournal	30	Noticiero de Austria (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Zeitlupe	05	Osterreich-Journal
30	REPORT FROM AUSTRIA	30	Zeitlupe

SATURDAYS

0000	Nachrichten	1200	Nachrichten
05	Ex Libris	05	Osterreich-Journal
30	Noticiera de Austria (S)	30	Zu Gast in Österreich
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Bunte Palette
30	REPORT FROM AUSTRIA	30	Los Sábados (S)
0200	Nachrichten	1400	Nachrichten
05	Musikgalerie	05	Kurzwellenpanorama
30	Noticiero de Austria (S)	30	COFFEETABLE
0300	Nachrichten	1500	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Zeitlupe	30	Journal d'Autriche (F)
0400	Nachrichten	1600	Nachrichten
05	Bunte Palette	05	Zu Gast in Österreich
30	Zu Gast in Österreich	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Kurzwellenpanorama	05	Kurzwellenpanorama
30	REPORT FROM AUSTRIA	30	Bunte Palette
0600	Nachrichten	1800	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Journal d'Autriche (F)	30	Hitparade (F)
0700	Nachrichten	1800	Nachrichten
05	Blue Berets	05	Zu Gast in Österreich
30	REPORT FROM AUSTRIA	30	REPORT FROM AUSTRIA
0800	Nachrichten	2000	Nachrichten
05	Kurzwellenpanorama	05	Kurzwellenpanorama
30	Zu Gast in Österreich	30	Los Sábados (S)
0900	Nachrichten	2100	Nachrichten
05	Osterreich-Journal	05	Osterreich-Journal
30	Bunte Palette	30	Hitparade (F)
1000	Nachrichten	2200	Nachrichten
05	Sport	05	Zu Gast in Österreich
10	Ferienjournal	30	Los Sábados (S)
30	Journal d'Autriche (F)		
1100	Nachrichten	2300	Nachrichten
05	Kurzwellenpanorama	05	Osterreich-Journal
30	COFFEETABLE	30	Kurzwellenpanorama

SUNDAYS

0000	Nachrichten	1200	Nachrichten
05	Bunte Palette	05	Wochenchronik
30	Los Sábados (S)	30	Die Musik allein
0100	Nachrichten	1300	Nachrichten
05	Osterreich-Journal	05	Esperanto language program
30	REPORT FROM AUSTRIA	30	Buzón Internacional (S)
0200	Nachrichten	1400	Nachrichten
05	Zu Gast in Österreich	05	Hörerbriefkasten
30	Los Sábados (S)	30	SHORTWAVE PANORAMA
0300	Nachrichten	1500	Nachrichten
05	Osterreich-Journal	05	Wochenchronik
30	Kurzwellenpanorama	30	Journal d'Autriche (F)
0400	Nachrichten	1600	Nachrichten
05	Esperanto language progr	05	Die Musik allein
30	Die Musik allein	30	REPORT FROM AUSTRIA
0500	Nachrichten	1700	Nachrichten
05	Arabic / Hörerbriefkaste	05	Hörerbriefkasten

****AUSTRIA (cont.)****

0630 REPORT FROM AUSTRIA	1730 Zu Gast in Osterreich
	56 DX-Telegramm
0600 Nachrichten	1800 Nachrichten
06 Wochenchronik	05 Wochenchronik
30 Journal d'Autriche (F)	30 Flash des Ondes (F)
0700 Nachrichten	1900 Nachrichten
06 Blue Berets	05 Arabic language program
30 REPORT FROM AUSTRIA	30 REPORT FROM AUSTRIA
0800 Nachrichten	2000 Nachrichten
05 Hörerbriefkasten	05 Hörerbriefkasten
30 Die Musik allein	05 Buzón Internacional (S)
56 DX-Telegramm	
0900 Nachrichten	2100 Nachrichten
0905 Frühschoppen	2105 Wochenchronik
	30 Flash des Ondes (F)
1000 Nachrichten	2200 Nachrichten
05 Sport	05 Die Musik allein
10 Ferienjournal	30 Buzón Internacional (S)
30 Journal d'Autriche (F)	
1100 Nachrichten	2300 Nachrichten
05 Hörerbriefkasten	05 Wochenchronik
30 SHORTWAVE PANORAMA *	30 Hörerbriefkasten

RADIO AUSTRIA Program Descriptions - valid until October 1991**ENGLISH**

Austrian Coffeetable - entertainment, mostly music
Report from Austria - 25 minutes of Austrian & world news
Shortwave Panorama - DX news (Sundays 10:30, 11:30, 14:30 UTC)
GERMAN

Austropop-Parade - Schlager und musikalische Spitzenreiter
Blasmusik einst und jetzt - Für Kenner und Liebhaber dieses Genres
Blue Berets - Information und Musik für Österreichs
Bundesländer-Magazin - Aktuelles aus den neun Bundesländern
Bunte Palette - Leichte Unterhaltung - Tratsch und Klatsch
Das Kulturthema - Kunst- und Kulturkritik
Die Musik allein - Berühmte Komponisten, Werke und Interpreten
DX-Telegramm - Aktuelle Empfangstipps für Wellenjäger
Ex Libris - Das Bücherradio
Frühschoppen - Volkstümliche Unterhaltung
Gruß- und Wunschkonzert - Sie wünschen - wir spielen
Hörerbriefkasten - Wir nehmen ihre Anregungen, Kritik beim Wort
Horizonte - Aus Wissenschaft, Medizin und Forschung
Kulturspiegel - Aktuelles aus dem Kulturleben
Kurzwellenpanorama - Medien-Magazin mit Hintergrundberichten
Made in Austria - Produkte, Firmen, Trends
Musikgalerie - Wolfgang Amadeus Mozart
Musikland Österreich - Unterhaltungsmusik, Jazz, Volksmusik, Konzert
Nachrichten - Österreich, Europa und die Welt - aktuell und objektiv
Österreich-Journal - Informationen zu Ereignissen in Politik, Kultur, etc
Politische Perspektiven - Politik, Gesellschaft, Medien
Soll und Haben - Wirtschaftsmagazin
Sport - Resultate und Berichte
Städte- und Landschaftsportrait - Streifzüge durch Österreich
Wochenchronik - Zusammenfassung der wichtigsten Ereignisse
Zeitlupe - Zeitgeschehen im Brennpunkt
Zu Gast in Österreich - Almanach für Urlaub, Reise und Touristik
FRENCH

Flash des Ondes - DX d'Autriche
Hitparade - les tubes autrichiens
Journal d'Autriche - 25 minutes est programmé tous les jours
SPANISH

Actualidad Musical - Do/Lu tienen una duración de 25 minutos
Buzon Internacional (el contacto directo con nuestros oyentes)
Noticiero de Austria, Los Sabados (Temas de fondo/Debate Europa)
(20-Aug-91/Bill Oxner/SW ECHO)

According to Radio Austria's German Service Media Editor, R. Austria has been collecting QSL cards and other radio related materials (station ID's on tape, pennants, etc) for 25 years. These are displayed at radio conventions in Europe. They have over 200,000 cards so far. These include ham QSL's. They also have interesting materials such as receiving logs. That may sound odd but he pointed out the useful nature of a radio log from 1832. It can tell us (now) what was available on the air then. R. Austria is actively seeking contributions for the collection. If you have QSL cards, pennants, taped programs, etc, they'll be happy to take them. Send to:

QSL Collection
Radio Austria
A1138
Vienna, Austria

(16-Aug-91/Media Network-16-Aug-91/Bill Oxner/SW ECHO)

****BAHRAIN****

This info was passed to me over the phone by Jonathan Marks. Unfortunately I failed to note the name of the original contributor - I will post this ASAP, but in view of its being a new shortwave country I want to inform you that Radio Bahrain has been monitored on 9745kHz until a few minutes before 1700 UTC, when it switches to 8010 as previously advised. 9745, like 8010, is registered for 0300-2100 with 80kW omnidirectional. The transmitter is currently relaying Radio Bahrain's English FM service. (29-Jul-91/Andy Sennitt/SW ECHO)

****BANGLADESH****

R. Bangladesh External Service - latest monitoring:
1230-1300 15208 now only announces this frequency English
1315-1345 7110 Nepali
1400-1600 15268 Urdu
1515-1545 15268 Hindi
1600-1630 15510v-20, 13608 Arabic
1630-1730 15510v-20, 13608 Bangla.
1815-1900 12030, 9575 English.

As we correctly assumed there is one 100kW transmitter which was used for the external service, now out of action. The station now announces only one freq at 1230 in English to S & E Asia, 15200. However at 1600 the transmitter on variable 15510 sometimes as high as 15520 which is used for the Home service 1230-16 joins the External Service. Dhaka was reported to have ordered of was it "going to" have 250kW transmitters and also with versions of an expanded external service. Anyone knows the real situation. A registered letter to Dir. General with IRCs still unanswered. Lets give it a few more months! (Victor Goonatileke/13-Sep-91/Bruce Macgibbon/SW ECHO)

****BHUTAN****

Bhutan - I have been able to confirm that there is still no transmission 11-15 on Sundays. Other days still the usual signal and program schedule. Yet I do not know whether sign on is at 11 or 10 UTC. In response to our query in UADX 140, I received the following letter from Biwa Shrestha in Kathmandu. "Ref your query Bhutan is usually heard from 12-15 on 5025 kHz. Signals are 54444 SINPO. Can't hear them from 08-10 either on 5025 or 8035 kHz on Sundays. (UADX News Jul/Aug 1991).(13-Sep-91/Bruce Macgibbon/SW ECHO)

****BOLIVIA****

Radio Altiplano, La Paz was noted as being on 5044.9 kHz with a sign-on at 1108 UTC.(HCJB DX PARTY LINE/10-Aug-91/Bill Oxner/SW ECHO)

An unusual situation on 4450 (probably the same as earlier heard around 4167): a station playing Peruvian music turns out to be from La Paz, seemingly a transmitter factory testing the equipment. They announced on the 9th between 2300-2330 that the transmitter was going to be sold to an unidentified station in Riberalta. They also played some Argentine tunes, but don't give a proper ID. (Juan Carlos Codina-PERU via Dario Monferini-ITALY/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quagliari/SW ECHO)

****BULGARIA****

The latest issue of the Bulgarian DX Club bulletin just arrived. They state that Radio Sofia will appreciate reception reports which should be addressed to:

Mr. Anastasov
Radio Sofia
4 blv. Dragan Tzankov
1040 Sofia, Bulgaria

The most convenient English transmissions for North American listeners are: 0300-0515 on 17825 15180 11720; 2145-2400 on 17825 15370 15330 15110 11710 11680 (25 Jul-91/Andy Sennitt/SW ECHO)

****CAMBODIA****

A review of that country's media scene: VO the People of Cambodia 1200-1230 in English on 11938. HS in Khmer on 4910 and 6090 audible from fade-in at 1200 to sign-off at 1430. The clandestine VO the Khmer (Prince Sihanouk's faction) is heard from 0900-1400 and 2230-0230 on 6325. The strongest station heard is the VO the National Army of Democratic Kampuchea on 5408 from 2315-0200 and 0900-1600 in Vietnamese and Khmer (representing the Heng Samrin faction). Finally, the VO Democratic Kampuchea transmits via Beijing at 1300-1355 on 9440 and 8025; it is the Pol Pot regime's voice from China. (Victor Goonatileke/RN MEDIA NETWORK 12-Sep-91/AJ Quagliari/SW ECHO)

****CHINA****

The following is a list of CPBS-1 and CPBS-2 frequencies heard in Gresham, Oregon at around 10:30 PM Beijing Time (7:30 AM here at my house & 1430 UTC) on September 17.

CPBS-1 5320, 5880, 6125, 7835, 9080, 9800
CPBS-2 7440, 7516, 7770, 9084, 9775, 10010, 11810, 11830
(Bruce MacGibbon/SW ECHO)

China off summer time now as I noticed CPBS-2 on 7516 signing off at 1555 UTC on 9/16. Also, I heard on my DX 440, Nei Menggu in Chinese with an excellent signal on 7105 signing off at 1455 ending with their theme music. For those of you who have a chance to hear it, the music is excellent. It is the music to the song "The Song of Big Unity of All Nationalities". The words go like this:

There's a tree that has 10,000 flowers/People of all nationalities are one family/
We will follow the Communist Party forever/Never separated in the next thousand years
and 10,000 years/A 10,000 year old tree/A 1 thousand year old flower/People of all nationalities have a connection in heart/People of all nationalities are one family!

This translation was provided by my friend who is Mongolian and was a newreader at Nei Menggu PBS. He is also an expert in Pinyin spelling of Chinese words. His mom lives in Huhhot, Inner Mongolia.

I've also noticed that CPBS-1 and 2 frequencies are slowly disappearing. Either the transmitters are being used for jamming of Taiwan broadcasts to China, used as co-channel interference to VOA, or the Chinese have figured a better way to broadcast to their people in the form of FM & MW. In talking to Binggi Huang, Deputy Director, International Relations for Central People's Broadcasting Station of China, he didn't know anything about the frequencies used and wants me to send him a tape of my excellent reception of 7516 CPBS-2. Mr. Binggi Huang also speaks excellent English, so don't hesitate to write him. Let him know that Bruce MacGibbon, Beijing, Chengde Cup Travel Knowledge Competition Winner gave you his name. I'm sure he would be glad to hear from any listeners of CPBS. Take care, Bruce in Gresham, Oregon. (16-Sep-91/Bruce Macgibbon/SW ECHO)

Radio Beijing has moved back to winter frequencies earlier than expected on at least some of its releases. To EU 22 on 9740 (from 11990) via USSR. To eNA 12 UT 15225, 00 and

****CHINA (cont.)****

03 UT on 11715 and 9770 via Mali, 04 on 11840 via Canada and 11885 via French Guinea. I haven't listened to the WNA announcements yet, but you can catch them at the end of the 03 UT transmission on 9890 via Spain. (26-Aug-91/Tom Sundstrom/SW ECHO)

Surprise! I found Radio Beijing at 2200 on the new frequency of 9880, no longer on 9740, via the USSR to Europe. 9880 was observed in use by Radio Moscow WS from 19 to 22 UT. The signal is quite good and the audio is better than that of the Mali, Spain or French Guinea relays. (11-Sep-91/Tom Sundstrom/SW ECHO)

Last night I found another change that took effect somewhere between [September] 3rd and 10th: Beijing at 22 to Eu via USSR is now on 9880 (ex-9740). (12-Sep-91/Tom Sundstrom/SW ECHO)

16225 is new frequency for R. Beijing's morning transmission to North America. No time was mentioned, but I suppose he means 1200 UTC. Unfortunately, it's right next to BBC. (John F. Wilson-DE/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quagliari/SW ECHO)

****COLOMBIA****

La Voz del Guaviare, 8036, had local programming, not CARACOL network, September 9th around 0100. (Rafael Rojas/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quagliari/SW ECHO)

****COSTA RICA****

Radio for Peace International has apparently - again - changed its program lineup without notice. I don't know if the 8-hour programming block has been cancelled or not. Today, Saturday, World of Radio was heard at 1930 UT ahead of the normally scheduled mailbag show at 20 UT. I sure wish they would pass the information along to those who can spread the word through radio shows or club bulletins... (Tom Sundstrom/SW ECHO)

****CUBA****

I had a telephone call this morning from Arnie Coro, CO2KK, of Radio Havana Cuba. Arnie, for those who came in late, is the host of the Saturday (repeated Tuesday) "DXers Unlimited" show. Arnie told me that the SSB tests on 5965 kHz are now complete. Whereas many different power and carrier levels were used in the past, the transmitter will now remain on USB with the carrier suppressed -8 db, LSB suppressed -45 to -50 db. This seems yield the most favorable results. I asked him about changes to NA for the upcoming fall and winter broadcast seasons. Bottom line, he is recommending no changes in the short fall season unless the MUF drops out. Changes will hopefully be postponed to November at which time a probable 31m frequency will replace 16140. Arnie also mentioned possibly getting onto 49 meters earlier to cover the SE United States; signals on 25m and 19m now skip over that area of the country.

He says with the cleaner telephone lines installed as a result of the Pan American games he hopes to get a modem and a fax machine working.

I didn't get a chance to ask him about the European release on 17705... he was in a hurry to go tape the show for today. It was an interesting summary of the Cuban MW radio networks. The shows these past few weeks have been shortened due to the games, but the normal 15-20 minute show will return starting Tuesday.

I also asked him to look at the spurs generated by 9505. Yesterday I heard Glenn Hauser on World of Radio #807 mentioning this problem (but I couldn't remember the other 31m frequency), and passed the information along. Arnie said he'd do something about it once the games are over and his life returns to normal.

Hope this helps... (17-Aug-91/Tom Sundstrom/SW ECHO)

****ECUADOR****

HCJB PROGRAM SCHEDULE

Please note that the days are LOCAL days, not UTC days, although the times are UTC. That's "local" to Ecuador, which is the same time as CDT. For example, DX Party Line is listed as being on at 0030 on Saturday. However, for HCJB's schedule makers, that means Saturday LOCAL day. Thus, it actually comes on at 0030 UTC Sunday (Saturday local in the USA and Ecuador). Don't panic! For the East & Central time zones this only has an impact from 0000-0500 UTC, 0000-0700 for West Coasters. After 0700 UTC (West Coast USA), local and UTC days are the same. So, DX Party Line at 0730 UTC Saturday REALLY is Saturday, both for local and UTC purposes (unless you live in Hawaii - grin). Ain't time zones fun?

SATURDAY	
0030 DX PARTY LINE	
0130 Musical Mailbag	
0200 Pause for Good News	
0230 DX PARTY LINE	
0330 Musical Mailbag	
0400 Radio Reading Room	
0500 DX PARTY LINE	
0600 Musical Mailbag	
0630 Radio Reading Room	
0700 Musical Mailbag	
0730 DX PARTY LINE	
0830 Musical Mailbag	
0900 Encounter	
0930 The Sower-Words of Life	
1000 DX PARTY LINE	
1100 Family Foundations	
1130 Sounds of Joy	
1200 We Kids	
1230 A Visit with Mrs. G.	
1300 Adventures in Odyssey	
1330 Children's Bible Hour	
1400 Songtime	
1430 Let My People Think	
1500 Living Word	
1630 Radio Reading Room	

SUNDAY	
0030 Saludos Amigos	
0130 The Sower - Youthtime Radio	
0200 HCJB Today	
0230 Saludos Amigos	
0330 Calvary Hour	
0400 Science & Scripture - Get Set	
0500 Saludos Amigos	
0600 HCJB Today	
0630 Turning Point	
0700 Mountain Meditations	
0730 Saludos Amigos	
0830 Mountain Meditations	
0900 Hour of Decision	
0930 Radio Bible Class	
1000 Saludos Amigos	
1100 Communication	
1130 Morning Song	
1200 Kids Corner	
1230 Your Story Hour	
1300 Adventure Club-The Word Today	
1330 Telling the Truth	
1400 Mountain Meditations	
1430 Moody Presents	
1500 Urban Alternative	
1630 Heaven & Home Hour	

****ECUADOR (cont.)****

1630 Quito Calling
1730 Music From the Mountains
1900 DX PARTY LINE
2130 Musical Mailbag

1630 Quito Calling
1730 Music From the Mountains
1900 Saludos Amigos
2130 Blues, Reggae, Jazz

MONDAY

0030 News - Dateline 90
0130 Focus on the Family
0200 Family Living-Rendezvous
0230 News - Dateline 90
0330 Insight for Living
0400 Psychology for Living
0500 News - Dateline 90
0600 Family Living-Rendezvous
0630 Classical Favourites
0700 HCJB Today
0730 News - Dateline 90
0830 Thru the Bible
0900 In Touch
0930 HCJB Today
1000 News - Dateline 90
1100 Rendezvous-Family Living
1130 Insight for Living
1200 Sound Words-The Sower
1230 Focus on the Family
1300 Morning in the Mountain
1330
1400
1430 Thru the Bible
1500 Sound Words
1630 Back to the Bible
1630 News - Dateline 90
1730 Musica del Ecuador
1900 News - Dateline 90
2130 Science & Scripture

WEDNESDAY

0030 News - HAM RADIO TODAY
0130 Focus on the Family
0200 Family Living-Rendezvous
0230 News - HAM RADIO TODAY
0330 Insight for Living
0400 Let My People Think
0500 News - HAM RADIO TODAY
0600 Family Living-Rendezvous
0630 Music From the Mountain
0700 Morning Song
0730 News - HAM RADIO TODAY
0830 Thru the Bible
0900 In Touch
0930 Family Bible Hour
1000 News - HAM RADIO TODAY
1100 Rendezvous-Family Living
1130 Insight for Living
1200 Get Set
1230 Focus on the Family
1300 Morning in the Mountains
1330
1400
1430 Thru the Bible
1500 Sound Words
1630 Back to the Bible
1630 News - HAM RADIO TODAY
1730 Happiness Is
1900 News - HAM RADIO TODAY
2130 The Sower-Chords of Love

FRIDAY

0030 News - Musica del Ecuador
0130 Focus on the Family
0200 Family Living-Rendezvous
0230 News - Musica del Ecuador
0330 Insight for Living
0400 Unshackled
0500 News - Musica del Ecuador
0600 Family Living-Rendezvous
0630 Classical Favourites
0700 Let My People Think
0730 News - Musica del Ecuador
0830 Thru the Bible
0900 In Touch
0930 Haven of Rest

TUESDAY

0030 News - Happiness Is
0130 Focus on the Family
0200 Family Living-Rendezvous
0230 News - Happiness Is
0330 Insight for Living
0400 Words of Life-Answers
0500 News - Happiness Is
0600 Family Living-Rendezvous
0630 Sounds of Joy
0700 Back to God Hour
0730 News - Happiness Is
0830 Thru the Bible
0900 In Touch
0930 Focus on the Family
1000 News - Happiness Is
1100 Rendezvous-Family Living
1130 Insight for Living
1200 A Visit with Mrs. G.
1230 Focus on the Family
1300 Morning in the Mountains
1330
1400
1430 Thru the Bible
1500 Sound Words
1630 Back to the Bible
1630 News - Happiness Is
1730 Dateline 90
1900 News - Happiness Is
2130 Radio Bible School

THURSDAY

0030 News - Happiness Is
0130 Focus on the Family
0200 Family Living-Rendezvous
0230 News - Happiness Is
0330 Insight for Living
0400 Christian Brotherhood Hour
0500 News - Happiness Is
0600 Family Living-Rendezvous
0630 The Christian's Hour
0700 Words of Hope
0730 News - Happiness Is
0830 Thru the Bible
0900 In Touch
0930 Words of Hope
1000 News - Happiness Is
1100 Rendezvous-Family Living
1130 Insight for Living
1200 Critter Country
1230 Focus on the Family
1300 Morning in the Mountains
1330
1400
1430 Thru the Bible
1500 Sound Words
1630 Back to the Bible
1630 News - Happiness Is
1730 HAM RADIO TODAY
1900 News - Happiness Is
2130 Radio Bible School

(14-Aug-91/Bill Oxner/SW ECHO)

...a discussion of two Ecuadorian pirate stations. Radio Gonaonoma was listed on 4270.8 at 0215 UTC. Radio Catecocha was listed on 6580 kHz at 0245 UTC. They said these have been reported as being heard all over South America. (HCJB DX PARTY LINE/10-Aug-91/Bill Oxner/SW ECHO)

STATEMENT OF PURPOSE

SHORTWAVE ONLINE DIGEST exists to disseminate info found on various computer "bulletin boards" and the Shortwave Echo to print editors, and through them to the general public. I produce SOD on my own time, at my own expense (although stamps/exchanges are appreciated), and issue it on my own schedule. At this time, I have neither the means nor the desire to offer subscriptions or otherwise expand the scope of SOD. - AQ

****EGYPT****

R.CAIRO broadcasts in English to N.America Daily from 0200-0330 on 9475 and 11885 kHz. Here is their pgm schedule:

Sunday (UTC Mon.)
0200 MUSIC
0206 HOLY KORAN AND INTERPRETATIONS
0216 NEWS
0226 ROUND UP
0236 LIFE IN EGYPT
0246 LISTENERS MAILBAG
0316 NEWS

Monday (UTC Tue.)
0200 MUSIC
0206 THE EGYPTIAN HOME
0216 NEWS
0226 COMMENTARY
0236 EGYPTIAN/AMERICAN RELATIONS
0246 ART IN FOCUS
0256 EGYPTIAN SONGS
0300 LETTER FROM EGYPT
0310 EGYPTIAN SONGS
0316 NEWS

Tuesday (UTC Wed.)
0206 THE LIGHTER SIDE OF THE NEWS
0216 NEWS
0226 SPOTLIGHT ON THE MIDDLE EAST
0236 TOURISM IN EGYPT
0246 CULTURAL LIFE
0256 MODERN EGYPTIAN SONGS
0316 NEWS

Wednesday (UTC Thu.)
0200 MUSIC
0206 WEDNESDAY TALK
0216 NEWS
0226 COMMENTARY
0236 INDUSTRY IN EGYPT
0246 LISTENERS MAIL
0316 NEWS

Thursday (UTC Fri.)
0206 PROFILES
0216 NEWS
0226 EGYPT'S FOREIGN POLICY
0236 STORY AND AUTHOR
0246 EGYPTIAN SONGS AND MUSIC
0256 CAIRO MAGAZINE
0316 NEWS

Friday (UTC Sat.)
0206 HOLY KORAN
0216 NEWS
0226 ALTERNATIVE POINT OF VIEW
0236 THE RELIGION OF ISLAM
0246 EGYPTIAN POP
0256 EGYPTIAN SONGS
0306 READERS CORNER
0316 NEWS

Saturday (UTC Sun.)
0206 QUESTIONS AND ANSWERS
0216 NEWS
0226 PRESS REVIEW
0236 STAMP COLLECTORS CLUB
0246 RADIO GUEST
0256 EGYPTIAN SONGS
0306 CURRENT EVENTS
0316 NEWS
(07-Aug-91/Dale Vanderpoel/SW ECHO)

****ESTONIA****

Estonian Radio was the only station in the Baltic area not closed or taken over by forces supporting the hardliners. (SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

****FINLAND****

>> Could someone post the times and frequencies for the LATIN
>> newscast on Radio Finland?
Certainly. Until September 18th, Radio Finland is broadcasting to North America at 1045-1400 UTC on 15400 and 21650kHz, and 2300-0030 UTC on 15185kHz. The Latin newscasts are on the air on Saturday at 1120 and 1150. I expect Dan Quayle listens regularly! (06-Aug-91/Andy Sennitt/SW ECHO)

****INDIA****

All India Radio at 2045-2230 UT has apparently shifted from 9910 to 9950, parallel to 11620 and 7412 and other frequencies. Noticed by Joe Hanlon (PA) and confirmed here, this move gets away from the BBC powerhouse on 9915. (25-Aug-91/Tom Sundstrom/SW ECHO)

****IRAN****

The latest program schedule from the IRIB External Service arrived from Tehran this week, with the following English language transmissions listed:
1130-1230 7215, 9575, 9695, 11790 & 11930 kHz (Middle East & E. Asia)

****IRAN (cont.)****

1930-2030 8140 & 9022 kHz (for Europe)
Their address for reception reports is IRIB, PO Box 3333, Tehran, IRAN
(14-Sep-91/Patrick McDonald/SW ECHO)

Yesterday I caught a R. Teheran broadcast in Spanish to Latin America. They gave their Spanish service schedule over the air, and it coincides with that on WRTH 91 except for: 1) They are using summer time. All broadcasts are one hour earlier. 2) They are using 15270 instead of 15084. I heard them at 0030 on 11930 and 9022. 15084 was empty, but on 15270 there were apparently two carriers present, could not make out which was which. (14-Aug-91/Richard Urena/SW ECHO)

****ISRAEL****

Here's the complete Kol Yisrael schedule that I received late last week.

Kol Yisrael Shortwave Broadcasts - 1 September to 3 November 1991

Time	Language	Freq	Targets
0400-2215	Arabic	5900 5915 15095 15480	Iran/Asia/SAm/Oz
1330-1355	Yeminite	15640	Yemen (M-Thu only)
1400-1425	Russian	11805 15590 15640 17575	East Europe/USSR
1430-1455	English	11587 11805 17575 17590	NAm/EEur/USSR
1430-1445	Bucharian	15590 15640	EEur/AsUSSR/USSR
1445-1500	Georgian	15590 15640	EEur/AsUSSR/USSR
1500-1515	Tat	11587 15590 17590	NAm/Eu/USSR
1500-1554	Persian	11805 15640 17575	Iran/AsUSSR/WEur/ NAm
1500-1555	Russian	15590 17590	East Europe/USSR
1600-1658	Russian	11805 15590 15640 17575 17590	East Europe/USSR
1700-1755	Yiddish	11587 11805 15590 15640 17590	East Europe/USSR
1800-1815	English	11587 11875 15590 17575	NAm/WEur/Afr/ USSR
1800-1815	Romanian	11805 15640	NAm/WEur
1815-1830	French	11587 11875 15590 17575	NAm/WEur/Afr/ USSR
1815-1830	Hungarian	11805 15640	NAm/WEur
1833-1955	Russian	11587 11805 11875 15590 17575	East Europe/USSR
2000-2030	English	11587 11805 11875 15640 17575 17630	NAm/Eur/Asia/Oz
2030-2055	French	11587 11805 11875 15640 17575 17630	NAm/Eur/Asia/Oz
2100-2125	Russian	9435 11587 11805 11875 15590	East Europe/USSR
2130-2200	French	9435 11587 11805 15100 15640 17575	N/C/SAm/Eur/USSR
2200-2230	Spanish	9435 11587 11805 15100 15640 17575	N/C/SAm/Eur/USSR
2230-2300	English	9435 11587 11805 15100 15640 17575	N/C/SAm/Eur/USSR

RESHET BET (relay of Hebrew HS)

0400-0605	11588	NAm, WEur
0400-2300	13753	NAm, Europe
0810-1355	17545	C/Eu/Am/WEur
0810-2310	15615	NAm, WEur

(12-Sep-91/Harry Bloomberg WA3TBL/INTERNET)

****JAPAN****

From newswire services: Tokyo (Sept. 11) Kyodo - Japan will expand its international radio broadcasts beamed at Europe, the Ministry of Posts and Telecommunications said Wednesday. Ministry officials said Japan needs to expand the broadcasts because of the fast-changing situation in the Soviet Union and eastern Europe and the scheduled integration of the European community (ec) in 1992. The current broadcasts, transmitted through an African relay station, last only 10 hours a day. Longer hours of better-quality broadcasting are required the officials said. The ministry is negotiating agreements to lease relay stations near Moscow or in London for the expanded broadcasts starting next April. It has requested appropriations of 130 million yen for the expanded broadcasts in the fiscal 1992 government budget. The Short-wave Radio Japan of Japan Broadcasting Corp. (NHK), a public broadcasting system, transmits its international broadcasts from a station in Ibaraki prefecture, north of Tokyo, and through four overseas relay stations in Gabon, French Guiana in South America, Canada, and Sri Lanka. (15-Sep-91/Mark Huff/SW ECHO)

I notice on page 203 of the '91 WRTH, the shortwave frequencies are given for the Far East Network in Japan. A while back, I noticed that I wasn't able to receive them, and so I called the number listed there. I found out that they discontinued the shortwave frequencies two years ago. (14-Aug-91/Gene Fornario/SW ECHO) (16-Aug-91/Media Network-15-Aug-91/Bill Oxner/SW ECHO)

You may recall I wondered if NHK Japan had changed its fax telephone numbers. I found out the answer tonight when I tried to place a voice telephone call. I heard a voice message and called AT&T to confirm it. Obviously, I never would have heard it calling on the fax line. For Tokyo, one now has to prefix the old number with a "3". So the number listed in the WRTH as 81 3 481 1576 becomes 81 33 481 1576. The AT&T "Reach Out World" information operator says the change went into effect December 31, 1990, but I could have sworn I have called Japan since that date using the single "3". (22-Aug-91/Tom Sundstrom/SW ECHO)

****KOREA (SOUTH)****

Radio Korea schedule - all languages - all target areas - valid 4/1/91 to ?

Time	Target	Frequencies
ENGLISH		
0000-0100	America	15575
0600-0700	non-direct.	7275
0800-0700	America	11810 15170
0800-0900	Europe	7550 13870
1030-1100	America	11715 (relay via Sackville, Canada)
1100-1200	ME & Afr.	15575

****KOREA (SOUTH (cont.))****

1215-1315 America 9750
 1400-1500 SE Asia 9670
 1600-1700 non-direct. 5975
 1800-1700 Africa 9870
 1800-1800 Europe 15675
 2030-2130 Africa 7550
 2030-2130 Europe 6480 15675

(target area omitted for following:)

WORLD NEWS SERVICE (KOREAN & ENGLISH)

0230-0300 9640 11805 15675
 0600-0630 7550 15675
 0900-0930 9570 13670
 1100-1130 7275 11740
 1330-1400 7275 11740
 1630-1800 7275
 1700-1730 9870
 2030-2100 5975 9870

KOREAN

0300-0400 7275 9640 11805 15675
 0700-0800 7275 11810 15170
 0900-1000 15675
 1000-1100 5985 6135 7275 15675
 1100-1130 9650
 1200-1400 9570
 1700-1900 5975 7550
 2100-2200 7275 9640
 2300-0100 5975

FRENCH

0630-0730 7550 13670 15170
 1630-1700 6480 7550
 1830-1900 7275 9515 9870
 1930-2030 5975
 2130-2230 7550

SPANISH

0130-0230 9640 11805 15675
 1030-1100 9570 11725 13670
 1900-1930 5975 7275 9515
 2230-2300 6480 7550 15675

PORTUGUESE

0100-0130 9640 15675
 0930-1030 9570 11725 13670
 1930-2030 6480 15675
 2300-2330 6480 7550

ITALIAN

0600-0630 13670
 1530-1630 6480 7550
 1730-1800 15675
 1930-2030 9515
 2300-2330 15675

GERMAN

0730-0800 7550 13670 15675
 1100-1130 13670
 1730-1830 7275 9515
 1930-2030 7550 9870
 2130-2230 6480 15675

JAPANESE

0100-0300 7275
 0800-1000 7275
 1100-1300 5975 6135
 2100-2300 5975

CHINESE (MANDARIN)

1130-1230 7275 11740
 1300-1400 6135
 1430-1530 7275 11740
 1600-1800 5975
 2230-0030 7550 9525 9640

ARABIC

1630-1730 7275 9515 15675
 1900-1930 7550 9870
 2030-2100 7275

INDONESIAN

1100-1200 9570
 1400-1430 7275 11740
 1600-1800 9570
 2230-2330 7275 9525 9640

RADIO KOREA PROGRAM DESCRIPTIONS

* Sunday *		* Thursday *	
0000 News	0000 News	0000 News	0000 News
0015 Echoes of Korea	0015 News Commentary	0015 News Commentary	0015 News Commentary
0030 Shortwave Feedback	0020 Seoul Calling	0020 Seoul Calling	0020 Seoul Calling
0600 News	0040 Forward to Reunification	0040 Forward to Reunification	0040 Forward to Reunification
0815 Echoes of Korean Music	0055 News Highlights	0055 News Highlights	0055 News Highlights

****KOREA (SOUTH) (cont.)****

0630 Shortwave Feedback 0600 News
 08-09 same as above 0615 News Commentary
 1030 Weekly News in Review 0620 Seoul Calling
 1040 Shortwave Feedback 0640 Forward to Reunification
 1215 News 0655 News Highlights
 1230 Echoes of Korean Music 08-09 same as above
 1245 Shortwave Feedback 1030 News
 14-15 same as above 1040 Forward to Reunification
 16-17 " 1215 News
 18-19 " 1230 News Commentary
 2030-2130 " 1235 Seoul Calling
 " 1255 Forward to Reunification
 " 1310 News Highlights

*** Monday ***

0000 News 14-15 same as above
 0015 News Commentary 16-17 "
 0020 Seoul Calling 18-19 "
 0040 Tales From Korea's Past 2030-2130 "
 0055 News Highlights

*** Friday ***

0600 News 0000 News
 0615 News Commentary 0015 News Commentary
 0620 Seoul Calling 0020 Let's Sing Together
 0640 Tales From Korea's Past 0040 Let's Learn Korean
 0655 News Highlights 0055 News Highlights
 08-09 same as above 0600 News
 1030 News 0615 News Commentary
 1040 Seoul Calling 0620 Let's Sing Together
 1215 News 0640 Let's Learn Korean
 1230 News Commentary 0655 News Highlights
 1235 Seoul Calling 08-09 same as above

*** Tuesday ***

0000 News 1030 News
 0015 News Commentary 1040 Let's Sing Together
 0020 Seoul Calling 1215 News
 0040 Korean Cultural Variety 1230 News Commentary
 0055 News Highlights 1235 Let's Sing Together
 0600 News 1255 Let's Learn Korean
 0615 News Comment 1310 News Highlights
 0620 Seoul Calling 14-15 same as above
 0640 Korean Cultural Variety 16-17 "
 0655 News Highlights 18-19 "
 08-09 same as above 2030-2130 "

*** Saturday ***

1030 News 0000 News
 1040 Seoul Calling 0015 News Commentary
 1215 News 0020 Sites and Sounds
 1230 News Commentary 0040 From Us to You
 1235 Seoul Calling 0055 News Highlights
 1255 Korean Cultural Variety 0600 News
 1310 News Highlights 0615 News Commentary
 14-15 same as above 0620 Sites and Sounds
 16-17 " 0640 From Us to You
 18-19 " 0655 News Highlights
 2030-2130 " 08-09 same as above

*** Wednesday ***

0000 News 1030 News
 0015 News Commentary 1040 From Us to You
 0020 Seoul Calling 1215 News
 0040 Pulse of Korea 1230 News Commentary
 0055 News Highlights 1235 Sites and Sounds
 0600 News 1255 From Us to You
 0615 News Commentary 1310 News Highlights
 0620 Seoul Calling 14-15 same as above
 0640 Pulse of Korea 16-17 "
 0655 News Highlights 18-19 "
 0800 same as above 2030-2130 "
 1030 News
 1040 Pulse of Korea
 1215 News
 1230 News Commentary
 1235 Seoul Calling
 1255 Pulse of Korea
 1310 News Highlights
 14-15 same as above
 16-17 "
 18-19 "

SEOUL CALLING: a magazine program of music, features & interviews on anything and everything Korean.

TALES FROM KOREA'S PAST: Historic figures, memorable events, folk tales

LET'S SING TOGETHER: sing along in Korean

SHORTWAVE FEEDBACK: letterbox program

FROM US TO YOU: letterbox program

FORWARD TO REUNIFICATION: South Korean propaganda

PULSE OF KOREA: major developmental aspects of Korea

ECHOES OF KOREAN MUSIC: traditional & contemporary pop

LET'S LEARN KOREAN: language lessons

(12-Aug-91/Bill Oxner/SW ECHO)

****LITHUANIA****

Radio Vilnius has been erratic lately. Heard at 2130 on 9675 KHz. (06-Sep-91/RN Media Network/Richard Urena/SW ECHO). R. Vilnius at 2300 on 11790 competes badly with R Beijing in Spanish to LA and other stations on the frequency; as the hour wears on, the signal is buried. (11-Sep-91/Tom Sundstrom/SW ECHO)

****MONACO****

The Radio Monte Carlo Arabic service via Canada began last week at 0300-0315 on 5960 and 9766. (GH/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AI Quagliari/SW ECHO)

****NETHERLANDS****

RADIO NETHERLANDS PROGRAMME INFORMATION RELEASE
SEPTEMBER-DECEMBER 1991

We continue to introduce more variety into our English language programme line-up. Each transmission is 65 minutes long. From Monday - Saturday inclusive, all transmissions begin with a bulletin of world news. This is followed by RNewlineS, a 14 minute review of current events (except during transmissions carrying Asiasec). "Newline" features on-the-spot correspondent's reports, interviews, and commentaries by our own in-house specialists. The "Newline" team includes, Ginger da Silva, Eric Beauchemin, Robert Green, Harry Kliphuis, Marijke van der Meer, and Luc Lucas. Special editions for Africa (aired at 1630, 1830 & 2030 UTC) are prepared by John Hammond and Jimmy Ocitti. Transmissions at 1130 & 1430 UTC generally carry a Newline edition with Francis Rolt specially catered to the interests of listeners in Asia. After "Newline", the transmissions continue with a 31 minute feature programme, as detailed below.

MONDAY

Now in its third successful year, Research File is one of Europe's leading science programmes. During September, Jonathan Marks hosts the programme. On September 9th we investigate why a team in Delft is trying to track satellites so accurately...who cares about a few centimetres. A week later, September 16th, Nina Morgan and Jonathan Marks visit the nuclear reactor at Petten. Why is the 45 MW reactor just pumping its energy into the sea? On September 30th, regular producer & host of the programme Anne Blair Gould, returns after the summer break. She is assisted by a team of reporters world-wide. The programme covers a wide variety of fields including astronomy, medicine, consumer technology, and the environment. The programme format is flexible, ranging from a magazine-style presentation of shorter items (including updates on earlier stories), to on-location documentaries. We would be interested to hear of subjects you would like us to cover.

TUESDAY

Tuesdays are devoted to the arts and culture in Europe, and starting in October we'll be expanding the scope of the programme into "Mirror Images". David Swatling, Dhersa Sujan, Nevil Gray and Martha Hawley are some of the voices you'll hear, covering what is happening in opera, ballet, theatre and music with interviews, news and actuality in Holland and in the various European capitals.

WEDNESDAY

Wednesday programming contains a variety of features throughout the year, some musical, others with a documentary character. "SITAR TO SALSA". World music/World beat/Non-western - whatever you want to call it, Holland serves as common ground. Musicians from all corners of the globe are producing traditional, modern and fusion sounds that signal this country's transformation into a multicultural society. In a series of 7 documentaries, Martha Hawley will present highlights from the unique range of non-western musical styles heard in Holland. The speakers: Dutch-based performers, managers, teachers from all backgrounds who have been raised in or adopted by Dutch society. The sounds: Japanese drumming, Antillian salsa, West African pop, Gamelan from Surinam, Moroccan avant-garde, Dutch merengue, Indian classical song, post-punk Moluccan and Hindi-pop, just to give you an idea.

In late November we're planning documentaries on Eastern Europe. How is the new found freedom affecting people in Poland and Czechoslovakia. Is investment from the West, such as from Dutch companies, helping the average person? We hope to answer some of these important questions.

On Christmas Day, December 25th, Pete Myers presents a special extended documentary looking at what's happened over the decades during Christmas Week.

And so to 1992. IN SO MANY WORDS is a twelve-part series on language diversity and the language cultures in the European Community countries. The series is produced and hosted by Marijke van der Meer and will be broadcast from early January through March of 1992. The 350 million people who are native to the 12 EC countries speak about 40 different languages, 9 of which are official EC languages. That makes the European Community the most multilingual international organization in the world, with the largest translating and interpreting services anywhere. But can the Community countries preserve linguistic diversity in the face of the English invasion, the increasing globalization of culture, the pressures of competing with monolingual cultures, and an expanding number of members bringing with them dozens of new languages? In separate programs devoted to each of the nine official languages we'll be asking such questions as: How did the Cold War division of Europe affect the German language and how is reunification affecting it now? Are ancient Greek and modern Greek the same language? Is it true that Italian is not a language but a collection of dialects? The Dutch once had a vast trading and maritime empire, so why did their language fail to establish itself as one of the world languages on a par with the other colonial powers like French, English, Spanish and Portuguese? What is happening to local dialects and to the so-called RminorityS or regional languages of Europe: Catalan, Welsh, Macedonian, Friuli, etc. Will language differences in Europe create a barrier to integration or, in fact, promote it? For the answers to these questions, tune in to "In So Many Words" for twelve weeks, starting on Wednesday, January 8!

THURSDAY

Media Network. Jonathan Marks hosts this weekly award-winning survey of communication developments compiled with the assistance of over 185 monitors across the globe. Regular contributors include Eric Beauchemin, Victor Goonetilleke, Jeff White, Lou Josephs, Jim Cutler, Andy Sennitt and Arthur Cushman. The programme offers unrivalled coverage of the media developments connected with current events as well as full-length documentaries. Recent special programmes have included coverage of changes to the Soviet media during and after the August coup. Input on the output is always welcome. If you have a computer and a modem, you can download our programme details electronically. In North America this is available on the ANARC BBS on +1 913 345 1978 or Pinelands RBBS at +1 809 859 1910. Selected information is also posted on USENET. More details on these services in our free pamphlet entitled "INFODUTCH". On September 12th Media Network investigates Digital Audio Broadcasting. What's so great about Eureka 147? September 28th is planned as a survey of developments in Latin America, hosted by

****NETHERLANDS (continued)****

Jonathan Marks, Marcel Rommerts, and Jeff White. Recent announcements by the American Forces Network in Frankfurt indicate that AFN Munich will close in April 1992. On October 3rd we profile changes over the years in the AFN mission, and how Munich got started. Roy Neal has some priceless stories to impart. October 10th is scheduled to investigate a voice in Boston! Jim Cutler is one of the regular voices behind the parody jingles on Media Network. He tells us about an industry that was impossible just five years ago.

FRIDAY

Friday is now devoted to a variety of light entertainment. During September, Pete Myers presents "Insights" and during this month will focus on some of the Hollywood myths. Who dubbed who? Pete discovers that many of the well-known voices are not what they seem.

Following the success of Sounds Interesting earlier in the year, we'll be running a second 13 part series starting October 4th. The host for this series is the effervescent Dhersa Sujan. Starting on April 6th we'll be running the second 13 part listener participation show, called "Sounds Interesting". We will be profiling the sights and sounds of Holland, as well as responding to your questions. We also phone listeners to get their opinions direct. If you have an idea which you think sounds interesting, include your phone number when you write. Alternatively, leave a comment on our 24 hour listener answer line. Dial the international exchange code (e.g. 011 in USA, 010 in Britain), followed by 31 for Holland, 35 which is the area code for Hilversum, then the subscriber number 724222. Pete Myers will be back in the New Year with more surprising background. 1992 is a year for change in Europe, Olympics in Barcelona, a World Fair in Sevilla, and 500 years since Columbus discovered the New World. Trust us to come up with something different. More details on air.

SATURDAY

Saturday is the day for our regional magazine programmes.

Caribbean, Pacific & North America: Starting in October, "Van Gogh's Ear" is a new weekly European orientated magazine show crafted together by David Swatling. He explores the alternatives; popular culture and cultural oddities; the avant-garde vs. the commercial; interesting people, strange stories, off-beat life styles. In short, it's a mix of commentary, interviews, music and humor (also opinions). An offbeat way to spend a Saturday...interesting too.

OR

Asian Transmissions Only : Carl Josephs is the producer of "Asiasec", the weekly 45 minute magazine show presenting news and features covering both Asia & Europe.

OR

African Transmissions Only : "Airtime Africa" is a topical review of events concerning Europe & Africa. Your regular host is Veronica Wilson.

SUNDAY

All transmissions (except 1630 UTC) carry "Happy Station"; family entertainment with music, birthday mentions, and competitions hosted by shortwave personality Tom Meyer. This is international radio's longest-running show, having first hit the airwaves in 1928!

BACKGROUND NOTES

As part of an improved listener service, many of our free publications have been thoroughly revised and updated. The "Booklist" and "Receiver Shopping List" are both now in their 13th editions offering a range of unbiased consumer advice that no other station can offer. Publications such as "Writing Useful Reception Reports", "Holland Info", "Latin American DXing", & "Introducing International Radio" have been re-styled and re-issued. Full details in our "Listener Services Catalogue".

Programmes via our Bonaire & Madagascar relay stations are now fed via a new digital link. This system, together with a new "Optimod" processor, has vastly improved the audio quality broadcast to North America, the Pacific, and West Africa. We'd also like to thank the many thousands of listeners who have sent reception reports on the SSB test conducted at 0030 UTC on 16560 kHz to North America. The use of SSB continues at 0030 UTC but the frequency in use is 11836 kHz.

In March 1992 we plan extensive alterations to our English language output. We are aware that the timings of our English language broadcasts are not ideal for a European audience. We are currently negotiating better technical solutions, since we do not have the facilities to provide the kind of service we would like. Shortwave is not the medium to reach English speaking target areas such as Britain. The Netherlands is too close, and during the winter months the signals don't propagate reliably at all. In the meantime, the frequencies of 9715 and 5955 kHz remain beamed to Europe at 1130 UTC. We recently concluded a series of test transmissions to South Asia at 0030 UTC. The signal quality was good, and we hope this will lead the way to a morning service to Asia in the course of 1992.

THE CURRENT SCHEDULE

Radio Netherlands broadcasts daily in 7 languages. Key: The letters before each frequency overleaf indicate the transmitter site. F = Fievo, The Netherlands. B = Bonaire, Netherlands Antilles, M = Madagascar. You can send messages through the ANARC BBS or Pinelands RBBS telephone bulletin boards, or via MCI Mail to Jonathan Marks 338-2983. You can phone the Radio Netherlands answerline on +31 35 724222 (24 hrs a day). You can also write to English Section, Radio Netherlands, P.O. Box 222, 1200 JG Hilversum, The Netherlands.

Radio Netherlands Winter English Schedule
valid from September 29th 1991 - March 29th 1992!

The 1630 UTC transmission carries a Dutch church service on Sundays.

Time UTC	Main Area Served	Frequencies (kHz)
0730	New Zealand	B11895, B9830
0830	New Zealand	B11895

****NETHERLANDS (continued)****

0830	S.E. Asia	M21485, M17575
0930	Australia	B11895
1130	South East Asia	F21520, M21480, M17575
1130	Europe	F9715, F5955
1430	S.W. Asia/Europe	F17805, M17575, M15150, F13770, F5955
1630	Southern/East Africa	M15570, M6020
1830	South/Central Africa	B21685, B17805, M15570, M6020
2030	West Africa	F13700, F11880, F9895, M9860, M7285.
0030	Eastern N. America	B11835, B8185, F6020
0330	Western N. America	B11720, B9590.

(Jonathan Marks - Head English Programmes, Radio Netherlands/file downloaded from Tom Sundstrom's PINELANDS RBBS)

Jonathan Marks reported that Radio Netherlands sends out 15,000 QSL's a year, at a cost of \$6,000 in postage, not to mention printing costs and personnel costs for handling them. (16-Aug-91/Media Network-15-Aug-91/Bill Oxner/SW ECHO)

****NEW ZEALAND****

Arthur Cushen reported that Radio New Zealand will be making a freq change on Sept 1st. From 1800-2200 UTC on 15120 kHz (replacing 13785). (16-Aug-91/Media Network-15-Aug-91/Bill Oxner/SW ECHO)

I have just received the new "Summer" Schedule for Radio New Zealand International, and I am including it in this posting. They are indicating one Frequency change, during the 1800-2206 time-slot, to 15120 kHz. There are also two new programmes, PACIFIC BEAT and PEOPLE FROM OUR PAST, and a limited series, CALLING JAPAN.

SUMMER SCHEDULE, September 1, 1991 - March, 1992

UTC	FREQUENCY	New Zealand Time
1800-2206 Sun-Fri	15120 kHz	0800-1008 Mon-Sat
2208-0730 Daily	17770 kHz	1006-1930 Daily
0730-1210 Daily	9700 kHz	1930-0010 Daily

NOTE: Transmissions beyond 1210 UTC to cover national and international sporting fixtures will be broadcast on 9700 kHz.

OUR PROGRAMMES are primarily for listeners and radio stations in the Pacific. Our programme variety however provides a "window of the Pacific" for listeners in beyond this region. Emphasis on programmes for the Pacific is between 1800 and 2200 hours UTC and between 0700 and 1000 hours weekdays. With this new schedule we introduce two new programmes: PACIFIC BEAT spins the latest pop records from New Zealand and the Pacific Islands and may be heard at 0810 on Tuesdays and Fridays; PEOPLE FROM OUR PAST recaps our history and is broadcast at 2020 Sunday and Thursday.

CALLING JAPAN will be broadcast as a pilot series from 31 August to 17 November on Saturdays and Sundays at 1100 UTC on 9700 kHz. The programme includes a summary of the week's news, interviews, New Zealand and Pacific music, and feature segments on tourism, trade, and education.

SHORTWAVE ENTHUSIASTS are invited to join Tony King for MAILBOX on Mondays at 0430 UTC, Thursdays at 0830 UTC, and Friday at 1930. TRAVEL PACIFIC with Susan Buckland airs at the same times on alternate weeks to MAILBOX.

FOR A prompt QSL response, reception reports must be accompanied by 3 International Reply Coupons. Cassettes of reception are not required. Mail to : Broadcasting House, Bowen St., P.O. Box 2092, Wellington, New Zealand (17-Aug-91/C. Ed Evans, Senior Station Manager, CSMS/INTERNET)

Radio New Zealand International has started its Japanese Service on August 31st. The first day transmission introduced greetings from the Japanese ambassador to New Zealand and the president of Japan BCL Federation following news bulletin and feature programs. The Japanese transmission is only on the air on Saturdays and Sundays from 1100-1200 on 9700. According to the station, this is a pilot broadcast schedule until November. All programs except the news bulletin will be broadcast four times in two weeks, that is on Saturdays and Sundays. The station urges all Japanese listeners to send their reception reports and suggestions to Radio New Zealand International. If the response is big enough, the service will continue after November. By the way, Radio New Zealand International has previously broadcast Japanese programs between 1980-1982; however, the program lasted for only ten minutes and was broadcast twice a month in the English transmission. (R. Japan DX CORNER/09-Sep-91/AJ Quaglieri/SW ECHO)

****NIGERIA****

R. Nigeria, Kaduna	4770 kHz	0430-2305 UTC
R. Nigeria, Lagos	4990	0430-2300
R. Nigeria, Enugu	8025	0430-2300
R. Nigeria, Ibadan	8050	0430-2305
R. Nigeria, Madragiri	8100	0400-2305

(HCJB DX PARTY LINE/08-Sep-91/Bill Oxner/SW ECHO)

****NORWAY****

On Radio Norway International's Saturday and Sunday English broadcast to North America at 1500, 15355 has replaced 15305 (which was the one on its schedule). The parallel frequency of 17790 remains unchanged. (18-Aug-91/Richard Urena/SW ECHO)

****PHILIPPINES****

A new English language service called Radio Filipinos is broadcasting from 0200-0330 UTC (daily) on 17840 & 21580 kHz. Also from 1800 UTC on 15190, 17840 and 21455 kHz. (16-Aug-91/Media Network-15-Aug-91/Bill Oxner/SW ECHO)
I am hearing this station on both 21580 and 17840 kHz between 0200 and 0318 UTC here in Sydney, with a fair signal, the former freq a bit stronger. ID at 0315 UTC as 'Radio Philippines' with a request for letters to a Quezon City address. (18-Aug-91/Patrick McDonald/SW ECHO)

****PHILIPPINES (cont.)****

Radio Filipinos had resumed broadcasting since August. Tetsuia Kondo (?) of the Asian Broadcasting Institute has now received a reply to his reception report. According to this reply, the station only conducted test transmissions in August, but regular transmissions have started since September 1st. (R. Japan DX CORNER/08-Sep-91/AJ Quaglieri/SW ECHO)

Radio Filipinos has Tagalog from 1800-1900 on 15190, 17840 and 21455; English (produced by former RVA English staffers) is from 0230-0330 on 17760, 17840 and 21580. All are via the VOA transmitting site in Tinang, Philippines. Address: Radio Filipinas, Philippine Broadcasting Service, Surgeon General's Avenue, Quezon City, Philippines. (Victor Goonetilleke/RN MEDIA NETWORK 12-Sep-91/AJ Quaglieri/SW ECHO)

Radio Veritas Asia has extended its 30-minute transmission on Sunday to an hour: 1500-1600 on 15140, carrying Holy Mass in English and Tagalog; on other days from 1500-1530 with an English newscast from 1525-1530 (this is the only English broadcast on RVA). (Victor Goonetilleke/RN MEDIA NETWORK 12-Sep-91/AJ Quaglieri/SW ECHO)

Via Union of Asian DXers July/August, Victor Goonetilleke says Radio Veritas Asia is now devoting 15-18 UTC on Sundays for its Philippine Service which included Mass in English. I find the service with Philippine hymns very nice the big signal makes it very listenable on 15140. My best receiver and antenna have been with RVA for the last couple of Sundays with RVA 15-18 UTC. (13-Sep-91/Bruce Macgibbon/SW ECHO)

****ROMANIA****

R. Romania Int'l was heard today (the 11th) announcing the following English releases to Europe: 1300 on 17850, 17720, 15365, 11940; 1930 on 11940, 9750, 9690, 7145; 2100 on 11940, 11810, 9750, 9690, 7145. On September 1st, I noted R Moscow on new 11940 at 20 UT, but on the 11th Moscow was no longer here. (11-Sep-91/Tom Sundstrom/SW ECHO)

****SEYCHELLES****

The September-October frequency schedule for FEBA indicates the 0432 English broadcast has again disappeared; the only English shown is from 1500 with two different programs at the same time: 1500-1555 (-1615 Sat) the south Asian program on 11865; 1500-1600 (Tu-Sat only) the international English program on 9590 and 15330. (GH/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quaglieri/SW ECHO)

****SOUTH AFRICA****

Schedule from Radio RSA The Voice of South Africa - S91 Season Effective From 7th September 1991 to 2nd November 1991

Time UTC	Target Area	Language	Frequencies
0300-0700	Indian Ocean Islands	French	15120 KHz 78 deg
0300-0700	Central Africa	French	+15365 350
0300-0500	Central & West Africa	French	11920 340
0400-0500	Nigeria & West Africa	English	+15440 325
0400-0500	East & Central Africa	English	11900 7
0400-0500	Southern Africa	English	7270 7
0400-0800	Mocambique	Portuguese	7230 76
0500-0800	Angola	Portuguese	11920 328
0500-0700	Central & West Africa	French	17815 340
0800-1000	Southern Mocambique	Tsonga	9585 76
(Sat & Sun)			
1000-1100	East Africa	English	17835 7
1100-1200	Central Africa	English	+11900 5
1100-1200	Namibia	English	11860 300
1100-1200	Southern Africa	English	9555 7
1400-1700	East & Central Africa	Swahili	15365 7
1400-1700	East & Central Africa	Swahili	11925 7
1500-1800	Caprivi & Zambia	Lozi	7270 340
1500-1800	East & Central Africa	English	+15270 5
1500-1800	Southern Africa	English	7230 5
1800-1800	West Africa	English	17840 340
1800-1800	Malawi, Zambia, Moc.	Chi-Chewa	+5960 20
1800-1900	Mocambique	Portuguese	4965 76
1800-2000	W/N/Central Africa	French	17840 328
1800-2000	W/N/Central Africa	French	15365 340
1900-2100	Angola & Cape Verde	Portuguese	+11950 320

+ Indicates 500 KW; Other Frequencies 250 KW

Issued By: Technology Operations, PO Box 6, Honeydew 2040

DOMESTIC SHORTWAVE SERVICES

Shortwave Station: HF Verwoerd (100kW) Definitive Schedule From 01.09.91 - 02.11.91

[Note format: dd.mm.yy]

RADIO SUID-AFRIKA

	Daily (UTC)	Frequencies
North West Cape/	0300-0500	4810
Namibia	0455-0815	9685
	0800-1455	11770
	1450-1655	9685
(incl. Market Reports And Meat Prices, Tuesday-Friday 1815-1635 9685)		
	1650-1900	4810

RADIO ALLEGRO

	Daily	Frequencies
North West Cape/	1900-2300	4810
Namibia		

****SOUTH AFRICA (continued)****

RADIO ORION		
	Daily	Frequencies
North West Cape/ Namibia	2300-0300	4810

RADIO ORANJE		
	Daily	Frequencies
North West Cape	0300-0515	3215
	0520-1620	9630
	1625-2200	3215

The tentative D91 November 3 to February 29 schedule reflects a move to summer conditions:

04-05	17835 15230 7270
10-11	21535
11-12	no change
15-18	17840 7230
16-18	21535

(Tom Sundstrom/PINELANDS RBBS)

****SPAIN****

The following SPANISH language schedule was given for Radio Espana Exterior during the DX program on September 8th at 0130-0140 UTC on 9630 kHz.

0200-0500	9630	North America
0500-0700	11730	Australia
0900-1900	17815 (Su only)	Central America
0900-1900	21570 (M-Sa)	Central America
0900-1900	21555 21570	South America
1000-1200	9620	Japan
1200-1400	11910	Philippines
1900-2300	15110	North America
1900-2300	15325	South America
1900-2300	17845	Central America
2200-0500	11815	South America
2300-0200	21495	South America
2300-0400	17715	South America
2300-0500	11880	North America
2300-0500	15365	Central America

Please note that these are SPANISH language broadcasts. The DX hosts noted that the foreign service sections of Spanish National Radio will be moving to the Nodo (sp?)

Building in downtown Madrid but their mailing address will remain:

Spanish National Radio
English Service
DX Section
PO Box 156202
Madrid 28080
(09-Sep-91/Bill Oxner/SW ECHO)

I was listening to REE's DX program Sunday, (4 August, 1991) when they gave the Catalan, Gallego, and Basque Schedule. Each transmission contains a 7 minute language segment in order Catalan, Gallego, and Basque.

Europe	0839-0900	11790, 11920, 15240, 15395
	2239-2300	7105, 9260
South America	2239-2300	15325
Central America	2239-2300	17845
North America	2239-2300	15110

(08-Aug-91/George Conover/SW ECHO)

****SWEDEN****

The time has changed for the new new hour long medium wave broadcast in English on Radio Sweden, beginning on September 29th. The new time will be 1930-2030. Besides mediumwave 1179 kHz, the broadcast will also be relayed on shortwave: 6065, 9655, and 15270 kHz. Those same frequencies will be used for Swedish preceding English at 1900. German at 1800-1900 will be on 1179, 6065, and 9655 kHz. Beginning September 29th, the rest of the Radio Sweden English schedule will be:

0100-0200	9695 and 11705 kHz	North America
0100-0200	9765 kHz	Asia/Pacific
0200-0300	9695 and 11705 kHz	North America
1330-1400	17740 and 21570 kHz	Asia/Pacific
1530-1600	17870 and 21500 kHz	North America
2130-2200	1179 and 6065 kHz	Europe
2330-2400	9695 and 11705 kHz	Latin America
2330-2400	1179 kHz	Europe

(SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

****SWITZERLAND****

Swiss Radio International schedule - all languages / all target areas, valid until Sept 28, 1991

Language	Time	Target	Frequencies
English	0200-0230	N. America	8125 6135 9650 9885 12035 17730
	0400-0430	"	6135 9650 9885 12035
	0630-0700	Africa	15430 17670 21770
	0630-0700	Europe	3985 6165 9535
	0830-0900	Australasia	9560 13685 17670 21695
	1000-1030	"	9560 13685 17670 21695
	1100-1130	"	13635 15570 17830 21770
	1200-1230	Europe	3985 6165 9535
	1330-1400	Australasia	7480 11695 13635 15570 17830 21695
	1515-1600	Europe	11995
	1830-1900	Middle East	9885 11955
	1900-1930	Europe	3985 6165 9535
	2100-2130	Middle East	9885 12035 13635 15525

****SWITZERLAND (continued)****

German	2130-2200	Europe	6035 6190 9680
	0230-0300	N. America	9885 12035
	0430-0500	"	6135 9650 9885 12035
	0530-0800	Europe	3985 6165 9535
	0545-0600	Africa	15430 17670 21770
	0900-0930	Australasia	9560 13685 17670 21695
	1100-1130	Europe	6165 9535 12030
	1200-1230	Australasia	13635 15570 17830 21770
	1430-1500	"	7480 11695 13635 15570 17830 21695
	1600-1730	Europe	3985 6165 9535
	1630-1700	Middle East	13685 15430 21630
	1900-1930	"	9885 11955 12035 13635 15525
	2330-0000	S. America	9810 9885 12035 15570
Italian	0130-0200	N. America	6125 9885 12035
	0330-0400	"	6135 9650 9885 12035
	0800-0830	Europe	3985 6165 9535
	0700-0730	Africa	15430 17670 21770
	0800-0830	Australasia	9560 13685 17670 21695
	1130-1200	Europe	6165 9535 12030
	1230-1300	Australasia	13635 15570 17830 21770
	1300-1600	Europe	3985 6165 9535 (Mon-Sat)
	1400-1430	Australasia	11695 17830
	1630-1700	Middle East	17830
	1930-2000	Europe	3985 6165 9535
	2000-2030	Middle East	12035 13635 15525
	2300-2330	S. America	9810 9885 12035 15570
Portuguese	2030-2100	Africa	9885 12035 13635 15525
	2030-2100	Europe	6035 6190 9680
	2230-2300	S. America	9810 9885 12035 15570
	0130-0200	N. America	6135 9650 17730
French	0500-0530	"	6135 9650 9885 12035
	0500-0530	Europe	3985 6165 9535
	0600-0630	Africa	15430 17670 21770
	0700-1000	Europe	3985 6165 9535
	0930-1000	Australasia	9560 13685 17670 21695
	1000-1100	Europe	6165 9535 12030
	1130-1200	Australasia	13635 15570 17830 21770
	1400-1430	"	7480 13635 15570 21695
	1600-1630	M.E./Africa	13685 15430 17830 21630
	1830-1900	Europe	3985 6165 9535
	1930-2000	M.E./Africa	9885 11955 12035 13635 15525
	2400-0030	S. America	9810 9885 12035 15570
Spanish	0030-0100	N. America	9810 9885 12035 15570
	0230-0300	"	6125 6135 9650 17730
	2030-2100	Europe	6035 6190 9680
	2130-2200	S. America	13635 15525
Arabic	1730-1800	Middle East	9885 11955 15525 17830 21770
Romanian	0115-0130	N. America	6125 6135 9650 9885 12035 17730
(Tues & Fri ONLY)	0315-0330	"	6135 9650 9885 12035
	0745-0800	Australasia	9560 13685 17670 21695
	1045-1100	"	13635 15570 17830 21770
	1230-1245	Europe	3985 6165 9535
	1315-1330	Australasia	7480 11695 13635 15570 17830
	1515-1530	Middle East	13685 15430 17830 21630
	1715-1730	"	9885 11955 15525 17830 21770
	2215-2230	S. America	9810 9885 12035 15570
Esperanto	0115-0130	N. America	6125 6135 9650 9885 12035 17730
(Wed & Sat ONLY)	0315-0330	"	6135 9650 9885 12035
	0745-0800	Australasia	9560 13685 17670 21695
	1045-1100	"	13635 15570 17830 21770
	1230-1245	Europe	3985 6165 9535
	1315-1330	Australasia	7480 11695 13635 15570 17830
	1515-1530	Middle East	13685 15430 17830 21630
	1715-1730	"	9885 11955 15525 17830 21770
	2215-2230	South America	9810 9885 12035 15570

English Language Programs

News: 7 minutes at the start of every transmission

DATeline: Mon-Sat, reports, interviews, comments on world affairs

SWISS SHORTWAVE MERRY-GO-ROUND: Saturdays, DX program, 10 minutes long

THE GRAPEVINE: 1st & 3rd Sundays, letterbox prgm & musical requests

SUNDAY SUPPLEMENT: 2nd Sunday, in depth on one Swiss subject

ROUNDOABOUT SWITZERLAND: 4th Sunday, focus on a Swiss town or region

(12-Aug-91/Bill Oxner/SW ECHO)

RED CROSS BROADCASTING SERVICE IN ENGLISH:

Target Area Time UTC Frequency kHz Dates of Transmission

Europe	1100-1130	7210	Sundays: 29.9.91
			27.10.91
			24.11.91
			29.12.91
			26.1.92
			23.2.92
Europe	1700-1730	7210	Mondays: 30.9.91
			28.10.91
			25.11.91
			30.12.91
			27.1.92
			24.2.92

(05-Sep-91/Jussi Rinkinen - Finland/INTERNET)

****TURKEY****

An official schedule was received via the fax machine, but its UT times are correct for standard time which probably takes effect at the end of this month. Summer time is still in effect, and the best bets for NA are those releases to Europe: 2000 on 9445 and 2200 on new-for-VoT 11710 (incorrectly announced as 9885) and 7185. I can hear all frequencies at 20 and 22 UT. George Poppin spoke by telephone to the chief engineer and tells me the new 500 kw transmitters are being installed. The VoT estimates the NA service won't return until February 1992. (11-Sep-91/Tom Sundstrom/SW ECHO)

****UAE****

According to information received from UAE Radio in Abu Dhabi, the Capital Radio service is now only operating at 0300-2000 (formerly 24h). If correct, this means that the broadcast at 2230-2300 is not a live relay, but a tape-delayed rebroadcast. I'd be interested in any observations you guys may have which can substantiate this - eg. the presence or absence of time checks. (08-Aug-91/Andy Sennitt/SW ECHO)

Radio Dubai at 1600-1840 UT today, at least, was still on 21605 but the 1830 frequency announcement says 16400 - but nothing there. Other frequencies (unchanged), announced and heard here, are 15320, 13875 and 11795. Perhaps the 16400 frequency announcement is indicative of an upcoming move after September 1. (25-Aug-91/Tom Sundstrom/SW ECHO)

****UK****

Here's the contents of a new BBC World Service frequency schedule for Atlantic and Eastern Canada and the Eastern U.S., mailed from London August 30, received here September 7 (I keep telling them to send these things on Fido or MCIMail, but they ignore such letters) - and effective September 29:

0000-0030 9590 7325 8175 6975
 0030-0430 7325 8175 6975
 0430-1100 none targeted to Eastern North America
 1100-1300 15220 5985
 1300-1400 15220 5985 9590
 1400-1430 15220
 1430-1500 15205
 1500-1600 15205 15280* 9515* * = Sat, Sun only
 1600-1815 15205 15260 9515
 1615-1745 15260 9515
 1745-2100 none targeted to Eastern North America
 2100-2200 9590
 2200-2300 9590 7325
 2300-2400 9590 7325 8175 6975

Remember, this list is not effective till September 29. (07-Sep-91/Don Kimberlin/SW ECHO)

BBC WORLD SERVICE TO DOUBLE RUSSIAN-LANGUAGE BROADCASTS
 LONDON, Aug 21, Reuter - The BBC World Service is to more than double its Russian language broadcasts from Thursday morning to almost 18 hours, the British Broadcasting Corporation said on Wednesday. The extended service, in response to the crisis over the coup against Mikhail Gorbachev, will replace five separate transmissions and will lift Russian broadcasts to 125 hours a week. REUTER PGB DN ACR 211808 GMT (21-Aug-91/DAVID ALPERT/PINELANDS RBBS)

****URUGUAY****

Uruguay Integracion Americana was noted on 8045 kHz. They also have a MW station which ID's as Libertad Sport. No times were given for the SW freq. (HCJB DX PARTY LINE/10-Aug-91/Bill Oxner/SW ECHO)

****USA****

I should let you all know that the Bethany Relay Station, VOA, is QSLing all of our frequencies. Reports should be sent to me at the station, and if correct, I will QSL them. We have just had some 10,000 cards made up, and for the 50th anniversary of Bethany and VOA, are QSLing direct, not thru Washington. By the way, the new transmitters are due to be programmed on about Nov. 1, 1991, and we are working on a first day broadcast and special QSL. Reports should be sent to: Bethany Relay Station, Voice of America, P.O. Box 227, Mason, Ohio 45040, Attn: John Vodenik. Good luck, and 73 from Bethany, John (18-Sep-91/John Vodenik/SW ECHO)

VOA Europe has popped up from 0300-0400 UTC on 15180 kHz. Although beamed to the USSR from Kavala, Greece (putting me squarely in what should be a minor sidelobe or a null), it does a pretty good job into upstate NY. It even beats out Sofia which occupies the same frequency for that hour. VOA began this relay immediately after the Russian coup, and they're still hazy on how long it will continue. Seems they want to see how the format floats in the Soviet Disunion, and are considering regular scheduling of VOA Europe on shortwave to that particular target area. The announcer mentions that this is a "special transmission to the Soviet Union," and gives the temperatures for various Russian cities ("and the weather in Minsk is..."). Am curious who else is hearing this. It's barely audible in Montreal or Washington, DC, but gangbusters here. (13-Sep-91/AJ Quaglieri/SW ECHO) Here in W. Mass the VOA Europe is fighting it out with R. Sofia in English on the same frequency. SINPO 42632 or thereabouts. (18-Sep-91/Richard Urena/SW ECHO)

It's time for the NEW SCHEDULES !!! Seriously, we have the new schedules ready, and, as we have to pay the FCC for changes now, we plan to try and keep these if at all possible. I won't promise they won't change, but we didn't feel like we were throwing away money when we sent the check for this schedule. We have also sent these out to the printers, so the QRM must cooperate. We can't just throw away several thousand printed copies.

****USA (cont.)****

THE WORLD SERVICE OF THE CHRISTIAN SCIENCE MONITOR
 W-91 SHORTWAVE FREQUENCY SCHEDULE
 0100 UTC 09/29/1991 to 0100 UTC 03/29/1992

WCSN 045.08.08N 068.33.35W

UTC	FREQUENCY	BEAM	REGION
0000	9850	90	C. & S. Africa
0200	9350	75	E.Africa/Mid E
0400	9840	105	South Africa
0600	9840	45	Europe
0800	9840	80	Europe
1000	13770	80	Europe/Af/M.E.
1200	21670	60	Europe/Mid E.
1400	21670	45	Europe
1600	21640	75	N. & E. Africa
1800	21640	105	E. & S. Africa
2000	13770	80	Europe/Mid E.
2200	13770	75	Eur/N. Africa

WSHB - 1 032.41.02N 081.07.51W

UTC	FREQUENCY	BEAM	REGION
0000	13780	167	So.America/Car
0200	13780	167	So.America/Car
0400	13780	230	Mexico/Carib.
0800	9870	245	Mexico/Carib.
0800	13780	260	Aus/Oceania
1000	9495	25	East. No. Am.
1200	9495	25	East. No. Am.
1400	15665	173/25	ENAm/Carib.
1800	15665	173/25	ENAm/Carib.
1800	15685	25	E.N. Am/Europe
2000	15685	25	E.N. Am/Europe
2200	9465	173/25	ENAm/Carib.

WSHB - 2 032.41.02N 081.07.51W

UTC	FREQUENCY	BEAM	REGION
0000	7395	25/173	ENAm/Caribbean
0200	+9455	245/315	WNAf/Mex/C.Am.
0400	9455	315	West. No. America
0800	9455	315	West. No. America
0800	9455	152	Cent. So. America
1000	9455	152	Cent. So. America
1200	13780	182	Central America
1400	13780	245/315	W. N. Am/Mex
1800	17555	245/315	W. N. Am/Mex
1800	17555	245/315	W. N. Am/Mex
2000	17555	137	Brazil
2200	17555	152	Cent. So. America

KHBI - 1 015.07.20N 145.41.37E

UTC	FREQUENCY	BEAM	REGION
0000	17885	355	Japan/Ea. USSR
0200	17885	355	Japan/Ea. USSR
0400	17780	340	Japan/Kor/USSR
0600	17780	310	China
0800	17555	355	Japan/Ea. USSR
1000	17555	310	China
1200	13625	285	India/Indo-Chn
1400	13625	285	India/Indo-Chn
1600	13625	285	India/Indo-Chn
1800	13625	285	India/Indo-Chn
2000	9455	340	Japan/Kor/USSR
2200	15405	310	China/Japan

KHBI - 2 015.07.20N 145.41.37E

UTC	FREQUENCY	BEAM	REGION
0000	17555	270	S.E. Asia/Phill.
0200	17555	270	S.E. Asia/Phill.
0400	17555	270	S.E. Asia/Phill.
0800	17555	270	S.E. Asia/Phill.
0800	13710	185	Australia/New Zeal
1000	13825	240	Indonesia
1200	13710	185	Australia
1400	9530	310	China
1600	11580	310	North India/China
1800	13825	185	Australia/New Zeal
2000	13825	180	Australia
2200	13825	240	Indonesia

****USA (cont.)****

OCCASIONAL USE FREQUENCIES

WCSN		
8850	0200-0400	75 DEG
7395	0800-0800	80 DEG
21545	1800-2000	105 DEG

WSHB		
8870	0400-0800	230 DEG
13780	1000-1200	152 DEG
17555	1400-1800	245/315
15810	1400-1800	173/25
15610	1800-2200	25 DEG
21780	1800-2000	25 DEG

KHBI		
15810	0800-1000	185 DEG
15610	1200-1400	195 DEG
15685	0800-1000	185 DEG
15685	1200-1000	195 DEG

(03-Sep-91/Michael Batchelor - WSHB/INTERNET)

I got this from John Bussey at WWCR today, The FCC has issued a cease operations order to WWCR's 7620Khz frequency. According to the FAX they got, the signal is causing interference in Australia. Does anyone know what the band plan in that region calls for? Or is this a ruse because the frequency has been used for numbers stations? As of yet WWCR does not have a replacement frequency assigned to it for the 2nd service, aka the Gene Scott show. -DE "Big" Steve in NYC. (21-Aug-91/Steve Coletti/SW ECHO)

WWCR PROGRAM GUIDE

15890 Khz 1100-2400 UTC
7435 Khz 2400-0800 UTC

Monday-Friday

UTC	PROGRAM	HOST/PRODUCER
1200-1205	USA News	USA Radio Network
1205-1247	American Sunrise	SUN Radio Network
1247-1250	Road Trip Radio	Radio America
1250-1300	Old Time Religion Hour	G.D. Hogan
1300-1330	Triumphant Living	Lercy Hall
1330-1335	Oasis	Carl Richardson
1335-1400	The Bright Spot Hour	Harold Sightler
1400-1402	News	USA Radio Network
1402-1500	The Grace Hour (Live)	Carl Stevens
1500-1505	Spiritual Warfare	Mickey Bonner
1505-1510	V. Of The Bible Tablet	A.L. Shehan
1510-1515	Day Of Challenge	Dr. Gary Lightfoot
1515-1530	Living Waters	Father Bob Guste
1530-1545	Voice In The Wilderness	Tom Benvenuti
1545-1800	Good News Unlimited	Desmond Ford
1600-1805	News	USA Radio Network
1605-1810	Pro Life Perspective	Dr. John Wilkie
1610-1815	New Horizons Travelogue	Janet Cobb
1615-1830	Truth For Living	Freds Crews
1630-1845	Voice Of Power	R.W. Shambauch
1645-1700	Christ In Prophecy	David Regan
1700-1715	Bringing To Light	Charlotte Fawver
1715-1730	Israel Press Review	Israel Broadcasting
	(Tu) Shekinah	Irene Spilotro
	(We) Sonlight Gospel	Carl Plaster
	(Th) House Of Prayer	Phyllis Brown
	(Fr) Moment Of Inspiration	Pastor Gibson
1730-1800	(Mo) A Call To Holy Living	Emanuel Hochstedler
	(Tu) The Way Of The Cross	George Manting
	(We) Apolistic Witness	Pastor Walls
	(Th) Lighthouse Bible Study	Aruther Devane
	(Fr) Time Of Deliverance	Lucille Richardson
1800-1805	News	USA Radio Network
1805-1810	Spoken Word Of God	Alexander Scorby
1810-1815	Around The World News	News Service 2000
1815-1830	Good News Unlimited	Desmond Ford
1830-1845	Faith Seminar Of The Air	Kenneth Hagin
1845-1900	Ever Increasing Faith	Frederick Price
1900-1915	Midnight Cry	C. Parker Thomas
1915-1930	The Sower	Michael Guido
1930-1945	(Mo) Water Of Life	Ernest Brusuelias
	(Tu) Harvest Time	Lorin Irish
	(We) Lift Up Your Head	Malachi Floyd
	(Th) Shower Of Blessing	Edward McAbee
	(Fr) Voice Of Power	R.W. Shambauch
1945-2000	Christ In Prophecy	David Regan
2000-2015	David Terrell Revivals	David Terrell
2015-2045	World Changers Ministry	Creolo A. Dollar Jr.
2045-2100	Voice Of Salvation	Elwood Matthews
2100-2130	Heaven's Peace Plan	Father Nicolas Grunner
2130-2200	(M-Tu)Christo Viene (SS)	Yiye Avila
	(We) Scriptures For America	Peter J. Peters
	(Th) Wolfe Calling	Roland Wolfe
	(Fr) World Of Radio	Glenn Hauser
2200-2205	News	USA Radio Network
2205-2210	Spoken Word Of God (SS)	Samuel Montoya
2210-2215	Focus On The Family (SS)	A. Alba & R. Cruz
2215-2230	Auqua Viva (SS)	Roger West

****USA (continued)****

2230-2300	Voz De Salvacion (SS)
2300-2305	Vin O Nuevo (SS)
2305-2400	Voz De Cuba (SS)
0000-0005	News
0005-0008	National Weather
0008-0100	For The People
0100-0105	News
0105-0106	National Weather
0106-0200	For The People (Part 2)
0200-0205	News
0205-0206	National Weather
0206-0300	Radio Free America (Live)
0300-0305	News
0305-0306	National Weather
0306-0400	Radio Free America (Part 2)
0400-0500	Prayer Line
0500-0505	News
0505-0600	Point Of View

Church of God in Prophecy
Vic Richards
Cuban Municipalities
USA Radio Network
SUN Radio Network
Chuck Harder
USA Radio Network
SUN Radio Network
Chuck Harder
USA Radio Network
SUN Radio Network
Tom Valentine
USA Radio Network
SUN Radio Network
Tom Valentine
Don Powell
USA Radio Network
Marlin Maddoux

Sunday (Sunday & Monday Morning UTC)

1100-1115	Wilson Family Broadcast
1115-1130	Israel Press Review
1130-1145	Sovern Grace Hour
1145-1200	Spoken Word Of God
1200-1230	Voice Of Joy (Mandarin)
1230-1300	Jesus Is Lord Fellowship
1300-1330	Your Gospel Hour
1330-1400	I Walk With God
1400-1430	Foursquare Gospel Tidings
1430-1500	A Temple Of Jesus Christ
1500-1530	The Way Of Truth
1530-1545	Miracle Fellowship Outreach
1545-1800	New Christian Ministry
1800-1830	Traditional Latin Mass
1830-1700	Bible Study Hour
1700-1715	Sounds Of Martha
1715-1730	Voice Of The Watchman
1730-1745	Your Call To Christ
1745-1800	Word Of Praise
1800-1815	The Good News
1815-1830	The Sower
1830-1930	Truth Of God
1930-2000	The Voice Of Hope
2000-2015	Knoxville House Of Faith
2015-2030	Sunday School Lesson
2030-2130	Bible Truth Hour
2130-2200	Cross Beams
2200-2215	Missions For God
2215-2230	Revolutionary Directoates (SS)
2230-2300	Junta Patriotica Cubana (SS)
2300-2400	Alianza Cubana (SS)
0000-0100	Partido Autentico (SS)
0100-0500	Radio Newyork International
0500-0505	News
0505-0535	World Of Radio
0535-0600	Afterglow

Rev. Cecil Wilson
Israel Broadcasting
Elder Jeff Harris
Tang Ding Kou
Overseas Radio & TV
John Jones
A.J. Baughey
Irene Atkinson
J.E. Charter
Cleveland Waters
Bishop Charles Stinney
C.J. Cooper
Fred Robinson
Father Gommard DePauw
Dan Carter
Martha Miranda
Johnathan Cahn
Jimmy Surgenner
Diane Mann
Mark Cedar
Michael Guido
Gino Jennings
O.L. Fenison
Sister Polly
Dr. Michael Graves
Bishop R. Goodwin
Frances Radford
Fred Quick
Manual De Varona
Jose Perez Linata
USA Radio Network
Glenn Hauser
Don Johnson

Saturday (Saturday & Sunday Morning UTC)

1100-1130	Spoken Word Of God (GG)
1130-1200	Voice Of Joy (Mandarin)
1200-1215	Time Of The End
1215-1230	Bible Lovers Fellowship
1230-1245	Harvest Baptist Church
1245-1300	Moments Of Inspiration
1300-1330	Church Of The Lord
1330-1400	Hour Of Reasoning
1400-1405	News
1405-1430	Unshackled
1430-1500	World Of Radio
1500-1515	Bill Rudge Ministries
1515-1530	Spirit And Truth
1530-1545	Call To Soulwinning
1545-1800	Voice Of Truth
1800-1830	Old Country Church
1830-1845	Victory Faith Healing Church
1845-1700	Voice Of The Risen Word
1700-1730	New Life For You
1730-1800	These Last Days
1800-1815	Alpha And Omega Ministry
1815-1830	Showers Of Blessing
1830-1845	Merry Street Church Of God
1845-1800	Victory Tabernacle
1900-1915	Word Of Life
1915-1930	Walking Thru The Promise
1930-2000	Rhema Radio Church
2000-2015	Truth, Life and Light
2015-2030	Sound Words
2030-2045	Victory In Jesus
2045-2100	Prophecy Times
2100-2115	A Study In God's Word
2115-2130	Spirit, Water And Blood
2130-2230	Monument Of Faith Hour
2230-2245	Collegiate Crusade for Christ
2245-2300	Harvest Time
2300-2315	Bible Gems

Edwin Auchenbauch
Overseas Radio/TV
Larry Gibson
J.R. Boyd
Ron Paul
Pastor Gibbs
A.W. McKenzie
Pastor P. Mobley
USA Radio Network
Pacific Garden Mission
Glenn Hauser
Bill Rudge
Phillip Winger
Wayne Hoffman
C.J. Choate
Paul Smith
Joyce Corbitt
Martha Redwine
Jimmy Morgan
Gary Wohlscheid
Frank Testa
Johnathan Greer
Elder Robert Ross
Terry Phillips
Don McDaniel
Bobby Lively
Kenneth Hagin Jr.
Dan Rhodes
Jim Dearman
R.L. Hanen
David Dixon
Hezekian Smith
Greg Hennegan
R.D. Henton
Arden Barkley
Ivan Bell
Jim Kristoff

****USA (cont.)****

2315-2330 The Blessed Word Of Life Perry Johnson
 2330-2400 World Of Radio Glenn Hauser
 0000-0030 What Does The Bible Say? M.H. Renolds
 0030-0130 Truth House Ministries E.C. Fulcher
 0130-0200 Lights Of Spiritual Guidance J.H. Loman
 0200-0230 Mission 2000 Radio News Service 200
 0230-0300 Scriptures For America Peter J. Peters
 0300-0305 News USA Radio Network
 0305-0335 World Of Radio Glenn Hauser
 0335-0600 -to be announced-

Transmitter Number 2
 7620 Khz 0100-1100 UTC
 12180 Khz 1100-1600 UTC
 17625 Khz 1600-2200 UTC
 12180 Khz 2200-0100 UTC

Monday-Friday
 UTC PROGRAM HOST/PRODUCER
 2300-2400 Grace Hour Pastor Stevens
 0000-0005 News USA Radio Network
 0005-0100 Point Of View Marlin Meddoux
 0100-0130 News USA Radio Network
 0130-0200 Afterglow Don Johnson
 0200-0300 Truth House E.C. Fulcher
 0300-2000 The Gene Scott Show Dr. Gene Scott

Saturday-Sunday
 24 Hours The Gene Scott Show Dr. Gene Scott
 (24-Aug-91/steve colatti/SW ECHO)

Heard AFRTS on SW on 11th Aug. at 0719 on 7571.8 USB with an excellent signal. Signal there till past 0746 but was on the way out. (12-Aug-91/Rob Williams/SW ECHO)

In an interview with Jonathan Marks, technical consultant George Jacobs talked about the planned construction of the world's largest SW broadcast facility. It will be located in Alabama and is funded by the Eternal Word TV Network, which is affiliated with the Lady of Angeles Monastery (Roman Catholic) in Alabama. He noted the EWTN currently reaches 22,000,000 people (mostly on cable), the largest religious audience in the world. Their construction permit is now being reviewed by the FCC and they hope to have it approved by November. Construction will take 2 years. They will have 4 x 500 kw transmitters, made by Continental. Several curtain antennae, made by TCI. (18-Aug-91/Media Network-15-Aug-91/Bill Oxner/SW ECHO)

****USSR****

Russ Tillman asked Andy Sennitt:

RT> With all the independent Republics emerging in the former Soviet
 RT> Union are we seeing the last days of Radio Moscow? Will we see
 RT> SWL stations begin broadcasting by the new republics?

Russ, all three of the Baltic republics already have shortwave stations of their own. The frequencies to check are 9710 for Vilnius, 5935 for Riga and 5925 for Tallinn. Those are from transmitters within the respective republics. I doubt that they will build new facilities in the immediate future because they have far more urgent problems to deal with. (08-Sep-91/Andy Sennitt/SW ECHO)

Radio Moscow seems to have made more changes after those on 1st of September. For example, on the 1st 8600 via Cuba was noted from 10 to 22 UT. Today (the 11th) 11840 was observed in use 19-22 UT; 11840 probably starts up no later than 12 UT. On the 1st only three or four frequencies were found with the WS circa 20-22 but today I found 10 or more. Included in this is 15375, mixing badly with RNE/Spain with English to Europe. After 22, however, I can only find 9855, 9735 and 9720 with the WS. 9720 has a severe delay (via Cuba?) compared with the other outlets and intermittently loses audio or carrier. This is a far cry from the many frequencies noted prior to the coup. Moscow via Cuba at 23 puts its open carrier on 10 or 15 minutes prior to the hour, covering up the end of the VoT/Turkey transmission. At 23, only 9720 continues from 22; 15355 and 11750 are added. (11-Sep-91/Tom Sundstrom/SW ECHO)

As of mid-September, here's where I am hearing Radio Moscow World Service in English (from the Pinelands of southern NJ). I haven't looked between 05 and 10 UT... you are on your own. (It's called sleep time.) This an extract (reformatted by the ed. -AQ) from the receiver data file for the NRD-535 Memory Management Program.

0000-0100 9530 9600 9720 11710 11750 11850 12180 15355 17890
 0100-0200 9530 9600 9885 9720 11710 11730 11750 11850 12005 12025 15415
 15425 15550 15590 17805 17820 17840 17850 17890 21890 21790
 0200-0300 9530 9600 9885 9720 11710 11730 11750 11850 11980 12005 12025
 15415 15425 15550 15590 17805 17820 17840 17850 17890 21890
 0300-0400 9530 9600 9885 9720 11875 11710 11730 11750 11850 11980 15415
 15425 15590 17820 17850 17890
 0400-0500 9530 9600 9885 9880 11875 11730 11850 11980 11995 15130 15540
 17805(WNA) 17820 17840(WNA) 17850 21740
 1000-1100 9600 15110 15140 15405 15415 15535 15540 15580 15590 17635
 17870 17715 17755 17785 17775 17815 17840 17890 21780 21785
 21800 21845
 1100-1200 9600 15110 15140 15155 15405 15475 15480 15535 15540 15550
 15580 15595 17570 17605 17620 17835 17870 17715 17755 17785
 17850 17815 17830 17850 21855 21890 21780 21785 21790 21800
 21845

****USSR (cont.)****

1200-1300 9600 11840 15110 15130 15140 15155 15205 15480 15540 15550
 15590 15595 17570 17620 17835 17870 17785 17805 17815 17830
 21655 21785 21845
 1300-1400 9600 15110 15140 15155 15375 15480 15540 15550 15590 17570
 17835 17670 17805 17815 17830 21785 21845
 1400-1500 11840 15140 15540 17570 17670 17815 21785 21845
 1500-1800 11840 15540 17570 17855 17870 21785 21845
 1600-1700 11840 17855 17870 21845
 1700-1800 11840 11890 11840 12030 15185 15480 17655 17670 21740 21845
 1800-1900 11840 11890 11840 12030 17805 17855 17670 21740 21845
 1900-2000 9810 8880 11840 11890 11930 12030 15375
 2000-2100 9810 8880 11840 11890 11930 12070 15375
 2100-2200 9810 9735 9800 8880 11875 11745 11750 11840 11890 11930 12070
 15385
 2200-2300 9720 9735 9855 11875 11710
 2300-2400 9720 11760 15355
 (14-Sep-91/Tom Sundstrom/SW ECHO)

Radio Tikhy Okean at 1939 on 11890 (only freq heard) with strong signal in Russian with ID at 2000 by woman on 8/12. (13-Sep-91/Bruce Macgibbon/SW ECHO)

On September 5 I caught the closing frequency announcement from the English hour on Radio Kiev at 0057: 11675, 11780 and 12005 (where I did not hear them) and the three higher frequencies presumably from the far east (where I did): 15180, 17685 and 17690. Strangely enough, they gave the frequencies for Europe as 5860 at 2100, with a repeat at 0130 - that's the middle of the night in Europe - on 9785. (GH/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quagliari/SW ECHO)

Radio Vado has been picked up in Japan recently from 1400-1800 on 11780 and 13710. The transmissions are in Russian, no transmissions on Saturdays and Sundays. Yoshinoyi Kato (?) and Shigenori Aoki (?) of Nagoya Center, Japan, tell us that Radio Vado is an independent station in Volgograd. According to the announcement, the station also goes on the air from 0330-0600 on Saturdays and Sundays; the frequencies are 5915 and 7125 shortwave and 1116 mediumwave.

Another non-governmental station in the Russian Republic has been also received in Japan since July. The name of the station is Radio Vladivostok. The broadcast is on the air from 2103-2300 on 1251 mediumwave. This is one of the regular frequencies of Radio Moscow. It is thought, therefore, that Radio Vladivostok, which is a private station, has rented Radio Moscow's transmitters for its own broadcasts. This information came from Shigenori Aoki (?) of Nagoya. (R. Japan DX CORNER/09-Sep-91/AJ Quagliari/SW ECHO)

I found R.KIEV now on their winter freqs of 11790, 12330, 17685, and 17690 from 0000 to 0100 UTC. 11790 and 17680 seemed to be the best here in FL. Please check R. VILNIUS at 2300 UTC on these same freqs to see if they too have moved to them (which they probably have, if they continue to follow the pattern they have in the past BUT, with all the changes going on over there and all who know what we'll hear from VILNIUS, or any of the other republics as far as that goes?????) (05-Sep-91/Dale Vanderpoel/SW ECHO)

On 21 August, I wrote "The night before last I checked 15425 KHz around 0300 UTC and the "North American" service was still coming in from their transmitter site at Petropavlovsk-Kamchatskiy. I'll check again this evening to see what's happening today. Some of the other semi-regular frequencies were silent, however, like 12050. So perhaps you are correct that either some of the feeds to remote transmitter sites are down or that the personnel are not broadcasting the pro-coup transmissions."

Well, I tried 12010, 12050, 15180, 15425, 17680, 17700, 17720 - all were dead as a door nail except for 12050, which had some kind of weird audio wobble - it almost sounded like a jammer! Finally, I tried 11710 - success! This is another Havana relay (2200-0400 UTC). As I listen to the frequency now, the signal is fairly good, but the audio was somewhat muffled. They are playing what sounds like a music program featuring various classical vocal and instrumental selections, with a woman providing commentary about the music in between cuts. The program ended at 0357 with a man ID'ing as Radio Moscow World Service and listing meter bands. The carrier went off as predicted at 0358. This definitely sounded like a canned program - perhaps a tape they had at the relay station? (22-Aug-91/Jason E. Berri/INTERNET)

Several posters have commented on "missing" Radio Moscow frequencies and the drama of listening to shortwave during the coup. Here in Australia I noticed that 15580 kHz (one of the frequencies used for the Asian/Australasian service) was off the air immediately after the coup. It appeared the next night but with the almost-continuous music and stilted, party-line news broadcasts. But it was off-air again during most of the UT day of August 21. Transmissions continued on the other frequency, 15490 kHz, and it has me wondering why one was off-air and the other on. I've been trying to check the transmitter locations in case there's some factor involved there, e.g. ease of control etc. Meanwhile, the 1400 UT news broadcast on August 21 held my attention as it contained considerable detail about the coup leaders leaving Moscow and then, after the rest of the world news, carried a late item about the tanks and troops being withdrawn from outside the Radio Moscow building. Back to music for an hour and then the 1500 UT news went in boots and all with ten minutes of details including the deaths in Red Square. The news ended with this: "Those are the headlines ... and to end the news, here is an announcement. The leadership and many thousands of employees of the USSR National Radio and Television broadcasting company have offered their apologies to the public for having been unable to conform to their professional duties due to strict controls that existed over the past three days." It was followed by a comprehensive look at world-reaction to the coup attempt. Perhaps we'll now hear that promised six-part series on the shooting-down of the KAL 747. Australia is UTC +10 so I've almost forgotten what sleep is like. (22-Aug-91/Ralphe Neill-Australia/INTERNET)

****USSR (cont.)****

The coup is now over, already, so this is probably totally outdated, but...
The following string of messages are from BBC MS, late Tuesday/early Wednesday UTC:

RADIO RUSSIA FROM MOSCOW HEARD ON AMATEUR BAND

Radio Russia has been heard on amateur short-wave bands this evening. It said it was using the equipment and wavelengths of Radio Triana and broadcasting from the premises of the Russian parliament. "Through the kindness of Radio Triana, the air waves of Radio Triana, working here at the transmitter of Radio Triana are correspondents of Radio Russia. We greet all radio amateurs who have tuned in to the Radio Triana wavelength", the radio said. "We are in the House of the Soviets of the Supreme Soviet of the Russian Federation. And present here now is the whole leadership of the Russian Federation", the radio said at 1850 gmt. The radio calling itself Radio Triana, or the call sign could be Tri-Ana, broadcasting from the Russian Parliament said on Tuesday night it would be working during the night, and announced frequencies and a plan to change frequency if it was jammed. It said: "Our frequencies are: the frequency of 7043, and if they start jamming we will go up within a variation of three khz; and also the frequency of 14175. "Later on we will be working during the night in the 80 metre band. The frequency is not yet known but it is provisionally around 3,840... ", it said. "This is Radio Triana in the Russian Parliament", it said. Radio Russia earlier said it was being allowed to use the short wave frequencies of Radio Triana. BBC MON MA/LS 2309200891:08210110

RADIO TRIANA ANNOUNCES FREQUENCIES

Radio Triana, broadcasting from the Russian Parliament building, has announced that it will be broadcasting on the shortwave frequency of 14175 kHz between 0900 and 1000 Moscow time. BBC MON TB 0421210891:08210622 (21-Aug-91/DAVID ALPERT/PINELANDS RBBS)

BBC Monitoring are now referring to this station as Radio 3-A (Ana being the Russian phonetic for the letter A). (02-Sept-91/Andy Sennitt/SW Echo)

WYOMING VIDEO COMPANY SAYS MOSCOW STATION ON SCHEDULE

DENVER, Reuter - The president of a small Wyoming company that plans to start an American-style radio station in Moscow, said Friday the station expects to be on the air in October. "It's on track," Video Communications and Radio Inc.'s president Ben Doud told Reuters. The Gillette, Wyoming-based company, which owns a radio station and produces travel videos, has been working on the joint-venture project for three years. Doud said the only unknown is whether transportation of the station's transmitter, which is being built in the Soviet Union, would run into delays. Doud said he expects the 60,000-watt station, which will run advertising from multinational companies, to be profitable in about 12 months. Advertising for the Moscow station, designated Radio-7, will be sold outside the Soviet Union, allowing earnings in hard currencies. The 24-hour station will broadcast contemporary music from Europe, the Soviet Union and the United States. "American music will dominate, because American music dominates the world," he said. But he said the station, which will broadcast at 74.3 on the FM dial, will be broad and include a couple of hours of jazz music. Video Communications owns a half interest in the station, with the remaining 50 percent owned by three Soviet partners, including the Union of Journalists. Video Communications came to the attention of the Soviet consulate in San Francisco after an article about the company's video projects appeared in the San Francisco Chronicle. When the Soviets found out the company also owned a radio station, doors were opened for the joint project. "It was serendipity," Doud said. REUTER Reut15:12 08-23 (21-Aug-91/DAVID ALPERT/PINELANDS RBBS)

"Echo of Moscow" has been in the news in recent days for their coverage of the coup. That coverage was repeatedly interrupted by loss of the phone circuit connecting their studio to the transmitter, after they were ordered to stop broadcasting by two men who would not identify themselves or what authority they represented.

Here is some background information about the station, sent by Matvei Ganapolski, one of the news presenters, a few weeks before the coup. You may recall that last month I posted a request for CDs to be swapped for Russian CDs, to give this station some fresh music to play. Thanks to the excellent response from Usenetters, Mr. Ganapolski took over 50 American CDs back to the station, where they are now being used.

Yesterday, Internews got a fax from "Echo" containing a long list of equipment the station needs to improve their operations - essentially everything to furnish new production and on-air studios. If anyone has either audio/radio equipment they could donate, or funds to help buy equipment, please contact me using the address in the header. (Remember that the electricity in Moscow is 220V/50Hz.) They are particularly in need of Sony, Marantz or Nakamichi portable cassette recorders, reel-to-reel tape editing machines, and a radio link to connect their studio to the transmitters - to free them from dependence on those cuttable phone lines leased from the Soviet ministry of communications.

Robert Horvitz
Internews Radio Consultant
Independent Electronic Media Program
for East & Central Europe

"Moscow Echo" was registered as a radio station on August 9, 1990 and first went on air on August 22, 1990. Its founders are Moscow City Council, "RADIO" Association (the Association for Radio Transmission), the magazine "Ogonyok" and the Faculty of Journalism of Moscow University.

Our radio station is not linked to any state transmission and is independent of the state television and radio company. Our medium wave transmitter is sited in Moscow. It has a strength of 10 Kilowatts; we broadcast on 1208 kHz. FM broadcasts to Moscow and region are planned for the fall of 1991. At the present time "Moscow Echo" broadcasts on short wave (using satellite link) to the Far East region of the USSR using a local transmitter in Khabarovsk. (Radio Netherlands says that they recently added a 100 KW shortwave transmitter just south of Moscow, with the antenna aimed northwest. The frequency is 9535 kHz. It signed on after this text was written. --rh) We are also currently engaged in discussions with other regions of the USSR to broadcast "Moscow Echo" as widely as possible, using non-state transmitters.

Recent surveys indicate that in and around Moscow we have an audience of more than three million people. Alongside the ten permanent staff we have a team of more than thirty

****USSR (cont.)****

free-lance correspondents and presenters. We are a Russian language station but have the facilities to produce English language broadcasts. "Moscow Echo" is a commercial station, its income coming from advertising and special shares. I enclose details of our schedule and programming information... Our Moscow fax is (085) 924-7234 (24 hours). Address: 7, Nicolaevskaya St., Moscow, USSR 103012. —Matvei Ganapolski, June 1991

SCHEDULE (as of 1 August 1991)

The overall volume of broadcasting: 7 hours (on week-days), 8 hours (on week-ends)
Schedule of broadcasting: from 7.00 to 10.00 every day, 18.00 to 23.00 on week-days, 18.00 to 23.00 on week-ends.

MORNING PROGRAMS:

a) 7.00 - 8.00: This broadcasting period consists of six 20-minute parts with similar structure: 3 min - news/2 min - ads/3 min - music/4 min - journalistic stuff (commentary, reporting, interview, remarks, press review, humorous story, etc.)/3 min - music
b) 9.00 - 10.00: This period has its own structure: 9.00 - 9.13 news program/9.13 - 9.15 a series of ads/9.15 - 9.28 musical program/9.28 - 9.30 series of ads/9.30 - 9.40 press review/9.40 - 9.53 journalistic stuff, including music/9.53 - 9.55 series of ads/9.55 - 9.58 news/9.58 - 10.00 announcement of evening programs and closing morning programs

NIGHT PROGRAMS:

a) 18.00 - 19.00 (on week-ends): 18.00 - 18.03 announcement of night programs and news/18.03 - 18.15 repeat of fragments from the best week's programs/ 18.15 - 19.00 author's musical program (with permanent host)/ads at 18.00, 18.30 and 18.50/
b) 19.00 - 20.00 (every day): 19.00 - 19.05 news/19.05 - 19.08 music/19.08 - 20.00 standing rubrics and short journalistic materials intermitted by musical compositions.

Standing rubrics:

"M-gist" (author's survey of newspapers) - every day at 19.25
"Sports courier" - Monday at 19.40
"Business Club" - Tuesday and Friday at 19.40
"A New Babylon" (ethnic problems) - Wednesday at 19.10
"Foreigners in Moscow" (meetings with ambassadors, foreign journalists, scientists) - Thursday at 19.30
"Without Mediator" (Editor-in-Chief Sergei Korzoun answers questions of audience by live phone) - Sunday at 19.40
Series of ads at 19.05, 19.30, 19.50 or in particular rubrics at advertiser's wish.
c) 20.00 - 21.00 (every day): 20.00 - 20.02 news/20.02 - 20.03 ads/20.03 - 20.06 commentary on key problems/20.06 - 20.07 ads/20.07 - 20.28 "Conversations of Muses" (on arts, sciences, philosophy, etc.)/20.28 - 20.30 ads/20.30 - 20.55 news program
"Echo"/20.55 - 21.00 ads and music/
d) 21.00 - 22.00: 21.00 - 21.02 news/21.02 - 21.04 ads/21.04 - 22.00 author's musical program:

Monday: classical rock of the 60s - 70s
Tuesday: jazz-rock or new Soviet rock groups
Wednesday: musical radio-show with guests
Thursday: unknown music, vanguard music
Friday: blues or classic rock
Saturday, Sunday: musical live radio-show
e) 22.00 - 23.00: 22.00 - 22.07 ads/22.07 - 22.58 detailed talks with guests: politicians, economists, businessmen, researchers, actors, psychologists, doctors, etc./22.58 - 23.00 announcements for the next day and closing the night programs (23-Aug-91/Robert Horvitz, 1122-1/2 E St. SE, Washington, DC 20003-2232/INTERNET)

Radio Echo of Moscow is now again on the air and I was able to hear them yesterday on 1208 KHz. The station is heard usually every afternoon at sunset time here in Finland. (26-Aug-91/Jorma Mantyla, Univ. of Tampere, Finland/SW ECHO)

Information from the recent QSL received from Radio Echo of Moscow: SCHEDULE:

MOSCOW TIME	UTC	DAYS
07.00-10.00	0400-0700	daily
19.00-23.00	1600-2000	Mon-Fri
18.00-23.00	1500-2000	Say + Sun

Frequencies: 1208 KHz medium-wave/6165 KHz short-wave

Radio Echo of Moscow now also verifies reception reports. The address is:

Mr. Sergei Sosedkin
Radio Echo of Moscow
103012 Moscow, Russia (USSR)

"Please, enclose 1 US dollar or 3 IRC's," says Mr. Sosedkin. (20-Sep-91/Jorma Mantyla - FINLAND/INTERNET). Moscow Echo has moved its shortwave frequency from 9535 to 6165 kHz. (BBCMS/SCDX #2140/17-Sep-91/PINELANDS RBBS/Jason E. Berri/INTERNET)

During the coup, media was tightly controlled and the Russian Federation's Russia's Radio was off the air. The Russian parliament was relayed on amateur radio. Here at Radio Sweden we monitored it in single side band on 14165 kHz. The relays on amateur radio used the call sign R3A, and were also reported on frequencies around 7040 and 13640 kHz. (Kent Berggren, Swedish Radio and Dimitri Pakitin via Internet News from Moscow/SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

Since August 27th, Russia's Radio has become a 24 hour service, replacing the All-Union Radio-2. (BBC Monitoring/SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

The commercial station in Volgograd, VEDO, signs on at 1500 on new 17860 kHz. (BBC Monitoring/SCDX #2140/17-Sep-91/PINELANDS RBBS/Jason E. Berri/INTERNET)

During the coup Radio Moscow relayed news from the hardliners, but there have been reports that only a few normal frequencies to North America were active. (SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

As a result of the coup, Soviet President Mikhail Gorbachev has fired the head of state broadcasting. Major changes are expected under the new head, Yegor Yakovlev. (SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

Deutsche Welle has signed an agreement to use the former Soviet jamming transmitters for relays of programs to Asia. Half the broadcasting time will be for relays in German, the rest for English and a number of Asian languages. (BBC Monitoring/SCDX #2139, 03-Sep-91/Tony C. Harding - UK/INTERNET)

****VANUATU****

The Australian International Development Assistance Bureau is assisting the Government of Vanuatu in the design and construction of new transmitting stations. I spotted an advertisement calling for pre-registration of tenderers for a contract to upgrade Radio Vanuatu transmitting facilities at Port Vila, as well as new facilities on Santo and Tanna.

I understand the proposal is for a new site to be developed at Efate (Port Vila) at which a 10 kW solid state variable frequency HF transmitter with a high vertical radiation antenna, and a new 2 kW MF transmitter will be placed. The existing transmitters will become standby units. At Santo a new 2 kW MF unit will replace the existing tx, while a new 1 kW tx plus mast will be constructed at Tanna.

In each case the medium wave frequency is projected to be somewhere around 800 kHz.

The projected timetable suggests completion will not occur until late 1992. (19-Aug-91/Jerome Van Der Linden/SW ECHO)

****VATICAN CITY****

The fourth quarter schedule for Radio Vaticana shows English to North America at 0250 on 6150 and 7305 only. I also noticed they have a new frequency used for various language services during their night time hours: 5935. (GH/Gbenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quaglieri/SW ECHO)

Arthur Cushman noted that Vatican Radio has a change in their 2245-2315 broadcast to Australia/New Zealand. They will now use 9800 (new), 11830 and 15105. (16-Aug-91/Media Network-16-Aug-91/Bill Oxner/SW ECHO)

****VIETNAM****

BBC Monitoring reports that the VoV domestic service is now being heard on 7113 between 2200 fade-in and 0600 s/ff. This is parallel to 12035, 10060, 6450, 5920, 5020 and 4895. According to announcements monitored previously, 7113 is a renovated transmitter serving the northwest region and central highland areas of Vietnam. Location not indicated. (23-Jul-91/Andy Sennitt/SW ECHO)

****YEMEN****

Radio Yemen from Aden began 30-minute daily programs in English from July the 1st. These are broadcast from 1600-1830 on 5970 and 7190. Transmissions consist of a 10-minute news bulletin followed by 5 minutes of commentary and press reviews. On Sundays and Wednesdays the next 5 minutes are used for local Arab and international press reviews; and on Mondays, Tuesdays, Thursdays and Fridays, for Yemeni songs. The rest of the air time is devoted to Western music on Sundays, miscellaneous features on Mondays, Spotlight on Tuesdays, Economic Corner on Wednesdays, Mosaic on Thursdays, and Yemen This Week on Fridays. This information comes from Fyodor Brazhnikov (?) of the USSR. IR. Japan DX CORNER/09-Sep-91/AJ Quaglieri/SW ECHO)

****YUGOSLAVIA****

English frequencies: 1200-1230 to Australia and North America on new 21805, along with 17725 and 17740; 1830-1900 to Europe and Africa on new 15140, plus 5980; and to Europe at 2100-2145 it continues on 5980 and 11735. (Alan Rowe-UK/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quaglieri/SW ECHO)

Radio Zagreb from Croatia 2100 on 9830 kHz. (06-Sep-91/RN Media Network/Richard Urena/SW ECHO)

Croatian Radio has announced shortwave relays on 7240 and 9830 kHz. (BBC Monitoring/SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

Excerpts from a letter from Veran Matic, the 29-year-old managing director of B-92:

B-92: OMLADINSKI RADIO
92.5 MHz FM Stereo
Makedonska 22
Beograd, Yugoslavia
Phones: 330-946 (redaction)
822-946 (marketing)

Radio B-92 started to broadcast on May 15, 1989, as an experimental youth radio station. The founding organization (required by Yugoslavian law) was the Youth Association of Belgrade (GK SSO), a body financed by the City Assembly of Belgrade, but somewhat independent from the ruling regime. In order to avoid some of the numerous legal restrictions, we were formally declared an experimental radio station. By December 1990 some of these restrictions were lifted, and we were registered as an independent company. In the meantime, GK SSO has transformed into an organization called the Youth Council of Belgrade, thus becoming an apolitical association representing various youth associations, such as Young Scientists, Boy Scouts, The League of the Unemployed, etc. The Council now funds 20% of our expenses, while 80% is supplied by our marketing service.

During all this time B-92 was constantly breaking the informational monopoly imposed by the ruling Socialist Party of Serbia (ex Communists), publishing material that was not approved by the regime. As a result we suffered (and are still suffering) the constant pressure of the authorities, threatening to take away our broadcasting license, and trying to impose their apparatchiks as editors. So far, we have managed to preserve our independent status.

We now broadcast 15 hours of our own program each day, while the rest (9 hours) is satellite music programs (mostly MTV). We hope to achieve 24 hours schedule of our program by the end of this year. The program consists of two thirds of the music and one third is the speaking part which is mainly political. Our political program is mainly oriented towards the informational blockade imposed by the Socialists, which are trying to create an impression that all the other parts of Yugoslavia are involved in the global conspiracy against Serbs, and that only the ruling party can save the nation from numerous (mostly fictional) inside and outside threats. B 92 is fighting against this self-isolating policy by trying to provide the listeners with the most accurate and objective information possible, and make people think with their own heads and make their own conclusions. What we are trying to achieve is to become one of the democratic institutions of Serbia. We feel that most changes recently introduced in Serbia are merely cosmetic, and that the only way to

****YUGOSLAVIA (cont.)****

preserve democracy is to build such institutions that will make democracy self-preservable. (12-Aug-91/Robert Horvitz/INTERNET)

****ZAIRE****

Last Sunday around 0420 I checked 11454.9 and found a stn that Hauser said 'Fine Tuning' ID'd as Kissagane, Zaire. It was HORRIBLY buried by a RTTY ute about 1 kc higher; according to my M7000, it was sending encoded wx traffic. Klingenfuss says that this is Roma Radio; so list both as very tentative until I can get better IDs on both. All I could get out of the (tent) Zaire stn was a M in French reading what sounded like some sort of commentary, then some rather nice sounding vocals in a chorus with no instruments- just some men's voices. This is going to be tough- I need to find a night when Roma Radio (tent) is not on....otherwise I will have just bits and pieces to go on. (13-Aug-91/Mike Agner/SW ECHO)

****CLANDESTINE****

Iraq clandestine Sedai-y-Mujahed (VO the Mujahed) on 4740 *0127; the other frequency, 6450, opens at 0132 with the same program. Perhaps the program is recorded in Baghdad, but it has been hand-delivered to two transmitter sites due to the state of communications infrastructure in Iraq; the two stations then start up the program on their own, not in synchronization. On September 9th it operated as high as 4760 and as low as 4730 as a bubble jammer traced it. (Hans Johnson-MD/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quaglieri/SW ECHO)

The Colombian clandestine, Radio Patria Libre, was heard on its new frequency 4710, August 31st at 0055. No jamming was heard, and there was no sign of a parallel on 48 meters. On September 5th they were on 4895 at 0048. (Hans Johnson-MD/Glenn Hauser's WORLD OF RADIO 14-Sep-91/AJ Quaglieri/SW ECHO)

BBC Monitoring quotes a report from the KNA News Agency in Nairobi that the Rwandese Patriotic Front are operating a station called Radio Muhabura on the 49 metre band (frequency not given) at 0400-0600 daily since mid-June. Broadcasts are in Kinyarwanda - who will be the first Echo participant to log this one? (BBCMS/Andy Sennitt/SW ECHO)

BBC Monitoring reports that the Voice of Iraqi Kurdistan was heard on 6151 at 0400-0600 on July 11th and 13th, ex-5950. On July 11th, 12th and 13th the 1600-1700 transmission was heard on 5831. (23-Jul-91/Andy Sennitt/SW ECHO)

****UTILITIES, KNOWN TO THE YL AS "HOW CAN YOU LISTEN TO THAT NOISE?*"**
Here are a few [RTTY frequencies] that I found in my database. All of these frequencies are confirmed. Please add where you can, and then re-post. I will look for some others this week. If you have any MENA frequencies in your log, please add them. Thanks.

PRESS BAUDOT RTTY					
Call	Time	Frequency	Call	Time	Frequency
TASS - USSR and Cuba			XINHUA - China		
RNN61	0930	8140.0	BZP64	1255	14367.0
REB24	1200	14700.0	BZR68	1245	16138.0
CLN461	2130	14901.0			
RBI78	1800	15930.0	TANJUG - Yugoslavia		
RGW28	1320	16140.0	YZD	0415	7658.0
RND70	1430	18125.0	YZJ6	0400	13440.0
RRQ20	1510	18385.0	YZJ8	1255	16705.0
			YZI4	1320	16343.0
IRNA - Iran			YZJ4	1810	19885.5
EPJ2	1800	19980/0	YZJ	1330	20204.0
ANSA - Italy			KCNA - North Korea		
IRF60	0830	8030.0	HMF55	2200	11430.0
ISX20	1400	20085.0	HMF42	0400	12175.0
IRS23	1400	20372.0			
ISX22	1630	22955.0	INA - Iraq		
ISX24	1840	24790.0	YIL73	1300	14373.0
DIPL0 - France			JANA - Libya		
FZM62	0400	16106.0	5AQ62	1800	12186.0
FZN7	0400	20078.0	5AQ88	1800	20560.0
Kyodo - Japan			APN - USSR		
JAL44	0800	14547.5	RWM77	1250	16145.0
CNA - Taiwan			PL - Cuba		
3MA22	1430	13563.0	CLN219	0930	8140.0
3MA35	1400	18224.0	CLN451	1400	14901.0
			CLN530	1430	16348.0
MAP - Morocco					
CNM61	1330	14780.0			
CNM80X11	1350	18496.1			

(20-Sep-91/Mark Burkart/SW ECHO)

There is a new Air Traffic Control frequency being tested on the North Atlantic route, 13354 kHz. (16-Aug-91/Media Network-16-Aug-91/Bill Oxner/SW ECHO)

Here are a few TASS frequencies that I have monitored.

Call	Frequency	Location	Time/UTC	
RND/70	18.125.0	USSR	14:30	425/60R Eng. Lang. nx.
RBI/78	15.930.0	"	16:00	RYRYRYRYRYRYRY
RRQ/20	18.385.0	"	15:00	Eng. Lang. nx.
RND/70	18.125.0	"	12:30	" " "
REB/24	14.700.0	"	13:00	" " "
CLN219	8.140.0	Cuba	09:30	" " "
CLN451	14.901.0	"	17:00	425/60N " "
CLN530	16.348.0	"	17:00	" " "

(23-Aug-91/Mark Burkart/SW ECHO)

****UTILITIES (cont.)****

Australian Coastal Radio Frequencies as of July 1, 1991:

Station	Ch.#	OTC Freq	Mobile Freq	Available
VIA Adelaide	412	4390	4098	On Request
	419	4411	4119	2230-1030
	817	8787	8243	On Request
	829	8803	8279	2230-1030
	1227	13156	12308	On Request
VIB Brisbane	404	4368	4074	On Request
	412	4390	4098	On Request
	416	4398	4107	2000-1000
	829	8803	8279	2000-0800
	1229	13161	12314	2000-0800
VID Darwin	416	4399	4107	2230-1030
	419	4411	4119	On Request
	811	8749	8226	2230-1030
	816	8781	8237	On Request
	1227	13156	12308	2230-1030
	1229	13161	12314	On Request
	1622	17306	16423	2230-1030
VIH Hobart	404	4368	4074	2130-0730 Mon-Sat
VIM Melbourne	404	4368	4074	
	417	4406	4113	On Request
	811	8748	8226	2200-1000
	1226	13152	12306	On Request
VIP Perth	404	4368	4074	2200-1400
	416	4399	4107	On Request
	808	8734	8210	2200-1400
	811	8749	8226	On Request
	816	8781	8237	On Request
	1226	13162	12306	2200-1400
	1228	13161	12314	On Request
	1604	17251	16389	2200-1400
	1612	17276	16393	On Request
	2212	22729	22033	2200-1400
	2228	22777	22081	On Request
VIR Rockhampton	417	4406	4113	2200-0730
VIS Sydney	406	4368	4077	Continuous
	417	4406	4113	On Request
	802	8722	8198	Continuous
	829	8803	8279	On Request
	1203	13083	12238	Continuous
	1231	13187	12320	On Request
	1602	17246	16383	Continuous
	1610	17269	16387	On Request
	1622	17306	16423	On Request
	2203	22702	22008	2000-0800
	2223	22762	22066	On Request
VIT Townsville	404	4368	4074	On Request
	412	4390	4098	On Request
	419	4411	4119	2000-1200
	817	8787	8243	2000-1200
	822	8782	8268	On Request
	1203	13083	12238	On Request
	1231	13187	12320	2200-0800
	1612	17276	16393	2200-0800

All frequencies are in kilohertz, all times in UTC. Times may change by one hour when Australia launches into summer time during October. In case you've heard one of the stations and want to try for a QSL - here are the addresses:

Adelaide Radio Johnston Road McLaren Vale S.A. 5171	Brisbane Radio Brisbane Island Road Ningi QLD 4511
Darwin Radio Gregory Street Parap N.T. 0820	Hobart Radio Upper Queens Dominion Hobart TAS 7000
Melbourne Radio Boneso Road Cape Schank VIC 3939	Perth Radio Gnangara Road Landedale W.A. 6086
Sydney Radio Jennifer Street La Perouse NSW 2036	Townsville Radio 19-23 Wackett Street Pallarenda QLD 4810

Rockhampton isn't listed, I believe this is remotely controlled from Brisbane. (09-Sep-91/Richard Jary/SW ECHO)

WCC Marine frequencies. Source: FAX info from KPH. Both KPH and WCC are owned by MCI Telecommunications.

Freq	Channel	Mode	Remarks
4179.0A	414 SHIP	NBDP	SHORE TX 4216.5
4182.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
4182.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
4184.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY

****UTILITIES (cont.)****

4184.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
4216.5A	414	NBDP	SHIP TX 4179.0
4331.0A			SHORE WORKING FREQUENCY
6273.0A	621 SHIP	NBDP	SHORE TX 6324.0
6276.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
6276.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
6277.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
6277.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
6324.0A	621	NBDP	SHIP TX 6273.0
6376.0A		CW	SHORE WORKING FREQUENCY
8366.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
8366.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
8368.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
8369.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
8384.0A	816 SHIP	NBDP	SHORE TX 8424.0
8386.5A	821 SHIP	NBDP	SHORE TX 8426.5
8424.0A	816	NBDP	SHIP TX 8384.0
8428.5A	821	NBDP	SHIP TX 8386.5
8686.0A		CW	SHORE WORKING FREQUENCY
8630.0A		CW	SHORE WORKING FREQUENCY
12487.0A	1221 SHIP	NBDP	SHORE TX 12688.5
12496.5A	1238 SHIP	NBDP	SHORE TX 12698.0
12650.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
12650.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
12652.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
12653.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
12699.5A	1221	NBDP	SHIP TX 12487.0
12698.0A	1238	NBDP	SHIP TX 12496.5
12847.0A		CW	SHORE WORKING FREQUENCY
12926.5A		CW	SHORE WORKING FREQUENCY
13033.5A		CW	SHORE WORKING FREQUENCY
16893.5A	1621 SHIP	NBDP	SHORE TX 16817.0
16702.0A	1638 SHIP	NBDP	SHORE TX 16826.0
16734.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
16734.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
16736.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
16738.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
16817.0A	1621	NBDP	SHIP TX 16893.5
16826.0A	1638	NBDP	SHIP TX 16702.0
16933.2A		CW	SHORE WORKING FREQUENCY
16972.0A		CW	SHORE WORKING FREQUENCY
22279.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
22280.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
22280.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
22281.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
22294.5A	2221 SHIP	NBDP	SHORE TX 22386.5
22386.5A	2221	NBDP	SHIP TX 22284.5
22518.0A		CW	SHORE WORKING FREQUENCY

KPH Marine frequencies. Source: FAX info from KPH. Both KPH and WCC are owned by MCI Telecommunications.

Freq	Channel	Mode	Remarks
4178.5A	413 SHIP	NBDP	SHORE TX 4216.0
4184.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
4184.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
4185.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
4185.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
4186.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
4186.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
4216.0A	413	NBDP	SHIP TX 4178.5
4247.0A		CW	SHORE WORKING FREQUENCY
6269.0A	613 SHIP	NBDP	SHORE TX 6320.0
6273.5A	622 SHIP	NBDP	SHORE TX 6324.5
6276.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
6276.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
6279.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
6279.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
6280.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
6280.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
6320.0A	613	NBDP	SHIP TX 6269.0
6324.5A	622	NBDP	SHIP TX 6273.5
6477.5A		CW	SHORE WORKING FREQUENCY
8269.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
8368.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
8368.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
8369.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
8370.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
8370.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
8382.5A	813 SHIP	NBDP	SHORE TX 8422.5
8387.0A	822 SHIP	NBDP	SHORE TX 8427.0
8422.5A	813	NBDP	SHIP TX 8382.5
8427.0A	822	NBDP	SHIP TX 8387.0
8618.0A		CW	SHORE WORKING FREQUENCY
8642.0A		CW	SHORE WORKING FREQUENCY
12483.0A	1213 SHIP	NBDP	SHORE TX 12686.6
12487.5A	1222 SHIP	NBDP	SHORE TX 12690.0
12497.5A	1242 SHIP	NBDP	SHORE TX 12600.0
12652.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
12652.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
12653.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
12653.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
12654.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
12654.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY

****UTILITIES (cont.)****

12686.5A	1213	NBDP	SHIP TX 12483.0
12690.0A	1222	NBDP	SHIP TX 12487.5
12600.0A	1242	NBDP	SHIP TX 12497.5
12808.5A		CW	SHORE WORKING FREQUENCY
13002.0A		CW	SHORE WORKING FREQUENCY
16889.5A	1613 SHIP	NBDP	SHORE TX 16813.9
16694.0A	1622 SHIP	NBDP	SHORE TX 16817.5
16738.0A	INIT SHIP	CW	SHIP CALLING FREQUENCY
16738.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
16737.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
16737.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
16738.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
16738.5A	ALT SHIP	CW	SHIP CALLING FREQUENCY
16813.9A	1613	NBDP	SHIP TX 16889.5
16817.5A	1622	NBDP	SHIP TX 16894.0
17016.8A		CW	SHORE WORKING FREQUENCY
17088.8A		CW	SHORE WORKING FREQUENCY
22280.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
22281.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
22282.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
22283.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
22283.5A	INIT SHIP	CW	SHIP CALLING FREQUENCY
22284.0A	ALT SHIP	CW	SHIP CALLING FREQUENCY
22290.5A	2213 SHIP	NBDP	SHORE TX 22382.5
22303.0A	2238 SHIP	NBDP	SHORE TX 22395.0
22382.5A	2213	NBDP	SHIP TX 22290.5
22395.0A	2238	NBDP	SHIP TX 22303.0
22477.5A		CW	SHORE WORKING FREQUENCY
22557.0A		CW	SHORE WORKING FREQUENCY

(13-Aug-91/Tim Johnson/SW ECHO)

WNU Marine frequencies. Source: WNU.

Freq	Channel	Mode	Remarks
4173.0A	402 SHIP	NBDP	SHORE TX 4211.0
4211.0A	402	NBDP	SHIP TX 4173.0
4294.0A		CW	
4310.0A		CW	
6263.5A	SHIP TX	NBDP	SHORE TX 6315.0
6315.0A		NBDP	SHIP TX 6263.5
6389.5A		CW	
6495.0A		CW	
8377.0A	802 SHIP	NBDP	SHORE TX 8417.0
8385.5A	819 SHIP	NBDP	SHORE TX 8425.5
8417.0A	802	NBDP	SHIP TX 8377.0
8425.5A	819	NBDP	SHIP TX 8385.5
8525.0A		CW	
8570.0A		CW	
8888.0A		CW	
12477.5A	1202 SHIP	NBDP	SHORE TX 12580.0
12486.0A	1219 SHIP	NBDP	SHORE TX 12588.5
12502.5A	1252 SHIP	NBDP	SHORE TX 12605.0
12505.5A	1258 SHIP	NBDP	SHORE TX 12607.5
12580.0A	1202	NBDP	SHIP TX 12477.5
12588.5A	1219	NBDP	SHIP TX 12486.0
12605.0A	1252	NBDP	SHIP TX 12502.5
12607.5A	1258	NBDP	SHIP TX 12505.5
12826.5A		CW	
12869.0A		CW	
13011.0A		CW	
16684.0A	1602 SHIP	NBDP	SHORE TX 16807.5
16692.5A	1619 SHIP	NBDP	SHORE TX 16816.0
16709.0A	1652 SHIP	NBDP	SHORE TX 16832.0
16711.5A	1657 SHIP	NBDP	SHORE TX 16834.5
16807.5A	1602	NBDP	SHIP TX 16684.0
16816.0A	1619	NBDP	SHIP TX 16692.5
16832.0A	1652	NBDP	SHIP TX 16709.0
16834.5A	1657	NBDP	SHIP TX 16711.5
17038.0A		CW	
17117.6A		CW	
17199.2A		CW	
22286.0A	2202 SHIP	NBDP	SHORE TX 22377.0
22293.5A	2219 SHIP	NBDP	SHORE TX 22386.5
22310.0A	2252 SHIP	NBDP	SHORE TX 22402.0
22312.5A	2257 SHIP	NBDP	SHORE TX 22404.5
22377.0A	2202	NBDP	SHIP TX 22286.0
22386.5A	2219	NBDP	SHIP TX 22293.5
22402.0A	2252	NBDP	SHIP TX 22310.0
22404.5A	2257	NBDP	SHIP TX 22312.5
22458.0A		CW	
22681.0A		CW	

WLO Marine frequencies. Source: WLO.

Freq	Channel	Mode	Remarks
2055.5A		CW	COAST WORKING FREQUENCY
4077.0W	405 SHIP	USB	SHORE TX 4369.0
4104.0W	414 SHIP	USB	SHORE TX 4396.0
4119.0W	419 SHIP	USB	SHORE TX 4411.0
4174.5A	406 SHIP	NBDP	SHORE TX 4212.5
4175.0A	406 SHIP	NBDP	SHORE TX 4213.0
4177.0A	410 SHIP	NBDP	SHORE TX 4215.0
4183.0A	C5	CW	SHIP CALLING FREQUENCY
4183.5A	C6	CW	SHIP CALLING FREQUENCY
4184.0A	C3	CW	SHIP CALLING FREQUENCY

****UTILITIES (cont.)****

4184.5A	C4	CW	SHIP CALLING FREQUENCY
4212.5A	405	NBDP	SHIP TX 4174.5
4213.0A	408	NBDP	SHIP TX 4175.0
4215.0A	410	NBDP	SHIP TX 4177.0
4267.5A		CW	COAST WORKING FREQUENCY
4343.0A		CW	COAST WORKING FREQUENCY
4343.0A		CW	TRAFFIC LISTS, WX
		- CW HH + 00	FEC HH + 35 NO FEC DURING HURRICANE SEASON
4369.0W	405	USB	SHIP TX 4077.0
4396.0W	414	USB	SHIP TX 4104.0
4411.0W	419	USB	SHIP TX 4119.0
4462.5A		FEC	TRAFFIC LISTS, WX HH + 35
		JUNE 1 - NOV 30	HURRICANE SEASON
6265.5A	608 SHIP	NBDP	SHORE TX 6317.0
6267.5A	610 SHIP	NBDP	SHORE TX 6319.0
6270.0A	615 SHIP	NBDP	SHORE TX 6321.0
6272.0A	619 SHIP	NBDP	SHORE TX 6323.0
6274.5A	624 SHIP	NBDP	SHORE TX 6325.5
6276.0A	C3	CW	SHIP CALLING FREQUENCY
6276.5A	C4	CW	SHIP CALLING FREQUENCY
6278.0A	C5	CW	SHIP CALLING FREQUENCY
6278.5A	C6	CW	SHIP CALLING FREQUENCY
6317.0A	608	NBDP	SHIP TX 6265.5
6319.0A	610	NBDP	SHIP TX 6267.5
6321.0A	615	NBDP	SHIP TX 6270.0
6323.0A	619	NBDP	SHIP TX 6272.0
6325.5A	624	NBDP	SHIP TX 6274.5
6344.0A		CW	COAST WORKING FREQUENCY
6344.5A		FEC	TRAFFIC LISTS, WX HH + 35
		JUNE 1 - NOV 30	HURRICANE SEASON
6416.0A		CW	TRAFFIC LISTS, WX
		- CW HH + 00	FEC HH + 35 NO FEC DURING HURRICANE SEASON
6446.5A		CW	COAST WORKING FREQUENCY
6852.0A		FAX	NOAA WEATHER FAX - TRANSMITTER IS
		WLOs, FAX IS RECIEVED VIA LANDLINE AND IS CONTROLLED	BY NOAA
8264.0W	824 SHIP	USB	SHORE TX 8788.0
8279.0W	829 SHIP	USB	SHORE TX 8803.0
8282.0W	830 SHIP	USB	SHORE TX 8806.0
8367.0A	C5	CW	SHIP CALLING FREQUENCY
8367.5A	C6	CW	SHIP CALLING FREQUENCY
8368.0A	C3	CW	SHIP CALLING FREQUENCY
8369.0A	C4	CW	SHIP CALLING FREQUENCY
8378.5A	805 SHIP	NBDP	SHORE TX 8418.5
8379.0A	806 SHIP	NBDP	SHORE TX 8419.0
8381.0A	810 SHIP	NBDP	SHORE TX 8421.0
8381.5A	811 SHIP	NBDP	SHORE TX 8421.5
8383.5A	815 SHIP	NBDP	SHORE TX 8423.5
8389.0A	826 SHIP	NBDP	SHORE TX 8429.0
8418.5A	805	NBDP	SHIP TX 8378.5
8419.0A	806	NBDP	SHIP TX 8379.0
8421.0A	810	NBDP	SHIP TX 8381.0
8421.5A	811	NBDP	SHIP TX 8381.5
8423.5A	815	NBDP	SHIP TX 8383.5
8429.0A	826	NBDP	SHIP TX 8389.0
8445.5A		CW	COAST WORKING FREQUENCY
8473.5A		CW	COAST WORKING FREQUENCY
8514.0A		CW	TRAFFIC LISTS, WX
		- CW HH + 00	FEC HH + 35 NO FEC DURING HURRICANE SEASON
8534.5A		FEC	TRAFFIC LISTS, WX HH + 35
		JUNE 1 - NOV 30	HURRICANE SEASON
8658.0A		CW	COAST WORKING FREQUENCY
8788.0W	824	USB	SHIP TX 8264.0
8803.0W	829	USB	SHIP TX 8279.0
8806.0W	830	USB	SHIP TX 8282.0
9157.5A		FAX	NOAA WEATHER FAX - TRANSMITTER IS
		WLOs, FAX IS SENT VIA LANDLINE AND IS CONTROLLED BY	NOAA.
12263.0W	1212 SHIP	USB	SHORE TX 13110.0
12302.0W	1226 SHIP	USB	SHORE TX 13149.0
12306.0W	1226 SHIP	USB	SHORE TX 13152.0
12479.0A	1205 SHIP	NBDP	SHORE TX 12681.5
12482.0A	1211 SHIP	NBDP	SHORE TX 12684.5
12484.0A	1215 SHIP	NBDP	SHORE TX 12686.5
12489.0A	1225 SHIP	NBDP	SHORE TX 12691.5
12491.0A	1229 SHIP	NBDP	SHORE TX 12693.5
12493.5A	1234 SHIP	NBDP	SHORE TX 12696.0
12496.5A	1240 SHIP	NBDP	SHORE TX 12699.0
12501.5A	1250 SHIP	NBDP	SHORE TX 12604.0
12502.0A	1251 SHIP	NBDP	SHORE TX 12604.5
12503.5A	1254 SHIP	NBDP	SHORE TX 12606.0
12551.0A	C5	CW	SHIP CALLING FREQUENCY
12551.5A	C6	CW	SHIP CALLING FREQUENCY
12552.0A	C3	CW	SHIP CALLING FREQUENCY
12553.5A	C4	CW	SHIP CALLING FREQUENCY
12581.5A	1205	NBDP	SHIP TX 12479.0
12584.5A	1211	NBDP	SHIP TX 12482.0
12586.5A	1215	NBDP	SHIP TX 12484.0
12591.5A	1225	NBDP	SHIP TX 12489.0
12593.5A	1229	NBDP	SHIP TX 12491.0
12596.0A	1234	NBDP	SHIP TX 12493.5
12599.0A	1240	NBDP	SHIP TX 12496.5
12604.0A	1250	NBDP	SHIP TX 12501.5
12604.5A	1251	NBDP	SHIP TX 12502.0
12606.0A	1254	NBDP	SHIP TX 12503.5

****UTILITIES (cont.)****

12860.0A	CW	COAST WORKING FREQUENCY
12704.5A	CW	COAST WORKING FREQUENCY
12886.5A	CW	COAST WORKING FREQUENCY
12886.8A	CW	TRAFFIC LISTS, WX
- CW HH + 00 FEC HH + 35 NO FEC DURING HURRICANE SEASON		
12992.8A	FEC	TRAFFIC LISTS, WX HH + 35
JUNE 1 - NOV 30 HURRICANE SEASON		
13024.9A	CW	COAST WORKING FREQUENCY
13110.0W	1212	USB SHIP TX 12263.0
13149.0W	1225	USB SHIP TX 12302.0
13152.0W	1228	USB SHIP TX 12305.0
18378.0W	1807 SHIP	USB SH
18453.0W	1832 SHIP	USB SHORE TX 17335.0
18480.0W	1841 SHIP	USB SHORE TX 17382.0
18685.5A	1805 SHIP	NBDP SHORE TX 18809.0
18688.5A	1811 SHIP	NBDP SHORE TX 18812.0
18690.5A	1815 SHIP	NBDP SHORE TX 18814.0
18695.5A	1825 SHIP	NBDP SHORE TX 18818.5
18697.5A	1829 SHIP	NBDP SHORE TX 18820.5
18703.0A	1840 SHIP	NBDP SHORE TX 18828.0
18705.0A	1844 SHIP	NBDP SHORE TX 18828.0
18708.0A	1850 SHIP	NBDP SHORE TX 18831.0
18710.0A	1854 SHIP	NBDP SHORE TX 18833.0
18713.5A	1861 SHIP	NBDP SHORE TX 18836.5
18735.0A	C5	CW SHIP CALLING FREQUENCY
18735.5A	C8	CW SHIP CALLING FREQUENCY
18736.0A	C3	CW SHIP CALLING FREQUENCY
18738.0A	C4	CW SHIP CALLING FREQUENCY
18809.0A	1805	NBDP SHIP TX 18885.5
18812.0A	1811	NBDP SHIP TX 18888.5
18814.0A	1815	NBDP SHIP TX 18890.5
18818.5A	1825	NBDP SHIP TX 18895.5
18820.5A	1829	NBDP SHIP TX 18897.5
18826.0A	1840	NBDP SHIP TX 18703.0
18828.0A	1844	NBDP SHIP TX 18705.0
18831.0A	1850	NBDP SHIP TX 18708.0
18833.0A	1854	NBDP SHIP TX 18710.0
18836.5A	1861	NBDP SHIP TX 18713.5
18988.5A	CW	COAST WORKING FREQUENCY
18997.8A	FEC	TRAFFIC LISTS, WX HH + 35
JUNE 1 - NOV 30 HURRICANE SEASON		
17022.5A	CW	TRAFFIC LISTS, WX
- CW HH + 00 FEC HH + 35 NO FEC DURING HURRICANE SEASON		
17172.4A	CW	COAST WORKING FREQUENCY
17280.0W	1807	USB SHIP TX 18378.0
17335.0W	1832	USB SHIP TX 18453.0
17382.0W	1841	USB SHIP TX 18480.0
22078.0W	2227 SHIP	USB SHORE TX 22774.0
22090.0W	2231 SHIP	USB SHORE TX 22786.0
22108.0W	2237 SHIP	USB SHORE TX 22804.0
22280.5A	C3	CW SHIP CALLING FREQUENCY
22281.0A	C4	CW SHIP CALLING FREQUENCY
22281.5A	C5	CW SHIP CALLING FREQUENCY
22282.0A	C8	CW SHIP CALLING FREQUENCY
22289.0A	2210 SHIP	NBDP SHORE TX 22381.0
22291.5A	2215 SHIP	NBDP SHORE TX 22383.5
22311.0A	2254 SHIP	NBDP SHORE TX 22403.0
22312.0A	2258 SHIP	NBDP SHORE TX 22404.0
22314.0A	2260 SHIP	NBDP SHORE TX 22408.0
22381.0A	2210	NBDP SHIP TX 22289.0
22383.5A	2215	NBDP SHIP TX 22291.5
22403.0A	2254	NBDP SHIP TX 22311.0
22404.0A	2258	NBDP SHIP TX 22312.0
22406.0A	2260	NBDP SHIP TX 22314.0
22407.0A	2262	NBDP SHIP TX 22315.0
22487.0A	CW	TRAFFIC LISTS, WX
- CW HH + 00 FEC HH + 35 NO FEC DURING HURRICANE SEASON		
22589.0A	CW	COAST WORKING FREQUENCY
22570.5A	CW	COAST WORKING FREQUENCY
22774.0W	2227	USB SHIP TX 22078.0
22788.0W	2231	USB SHIP TX 22090.0
22804.0W	2237	USB SHIP TX 22108.0
25171.5A	C6	CW SHIP CALLING FREQUENCY
25171.5A	C5	CW SHIP CALLING FREQUENCY
25172.0A	C3	CW SHIP CALLING FREQUENCY
25172.0A	C4	CW SHIP CALLING FREQUENCY

(13-Aug-91/Tim Johnson/SW ECHO)

WOM Marine frequencies. Source: WOM.

Freq	Channel	Mode	Remarks
2031.5W	209 SHIP	USB	SHORE TX 2490.0
2118.0W	221 SHIP	USB	SHORE TX 2514.0
2390.0W	245 SHIP	USB	SHORE TX 2586.0
2406.0W	247 SHIP	USB	SHORE TX 2442.0
2442.0W	247	USB	SHIP TX 2408.0
2490.0W	209	USB	SHIP TX 2031.5
2514.0W	221	USB	SHIP TX 2118.0
2586.0W	245	USB	SHIP TX 2390.0
4071.0W	403 SHIP	USB	SHORE TX 4363.0
4098.0W	412 SHIP	USB	SHORE TX 4390.0
4113.0W	417 SHIP	USB	SHORE TX 4405.0
4131.0W	423 SHIP	USB	SHORE TX 4423.0
4363.0W	403	USB	SHIP TX 4071.0 TFC LIST @ ODD HRS Z
4390.0W	412	USB	SHIP TX 4098.0

****UTILITY (cont.)****

4405.0W	417	USB	SHIP TX 4113.0
4423.0W	423	USB	SHIP TX 4131.0
8198.0W	802 SHIP	USB	SHORE TX 8722.0
8207.0W	805 SHIP	USB	SHORE TX 8731.0
8222.0W	810 SHIP	USB	SHORE TX 8746.0
8234.0W	814 SHIP	USB	SHORE TX 8758.0
8267.0W	825 SHIP	USB	SHORE TX 8791.0
8285.0W	831 SHIP	USB	SHORE TX 8809.0
8722.0W	802	USB	SHIP TX 8198.0 TFC LIST @ ODD HRS Z
8731.0W	805	USB	SHIP TX 8207.0
8746.0W	810	USB	SHIP TX 8222.0
8758.0W	814	USB	SHIP TX 8234.0
8791.0W	825	USB	SHIP TX 8267.0
8809.0W	831	USB	SHIP TX 8285.0
12245.0W	1208 SHIP	USB	SHORE TX 13092.0
12251.0W	1208 SHIP	USB	SHORE TX 13098.0
12254.0W	1209 SHIP	USB	SHORE TX 13101.0
12272.0W	1215 SHIP	USB	SHORE TX 13119.0
12296.0W	1223 SHIP	USB	SHORE TX 13143.0
12317.0W	1230 SHIP	USB	SHORE TX 13164.0
13092.0W	1208	USB	SHIP TX 12245.0 TFC LIST @ ODD HRS Z
13098.0W	1208	USB	SHIP TX 12251.0
13101.0W	1209	USB	SHIP TX 12254.0
13119.0W	1215	USB	SHIP TX 12272.0
13143.0W	1223	USB	SHIP TX 12296.0
13164.0W	1230	USB	SHIP TX 12317.0
16380.0W	1601 SHIP	USB	SHORE TX 17242.0
16384.0W	1609 SHIP	USB	SHORE TX 17286.0
16387.0W	1610 SHIP	USB	SHORE TX 17289.0
16390.0W	1611 SHIP	USB	SHORE TX 17272.0
16405.0W	1616 SHIP	USB	SHORE TX 17287.0
17242.0W	1601	USB	SHIP TX 16380.0 TFC LIST @ ODD HRS Z
17286.0W	1609	USB	SHIP TX 16384.0
17289.0W	1610	USB	SHIP TX 16387.0
17272.0W	1611	USB	SHIP TX 16390.0
17287.0W	1616	USB	SHIP TX 16405.0
22042.0W	2215 SHIP	USB	SHORE TX 22738.0
22045.0W	2218 SHIP	USB	SHORE TX 22741.0
22083.0W	2222 SHIP	USB	SHORE TX 22759.0
22738.0W	2215	USB	SHIP TX 22042.0 TFC LIST @ ODD HRS Z
22741.0W	2218	USB	SHIP TX 22045.0
22759.0W	2222	USB	SHIP TX 22083.0

WOO Marine frequencies. Source: WOO.

Freq	Channel	Mode	Remarks
2168.0W	232 SHIP	USB	SHORE TX 2258.0
2258.0W	232	USB	SHIP TX 2168.0
2388.0W	242 SHIP	USB	SHORE TX 2450.0
2450.0W	242	USB	SHIP TX 2388.0
4092.0W	410 SHIP	USB	SHORE TX 4384.0
4095.0W	411 SHIP	USB	SHORE TX 4387.0
4110.0W	416 SHIP	USB	SHORE TX 4402.0
4128.0W	422 SHIP	USB	SHORE TX 4420.0
4384.0W	410	USB	SHIP TX 4092.0
4387.0W	411	USB	SHIP TX 4095.0 TFC LIST @ EVEN HRS Z
4402.0W	416	USB	SHIP TX 4110.0
4420.0W	422	USB	SHIP TX 4128.0
8218.0W	808 SHIP	USB	SHORE TX 8740.0
8225.0W	811 SHIP	USB	SHORE TX 8749.0
8237.0W	815 SHIP	USB	SHORE TX 8761.0
8270.0W	828 SHIP	USB	SHORE TX 8794.0
8740.0W	808	USB	SHIP TX 8218.0
8749.0W	811	USB	SHIP TX 8225.0 TFC LIST @ EVEN HRS Z
8781.0W	815	USB	SHIP TX 8237.0
8794.0W	828	USB	SHIP TX 8270.0
12236.0W	1203 SHIP	USB	SHORE TX 13083.0
12257.0W	1210 SHIP	USB	SHORE TX 13104.0
12280.0W	1211 SHIP	USB	SHORE TX 13107.0
12311.0W	1228 SHIP	USB	SHORE TX 13158.0
13083.0W	1203	USB	SHIP TX 12236.0
13104.0W	1210	USB	SHIP TX 12257.0
13107.0W	1211	USB	SHIP TX 12280.0
13158.0W	1228	USB	SHIP TX 12311.0
16372.0W	1605 SHIP	USB	SHORE TX 17254.0
16417.0W	1620 SHIP	USB	SHORE TX 17299.0
16435.0W	1628 SHIP	USB	SHORE TX 17317.0
16450.0W	1631 SHIP	USB	SHORE TX 17322.0
17254.0W	1605	USB	SHIP TX 16372.0
17299.0W	1620	USB	SHIP TX 16417.0
17317.0W	1628	USB	SHIP TX 16435.0
17322.0W	1631	USB	SHIP TX 16450.0
22000.0W	2201 SHIP	USB	SHORE TX 22696.0
22012.0W	2205 SHIP	USB	SHORE TX 22708.0
22027.0W	2210 SHIP	USB	SHORE TX 22723.0
22105.0W	2236 SHIP	USB	SHORE TX 22801.0
22896.0W	2201	USB	SHIP TX 22000.0
22708.0W	2205	USB	SHIP TX 22012.0
22723.0W	2210	USB	SHIP TX 22027.0
22801.0W	2236	USB	SHIP TX 22105.0

(13-Aug-91/Tim Johnson/SW ECHO)

****UTILITIES (cont.)****

The North Shore of the province of Quebec is getting the 1@\$\$*! burned out of it this week. You can monitor some of the fire warnings on Alma radio (Bush Radio) on 5430 Mhz. Also give a listen to the Dept of Natural Resources on these: 3368.5, 4982.0, Federal 4460, 4620, 4635, 4680, 4880, 5170, 5240, 5540, and 9172 kHz. There will be activity off and on. All comms in SSB. (ORIGINAL CONTRIBUTOR INFO LOST - SORRY! - AQ)

BTW, I was recently made aware of a publication that hardcore aviation junkies might find useful. It's the Flight Guide available by subscription from Airguide Publications, Inc., P.O.Box 1288, Long Beach, CA 90801. Flight Guide is an airport facilities guide for pilots. It includes frequencies, airport diagrams, navigational aids, airport services, etc. for everything from the littlest landing strip to the biggest airports ... and all this in a 4 1/2"x5" loose leaf format (nice and compact for scanner expeditions to your local airport). The subscription includes frequent and regular updates. Write to Airguide Publications for current rates. (End of unpaid/unsolicited endorsement)(ORIGINAL CONTRIBUTOR INFO LOST - SORRY! - AQ)

Q: Can anyone recommend some good, plain English RTTY stations?

- A: Maybe the following frequencies can help:
- GNA - Gulf News Agency (Bahrain) 1500-1700 14784 kHz 75 Baud/425Hz/L
- IRNA - Islamic Republic News Agency (Iran) 1600-1730 19980 kHz 50 Baud/425Hz/L
- JANA - Jamahiriya Arab News Agency (Libya) 1815-1730 20560 kHz 50 Baud/425Hz/L
- MAP - Maghreb Arabe Presse (Morocco) 1200-1400 10213, 14670 kHz 50 Baud/425Hz/L
- MTI - Magyar Tavirati Iroda (Hungary) 1700-1800 9114 kHz 50 Baud/425Hz/L
- PAP - Polska Agencja Prasowa (Poland) 2100-2130 8805, 7845 kHz 50 Baud/425Hz/L
- TANJUG - Telegrafaska Agencija Nova Jugoslavija (Yugoslavia) 1100-1700 12212.5, 13440 kHz 50/75 Baud/425Hz/L
- 1700-2400 5240,7658,7806,7998 kHz 50/75 Baud/425Hz/L
- XNA - Xinhua News Agency (PR China) 1030-1700 14367,18136 kHz 50/75 Baud/425Hz/L
- 1830-2000 7620, 7850 kHz 50/75 Baud/425Hz/L

All these stations transmit in plain RTTY-Baudot-code (no FEC etc.). These frequencies are actual logs. The main problem for you will be the reception of this broadcasts. I do not know the times and frequencies for the best reception of this programs in the U.S. (02-Aug-91/Stephan Feiner/SW ECHO)

****PIRATE-LIKE BEHAVIOR****

* In a message dated 08-28-91 to All, Frank Kennedy said:
FK> Can anyone tell me how Radio New York International is doing these days?
-Stuff deleted-
FK> Are they still around?

We're doing OK. We had a breakup of the partners in June so Randi Steel, Dan Lewis and Neil Scott left, but the rest of us are still around. We also picked up 4 new programs to fill the void although one may be leaving due to conflict of interest. (His employer is a tough cookie).

The service is leaning to the political left because of "Pirate Joe" and all his airtime, except on the 3rd week when J.L. & I are back to back with our usual insanity. I'm still on the 1st week too, but I'm followed by Joe's girlfriend Julie Weiner, (no relation to Allan), our resident communist as I call her.

I've put the Crossband show on a scaled back hiatus due to some personal problems which are stopping me from getting the show together. But some of the news items and departments are still there. It WILL return, perhaps faster than expected.

Keith LaMonica lost his satellite service so we are no longer on a bird. I was doing my Crossband show on Jim Bass' "Let's Talk Radio" network for a few weeks but the response on Sunday nights is nil. I may go back there now that people have found out about the service. If we can come up with the money for the back haul, all the RNI programming could be on that channel too, but that is not something we will be able to afford for a long while.

FK> What are their present broadcast frequencies?

WWCR has changed their nighttime frequency to 7435 KHz. We're still on Sundays at 9PM Eastern - 0100 UTC/Monday. Hope you rejoin us, (at least for my show).

-DE "Big" Steve in NYC.
(28-Aug-91/Steve Coletti/SW ECHO)

** 7415 ** 7415 ** 7415 ** 7415 **

30 July 1991 Circulation: 281
The Internet Pirate Radio Listener Newsletter

Hello again. Attached are some logs and some of the current news, rumors and innuendo floating around the normal channels. Hope that some of you got better July 4 reception than I did, as travel took me away from my station and I missed it all.

First the logs. Mike's reports pretty much summarize what was available over the holiday [thanks Mike!] and show that even in the lousy DX months, some good activity can be found.

WORK heard on 7/7 from 0215-0347 UTC on 7413. A lot of noise, but a fairly strong signal in AM. Played some music, a game show, Cowboy Bob promoting Liberty for Potatoes, Public School Menu, a PSA from Eddie Albert & Eva Gabor about pesticides, Drugs in the Workplace, and more. Gave Wellsville, NY address for QSL.. (David M. Archer - NY)

Just would like to note that I logged He-Man Radio on 7/17 at 0203 UTC on 7411.9 USB. Only caught the tail end of the broadcast with "the new he-man radio anthem". Also gave PA address for QSL. (David M. Archer - NY)

****PIRATE STUFF (continued)****

Radio Free America on 7415 uppersideband from 0415-0610 Sunday UTC. The station played mostly heavy metal and dedicated a song to "Hussein the Insane." The announcer said that the station was operating on 1500 watts. He boasted that he could be heard from the east coast to the west coast, South America, Central America, Europe and Africa. I imagine he could be right if only his signal was better. The music was horribly distorted. The only audible thing was the announcer.

Almost immediately after RFA signed off, Radio USA came on. The station was on from 0512-0545 UTC Sunday. The station's signal was very weak. I could only completely make out the last few minutes. The announcer said to get a QSL before it is too late and then a siren was heard in the background. (Mike Carr - DC)

WORK 0400-0440 UTC July 4 on 7415 The station's theme centers around work. At about 0425, he had a special guest, a recent Soviet immigrant. They talked about working in the Soviet Union. All of a sudden without warning, the station left the airwaves and someone came on a couple of minutes later asking what happened to WORK. He got no response. (Mike Carr - DC)

WHO-The Voice Of Free Radio around 0155-0215 on 7415. At the end of the broadcast, he asked people to write to their Congresspeople to help in some way to legalize free radio. Radio Free Angus (recognized his voice from some months passed doing something like this) came on announcing how professional he thought the station was. (Mike Carr - DC)

Omega Radio 0050-0125 UTC July 6 on 7418-7. It is a Christian pirate radio station promoting Christian values. They play Christian Progressive Rock. It is a division of Radio USA. (Mike Carr - DC)

Radio USA 0128-0200 and then from 0200-0240 July 6 on 7418-7. This station as was the above suffered from static and station interference from WSHB. It was very difficult to hear. Their broadcast from 0128-0200 was a rebroadcast from their May 26 1991 show from 2357-0019. The show from 0200-0240 listed pirates that have been busted by the FCC and it had an "air check" of Radio Tower from the Netherlands. (Mike Carr - DC)

WTKR 0615-0700 7415 uppersideband. Pirate testing. He has two transmitters. One is on 15050 KHz and the other is on 7415 KHz. The 7415 was putting out 1,000 watts. (Mike Carr - DC)

WNOT helped WTKR or at least tried to help out with its testing. They could not make radio contact, even though both were in the clear. (Mike Carr - DC)

Chicago Tunnel Authority 0705-0715 UTC July 6 (same as WTKR) on 7410 KHz. This station operated tested in the am and then in upper sideband with good results. (Mike Carr - DC)

Radio USA repeat broadcast of their 0200 transmission on 7417 at 12:40 UTC July 8. (Mike Carr - DC)

Just would like to note that I logged He-Man Radio on 7/17 at 0203 UTC on 7411.9 USB. Only caught the tail end of the broadcast with "the new he-man radio anthem". Also gave PA address for QSL. (Mark Carr - DC)

Station news: Hope that some of you caught the marathon activity this past weekend. Action R., Revolutionary Voice of Plainville, WKND (R.Animal returns!!) and Tube Radio (another station that has not seen much activity since last year) all were on. There were carriers on 41 m for 3-4 hours Saturday night! I don't know if this was a planned event or not, but it was interesting to see all the activity.

According to one report, the newly activated Chicago Tunnel Company is now newly inactivated due to FCC action. Frequent long broadcasts assuredly hastened its demise!

Tune the 1775 khz area if you are in the NE as some stations are testing there.

I got a nice phone call from HV Short of RFM who said they are now running plate modulation with a Viking II.

In the QSL department, I received a couple of nice certificate/qsls from the late KUSA, and a Wolfpak from WOLF. KUSA is providing these qsls for reports of broadcasts earlier in the year.

From PiPa, news is that Radio Repulse continues to send out unusual (to say the least!) verifications. I got a oil painting, others have received ceramic platters and antlers with reception verification info inscribed. Betsy won't get THAT from Deutsche Welle!!? With most summertime activities reaching a manageable level, I will attempt to put this newsletter out bi-weekly.... or as the posting levels demand. Send whatcha hear! 73 and DX /john

****GH WANTS YOU TO KNOW****

Per a phocall to Glenn Hauser, here is the latest asked for WORLD OF RADIO (all times - AND DAYS - UTC):

ON WWCR:

Friday	2130 15680
Saturday	0130 7520
Saturday	1430 15680
Saturday	2330 15680 (may run 1 hr later, i.e. Sun 0030)
Monday	0500 7435

ON WRNO:

Saturday	2330 7365
Sunday	2030 15420
Monday	1530 15420

ON RADIO FOR PEACE INTERNATIONAL (freqs: 16030, 13630, and 7375USB; 21465 is currently off for antenna work, but may soon run as late as 0330):
Sunday 2230

****WORLD OF RADIO SCHEDULE (cont.)****

Monday 1030
Tuesday 2030
Wednesday 0230
Wednesday 0830
Friday 2100
Saturday 0300
Saturday 0900
Saturday 1930
Sunday 0130
Sunday 0730

ON AM AND FM STATIONS (local times):
WHUS 91.7 Storrs, CT Friday 10:30 am Eastern
WPKN 89.5 Bridgeport, CT Saturday 2:30 pm Eastern
WSUR 91.0 Iowa City, IA Saturday 10:30 am Central
WOI 84.0 Ames, IA Saturday 6:30 am Central

Glenn also produces a segment in Spanish which airs on Radio Nederland's "Radio Erlace" Spanish-language DX program. His reports air just past the top of the hour on the 2nd Friday of each month (and also on the 3rd and 4th Fridays if there's a lot of material). (18-Aug-91/AI Quagliari/SW ECHO)

****OLD TOYS, NEW TOYS****

I asked Alistair van Tonder (hope I remember the name right) in South Africa if he knew of a source for alignment information. He gave me the name and telephone/fax numbers of Hamrad in Cape Town, to whom I sent a fax requesting help. They faxed back a copy of the tech manual (seven pages). Hamrad's address is:

Hamrad (Pty) Ltd
P.O. Box 3579
Cape Town
8000
South Africa

(26-Aug-91/John Ross/SW ECHO)

I received some info from Craig Siegenthaler recently, and I thought I would share it with you. First of all, KIWA has a NEW ADDRESS: 812 South 14th. Ave. Yakima, WA 98902 Telephone (509) 463-KIWA

Craig is coming out with version 2.0 of the MAP unit. He hopes to release it late this fall. The new version will sport two synchronous detectors (the additional being a new locking type) and will have new audio controls. It will also "support the new Collins mechanical filters." (I'm not sure if Craig means it will have them built in - I assume this is the case.) He also says that owners of the present 1.0 model will be able to upgrade to 2.0.

No price is mentioned....but the price for the 1.0 has been \$340. There was one on sale used from Universal Shortwave for \$200, and I wanted to get it - but I wasn't fast enough. I think I can wait till Christmas!

Craig also offers replacement filters for the ICF-2010.
(22-Aug-91/Andy Wallace/SW ECHO)

ANOTHER POMTRES SIGHTING

We now have sightings of this little puppy with four logos and two shapes: Pomtrex (squarish case, English markings), TEK (roundish case, German markings), Windsor (roundish case, English markings) and now MCE (roundish case, English markings.) Anybody know what the "official" name of this thing is, i.e., what the factory calls it? Or even where in China the factory is? (29-Jul-91/Earl Boebert/SW ECHO)

Quite often I see requests for Radio Shack (Tandy) instruction manuals, technical service manuals, and parts. If your local dealer is unable to help you, Tandy's National Parts Center probably can. Here is how to reach it. Save this information for future use:

TANDY NATIONAL PARTS
900 E. NORTHSIDE DR
FT. WORTH, TX 76108 (800) 442-2426 or (817) 870-5600 (Paul Lukes/SW ECHO)

Saw an ad in last Sunday's NY Times Magazine from Havorhills of San Francisco. The gizmo is called an "Antenna Multiplier," and I quote from the copy: "...inside its unprepossessing housing, the Antenna Multiplier hides a small technological miracle - an array of electronic components that literally multiplies the reception power of your TV. The Antenna Multiplier stabilizes your TV picture, eliminates "ghosts" and static, and brings in stations that were until now only visible as flickers and annoying shadows. In most areas you will be able to eliminate any outdoor antenna completely, making yourself independent of bad weather interference and atmospheric disturbances. (a little further down)..."Antenna Multiplier will not just enhance your TV reception manifold, it also vastly improves AM/FM radio reception and brings in new stations on multiband and shortwave receivers." This doodad is priced at \$29.95, or 3 for \$59.90. I strongly suspect the only "new stations" it would bring in "on multiband and shortwave receivers" would be images and spurious signals galore, as the full spectrum of radio signals, sloppily amplified, comes rushing in to overload the front end of your receiver. As for its absurd claims re TV, I'd bet money that you'd have more success eliminating unwanted "ghosts" with an exorcism. Be on the lookout for this device. Warn your non-techie friends. And if they still insist on throwing away \$35.90 (the "handling" costs are a joke too) on one, send me their names and addresses - I have some Southern California water rights for sale..... (13-Aug-91/AI Quagliari/SW ECHO)

****PUBLICATIONS AND OTHER THINGS PRINTED ON PAPER****

R. Netherlands has the 13th edition of "The Booklist" now available (for free). It reviews 48 radio related books/publications. For a free copy, write to:

The Booklist
Radio Netherlands
English Section
Box 222
1200 JG Hilversum
The Netherlands

(18-Aug-91/Media Network-16-Aug-91/Bill Oxner/SW ECHO)

****PUBLICATIONS (cont.)****

The 1991 Editor of "Radio Stations in the United Kingdom" has just been published by the British DX Club. It lists all British medium wave and FM radio stations, by frequency, with full postal and telephone information, as well as background information on the various BBC services, the new Radio Authority, and much more. It's available for 2 pounds, 4 American dollars or 6 IRCs from the British DX Club, 64 Birkhall Road, Catford, London, SE6 1TE, England. (SCDX #2139, dated 03-Sep-91/Tony C. Harding - UK/INTERNET)

In a message to Havana Moon <03 Aug 91 22:06> Henry Menach wrote:
HM> can we have an address for the swl swapper? How does one get the HM> sample copy?

The SWL Swapper can be reached at the following address:

SWL SWAPPER
PO Box 1136
Pepperell, MA 01463-1136

A single free copy is available on request. Annual subscriptions are \$10.00/US, \$12.00/Canada. Each new subscriber is entitled to a free 50-word classified ad with their paid subscription. Checks are to be made payable to "Brendale's". An 800# exists, as well - 800-746-8951. (06-Aug-91/Havana Moon/SW ECHO)

****OH GREAT! MORE ECPA HEADACHES****

Re: The Federal Communications Commission Authorization Act of 1991.

The Rinaldo Amendment, introduced by Rep. Matthew J. Rinaldo (R- NJ), to The Federal Communications Commission Authorization Act of 1991, Sec. 8 (b)(1) has some far reaching implications that would effect what we can listen to in the future. Most of us remember the Electronic Communications Privacy Act and how it changed your hobby. Well, the law makers are at it again. This time they were working behind closed doors to keep it away from the general public. The wording of this amendment is as follows:

Sec. 8 (d)(1) INTERCEPTION OF CELLULAR TELECOMMUNICATIONS.

Within 180 days after the date of enactment of the Federal Communications Commission Authorization Act of 1991, the Commission shall prescribe and make effective regulations denying equipment authorization... for any scanning receiver that is capable of:

(A)...receiving transmissions in the frequencies allocated to the domestic cellular radio telecommunications service;

(B)...readily being altered by the user to receive transmissions in such frequencies, or;

(C)...being equipped with decoders that convert digital cellular transmissions to analog voice audio.

(2) MANUFACTURE OF NONCOMPLYING EQUIPMENT.

Beginning one year after the effective date of the regulation adopted..., no receiver having the capabilities described in subparagraph (A), (B), or (C) of Paragraph (1) shall be manufactured that does not comply with the requirements set forth in paragraph (1).

THIS BILL IS IMPORTANT!!! THE RINALDO AMENDMENT MUST BE STOPPED! If this amendment is allowed to stand we can kiss our hobby good-bye. Any scanner that can receive 800MHz can be easily converted to receive cellular communications and could be denied acceptance. The amendment would require the FCC to refuse equipment authorization under FCC Part 15 certification, which is required for all scanners sold in this country, along with many other consumer products.

If we stop and think for a minute or two, it becomes quite obvious that this could have far reaching ramifications. First you must remember that this amendment will make it illegal to manufacture a scanning receiver that can or could be readily converted to receive cellular communications. That means that if we were to manufacture a scanner that could receive the 800 MHz band some enterprising owner would figure out how to make it receive cellular transmissions. So, just to make sure that we can't be cherged with manufacturing a scanner that could be modified, let's not put 800 MHz in the scanners that we make. Ok, we solved that little problem, or did we? If someone buys one of our scanners, that doesn't have 800 MHz coverage, and then attaches a down converter that allows them to receive 800 MHz are we again in violation of the law? Only the courts can answer that question. This may or may not be going to extremes. I am sure that if this law is enacted it will have a dire effect on your hobby. We must ban together and stop this action NOW!!! Its not too long of a jump to Police and other public safety frequencies next. We have communicated with Bob Grove, of Monitoring Times, and he stated that the timing of this bill was such that he received information just as they were going to press and was only able to mention it in passing, due to a lack of details. This has seriously cut into our ability to spread the word. So, spread it around. Your participation is more important than ever, WE ONLY HAVE TWO OR THREE WEEKS. This is an important action, and if you put your head in the sand and not respond to this challenge, the same thing will happen that happened when the cellular industry pushed the ECPA through Congress. WE MUST nip this action in the bud. WRITE TO YOUR REPRESENTATIVE NOW!!!! DON'T DELAY. At the time this article was written H.R. 1674 was in the House Energy & Commerce Committee. The following addresses are people that you should send your protest to, and make it STRONG AND LOUD!!!!

John D. Dingell
Chairman Committee on Energy and Commerce,
2125 Rayburn House Office Building
Washington, DC 20515-6116
Phone - 202-226-2927
Fax - 202-226-2626

(Make this the busiest phone in Washington, & bury the fax machine in it's own paper.)

The Committee's Legislative Assistant is Lisa Kountoupe.
Minority Staff's Legislative Assistant, Darlene McMullen
(Make sure they hear from you also.)

The following is a list of the Representative that sit on this committee. Use it, write, call and/or FAX each of them. Don't forget to point out the fact that there can be no "REASONABLE EXPECTATION OF PRIVACY WHEN USING A TWO-WAY RADIO."

Joe Berton (R-TX) Michael Bilirakis (R-FL)
Thomas Bilby (R-VA) Rick Boucher (D-VA)
Terry Bruce (D-IL) John Bryant (D-TX)

****ECPA (continued)****

Sonny Callahan (R-AL)	Cardias Collins (D-IL)
Jim Cooper (D-TN)	William Dannemeyer (R-CA)
John Dingell (D-MI)	Dennis Eckart (D-OH)
Jack Fields (R-TX)	Ralph Hall (D-TX)
Claude Harris (D-AL)	Dennis Hastert (R-IL)
Clyde Holloway (R-LA)	Peter Kostmayer (D-PA)
Richard Lehman (D-CA)	Norman Lent (R-NY)
Thomas Menton (D-NY)	Edward Markey (D-MA)
Alex McMillan (R-NC)	Tom McMillen (D-MD)
Carlos Moorhead (R-CA)	Michael Oxley (R-OH)
Bell Richardson (D-NM)	Mathew Rinaldo (R-NJ)
Don Ritter (R-PA)	J. Roy Rowland (D-GA)
Dan Schaefer (R-CO)	James Scheuer (D-NY)
Philip Sharp (D-IN)	Garry Sikorski (D-MN)
Jim Slattery (D-KS)	Gerry Studds (D-MA)
Al Swift (D-WA)	Mike Synar (D-OK)
Bill Yauzin (D-LA)	Edolphus Towns (D-NY)
Fred Upton (R-MI)	Henry Waxman (D-CA)
Ron Wyden (D-OR)	

Don't forget to refer to H.R. 1674 SEC. 8 Interception of Cellular Telecommunications.

THIS IS IMPORTANT, ACT NOW, DON'T DELAY, this bill was quickly passed through the Subcommittee on Telecommunications and Finance with no public input on the scanner portion of the legislation. Let's make sure that there is plenty of input this time. Write NOW!!!!!! WE DON'T HAVE MUCH TIME. (22-Aug-91/Bob Gehri/Kirk Baxter/SW ECHO)

A journalist covering the ban on scanners capable of receiving cellular radio frequencies (which is contained in HR.1674, a bill authorizing the FCC's 1992 budget) says that Congressional staffers who wrote the bill are very pleased that "so few complaints" have been received about the proposed ban. The bill will be voted on when Congress returns from its August recess.

So this is a reminder to spread the word as far and as fast as possible, and CALL, FAX or WRITE to your Congressman, the House Telecommunications Subcommittee and/or the House Commerce Committee, as soon as possible. It does zero good to post cynical comments about Congress' radio ignorance or addiction to cellular donations. It DOES do some good to post copies of model letters that you've written to Congress. It does even more good to encourage everyone you know to write or call to protest Section 8 of H.R.1674.

Note also that the staffers who drafted this section apparently think that the language extending the ban to scanners "readily modifiable" to receive cellular could lead to a GENERAL ban on scanners...and that is part of their intent. So clearly, you don't have to enjoy listening to cellular to suffer the consequences of this draft bill. On the other hand, that may be the clue to a possible compromise: delete Section 8, paragraph (b) which refers to modifiability....at the very least. (23-Aug-91/Robert Horvitz/INTERNET)

This is the body of the letter I wrote to my Congressman concerning HR 1674. I have avoided expressions of self-interest (interference with what I want to do technically, my "radio reception" rights, etc.), and tried to speak to what I think is the heart of the matter: this ban is an ineffective legislative remedy to what should be a technical security problem.

Hon. _____
US House of Representatives
Washington, DC 20515

Dear Mr. _____:

I urge you to work with your colleagues to amend HR 1674, the proposed Federal Communications Commission authorization act, to strike Section 8 of the bill. Section 8 legislates a ban on the sale of scanning radio receivers capable of receiving cellular telephone conversations.

Section 8 of HR 1674 is a futile attempt by the cellular telephone industry to assure cellular telephone users that their conversations are private. The attempt is futile because millions of scanners that are capable of receiving cellular conversations have already been sold. In addition, older television sets that can receive former UHF channels 70-83, and newer "cable-ready" television sets are capable of receiving cellular telephone conversations.

The proper and effective way for cellular telephone service providers to ensure the privacy of cellular telephone conversations is to provide cellular telephone equipment that encrypts (scrambles) phone conversations. In other words, the remedy is technical, not legislative.

The current bill as it stands would do little or nothing to enhance cellular telephone privacy, and would be used by the cellular industry to provide a false sense of security and privacy to cellular telephone users.

As one of your constituents, I urge you again to strike Section 8 of HR 1674. Thank you for your consideration of this matter.

(06-Sep-91/Dan Halbert KB1RT/INTERNET)

****SCANNING WITH THE EXPERTS****

Sunday, 8 September 1991

Rachel Baughn
Editor, Monitoring Times
P.O. Box 98
Brazstown, NC
28902

Dear Ms. Baughn,

As a subscriber to Monitoring Times, I am writing to express my concern over a particular MT columnist who is using space in his column to promote his own, separate financial venture.

I'm pretty sure that you've received other letters about this, and therefore already have an idea as to who & what I'm talking about. If not, I am complaining about MT columnist Bob Kay's "Scanning Communications" tests -- a financial venture otherwise not connected with Monitoring Times or Grove Enterprises.

Months ago, when I first read about the tests, I thought it was a joke. While I often find useful information in Kay's 'The Scanning Report' column, I have yet to see printed the credentials which he -- and Monitoring Times -- believe makes him qualified to prepare the mail-order 'exams' and level the various titles upon people who pass these tests.

Of course if people choose to take these 'exams,' that is their own prerogative, much like some people pay money to grace themselves with "registered monitor" status.

What concerns me more is that Monitoring Times magazine allows Mr. Kay to continually utilize his column as a vehicle used to promote this separate venture of his. In the current (SEP 91) issue, Mr. Kay even names the individuals who have paid the \$30 and passed the 'test' to be labelled as a "Scanning Communications Expert." Kay goes on to say that there is only one way to see if you too can be a "Scanning Communications Expert" (of course by paying him \$30 & taking his test(s)...). To top it all off, Mr. Kay requires people who simply want to try the "Expert" level test to still pay for the equivalent of taking the two other levels!

In addition to his regular payment as a MT columnist, Kay has made at least \$360 from the people who have taken & passed his "expert" test (not to mention the people who took the other test levels, and the people who paid but flunked). I think it is about time Bob Kay buy commercial advertising space in Monitoring Times, and not corrupt his otherwise very good monthly column.

Sincerely,

Tim Tyler

(08-Sep-91/Tim Tyler/INTERNET)

****A NOTE FROM INTREPID BRUCE****

I just returned on August 5th from my trip to Beijing, China from July 29th. I was picked up at the airport at 9:25 PM Monday night by Zhong Guo Hua, who does 'Current Affairs' on Radio Beijing and Dai Yi Rong, a Radio Beijing Reporter, who said she would be my guide. I stayed at the Beijing International Hotel. The next morning my guide and I ate Breakfast and then I was told to be up on the 2nd Floor for a News Conference. Turned out it was the kick off of 'China Tourism 92' and the Chinese Press including TV and the English Press were there. Zhong Guo Hua explained how the competition was run. There were 80,000 participants and I was the number 1 winner, from what I was told. Other winners were from Russia, Poland, Pakistan, Italy, and Japan. We all had separate rooms and had individual guides. On the 30th and 31st, we went to Chengde to receive our prizes and was accompanied by a Chinese Video Crew that was shooting a Tourism Movie using us as the Stars. In Chengde we received our prizes again in front of Press and TV Cameras. That night we were on CCTV. We also gave thank you speeches and I made a tape of the whole ceremony. It was truly exciting and was not expected by any of us. We then spent the rest of our time visiting sites in Beijing accompanied by a Video Crew. I believe this Tourism Movie is to be shown on Air China for tourists coming to China.

As for Shortwave Listening, Mr Hibi from Japan and I spent one whole night on the roof of a hotel in Chengde listening to the radio. The VOA came in clearly in English and Chinese and the jammer was barely heard. Radio Australia as well as BBC and The Christian Science Monitor Station was well heard. Also heard Voice of Vietnam on 15009 as a local and also heard 'All India Radio' on 7412. This was my best opportunity to listen to the Radio as when I was in Beijing at night, I spent my time at a 'Karaoke Bar' along with the gentlemen from Italy, who I learned was a Communist Party Trade Union Boss as well as a friend of Dario Monferini's, 'Mr. Play DX'. At the Karaoke Bar, I talked to Miss Li Li Yu who spoke Japanese and Chinese and a little English. I acted as an interpreter for the Italian who only spoke Italian. I also sang 'Only You', which I tape recorded and my last night in Beijing, Miss Li Li and I sang 'Love Me Tender'.

I was interviewed by Radio Beijing's 'Zhong Yuen' and will be on 'Listener's Letterbox' this Sunday. Also, I was interviewed by China Daily, the English Language Newspaper at 4 AM in the morning, the morning I left Beijing. I made a lot of friends, came home with a CPBS Tie Clip after visiting Radio Beijing, met Li Dan and Steven Crandall (who wrote the article in the San Francisco Examiner about Radio Beijing and the Student Democracy Stuff). Had a good time and am suffering from 'Culture Shock'. (08-Aug-91/Bruce MacGibbon/SW ECHO)

****LATE LOGS FROM OPERATION DESERT STORM****

Having seen a couple of messages....about...listening during Desert Storm and other comments about that eventful period, I thought I might relate my own experiences...although there would not be room to account for them all.

I was based as a civilian working for Telecom Australia International, in Riyadh Saudi Arabia from March '90 to May '91. At the time of the Kuwait invasion in August '90 I was back in Oz on vacation, and arrived back in Riyadh a week or two later. Again in January I was on holidays and my masters were adamant that this time I had to be back before Saddam's deadline of January 15!

As a SWler since the early '60s I had taken a Sony 2001D with me and used it for my own listening as well as providing a relay of BBC & Radio Australia within our compound (living area...like a small suburb with a wall around it) to other Aussies, via a cable FM radio service, using the Sony's programmable timer. This worked really well, even while I was on vacation in Australia it worked unattended and was much appreciated by my fellow

****DESERT STORM (cont.)****

workers.

Local radio and TV in Saudi Arabia, while available in English for many hours daily, is quite limited in its content and presentation compared with what we're used to and overseas broadcasts are listened to regularly by the very large expatriate workforce from Africa, South and South east Asia not to mention the many westerners. Just about every model of radio and hi fi unit on the market there includes SW bands, including the very popular Sony mini 'FH' and larger range of stereo units. As I indicated in reviewing them for the '91 WRTH, even digital car radios with SW are readily available, and analogue tuned MW/SW units are fitted as standard equipment on some Nissan and Toyota cars.

As early as late September 1990, very soon after allied forces started arriving, we in Riyadh were treated to "Desert Shield Radio" operated by US forces radio. Initially all that was relayed was a satellite feed of the AFRTS program inserts with cues announced for recording by relay stations, and many sporting descriptions. Later we got contemporary music which was a boon to us all and even many Saudis, some of whom had western education, tuned to it. By November the British too had a relay of BFBS operating on FM in Riyadh.

As soon as I arrived back in Riyadh on 12th January, the pace of things hotted up. Shortwave radios were very hard to get in the shops, particularly good ones. Everybody was being issued with gas masks, and emergency plans for possible evacuation were being discussed. We had been assured that Scuds would not be able to reach Riyadh or at least be shot down before they reached it: so much for promises! We had air raid alerts about two days after the war started, and on the Sunday night were all treated to a frightening display of pyrotechnics as patriots tried to intercept scuds at 1 am in the sky immediately over our heads! On the Monday night Jonathan Marks telephoned me for an interview on radio and the shortwave scene in the middle east, and was rudely interrupted by another alert, as some of you may have heard at the time. Tuesday morning I had had enough and removed myself a safe distance to Jeddah for a few weeks.

There I was able to watch the war in comfort on TV, and having left my 2001D in Riyadh, was forced to buy a Sony 7601 to be able to listen to the news as Jeddah did not have any allied radio stations on FM. The other point of interest here is that Saudi TV used CNN for its news of the war, but censored it considerably. The first two days of the war they did this 'live', with the announcer intruding as appropriate, but later they recorded it and played everything back 6 hours after the rest of the world had seen it! It was definitely a good time for SW radio, just as the last week or two have again been with the goings on in the USSR. (27-Aug-91/Jerome Van Der Linden/SW ECHO)

As a Radio Officer on a very large hospital ship during Gulf War, I had a "front row" seat to the various comms going on. I carried a Pro-80 with me when off duty when walking around flight deck, and heard some very interesting communications, especially at night. Troops were using night-vision equipment on patrols, and their descriptions of what they were seeing were very exciting, especially the night the war started. (The war started on my watch around 2 am Gulf Time, and we had an idea about when hostilities would start, and Captain of ship and I had several tape recorders set up in radio room). Some of the exciting tac freqs I found were:

- 6600 - Used very much the night the war started
- 6646 - Many 2 letter call signs, for example, yw de yf, etc.
- 6736 - Seemed to be used by joint forces, many foreign accents
- 6697 - Joint Forces, tactical call signs
- 6808 - Scrambled voice, very strong when we were off coast of Kuwait
- 6675 - Tactical used by Navy Medical Net to Diego Garcia
- 6655 - Tactical
- 6895 - USB, Various accents
- 6650 - Arabic (the enemy) walled jamming - The arabic would get very frantic during the bombing raids. Probably Iraqi troops.
- 6640 - U.S. Tactical freq, heard troops in field running phone patch for newspaperman from Atlanta Dispatch during first few days of war.

The tactical communications consisted of either plain-language USB or if going scrambled, a burst of high-speed data (which probably sent the key to the following scrambled voice) then the scrambled voice. Voice channel is broken up into various frequency bands, and these bands are transmitted mixed-up according to a predetermined key. Comical sounding at first. Also, on 6693 heard many female voices speaking arabic. I also had my PK-232 and Icom 720 with me, and talked to quite a few servicemen who had brought ham gear with them in order to run Mars messages back to States. I had amtor comms with W6KSI in New Orleans and VK8TN most nights, until we went on radio silence for 58 days before and during war.

Will try to post more info if I ever get the boxes unpacked with my notes and tapes. I heard some very exciting comms during the 6 months I was over there. Our primary news source was BBC, and on the hour you could see little groups of servicemen standing on flight deck listening to BBC news. Every type of short wave receiver imaginable could be found amongst the crew. When close to Saudi Arabia we could sometimes get CNN Video News on a local station that transmitted this feed continuously. One of the crew obtained a Pal TV, so we copied CNN and placed a NTSC camera in front of the monitor, and piped that into ship's entertainment TV's in the various crew messrooms/lounges. CNN definitely had best coverage, but we could rarely get it. (31-Aug-91/Jim Overstreet/SW ECHO)

****DOC, THERE'S THIS ELF LIVING IN MY HEAD****

Here is a strange one. I live in Upper Michigan, site of the controversial NAVY project ELF. For those who do not know, ELF (EXTREMELY LOW FREQUENCY) is the Navy's Submarine Communications System, which operates on the SUPER low frequency of 70 hz, with a multi megawatt transmitter that feeds a HUGE antenna system that goes from REPUBLIC township here in Michigan's Upper Peninsula, all the way to Clam Lake Wisconsin. (This is the world's LONGEST antenna).

After going through a number of names (Sesferer, Sanguine, ELF) and being voted down again and again by the residents of our fair state, the system none the less went in, and is now fully operational. I have a friend who lives less than 6 miles from the transmitter. The

****ELF (cont.)****

power company, the cable company and others have had to do all sorts of things to get the LOW FREQUENCY RF out of his phone and power systems. But And this is the weird part.... They can't get it out of his head.

He claims he "HEARS" the ELF transmitter INSIDE his HEAD. He says it even wakes him up. Now this guy is no wacko, and I don't think he is making this up. He can not copy CWV, and in any case ELF would be encrypted text. BUT he says he had no problems until the thing went to full power. I have encouraged him to begin logging the transmissions. He just bought a DX-440 (On sale) and is getting more and more interested in communications. He also got a computer and modem, and is a satellite dish owner, and pretty level headed.

I think that if his logs match the navy logs, he might have a case at least to find out WHY he is hearing the transmissions. I suspect it is the old "molar detector" where the amalgam used in teeth fillings has formed a diode detector in his teeth. He has not told anyone besides his wife until yesterday, when we were discussing radio propagation and antennas. He was actually quite embarrassed by the whole thing, but he has agreed to an interview, which I am going to do, and you might actually hear on one of the DX shows eventually.

I am wondering if there are any urban (or suburban) legends along these lines. I have heard lots of tales of when WLW was running 500,000 watts. Well, this transmitter makes that look like a walkie talkie....

If nothing else, it is a pretty interesting story, and one that CAN be at least partially verified (though I doubt that the navy will confirm or deny his logs).

If it were me, I would be looking for a high powered lawyer.....
(23-Aug-91/Gary Bourgeois WBBOH/INTERNET)

****DIGITAL AUDIO BROADCASTING, or A LITTLE DAB'LL DO YA****

This article on digital audio broadcasting appeared in a British sci/tech magazine. Fox, Barry. "Radio sans frontieres." New Scientist, vol. 131, no. 1778, July 20, 1991, pp. 29-32.

"We have solved all the technical problems," says Egon Meier-Engelen, manager of the project (Eureka EU-147), who works for the German Aerospace Research Establishment (DLR) in Cologne, which coordinates EU-147. "The only remaining challenge is to find a suitable radio spectrum to carry the service." "...Researchers have rushed to prove the system in time for the next World Administrative Radio Conference, to be held in Spain next February. ...The DAB team wants to use the lowest radio frequency bands still unallocated, which are around 1500 megahertz, because the atmosphere disrupts terrestrial signals transmitted at higher frequencies. If the WARC administrators agree, the system could be in service [in Europe] by the mid-1990s."

Goes on to discuss multipath problems. Discusses noise-reduction techniques. "For DAB, broadcasters want to group at least 16 stereo radio programmes together in slices of the radio spectrum, each with a frequency bandwidth of 7 megahertz. ... Each stereo sound channel would be accompanied by at least 4 kilobits per second of extra data that could be displayed on small liquid crystal screens close to the radio receivers. The additional information could provide news, traffic flashes, or details about the radio station or music being played."

"Because the DAB system is so resistant to multipath interference, it can also cope with areas of overlap between different transmitters operating on the same frequency. This means that a DAB network can operate across the entire country on a single frequency." This could include direct satellite reception or relay from ground stations.

"...The National Association of Broadcasters in the U.S. is vehemently opposed to the idea of broadcasting digital radio from satellites, which Europe favors. The NAB represents the 11,000 local radio stations that currently serve the U.S., most of which cover only small areas of the country and rely on advertising to stay in business. If satellites blanket large areas, many local stations are likely to go out of business as advertisers switch their allegiance to broadcasters with the biggest audiences.

Meier-Engelen says that satellite broadcasting is inevitable: "NAB cannot avoid this. It will happen. The Canadians will use satellites anyway." "For once, Japan is streets behind Europe. Japan's Ministry of Posts and Telecommunications has licensed six consortia to provide a national digital radio service. But the Japanese broadcasters use conventional digital coding, ...Programmes can only be received with an accurately aligned satellite dish and the Japanese system will not work in cars." (12-Aug-91/Jim Hobbs/INTERNET)

****HAPPY RADIO FOR HIGH FLIERS****

WASHINGTON, D.C. (SEPT. 8) PR NEWSWIRE - USA TODAY announced today that it will launch a service to provide live radio on commercial aircraft. The venture will be called USA TODAY Sky Radio and will deliver live news and sports to passengers through the audio systems already installed on many commercial aircraft. Broadcasts will be in 1992. USA TODAY Sky Radio will use a customized radio channel that will be delivered to aircraft via satellite technology. A constant program wheel of live news, financial reports, sports scores and weather reports will be offered throughout the day. Additionally, USA TODAY Sky Radio plans to offer live professional and college sports during evenings and weekends. "USA TODAY has become the news source for travelers who want to know what happened in the past 24 hours and what will happen in the next 24 hours. USA TODAY Sky Radio is the perfect fit for airline passengers who want a quick update on the news as it happens," said USA TODAY Executive Vice President and General Manager Thomas J. Farrell, who will oversee the project. News and other special programming will be generated from a programming center in the Washington area. Programming will be supported by sponsorships and commercials. USA TODAY will provide the service through a partnership with Washington, D.C.-based FliteCom Systems, Inc. FliteCom has spent more than a year developing the Sky Radio technology and service. FliteCom was formed by Richard S. Cooperman, I. Don Brown and Richard M. Neustadt in 1990. For USA TODAY Sky Radio, Cooperman becomes president, Brown becomes executive vice president and Neustadt becomes vice president/strategic planning. USA TODAY, with nearly 6.6 million daily readers, is the USA's only national, daily, general-interest newspaper. Published via satellite at 33 locations nationwide, the newspaper is available throughout the country. USA TODAY's international Edition, which is printed at two locations in Europe and Asia, is available worldwide. CONTACT: Steven Anderson,

****USA TODAY SKY RADIO (cont.)****

Manager of Public Relations of USA TODAY, 703-276-5872 or (home) 703-771-8042.
(15-Sep-91/Mark Huff/SW ECHO)

****GENE SCOTT FLIPS OUT****

Monday Gene Scott, the controversial TV/Radio preacher is scheduled to begin his new 17 hour a day shortwave service on WWCR from Nashville. This will compliment his already running 24 hour a day satellite service on Westar 5, transponder 1X (2 in dog channels)....

Well Sunday, Scott blew his cork, as he often does, and those of us with satellite got to see it all live.

First at 2pm Eastern, his regular church service. Only on Satellite do you get all the nice Baroque music and scenery before Scott walks out on stage. When the curtain went up, Scott noticed that the "Cathedral" (The old United Artists Theatre in downtown Los Angeles) was not full. So he spent 30 minutes chastizing the congregation and then he walked off the stage.

For the next three hours, we were treated to a shot of his chair empty while big band music played.

Then he came to the studio, and proceeded to FIRE his entire staff, and jump around and yell. He went out of focus and turned red. He singled out one volunteer, an attorney, and had the guy up on camera, and proceeded to rip him down one side and up the other. He said he did not NEED the money from the Los Angeles people to build his shortwave station, since he could sell the "Cathedral" and buy SIXTY of them.

After a while, he did calm down a bit, but maintained his hard line, then replayed the Sunday service, and then back to the empty chair. From there it was back to the afternoon show, but they have not rerun the part where he "lost it".

And tomorrow he begins his world wide 17 hour a day service. I suspect he will continue to rerun his hollering show, minus the part where he looks slightly insane. Scott has for the past few years, especially the last year been losing his temper more and more, and acting a bit Hitlerian.

He sure is not the guy he used to be.
(30-Jul-91/Flesh Hoser/USENET/SW ECHO)

****SIMPLE QSL REQUEST COLLIDES WITH REALITY****

Today I received what has to be the most unusual QSL I have ever received, or ever will receive in my life. The letter is typed (most likely on a manual typewriter, some letters have been struck harder than others), there are corrections in both handwriting and correction fluid. The letter was posted from Kobe, Japan and bears a D.P.R. of Korea return address. I have tried to reproduce it verbatim, including the capitalization (Korea is capitalized throughout, north and south are always in lower case). For obvious reasons, I am withholding the name of the sender as well as his address.

J.J. Hitt
6400 South Gessner #2077
Houston, TX 77038
U. S. A.

Dear Mr. J. J. Hitt, July , 1991

I found your name and address at the office of Radio Pyongyang, when I visited a friend of mine working there. But I could have no chance to read what you wrote because there was a secret police watching me. Everywhere you go in my country, you will find secret police. I am a student of the Kimilsung University in Pyongyang, and I am going to tell you why I hate my communist government and my communist leaders in my country.

Since 1948 we north Koreans have been ruled by the totalitarian communist rule under the dictatorial leadership of President Kim Il-sung. Kim Il-sung became our first president in 1948 and he is till our president for 41 years. How many years your president occupies the office of presidency? For his life time like our President Kim Il-sung? When the communist party and a communist government were established in my country in 1948 under the auspices of Soviet troops occupied our country after the World War II, our communist leaders built up enormous military forces numbering now 1.2 million. The U.S. Defense Department announced lately that our north Korean military forces amount over one million which is the 5th largest military power in the world today along with the Soviet Union, China, the U.S. and India. We have total population of 20 million, but just think of over one million soldiers, that is one out of 20 persons. That is the number of regular armed forces.

You have to remember there are other para-military forces which are not included in the number of regular armed forces. They are named "Red Youth Guard" consisting of 880,000 youths and students, 400,000-strong "Peasant Guard" and 124,000-strong "People's Guard." If you add the regular and para-military forces together, the total number of our armed forces is over 2 million. Therefore, my communist leaders have turned my country into a fortress full of oldiers everywhere in my country.

Do you know why my government leaders maintain such a large number of soldiers? It is because it is very easy for them to keep the entire populace under strict control and surveillance when the peoples are under military orders.

Nevertheless, now my communist leaders are talking about peaceful unification of the Korean peninsula which was divided into the north and the south Korea. If they really want to reunify our country peacefully, why do they need such a large number of oldiers? The main motives behind building up such an enormous armed forces is to communize south Korea by force one day. Once in 1950 my government forces invaded south Korea by surprise all-out attack, but they were completely defeated by the U N forces consisting of mainly of the U S forces at the time.

While my communist leaders are building up military forces, we north Koreans are suffering from severe shortages of food, clothing and housing because the most national resources have been consumed to maintain the military power.

****PYONGYANG PLEA (cont.)****

Please do not believe what my government broadcasts say and what my government publications talk about. Do you remember what happened to all socialist countries in East Europe? Do you know all the communist parties in East Europe have been collapsed in the twinkling of an eye? You will see what will happen to our communist ystem?

Please write to me if you can, and tell about the world outside.

Looking forward receiving your letter,

Sincerely,
[Name withheld.]

I rather doubt that I will write back to this student. I do not think that it would be in his best interest. What little I can do is to post it here and give him/her a much wider readership than what was hoped for. (16-Sep-91/J.J. Hitt/SW ECHO)

****LOOK OUT! IT'S A METEOR BURST!****

Hundreds of thousands of tiny pieces of space junk strike the Earth's atmosphere every day. Most of this stuff is moving between 18 and 40 miles a second and burns up leaving a long thin ionized trail in the upper atmosphere much like an antenna. Depending on the size and speed of the individual meteor, the trail will remain for a fraction of a second up to minutes. Most trails last a few seconds. Now these ionized trails can be used to reflect radio signals. The best reflections occur in the 30 to 60 Mhz range.

Equipment to utilize meteor trails is usually in the 100 watt class with a directional antenna having a half power beamwidth of about 60 degrees in order to illuminate as large a common atmospheric space as possible. The transmitter repeatedly sends a piece of data listening in between transmissions for an acknowledgement from the intended receiver. Only after receiving an acknowledgement will the transmitter send the next piece of data. This is called ARQ packet transmission. With micro-meteors occurring very frequently, a useable trail becomes available every few seconds and throughput is quite good.

The Forest Service uses such equipment in the Western states to interrogate snowfall accumulation sensor stations located in inaccessible mountain locations. This data is used to predict spring runoff. The military has also used this technique for secure communications.

Another communications technique, back scatter transmission, appears similar to meteor burst communications, but works on an entirely different basis. In scatter, a very powerful transmitter beams UHF or microwave signals at a volume of sky and reflections, or scatter, from ordinary air molecules allows a receiver beyond line of sight to receive the transmission. This method has been used commercially by the phone company to service off shore installations such as the Florida to Cuba path. It requires very high power, in the megawatts, and very sensitive receivers, but is 100% reliable 24 hours a day.

The requirements for reliable meteor burst communications are relatively modest and can be met with modest amateur radio equipment. If you would like to experiment with this technique, get a 100 watt 8 meter amateur radio and a packet TNC with maxframe set at 1 and retries set to infinity. A small 3 element beam is helpful, but not required. Get a friend 500 to 800 miles away to acquire a similar setup and you should be able to reliably exchange data.
(15-Aug-91/Gary Coffman KE4ZV/Internet)

****PRAISE THE LORD AND PASS THE ANTENNA TUNER****

There is a "fun" side to the job the international Gospel broadcasters take so seriously. I got this one from a TransWorld Radio retiree:

...What TWR does (as do many) is to get people in very remote places listening, exchanging letters to encourage them to cluster and form a little "church." When one cluster seems firm enough to warrant it, they fly in a missionary for a visit. Now, this is thrilling stuff to people who are so remote they don't really even have an airstrip, and there are plenty of them.

So, the TWR story goes that a group had formed in a remote section of the Amazon Basin, and they were ready for the bush-pilot missionary to fly in. They cleared a landing strip from instructions by mail (Pilots reading this will probably cringe, but it shows you how intent these missionaries are!). The date was set; the bush-pilot missionary took off and located the cleared area in virtually trackless outback, and swooped over it several times, to make sure he could see no hazards to a reasonably safe landing. Of course, the people swarmed out for the great event and visitor from the other end of the radio. He landed and they welcomed him warmly. ...It just so happened that as he was arriving, they were having a church service, so he got swept right over to the "church" the natives had built, to be there for the ending of the service. After calm settled back in, the local "pastor," who had learned everything he knew about Christianity from the shortwave radio, delivered a benediction to his flock, saying: "...So be sure to tune in again next week, same time, same frequency!"

Obviously, the missionary had some teaching to do while he was there.
(08-Sep-91/Don Kimberlin/SW ECHO)

****OLD VOA SITES, RADIO HISTORY, ... AND NOT A PEEP OUT OF "ALICE BRANNIGAN!"****

Here are some interesting parts of a discussion which rambled on for several weeks in late August/early September. Since it ran off on several tangents, I've attempted to edit replies into the appropriate spots to make it an easier read. - AQ

ANDY SENNITT: ...until some time in the 70's (I forget exactly when) all VOA's transmitter sites announced themselves at sign on...

AL QUAGLIERI: If my memory is correct, they all had call signs too. There was a big antenna farm about 10 miles east of here in Schenectady which dated back the the infancy of shortwave radio. Built sometime in the early '20s by General Electric, the station,

****OLD VOA (cont.)****

W2XAD, relayed the broadcasts of AM station WGY. Combined with a receiving site in nearby Greenville, the facility was responsible for keeping the 1929 Byrd South Pole Expedition informed, and in turn relayed live audio from the Expedition itself. I believe in the late '40s, the site was upgraded and became VOA relay stations WGEO and WGEA (the former with antennas beamed toward Europe, the latter to South America). I recall seeing the huge towers, situated adjacent to the New York State Thruway, on family car rides in the late '50s. It was still active when I got into shortwave, circa 1962, but not for long thereafter. The antennas set dormant for the better part of the '60s, and were then torn down. The site is now the home only to WGY's enormous, solitary mast. A few months ago sneaked onto the site for a look-see; all that remains of the once-mighty operation are some concrete tower footings and the foundation of the transmitter building.

STEVE COLETTI: I remember WBOU and, "This is the Voice of America Transmitter at Bound Brook, NJ". These seemed to be used at the same time but on different transmitters from the same place. The "Bound Brook" may have been a phase out period.

DON KIMBERLIN: The Bound Brook, NJ plant had been CBS' original shortwave broadcast transmitter plant from the late 1930's, as I recall from a high school buddy whose father was an engineer there. As part of CBS' interest in the whole matter, they would buy some "store bought" transmitters, build some, try out different antennae, and such. That, of course, was in an era when network broadcasters had the funds to spend for trying out new things....

ROGER STARK: About the old VOA sites, the two here in California were both private, as well. One in Dixon, about 20 miles southwest of Sacramento was originally KNBH and was NBC's shortwaver (before the NBC TV station of the same name). The one in Delano, in Central California near Fresno was originally KCBR, a CBS-owned station. I don't believe Dixon does anything for VOA anymore, except act as standby and do some contract work. Delano still does the Latin American VOA service mainly. I believe VOA dropped the callsigns about 1983, the official statement at the time being that the different signs were confusing to listeners. The typical ID was "This is the Voice of America transmitter, KCBR, Delano California." I do think they used the callsign WLWO for Cincinnati, Bathany Ohio, and possibly the original Greenville unit. Another interesting history is KGEI, the Far East Broadcasting station licensed to San Francisco. It's actually in Redwood City, about 35 miles south of SF, and operates nights mainly on 9815 in Spanish. KGEI was started by General Electric in 1939 for the World's Fair, I'm told mainly as an experimental station. At one time it was operated as a front for one of our better-known governmental agencies as part of an anti-Castro campaign. (18-Aug-91/Roger Stark/SW ECHO)

GLENN JOSEPHSON: There IS a VOA site at Bathany, that's still quite active. As a matter of fact, they recently got fitted up with new transmitters. It *is* inaccurate for Passport to list the Bathany relay site as Cincinnati, as it is not only not in Cincinnati, it's not even in Hamilton County. John Vodenik (who works there, and posts from this BBS) could probably place it better, but I think it's actually closer to Dayton than Cincinnati, but it's a distance from Dayton also.

CHRIS STAMPER: Actually, I think Passport may have listed the Queen City because it is easier to find on a world map than Bathany. I lived in the Tri-State for 18 years and traveled to Dayton regularly and I've never once been to Bathany. The VOA Bathany site is only a few miles from the big WLW transmitter in Mason. Is there a Bathany-WLW connection?

BRIAN CARLING (in a mag about VOA Bathany, Ohio): Any idea how much power they are running? It's a wonder the local residents don't try to sue and blame VOA's RF for all their ailments!

JOHN VODENIK: Brian, to clear up the question of how much power we run...here at Bathany we have 6 250 kW. AM transmitters, and 2 50 Kw. ISB feeder transmitters. This comes to a total carrier power of 1.6 Megs. When you include the antenna gains, of from somewhere between 16 and 18 dB, then the ERP gets really BIG. OK, in a message to you from Chris Stamper, you were questioning the history of Bathany. Well, Bathany started as part of the Office of War Information, sometime around 1938 or 39. The Crosley Broadcasting Co. was under contract to OWI to build and operate Bathany, which they did, until about 12. Bathany didn't get absorbed as such, as it always was there. Bathany was the name of the telephone exchange where the program lines ran through. The relay station is located in Westchester, and has a mailing address of Mason, Ohio. The "town" of Bathany is about 6 miles northwest of the station, and has two bars and a gas station. Bathany relay is about 23 miles north of Cincinnati, and 30 miles south of Dayton. WLWO was the call of the old shortwave transmitter located at the present WLW site. Bathany had three calls: WLWL, WLWR, and WLWS. The other two transmitters were at the WLW site, and they were WLWO and WLWK.

ROGER STARK: Gee, I could have sworn that VOA Bathany used to ID as WLWO. It couldn't have been Greenville. I think Greenville was built for VOA and didn't even have a call. What else could it have been? I distinctly remember hearing the WLWO call in the early 60s. Oh well. You mention the present WLW site. Do you mean that WLW now operates a SW? Or did WLW move from a past location to the SW site?

DON KIMBERLIN:...I gotta say you're right on that, John. I've been listening when you fire up that big hog on 9590 for BBC for several years, and it puts out a LARGE signal! (Makes me want to assure the chap from Dayton who asked on here if he can hear BBC on a small radio!) ...With the rather uniform antenna gains you mentioned, it sounds like your antennas are still curtains and not the log periodicals lots of newer plants use, with their variable gain with frequency. Question: Are they steerable ones? I got some books from Deutsche Welle about their Julich beast (9 x 500 kW!), and was amazed to see that "steerable curtains" are a mass of motors and cables that actually move the curtain elements around. Such a plant must need a crew of riggers on hand at all hours to keep it working! And, I have heard BBC on the air, steering their curtains, I swear. You can tune in their 12095 that's on to Africa, and hear it "fade up" a good 30-40 dB within 30 seconds always during a station break. Definitely no carrier breaks, sudden jumps in level or nothin'. Fascinating when you can visualize what's going on with 50 Amps or so of

****OLD VOA (continued)****

antenna current!

JOHN VODENIK: OK, we USED to run BBC English on 9590, but that was about 2 years ago. We now run BBC Spanish, at 1300, on 17850 kHz., and O.A.S. at 2346 on 9589, and 11930 kHz.

ANDY SENNITT: Brian, you may be interested in this little gem from Sennitt's bottomless pit of useless information - years ago it was reported that farmers within a 7 kilometre radius of VOA's megawatt mediumwave relay at Ban Pacht, Thailand, used the RF to power electric lighting. The station used to sign on shortly before they milked the cows in the morning, and stayed on until daylight. It signed on again at dusk and remained on until bedtime. The locals got free electric light exactly when they needed it. So there can be benefits too!

PLONI ALMONI: I was under the impression that these sites were bought from the private interests and were owned by VOA. And I have been led to believe that Dixon is totally closed. Do you have later info??

ROGER STARK: Yes, they were bought, but kept using the old callsigns into the early 1980s. As to Dixon, the info I had as of about 2 years ago was that the facility is mothballed, available on contract (such as United Nations Radio and things like that), but hadn't been used in several years. While I haven't been on tour of the place, the last time I drove through Dixon, about a year ago, there was still a VOA sign at the plant. (21-Aug-91/Roger Stark/SW ECHO)

DON KIMBERLIN: Thanks for that interesting (to me, at least) information. The father of one of my high school chums had been a transmitter engineer at CBS' shortwave plant at Bound Brook, New Jersey, near New York City, which also had been taken over with VOA operations in early VOA days. He would describe incidents of his dad (and others) who would light off one of the 60 KW transmitters hooked into a 30 dB gain Sterba curtain antenna aimed at Europe, set the VFO in the 20 meter ham band, and plug in a mike to say softly, "Anybody out there hear me?" Well, 50 megawatts effective toward Europe from the East Coast on 20 meters gets a lot of replies! They never had the nerve to establish a QSO, though. When I worked for AT&T in its point-to-point and High Seas station at Fort Lauderdale, we had transmitter engineers who would do the opposite. They'd hook a test bench signal generator into an unused rhombic antenna and try QRP on CW with 50 milliwatts or so. They could often work Australia or New Zealand with no problem.

I'm curious about a couple of points of California radio geography:

1.) RCA, of course, was started from the beginnings that Marconi had made in the U.S. I have a book from 1921 that describes the monstrous low-frequency stations Marconi had underway at the time of the RCA takeover, operating 150 to 300 kilowatt spark transmitters. These things were amazing electrical powerhouse brutes full of machinery. A typical one was described as having its own 500 horsepower steam turbine power plant, for example! But, the transmitter plant working Hawaii was said to be at "Bolinac, CA," while its receivers were at "Marshall, CA." Can you identify these as any later RCA location?

ROGER STARK: Yeah, that's right. Bolinas is a hippie enclave about 20 miles (30 km) NNW of San Francisco. Marshall is about 15 miles further NNW from Bolinas. Just south of Marshall is a town called Marconi! Not much to it, though. They dismantled the Bolinas station a few years ago and a caller on a local board here knows the guy who got to cannibalize the equipment. I think most of it dated from the 30s-40s. The Bolinas station was right next to the greatest nude beach on the West Coast.

PLONI ALMONI: RCA Bolinas is of course their big transmitter site. As far as I can tell, it is still in the same place that it was in 1921. RCA Point Reyes is the receiver site - right next door to ATT's KMI plant. It is "almost" in Marshall (across Tomales Bay) and it, too, dates from the early 1920s.

DON KIMBERLIN: Then it's kind of what I suspected, that what had originally been the locations of the Marconi plants really are in the same place as they started. I have a 1919 book with photos of the beastly machinery that Marconi had to build to create his half-megawatt sparks ... incredible machines. When they finally got into HF radio, RCA must have taken tons of steel and copper to the dump! ...And the locations, of course, were very remote in the early 1920's, I'm sure. Plan drawings of the properties indicate things like a "chief engineer's residence," and a "hotel." The capital investment (in 1920's terms) must have been enormous.

DON KIMBERLIN: 2.) By the 1960's, RCA had a landline international telegraph center with Telex exchange in "Lodi, CA." I understand that's somewhere near Sacramento. Could it by any chance be one of the historic RCA/Marconi locations? Think that's still in operation today as part of RCA Global Communications, now owned by MCI.

ROGER STARK: Lodi is 40 miles (60 km) south of Sacramento or 70 miles NE of SF. I'm unaware of any stations in the area, but I don't know much about Lodi, except that it's hot and Creedence Clearwater Revival didn't want to be stuck there again.

PLONI ALMONI: Lodi is north of Stockton, quite a distance from both San Francisco and Sacramento. The site is a hardened blockhouse, very close to ATT's similar center. It was constructed "from scratch" as a switch, and the site was selected only for its proximity to ATT.

DON KIMBERLIN: Thanks very much for clearing up where "Lodi" is/was. I did plenty of time around RCA Global at Broad Street and later when the built what has been variously called "Kingsbridge" (the name of the industrial park it was in) and "Piscataway" (the name of the NJ town Kingsbridge Industrial Park is in), but never quite understood the rationale for Lodi. Kingsbridge, by comparison, was not hardened, nor particularly remote, nor particularly close to AT&T. It seemed more to be simply getting away from expensive Manhattan real estate, with 86 Broad Street destined to become a subscriber exchange for the 12,000 or so NY City subscriber lines.

****OLD VOA (continued)****

ROGER STARK: To be honest, I wasn't aware that RCA was a Marconi spinoff. I knew it had been founded by GE, AT&T, Westinghouse and who knows who; and that David Sarnoff had worked for Marconi (allegedly making history by intercepting the mayday from the Titanic), but I was unaware of any RCA-Marconi connection.

JOHN ROSS: You are correct about the relationship between Marconi and RCA. RCA was created at the behest of the U.S. Navy in order to keep total control of wireless communication out of foreign hands.

DON KIMBERLIN: In fact, a couple of books I have from that era speak in very careful terms about how Marconi was "encouraged" by the U.S. government, supported by the British government, to sell his properties to the new/RCA (message garbled) piece of RCA in about 1927, as a part of the haggling between broadcasters and "the phone company" about how the communications pie should be sliced up among all the Big People. ...Talk about Donald Trump being something new??? Ha!!!

JOHN ROSS: It was a patent pool among Westinghouse, General Electric, AT&T, and United Fruit (if you look real close at those cartoons of Chiquita Bananas, you'll see a little antenna hidden in the fruit on her hat!). Marconi was most emphatically NOT part of that group.

FRED HATFIELD: I immediately took mine out of the refrigerator and looked closely. You're right!

DON KIMBERLIN: To the point of an "RCA-Marconi connection," it was more than that. Part of our American history that's not loudly published is that in WWI, the U.S. government did something they like to say they never do. They expropriated German-owned property in the U.S. That included AGFA-Gavaert's film and dye company, which became AGFA-Anasco, and ultimately General Aniline and Film, of GAF Corporation as you know it nowadays. Similarly, AEG-Telefunken was here and got its 1910-style primordial beasts of radio stations (that were based on German technology for arc transmitters—ever hear of the Joly-Arco transmitter? A beast that could electromagnetically multiply its radio frequency; fascinating thing—and Goldschmidt Alternators) taken over by the U.S. Navy which wasn't anxious to give them back after the war. Along this train of thought, our government was said to be "nervous about having foreign interests controlling communications." Back in England, the government had dogged near stolen Marconi's properties from him, despite all he had done for them, after going there because his home country, Italy had refused interest in what he accomplished in radio in the 1890's. So, it seems he was "encouraged" to sell his properties on U.S. soil to a "new American company" called RCA...In fact, since the British also forced him out of the business, splitting his assets between the British Post Office and Imperial and International Communications (today part of Cable & Wireless), Marconi got pretty well screwed out of all that he had developed and given the world. ...Not a nice story at all, when you really know all its parts....And, the U.S. Navy also seized the German stuff here in WWI, also, all the Goldschmidt alternators and such that AEG-Telefunken had built in the U.S. I think the new RCA wound up with those stations, too, as a kind of "reparations" from Germany after WWI. RCA was "encouraged" into existence with shares held by Westinghouse, GE and AT&T. AT&T sold out their piece in the late 1920's when some further government action made it clear that AT&T wasn't welcome to try to monopolize radio broadcasting as it was clear AT&T wanted to. ...Hope that bluster of history is of interest to you. It's fairly well documented in government record and textbooks specific to broadcasting and such.

JOHN ROSS [to Don Kimberlin]: A slight addition to your account of the start of RCA. United Fruit was also a member of the RCA patent pool, along with GE, AT&T and Westinghouse. Not so strange if you think about it—they used wireless communication to advise their ships full of bananas which coastal port was buying fruit at the best price, an directed them to deliver the fruit there. That part of United Fruit later became Tropical Radio & Telegraph.

DON KIMBERLIN: That's incredible, seeing as United Brands (which wound up owning United Fruit, which owned Tropical Radiotelegraph), renamed the company to TRT Telecommunications and sold the stock to the public. TRT still operates one marine shore station at Pearl River, LA, but its main business has become worldwide wireline communications. TRT's history goes clear back to the earliest days of marine radiotelegraphy before WWI, when some smart Boston fruit brokers adopted a brand-new technology to be able to send diversion messages to their ships to land at ports where the prices were best. That grew into owning the plantations and putting radios there. That extended to opening a public telegraph service, which expanded into opening international radiotelephone for most of the "banana republics." When I joined AT&T at Ft. Lauderdale, AT&T actually rented space from TRT for its HF control and receiver plant, had its transmitters in a TRT plant at Ojus, with TRT employees running them, and worked TRT on the other end as the correspondent "international phone company" of the other country. So, there's real reason for the antenna in Chiquita Banana's turban (which I never noticed), but that was long ago. I doubt the artists now know why it's there. (09-Sep-91/Don Kimberlin/SW ECHO)

JOHN ROSS: Oh my gee! I think I've started a piece of folklore! Wonder how long it'll be until United Brands formally denies that there's any antenna in the picture?

DON KIMBERLIN: Recent posts here about historic shortwave broadcasting sites caused me to dig into some old books on radio that are part of my own prized collection. I'd like to exchange posts with others who might have some of this history - in small bytes. Anyone who gets inspired by this can likely find some bits on public library shelves around section 621.388, the section that often has old books about radio, because the librarians don't know if they should toss them out. So, if this inspires you to do so, stop into a local library (I have found college libraries tend to keep books the longest) and share it with us: (From "Radio Theory and Operating," by Mary Texanna Loomis, copyright 1928, page 632: "Radio broadcasting on short waves, not beam transmission, is being given to the citizens of the British Empire and Dominions, as well as amateurs throughout the world, by a public-spirited amateur, Mr. Gerald Marcuse, of station 2NM, in Caterham, Surrey, England. Crystal control is used at this station with 1-kilowatt power amplifier. Broadcasting is done for two hours per day on wavelengths of 23 or 33 meters - 13,044 or 9,090 kilocycles. The crystal is ground for 130 meters, and the output subjected to two stages of frequency doubling to obtain the frequency doubling to obtain the frequency of

****OLD VOA (cont.)****

32.5 meters. The last frequency passes through three stages of amplification. Each amplifier stage is neutrodyne. The crystal drive is housed in a screen compartment. The modulation is the orthodox choke control, and the input from the line transformer is coupled straight to the filament and grid of the sub-control valve. The aerial system is of the Zeppelin type and is found to be equally efficient on both wavelengths. It is stated that the British Broadcasting Corporation, stirred by the success of Mr. Marcuse in broadcasting speeches and musical programs on such short waves, is planning a short-wave broadcasting station at Chelmsford, Essex. They expect to work on 24 meters with a power of 25 kilowatts. The call will be 5SW."

(A photo accompanies the article, saying it is courtesy of the magazine "Wireless World." It shows the transmitter built on the walls of a room, complete with rotary DC generators on the floor.)

JOHN ROSS: "... the Post Office proceeded with the building of a high-powered long-wave valve transmitting station at Rugby. This was opened for telegraphic transmission on 1 January 1926 and for short-wave telephonic communication with America later in the same year.

DON KIMBERLIN:...That certainly is the GFEX brute my book says was a Hillmorton, near Rugby. It was 1 megawatt input, 540 kilowatts in the antenna...with SEVEN Amps antenna current! To provide the 6000 Volts DC needed at enough current for the final amplifier, they had three 500 KW DC generators in operation. The final amplifier at GFEX is described as being three "units" with EIGHTEEN ten kilowatt "valves" in each...what a monster...all to produce one Morse-keyable carrier! ...What interests me is that the article says the "valves" were made by "Western Electric" in New Southgate, England. Wonder what AT&T's Western Electric was up to in England in the 1920's? Opening a factory just to make those tubes was obviously not all there was to it.

FRED HATFIELD: Western Electric was into producing many products, including commercial broadcasting equipment and components. Indeed, you can find sewing machines, vacuum cleaners, etc. made by WE. I personally own the predecessor of a 1/4" hand drill that has a prominent WE label. In the depression, the manufacturing plant in Cicero, Illinois kept its employees on the payroll by utilizing their manufacturing machinery to make many home products - even jigsaw puzzles! I still have a Western Electric tube manual around the cottage somewhere. Eventually through the use of consent decrees, WE was limited by the government to producing only communications equipment.

DON KIMBERLIN:...And the operation to run telephone calls to the US at Hillmorton is just mentioned in passing. Obviously, since WECO was in England, AT&T had more to say than just "Let's try it out, old chap!" Of course, a lot of people don't know that back in the US, RCA was formed at government behest back in 1918 with Westinghouse, GE and AT&T getting together to force Marconi to sell his stuff out to the new RCA....

...And, I wonder what the hams (and indeed, the commercial broadcasters on here) think of those Beasts of the Megalithic Era of Radio...our own sort of dinosaurs, I'd say! Anybody have anything about others? The Germans and French at least also built some real beasts in those days of radio yore...

****FROM THE HAM BANDS****

DX BULLETIN 40 FROM ARRL HEADQUARTERS NEWINGTON CT SEPTEMBER 13, 1991

THANKS TO PAUL, KB1BE, NAO, NX1L, AND THE CONNECTICUT DX ASSOCIATION FOR THE FOLLOWING DX INFORMATION.

SAINT BRANDON ISLAND, 3B7. JACKY, 3B8CF/3B7, IS ACTIVE FROM THIS INDIAN OCEAN ISLAND. HE IS WORKING ON 7006, 14036, AND 21036 KHZ WITH CW, LISTENING UP, FOR SSB, LOOK FOR HIM ON THE DX NETS ON 14160, 14266, 21336, AND 21365 KHZ. QSL TO HOME CALL 3B8CF. THIS ISLAND COUNTS THE SAME AS AGALEGA ISLAND, 3B6, FOR DXCC PURPOSES.

ALBANIA, ZA. IARU ANNOUNCES ALBANIA WILL BE ON THE AIR AS EARLY AS MONDAY, SEPTEMBER 16, WITH AN INTERNATIONAL GROUP OF INSTRUCTORS AND OPERATORS. THE CALLSIGN WILL BE ZA1A, CHECK 14020, 21020, AND 28020 KHZ FOR CW, AND 14146, 21246, AND 28346 KHZ FOR SSB. QSL ROUTE FOR THE INITIAL OPERATION IS NORTHERN CALIFORNIA DX FOUNDATION INC, PO BOX 1, LOS ALTOS, CA USA. BUREAU CARDS GO VIA W6A0AT.

AFTER THIS INITIAL OPERATION THERE WILL BE LOTS OF ACTIVITY BY BOTH LOCAL AND VISITING AMATEURS, INCLUDING THE CQ WW SSB CONTEST IN OCTOBER.

MYANMAR, BURMA, XZ. THE XYORR DXPEDITION BY THE RUSSIAN TEAM LED BY ROMEO, 3W3RR, MADE OVER 60,000 CONTACTS BEFORE GOING QRT SEPTEMBER 11. THEY WERE ON CW, SSB, AND RTTY, INCLUDING WARC BAND ACTIVITY. QSL TO OMEG STEPANENKO, BOX 812, SOFIA, 1000, BULGARIA.

MARSHALL ISLANDS, V73. NEW OPERATOR KEN, V73ZX, CAN OFTEN BE FOUND ON 28380 KHZ. HE WILL BE ON THE MARSHALLS FOR QUITE SOME TIME.

JUAN DE NOVA, FR/J. YOLAND, FR6AI, EXPECTS TO OPERATE AS FR6AI/J FROM OCTOBER 16 THROUGH NOVEMBER 28 FROM THIS INDIAN OCEAN ISLAND.

LIECHTENSTEIN, HB0. FRANK, HB9NL/HB0 WILL BE ACTIVE FROM SEPTEMBER 7 TO OCTOBER 19 ON ALL BANDS 160 THROUGH 10 METERS, INCLUDING THE WARC BANDS, USING CW, SSB, RTTY AND ARQ. QSL VIA THE BUREAU OR DIRECT TO HB9NL.

DX BULLETIN 39 FROM ARRL HEADQUARTERS NEWINGTON CT SEPTEMBER 6, 1991

THANKS TO TEDD, K8BNW, AND THE OHIO/PENN PACKET CLUSTER NETWORK, FOR THE FOLLOWING DX INFORMATION.

BANGLADESH, S2. JIM SMITH, VK9NS, REPORTS THAT THE BANGLADESH TELECOMMUNICATION BOARD HAS VOTED TO OPEN UP AMATEUR RADIO IN S2 LAND.

****FROM THE HAM BANDS (cont.)****

IT WILL BE INTERESTING TO SEE IF LICENSES WILL BE ISSUED TO FOREIGNERS AS WELL AS NATIONALS.

SOUTH GEORGIA, VP8. GM4KLO, QSL MANAGER FOR MANY VPB STATIONS, SAYS TO LISTEN FOR CW ACTIVITY FROM THAT ISLAND VERY SOON.

MORE FROM THE SAGINAW DX FORUM. TED, K8NA, MENTIONED THE VOTE FOR JARVIS ISLAND WILL BE DURING THE WEEK OF SEPTEMBER 30.

PREFIX HUNTERS. IN CELEBRATION OF BOTSWANA'S 26 YEARS OF INDEPENDENCE, THE PREFIX A26 WILL BE USED IN PLACE OF A22, AND A28 IN PLACE OF A24. THESE PREFIXES WILL BE IN EFFECT FOR SEPTEMBER AND OCTOBER 1991.

STOP, BACKSPACE, AND EDIT, OR CORRECTIONS TO ARLD037. KAN MIZOGUCHI OF JARL HOLDS THE CALLSIGN JA1BK, NOT JA2BK AS STATED IN THE BULLETIN. NCDXF HAS NO OFFICIAL INVOLVEMENT IN PROVIDING OPERATORS IN ALBANIA'S RETURN TO THE AIRWAVES.

DX BULLETIN 37 FROM ARRL HEADQUARTERS NEWINGTON CT AUGUST 30, 1991

THANKS TO THE TEDD, K8BNW, AND THE OHIO/PENN PACKET CLUSTER NETWORK, FOR THE FOLLOWING DX INFORMATION.

REPUBLIC OF GUINEA, 3X. 3X0HNU IS NOW QRV, MOSTLY WITH LISTS AND NETS, BUT SOME FREESTYLE. QSL TO F8FNU.

GUANTANAMO BAY, KG4. DOUG, KG4DD, WILL BE REDUCING HIS OPERATING IN MID-NOVEMBER AND GOING QRT IN MID-MARCH. HE HAS BEEN ACTIVE ON RTTY AROUND 14085 KHZ BETWEEN 2200 TO 0630Z, AND ALSO VERY BUSY ON 17 METERS, BOTH RTTY AND SSB. CHECK 3900 KHZ AROUND 0300Z MOST EVENINGS. DO NOT SEND CARDS TO THE KG4 BUREAU. QSL TO DOUG DONLEY, PSC 1006 BOX 66-892, FLEET POST OFFICE, AE 09693-0066.

BANGLADESH, S2. ERIK, WZ8C, WHO WAS OFF THE AIR FOR A MONTH, IS NOW QRV SIGNING S21NO. HE WILL BE OPERATING ON ALL BANDS UNTIL THE END OF SEPTEMBER. WFWL. QSL VIA W4FRU.

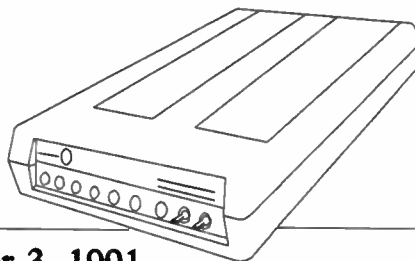
SOUTH ORKNEY ISLANDS, VPB. BRIAN, VPBCFM, HAS BEEN ACTIVE ON 12 METERS AROUND 2100Z, AND 17 METERS AROUND 2330Z. QSL VIA GM4KLO.

(Copied "off-the-air" by WB8BDY/RADIOSPORT BBS)

***Thanks to all those SWL's,
DX'ers, and other radio
types whose active
participation on computer
BBS's has made the
preceding possible!***

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Shortwave Online Digest



Volume 1, Number 5

December 3, 1991

Compiled by Al Quaglieri, NN2U
P.O. Box 888, Albany, NY 12201-0888

Many, many thanks to all of you for your replies to last issue's "write-me-or-else" sabre rattle. Your positive comments and support have been duly reported to Santa. As for the long wait for this issue (SOD 4 was dated - gulp! - September 20), I have several nearly-acceptable excuses: 1) very little "hard info" came down the SW ECHO pike until early November; 2) by mid-November, I was swamped with other work; 3) then I came down with the flu. Oh, alright, let's add 4) I'm also a lazy, disoriented, disorganized procrastinator. So sue me.

In response to overheard grousing, I upped the typeface size this issue.

Despite the caveats plastered all over the preceding issue, one editor went ahead and told the general public to write me for a sample of this swell new publication. Aargh! Polite refusals have been mailed, and I'm now hoping the whole thing just goes away. A gentle reminder: this is designed to be a limited-circulation newsletter; please help me keep it such.

SOD #6 sometime in January. Promise. Meanwhile, here's wishing everyone a happy holiday season, and a healthy and prosperous 1992!

****AUSTRALIA****

3XY Melbourne 1422 has closed, and after 66 years 5AD Adelaide on 972 has called it a day and closed down also. (14-Nov-91/Arthur Cushen/R. NEDERLAND MEDIA NETWORK/Al Quaglieri/SW ECHO)

Not quite correct. Reference to WRTH will see that 5AD was on 1323kHz. Two MF stations transferred their operations here in Adelaide to FM: 5DN which was on 972 has become 5DDN on 102.3 FM, while 5KA which was on 1197kHz has gone to 104.9 FM, with its call becoming 5KKA. On 1197, we now have radio for the print handicapped. (21-Nov-91/Jerome Van Der Linden - Australia/SW ECHO)

Radio Australia is using 11720 from 1130-1530, which is also being used by VOA. (14-Nov-91/Arthur Cushen/R. NEDERLAND MEDIA NETWORK/Al Quaglieri/SW ECHO)

Tenders for the two additional 250 kW transmitters at RA Darwin have closed and are currently being considered. Mum's the word at this stage though. If I am permitted to reveal who tendered, I'll let you know. (03-Oct-91/Jerome Van Der Linden/SW ECHO). Since its been made public in the Commonwealth Gazette, it must be ok to let you know that Thomson CSF won the tender to supply the two new 250/300kW transmitters. Delivery is to be by March '93. I understand the design is a new (untried?) one, being a 'cut down' version of their 500kW job. (15-Nov-91/Jerome Van Der Linden/SW ECHO) Are those the first Thomson rigs for RA? I think they have a good reputation. They were the ones who installed the massive facility in Iraq at Salah el Deen which got destroyed in the Gulf War, and I wouldn't be at all surprised if they pick up another contract to rebuild it. Thanks for the update. (19-Nov-91/Andy Sennitt/SW ECHO)

Tasmania: Summer Time UTC +13 commenced 6 Oct 91.
S.Australia: Summer Time UTC +10 1/2 commenced 27 Oct 91.
Vic, NSW & Qld: Summer Time UTC +11 commenced 27 Oct 91.
W.Australia Summer Time UTC +9 commenced 17 Nov 91.
(Nov-91/DX Australia/Bruce MacGibbon/SW ECHO).

****AUSTRIA****

ORF to the Far East with German at 1300, English 1330-1400, is now on 15450 (ex-15430) and 11780. The announcement still

****AUSTRIA (continued)****

says "15430 on the 25 meter band..." (25-Nov-91/Tom Sundstrom/SW ECHO)

AUSTRIAN SHORTWAVE PANORAMA: a look at developments in communications and DX-news:

Sun	1130	6155, 11780, 13730, 15450, 21490
	1330	11780, 15450
	1530	6155, 11780, 13730, 21490
Mon	0630	6015 (via RCI)

KURZWELLENPANORAMA (German, 25 min, my favourite):

Sat	0505	6015, 6155, 13730, 15410, 21490 kHz
	0805	6155, 13730, 15450, 21490
	1005	6155, 13730, 15450, 21490
	1105	6155, 11780, 13730
	1405	6155, 11780, 13730, 21490
	1705	5945, 6155, 12010, 13730
	2005	5945, 6155, 9870, 13730
	2330	9870, 13730
Sun	0205	9870, 9875, 13730

DX-TELEGRAMM (German, 5 min):

Sun	0055	
	0555	6015, 6155, 13730, 15410, 21490
	0855	6155, 13730, 15450, 21490
	1155	6155, 11780, 13730
	1555	6155, 11780, 13730, 21490
	1755	5945, 6155, 12010, 13730
	2055	5945, 6155, 9870, 13730

FLASH DES ONDES (French):

Sun	1930	5945, 6155, 12010, 13730
	2230	5945, 6155
Mon	0030	9875, 13730

(RAINER HENRICH - Switzerland/USENET/11-09-91/Kirk Baxter/SW ECHO)

****BELGIUM****

Relays of RTBF Radio 1 HS programs in French on SW are broadcast as follows: 0500-0700 Mon-Fri 17140, 17680; 07-0730 7140, 17680; 12-1230 9925, 21460; 17-1815 15540, 21460. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

****BOLIVIA****

New station is R. Horizontes, Cobija, Pando. Noted 1130-1230 on 4542.5 (Juan Carlos Codina/DSWCI Shortwave News/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)[Yep, the credits have finally become longer than the item..ed.]

****BOTSWANA****

VOA's new shortwave relay station in Botswana will begin broadcasts December 6, 1991, at 1600 UTC. Initially, two 100 kw transmitters will be used. Two more will follow next year. The schedule of transmissions will be:

7265 kHz	0300-0500 UTC	English
11940	0300-0430	English
15370	0430-0500	Portuguese
15370	2200-2300	Portuguese
15445	1600-2200	English
17705	1630-1730(M-F)	Swahili
17705	1730-1830	Portuguese
17870	1830-2030	French
17870	2030-2100(M-F)	Hausa
17870	2030-2100(S-S)	French
17870	2100-2200	French
17870	2200-2300	Portuguese

The first night the station is on the air it will stay on all night with special programming in English. The schedule for this extended broadcast, beginning at 2300 UTC on December 6, 1991, is:

2300-2400 on 11895 and 15370 kHz
0000-0100 on 11895 and 15300 kHz
0100-0200 on 11725 and 15300 kHz
0200-0300 on 6130 and 11725 kHz

A special QSL card will be available for reception of the Botswana Relay Station. Reports should be sent to the normal VOA address:

Audience Mail
Voice of America
330 Independence Ave., SW
Washington, DC 20547
U. S. A.
(Nov-91/Dan Ferguson/VOA BBS)

****BULGARIA****

Radio Sofia is almost unreadable in NA now. Its World Service in English: 0400-0615 11765, 11720, 9595; 1830-2000 11735, 11720, 11680, 9700, 9650, 6035; 2045-2130 11735, 11680, 9560; 2245-0100 11950, 11720, 11680, 11660, 9700, 9595. This data per the sign-on announcements heard 23 Nov 2245 UT on 11660 and 9700. As the 2245 release wears on, virtually all frequencies are buried by co-channel interference. I can't hear any of the 04 frequencies. (25-Nov-91/Tom Sundstrom/SW ECHO)

****CAMBODIA****

Voice of the People of Cambodia, on 4910 and 6090, has extended its broadcasts to 1600 (from 1430); the External Service in English continues on 11938 at 0100 and 1200. (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****CANADA****

I live in Gresham, Oregon and haven't heard CKFX on 6080 for months now. Are they no longer on the air? (Bruce MacGibbon/SW ECHO)

****CHINA****

Central People's Broadcasting #1 heard quite well in Oregon on 17765 with open carrier at 2057 then orchestral music at 2058 then woman announcer with talk then the usual time pips and the time in Chinese and then the news. I can barely hear the VOA underneath it. Now when I was in Beijing, China July 29-August 5th, I could hear the Voice of America real strong in Chinese, so apparently the Chinese Government isn't worried about the Chinese Students or people hearing it there. So do you have any information as to what part of China, the VOA is being strongly jammed by this transmission or any other Central People's Broadcasting transmissions. Would appreciate a reply. (24-Sep-91/Bruce MacGibbon/SW ECHO)

At 2058 CPBS-1 at 2058 suddenly there on 17765 with VOA signing on underneath. On the frequency of 15395 which was CPBS-1 yesterday, today Oct 23, I heard the VOA signing on at 2059 and at 2100 Man with ID "The following program is in Mandarin. (23-Oct-91/Bruce MacGibbon/SW ECHO)

On November 11, I noticed that 4950 and 3990 (listed in WRTH 91 and PWBR 92 as Shanghai (VO Pujiang) were relaying CPBS Network 1 parallel 12040, 7504, 5880 & other freqs I'm sure but not checked. 4950 and 3990 both signed off at 1555" as listed. (11-Nov-91/Bruce MacGibbon/SW ECHO). This morning I rechecked on 4950 and 3990 and they were both carrying VO Pujiang from Shanghai, so possibly my ears deceived me yesterday morning. I'll check to see if this happens again. (12-Nov-91/Bruce MacGibbon/SW ECHO)

****CHINA (continued)****

Someone mentioned recently that they hadn't seen any new copies of "The Messenger" magazine by R. Beijing lately. Today I got a very nice edition (Volume 2, #6 Nov-Dec 1991) of it. The schedule that came with it is dated as valid beginning November 11, 1991 (no release date). Here's the North American portion:

0000-0100	9770 11715
0300-0400	9690 9770 11715
0400-0500	11695
0500-0600	11840
1200-1300	9665
1400-1600	7405

Qinhai PBS, Xining, has this sked for its services: Chinese program: 0925-1535 & 2225-0030 on 666, 3950, 4940 (unconfirmed), 6262.8. Tibetan program: 0355-0540, 1025-1355, 2255-0100 on 1251, 6500. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Fujian PBS, Fuzhou, has this sked: 1st program: 0850-2050 on 558, 612, 882, 1370, 1424(unconfirmed), 2340, 4975, 5040; 2050-0600 on 558, 612, 882, 1370, 1425(unconfirmed), 2340(unconfirmed), 4975, 5040. 2nd program: 0250-1600 & 2120-0000 on 1467. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Hubei PBS, Wuhan broadcasts the following services: Provincial service: 0850-1530 & 2125-0615 on 774, 1494, 3940. Wuhan City Service - 1st program: 0730-1500 & 2130-0515 on 873. Wuhan City Service - 2nd program: 0350-1430 on 1053. (Nov 91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Guangxi PBS, Nanning is listed from 0925-1600 & 2150-0515 for 792, 1071, 1440, 4915. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Sichuan PBS, Chengdu, is listed with the following services: 1st program: 0345-0550, 0945-1515 & 2155-0135 on 612, 909, 1116, 6060, 7225. 2nd program: 0950-1315, 2150-0530 on 1089, 5900. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Radio Beijing has made their winter switch to English at 1400-1600 on 7405. (14-Nov-91/Bruce MacGibbon/SW ECHO)

Heard Radio Beijing in English at 0400 on 11695 via French Guiana ex 11685 on Nov 16 which had a Spanish numbers transmission on it. (15-Nov-91/Bruce MacGibbon/SW ECHO)

I note R. Beijing has moved back to 9665 (ex-15225) at 12 UT to eNA. As of this morning, the old frequency is still being announced. (16-Nov-91/Tom Sundstrom/SW ECHO)

On 23 Nov Radio Beijing continues to announce old schedules prior to sign-off of its various transmissions. In addition to the NA changes previously posted, other changes noted here include 15170 (ex-15110) via Mali at 20 and 21 and 7170 (ex-9880) via the USSR at 22. (25-Nov-91/Tom Sundstrom/SW ECHO)

Guangxi PBS heard on 4915 signing off at 1600 with "Sing Praise To The Motherland". Used to signoff at 1630 I believe. (26-Nov-91/Bruce MacGibbon/SW ECHO)

Radio Beijing's FAX number is 011 86 1 801 3175. My economy period cost was \$3.50 for one page. (30-Oct-91/Tom Sundstrom - NJ/SW ECHO)

****COOK ISLANDS****

DX Australia member Jimmy Cullen informed me after his honeymoon in Raratonga that Radio Cook Islands frequency of 11760 was inactive! (via Ian Baxter) (Editors note: Was this info gained directly from the station or from monitoring? If it came as a result of monitoring, caution should be observed as when we were last in Raratonga 11760 was not audible on the opposite side of the island to the antenna - yet the station was on air when we visited the airport area.) (Nov-91/Don Rhodes' "Radio Activity" column, DX Australia/Bruce MacGibbon/SW ECHO)

****COTE D'IVOIRE****

Heard at 0509 on 7215 in French with woman and man announcer. At 0513, a listener called in to station. Also at recheck at 0605 a listener called the station. This on 11/11. As Cote D'Ivoire is listed to sign on at 0600, I will do further checking nitely to see if this is a change or just was something special. (11-Nov-91/Bruce MacGibbon/SW ECHO)

****CUBA****

The following data on Radio Havana Cuba was gathered through several conversations I had with Arnie Coro, CO2KK, host of "DXers Unlimited" on 17 November on 10m SSB, a telephone conversation 22 November and on 23 November on 10m SSB. Coro is working with RHC engineers on its frequency usage and has access to all the appropriate documents. The information doesn't get any better than this.

****CUBA (continued)****

Radio Havana Cuba: to May 1992

<u>965</u> CA cNA	(pair of curtains) 50 kw	1100-1400 *2230-2300	Spanish Esperanto (Sundays only) (336 deg)
		*2300-0200 *0200-0430	Spanish English
		* may change to either 13700 or vicinity or 9775-9915.	
<u>6180</u> Carib	50 kw	0300-0400 0400-0600	French English
<u>9505</u> SA Carib	250 kw 75 kw	0900-1100 1100-1650	Spanish Spanish (curtain @ 160-deg pair of dipoles 6db gain)
<u>9550</u> CA	250 kw	0000-0400	Spanish
<u>9620</u> Carib Carib Carib	75 kw	2100-2200 2230-2300 2300-0600	Creole Esperanto (Sundays only) Spanish
<u>11760</u> cSA NA/CA/SA	100 kw	1000-1050 1100-1700	Quetchua (curtain) Spanish (omni-directional dipoles)
NA/CA/SA NA/CA/SA NA/CA/SA NA/CA/SA wNA		1700-1730 2300-0200 0200-0300 0300-0400 0400-0600 *0600-0800	Esperanto Spanish Creole French English English (curtain @ 315 deg)
		*may change to 31m tentative 9550 maybe January.	
<u>11875</u> wSA nSA	100 kw 100 50 50	2230-2300 2300-0600 1100-1700 1700-1730	Esperanto (Sundays only) Spanish Spanish Esperanto (Sundays only)
<u>11950</u> eNA	(CO2KK-designed broad-band curtain of dipoles/reflector) 250 kw	0000-0600	English
<u>11970</u> nSA	50 kw	2200-2300 2300-0600	Arabic Spanish
<u>15105</u> (rhombic) swEu/Medit	100 kw	0630-0730 0730-0830	Spanish Portuguese
<u>15300</u> (rhombic) cSA	100 kw	0900-1145	Spanish
<u>15340</u> c&eSA	50 kw	1000-1100 1100-1700	Portuguese Spanish (may change to 16m band in January)
		1700-1730 2200-2300 2300-2400 0000-0100 0100-0200	Esperanto (Sundays only) Portuguese Guarani Quetchua Arabic
<u>15230</u> eSA	50 kw 250 kw	1100-1700 1700-1730 2230-2300 2300-0600	Spanish Esperanto (Sundays only) Esperanto (Sundays only) Spanish
<u>15415</u> CA CA	50 kw	1400-1700 1700-1730	Spanish Esperanto (Sundays only)
<u>15425</u> (curtain) Medit/sEu	50 kw	1830-1900 1900-2000 2000-2200 2200-2230	Esperanto (Sundays only) Arabic Spanish Esperanto (Sundays only)
<u>17705</u> (curtain or rhombic) Eu	100 kw	1830-1900 1900-2100 2100-2240	Esperanto (Sundays only) English French
<u>17750</u> wSA	100 kw	1200-1700 1700-1730	Spanish Esperanto (Sundays only)

****CUBA (continued)****

17770 (rhombic)

Medit/sEu	1830-1930	Esperanto (Sundays only)
100 kw	1900-2000	Arabic
	2000-2200	Spanish
	2200-2220	Esperanto (Sundays only)

USSR relays

				My interpretation of ITU zone #s
7215	2100-2200 2200-2300	French English	ITU 27.28	Eu
9515	1800-2000 2000-2100	Spanish Portuguese	ITU 38.48.53	eAf
9590	1800-2000 2000-2100	Spanish Portuguese	ITU 28.46	eEu/wAf
9600	2100-2200	French	ITU 37.46	n&wAf
9760	1800-1900 1900-2000 2000-2100	Arabic French English	ITU 38.39.47.48.52.53	ME/eAf
11920	1800-2000 2000-2100	Spanish Portuguese	ITU 38.39.48.52.53	ME/eAf

DXers Unlimited

Su 0135,0335,0535,0735
 Tu 1935,2235
 We 0035,0235,0435,0635 <= note change to first hour)
 Sa 1915,2215
 (24-Nov-91/Tom Sundstrom/SW ECHO)

Via a November 27 telephone conversation with Arnie Coro, CO2KK, of Radio Havana Cuba: Here's a 90 meter DX challenge for listeners. With love and care and pampering, Cuban engineers have refurbished an early 1940s transmitter and put it in on the air. Located in Havana, the transmitter runs 500 watts (using Eimac 450TH tubes) into a low dipole on 3365 kHz. Assuming no breakdowns, the intent is to keep this transmitter on the air 24 hours a day. The audio is fed via telephone line from the national radio network Radio Rebelde. (One parallel on SW is on 5025 kHz). The audio sounds a bit constricted when compared with other Radio Rebelde outlets on MW and SW. This transmitter is intended to serve the mountainous areas of western Cuba. MW coverage is poor, especially in the deep valleys. The low dipole should produce a high skywave angle and afford good coverage. Reception reports should be addressed to Arnie Coro at Radio Havana Cuba. He's asked me to remind all listeners that the mail service is very, very slow... 9 months in some cases... so those waiting for QSLs et al should be patient. I tuned in 3365 while Arnie and I were talking (circa 7 p.m.) and the signal was quite good here. He had the opportunity to listen via the telephone to both 3365 and 5025, and he was surprised how good the 3365 reception was. (27-Nov-91/Tom Sundstrom/SW ECHO)

****CYPRUS****

There are some new frequencies for the External Service of the Cyprus Broadcasting Corporation. Programmes in Greek beamed to the United Kingdom are on the air every Thursday, Friday and Saturday at 2215-2245 UTC via the BBC East Mediterranean relay station, and the winter frequencies are 6180, 7125 and 9770kHz. (26-Sep-91/ANDY SENNITT/SW ECHO)

****CZECHOSLOVAKIA****

Radio Prague International to NA at 00, 01, 02, 03 and 04 has moved to 9540 from 11685. At 00 the additional frequencies are 11990 and 7345. At 01, 02, 03 and 04 the additional frequencies are 7345 and 5930. I find 7345 is consistently the best here (in NJ). (25-Nov-91/Tom Sundstrom/SW ECHO)

FM in CSFR is available on the 88-108 MHz range. I heard many CSFR-stations. Since I didn't have a 66-72 MHz receiver, I don't know how much is still available on that range. The BBC-WS is on 101.1 MHz in Prague and to my surprise it's on 92.6 in the Brunn/Brno area. Radio Plus, the French/Czech station, is on 96.6. Europe-2, the French music station, is on 88.2 I wonder if many Prague people understand French? In a few cities there were also rock music stations which sounded quite good, apparently non-commercial and had a wide variety of music. In the Tri-State area of Poland/Germany/CSFR there were only one or two FM stations. I suspect they rely more on the 66-72 MHz range there. Unfortunately I couldn't identify the Czech/Polish stations, the language is too difficult! The foreign service of Radio Prague (Inter-Program) is on 6055, 1071kHz and on 92.6MHz in the Prague area (FM only from 0800 to 0900 local time). The other SW freq's I don't recall. The programs consisted mainly of tourist information, I didn't hear any news program. To me it was quite boring. They switched to German/English/French during course of their programming. (11-Oct-91/Jurgen Bartels/SW ECHO)

****ECUADOR****

Hot news just hit Colorado from HCJB...I just talked with HCJB in Miami, and they will be moving their WORLD WIDE HDQ to Colorado Springs, Colorado in June 1992. They will be bringing 20 to 25 employees from the Miami and Quito offices, and will be hiring 20 to 25 employees from the Colorado Springs and Denver areas. This was announced on local TV on Oct 7th. (10-Oct-91/Rob Harrington, NONNI/SW ECHO)

****ESTONIA****

Radio Estonia's FS broadcasts are listed as follows: 0800-0900 Sun Finnish, 09-0930 Sun Swedish/Esperanto, 10-11 Sat Finnish, 1030-11 Mon-Fri Finnish, 16-1630 Mon-Fri Finnish, 16-17 Sat Finnish, 21-2130 Mon-Fri Swedish (also Esperanto Thursday), 2130-22 Mon/Thursday English, 2130-2200 Estonian. All on 1035 & 5925. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

****FINLAND****

For W91, Radio Finland has introduced a new service in Russian to Asia and Australia. The service is scheduled from 1045-11 on 15245 & 17800. (Bob Padula/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Radio Finland English Service schedule, 9-29-91 -- 3-28-92 (NOTE: some programs 5 minutes shorter on Saturdays)

0230-0250	11755 9580	North America
0730-0745	11755 9580 6120	Europe, Mid East, Africa
0900-0925	21550 17800	Australia, Asia
0925-0955	17800 15245	Australia, Asia
1230-1250	15400 (M-F)	North America
1330-1350 (M-F)	21550 15400	North America
1400-1455 (S-Su)	21550 15400	North America
1430-1500 (M-F)	21550 15400	North America
1505-1530	21550 15440 11755	North America

1930-2000	11755 9730 6120	Mid East, East Europe
2230-2250	9730 6120	Europe, Mid East, Africa
2230-2250	11755	Europe, Mid East, Africa
		Australia, Asia

(21-Oct-91/Jari Perkiomaki - Finland/USENET/Kirk Baxter/SW ECHO)

****FRANCE****

The English broadcast in English to the Far East 1230-1300 is using 11670 and 15195; from 1400-1500 it's on 11910. (14-Nov 91/Arthur Cushen/R. NEDERLAND MEDIA NETWORK/AI Quaglieri/SW ECHO)

****GERMANY****

In Rostock I read a newspaper stating that the whole staff of Radio Mecklenburg-Vorpommern (RMV) (TV & Radio) will be laid off by the end of this year. Norddeutscher Rundfunk (NDR) who apparently will take over that area has offered everyone a position on a 1 year trial basis. Radio DT64 (Youth radio of former GDR) will close down by the end of this year, for one day they broadcasted a "pirate radio" in order to protest that decision. I don't know who will replace them. To our US friends: All former GDR stations have to reorganize and mostly become members of the ARD (Network of public stations) by the end of 1991. This means some closures as well. When driving from Poland to Germany I was surprised how far German stations reached into Poland, almost not at all. Only short before the border I heard the first FM-stations. MW penetrated just a little bit more. On the other hand, former West-German stations reached FAR into former East-Germany territory, it was amazing! But that was intentionally set up. (10-Oct-91/Jurgen Bartels/SW ECHO)

WDR5 was newly introduced, that caused a reshuffling of its existing network.

	WDR1 MHz	WDR2 MHz	WDR3 MHz	WDR4 MHz	WDR5 MHz
Aachen-St.	92.7	100.8	95.9	93.9	101.9
Bonn	102.4	100.4	93.1	90.7	88.0
Ederkopf		101.8	gepl	100.7	95.8
Bärbelkreuz		101.0	96.3	104.4	89.6
Hallenberg				96.1	88.3
Höxter		96.4	95.2	87.8	93.9
Ibbenbüren		96.0	97.3	99.5	88.5
Kleve	103.7	93.3	97.3	101.7	99.7
Köln		91.8			
Langenberg	106.7				88.8
Langenberg		99.2	95.1	101.3	103.3
Lübbecke		96.0	91.7	99.6	88.6
Monschau		94.2	98.2	91.9	87.7
Münster	107.9	94.1	89.7	100.0	92.0
Nordhelle	102.7	93.5	98.1	103.8	90.3
Nordhelle				104.7	90.3
Olsberg		102.1	gepl	104.1	98.6
Remscheid					95.7
Siegen		97.1	98.4	101.2	88.2
Teutob.Wald	88.1	93.2	97.0	100.5	90.6
Warburg		91.8	94.3	104.5	88.4
Wittgenstein			92.3	88.7	
Wuppertal					99.8

****GERMANY (continued)****
Hörfunk-Frequenzen MW

Langenberg	1593 kHz	Soweit keine Sondersendungen:
Bonn	774 kHz	WDR 2
Langenberg	720 kHz	WDR 2
Kleve	702 kHz	WDR 5
Siegen	702 kHz	WDR 5

WDR5 regional
Sender MHz

Aachen	Aachen	101.9
	Bärbelkreuz	89.6
	Monschau	87.7
Bielefeld	Höxter	93.9
	Lübbecke	88.6
	Teutob. Wald	90.6
	Warburg	88.4
Düsseldorf	Kleve	99.7
	Langenberg	88.8
Essen	Langenberg	103.3
Köln	Bonn	88.0
Münster	Münster	92.0
	Ibbenbüren	88.5
Siegen	Ederkopf	95.8
	Hallenberg	88.3
	Nordhelle S	90.3
	Olsberg	
Siegen	Siegen	88.2
Wuppertal	Nordhelle W	104.7
	Remscheid	95.7
	Wuppertal	99.8

Since about mid August there's a new radio station in Berlin. It's called RTL 104.6 (104.6 MHz) it only serves Berlin, I think this is the first local station RTL is operating. They can also be heard on ASTRA on the back of TELE-5 TV program. I'm not sure why they are doing this, but one rumor says, they don't have a studio in Berlin yet, and are producing in their Luxembourg studios. Programming is pop-music from the '70, '80, '90.

Another station a bit longer on the air is Radio Energy, as far as I recall, their freq is 103.6 MHz. It's programming is pretty similar to RTL. (20-Oct-91/Jurgen Bartels/SW ECHO)

On Wednesday the Ministers of all German states agreed to add two new members to the ARD as of 1 Jan 1992. The MDR (Mitteldeutscher Rundfunk) will cover the states of Thuringen, Sachsen and Sachsen-Anhalt. The ODR (Ostdeutscher Rundfunk) will cover the state of Brandenburg. As I told you earlier the NDR will add the Mecklenburg-Vorpommern region to its coverage area. As I understand all organizations will get the broadcasting- and transmitting facilities from the stations now operating. These stations have to cease by the end of this year. I don't know the exact frequencies. (29-Nov-91/Jurgen Bartels - Germany/SW ECHO)

****GHANA****

Ghana Broadcasting Corporation Transmission Schedule (received Oct 91)

Radio 1 - 4915	0525-0905 & 1225-2305 UTC Mon-Fri
	0525-2305 UTC Weekend & Holidays
	The school broadcast is heard from 0905-1115 UTC when schools are in session.
Radio 2 - 3366	0525-0905 & 1705-2305 UTC Mon-Fri
	0525-0905 & 1705-2305 UTC Weekend & Holidays
7295	1225-1705 UTC Mon-Fri
	0915-1705 UTC Weekend & Holidays
	The school broadcast is heard from 0915-1110 UTC when schools are in session.

External Service to West Africa:
6130 0645-0800 & 1845-1900 UTC in English
0845-0900 & 1900-2000 UTC in French
(Ian Baxter, NSW/Nov-91/Don Rhodes' "Radio Activity" column, DX Australia/Bruce MacGibbon/SW ECHO)

****GUAM****

ADVENTIST WORLD RADIO -- ASIA (KSDA)
W-91 Broadcast Schedule 29 Sept 91 - 29 Mar 92

UTC	DAYS*	LANGUAGE	FREQ
0100-0200		Burmese	15610
0200-0300	AS	English	13720
		Mandarin	15225
0300-0800	AS	Mandarin	13720
0800-0900	AS	Shanghai/Minnan	13720
		Mandarin	15225
0900-1000		Hakka/Cantonese	13720
0900-1300		Mandarin	11980
1000-1100		Russian	9530
1100-1200		Indonesian	13720
1200-1300	ATF	Tagalog	13720
	SH	Ilonggo	13720
	MW	Cebuano	13720

****GUAM (continued)****

1300-1400		Japanese	11980
		Korean	9650
1400-1500		Burmese	13720
1400-1600		Mandarin	11980
1500-1600	SWA	Tamil	13720
	MH	Malayam	13720
	TF	Marathi	13720
1600-1700		English	11980
	STHA	Hindi	13720
	MWF	Telegu	13720
1700-1900	AS	English	13720
1900-2000	AS	Russian	11980
2000-2100		Korean	11980
2000-2200		Mandarin	9495
2100-2200		Japanese	15310
2200-2300		Indonesian	15610
2200-0200		Mandarin	15225
2300-0100		English	15610

Day Codes: S = Sunday; M = Monday; T = Tuesday, W = Wednesday
H = Thursday; F = Friday; A = Saturday
(Paul Blumstein/USENET/21-Oct-91/Kirk Baxter/SW ECHO)

****INDIA****

Thanks to a telephone call from Bob Brown circa 00 UT, I was alerted to a monster signal from the All India Radio outlet on 4990 at grayline (sunrise). For more than 45 minutes the signal hung at better than S9, peaking at 30 db/9. Bob says this is the time of the year to listen to this kind of stuff, and he and I went chasing around some of the other outlets as well. This was clearly the best, with an English ID at 0030. (01-Oct-91/Tom Sundstrom/SW ECHO)

Today I noted 15080 in use at 1600 UT, so apparently this one is a goodie all day long here (but I haven't checked all the English hours yet). (13-Oct-91/Tom Sundstrom/SW ECHO)

I've been picking up AIR the past few days on 15080 (1800-2100 UTC) and 11620 (2000-2200) from Colorado. The signal's loud enough at times to make listening to the music a pleasure. Iran was playing some nice music with a good signal around 1900-2100 today, October 17. (17-Oct-91/Richard Keen/SW ECHO)

I have the current schedule right here on computer, courtesy of Manoshi Guha, so here it is:

English	1000-1100	21735	Khampur	250	neAS
	1000-1100	17895	Aligarh	250	neAS
	1000-1100	15050	Aligarh	250	neAS
	1000-1100	17387	Aligarh	250	PA
	1000-1100	15050	Aligarh	250	PA
	1330-1500	15120	Aligarh	250	seAS
	1330-1500	11760	Khampur	250	seAS
	1800-2000	15080	Khampur	250	eAF
	1800-2000	11935	Bombay	100	eAF
	1830-1930	11860	Aligarh	250	nAF
	1830-1930	9950	Aligarh	250	nAF
	1845-1945	11620	Bangalo	500	nEU
	1845-1945	7412	Aligarh	250	nEU
	2045-2230	11620	Bangalo	500	wEU
	2045-2230	9950	Khampur	250	wEU
	2045-2230	7412	Aligarh	250	wEU
	2045-2230	15265	Bangalo	500	PA
	2045-2230	11715	Khampur	250	PA
	2045-2230	9910	Aligarh	250	PA
	2315-0115	17830	Khampur	250	seAS
	2315-0115	15145	Aligarh	250	seAS
	2315-0115	15110	Aligarh	250	seAS
	2315-0115	11745	Bangalo	500	seAS
	2315-0115	11715	Aligarh	250	seAS
	2315-0115	9910	Khampur	100	seAS

(15-Oct-91/Andy Sennitt/SW ECHO)

****IRAN****

A new Shortwave Service has been noted from R. Zahedan. The station has been noted in Urdu from 1530-1630 on 11930. This is a separate station from Radio Teheran. (Alok Dasgupta - India/Mick Ognizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

****IRAQ****

The Iraqi Embassy in Brussels reports that Radio Baghdad will resume English broadcasts to Eur and NAM during the first week of December: EUROPE: 1800-2300 UTC on 11740; NORTH AMERICA: 2300-0100 UTC on 11830. Jonathan Marks noted that since RNI uses 11835 for its 0030 NAM broadcast, they will be interested in reports of any interference. (BRT/28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

Radio Kuwait and the Voice of Iraq have not returned to shortwave until now. Radio Baghdad is broadcasting as follows (in Arabic, as I suppose):

to Brasil:	11755	until 0900 UTC
to Argentina:	15445	until 0900
to the Gulf:	6045 6055	until 1330
to Near East:	11990	until 1030
to North America:	13620	until 1330

****IRAQ (continued)****

Baghdad is broadcasting also on the following frequencies:

3980, 4600, 9722.8	(programme 1)
7350	(programme 2)
6540	0330-2000 Kurdish
7180	0430-1900

(I do not know if all these details are correct.)

12-Oct-91/Radio Austria International, Kurzwellenpanorama/Rainer Henrich - Switzerland/USENET/Kirk Baxter/SW ECHO)

****IRELAND****

Compiled from local newspapers in Ireland: Former director Oliver Barry is heading the behind-the-scenes attempt to rescue Century Radio with a new consortium, it emerged last night. Sources said Mr Barry has spent the last two days in intensive negotiations with a number of business interests aimed at buying out the existing shareholders, James Stefford, Capital Radio and financial institutions.

It is understood that Mr. Barry approached his former partner in Century, the financier James Stafford, with new proposals for a rescue package shortly after the closure was announced. Last night Mr. Barry was unavailable for comment on the dramatic attempt to get the ill-fated station operating again.

Yesterday the Independent Radio and Television Commission met to consider the closure and it was expected they would have decided to withdraw the license, but unexpectedly they agreed to defer a decision until next Thursday. It is understood that Mr Barry wrote to the IRTC requesting a few days to put a package together. There is skepticism, however, that it can be done before early next week despite Mr. Barry's apparent confidence.

However, the Cork-born promoter has already cleared one obstacle. Last night, sources close to the negotiators said he had agreed terms with Capital Radio and was now dealing with the Bank of Ireland, financial institutions and Mr. Stafford. But even if Mr. Barry can pull together a deal which satisfies the shareholders it will need substantial financial backing to win approval at the IRTC.

FROM THE "IRISH INDEPENDENT," 20-Nov-91: Ireland's largest Independent Radio station, Century Radio, ceased broadcasting at 6pm on November 19 and the directors of Century intend to petition the court for the appointment of a liquidator and for a winding-up date. (23-Nov-91/Brian Dowling (Irish reporter)/Edward Dunne - Ireland/SW ECHO)

****ISRAEL****

KOL YISRAEL SCHEDULE 3 NOVEMBER TO MARCH 1992

English	0500-0515		
French	0515-0530	11588	Central & N. America, W Europe
English	1100-1130		
French	1130-1200	17545	Central & N. America, W Europe
English	1430-1458	11605	West USA, E. Europe, USSR
(Not on Friday,		17590	West USA, E. Europe, USSR
Saturday, Jewish		15840	Central & N. America, W. Europe
Holidays or Eve)		11587	Central & N. America, W. Europe
English	1800-1815		
French	1815-1830	15640	N. America, W. Europe
		17575	S. & Central Africa
		11587	Central & N. America, W. Europe
		11675	E. Europe, USSR, W. USA
English	2000-2030		
French	2030-2055	11605	Central & N. America, W. Europe
		17575	S. & Central Africa
		7465	Central & N. America, W. Europe
		11587	Central & N. America, W. Europe
		11675	E. Europe, USSR, W. USA
		9435	Central & N. America, W. Europe
French	2130-2200		
English	2230-2300	7465	Central & N. America, W. Europe
		9435	Central & S. America
		11585	Central & N. America, W. Europe
		11605	Central & N. America, W. Europe
		17575	South America
		11675	E. Europe, USSR, W. USA
Russian	1400-1425	11605	E. Europe, USSR
		17575	E. Europe, USSR
		17590	E. Europe, USSR
		15590	E. Europe, USSR
		15640	Asian USSR
		11587	Central & N. America, W. Europe
Russian	1500-1655	15590	E. Europe, USSR
		17590	E. Europe, USSR
Russian	1833-1955	7465	N. America, W. Europe
		11605	USSR, E. Europe, W. USA
		9435	USSR, E. Europe, W. USA

****ISRAEL (continued)****

	19845		USSR, E. Europe, W. USA
1900-1955	11675		USSR, E. Europe, W. USA
2100-2155	7465		N. America, W. Europe
	11605		USSR, E. Europe, W. USA
	9435		USSR, E. Europe, W. USA
	15590		USSR, E. Europe, W. USA
	11675		USSR, E. Europe, W. USA
Tat (Sun, Wed only)	1500-1515	15590	USSR, E. Europe, W. USA
		17590	USSR, E. Europe, W. USA
Buchar'n	1430-1445		
Georgian	1445-1500	15590	USSR, E. Europe, W. USA
		17575	Asian USSR
Yiddish	1700-1755	9435	N. America, W. Europe
		11605	Central & N. America, W. Europe
		15640	N. America, W. Europe
		17575	South Africa
	1700-1725	11587	Central & N. America, W. Europe
		11675	E. Europe, USSR, W. USA
Spanish	1750-1800	11587	Central & N. America, W. Europe
		11675	W. USA, E. Europe
	2200-2230	17575	S. America
		9435	Central & S. America
		7465	Central & N. America, W. Europe
		11585	Central & N. America, W. Europe
Roman'n	1800-1815		
Hung'n	1815-1830	11605	Central & N. America, W. Europe
		9435	N. America, W. Europe
Persian (Not on Friday, Sat, Jewish Holiday or Eve)	1505-1600	11605	Asian USSR
		15640	Iran
		17575	N. America, W. Europe
Hebrew (Reshet Bet)	0400-2300	15615	Central & N. America, W. Europe
		13753	N. America, E. & W. Europe
		9388	Central & N. America, W. Europe
	0400-0605	11588	Central & N. America, W. Europe
	0600-1355	17545	Central & N. America, W. Europe
Yeminite (I think time is a typo. HPB) (MTWTh only)	1330-0355	15640	Yemen
		1330-1355	Doesn't make more sense?
Reshet Alef			
Easy Heb.	1725	11587	Central & N. America, W. Europe
Romanian	1830	11675	E. Europe, USSR, W. USA
Ladino	1845	11675	E. Europe, USSR, W. USA

(No concluding times are listed in the schedule for the above. HPB)

Mail Address:

Kol Israel
 External Service
 POB 1082
 Jerusalem 91010, Israel
 (14-Nov-91/Harry Bloomberg WA3TBL/INTERNET/Tom Sundstrom/SW ECHO)

****ITALY****

The Italian Radio Relay Service has asked us to inform all listeners that starting on Monday (30th Sept) their frequency of 9815 will be replaced by 7125. Still operating on upper sideband with 6dB carrier reduction. On Sundays IRRS will be on the air between 0600 and 1630 UTC, and there's an evening transmission between 2030 and 2200 daily. The modulation will continue to be in upper sideband with reduced carrier. (26-Sep-91/ANDY SENNITT/SW ECHO)

****LITHUANIA****

A new 100kW shortwave transmitter is on order, to be installed at the existing transmitting site 18 kilometers north west of Kaunas. However, it won't be carrying Radio Vilnius, because a new company has been set up to lease airtime exclusively to other broadcasters. It's hoped to have the facility ready by May of next year. The marketing manager for this project is Mr. Rimantas Pleikys, who is also editor in chief of Radiocentras. That station has an English programme on the last Saturday of the month, and plans to start one in German. This Saturday the English broadcast will be at 0600-0645 UTC on 9710kHz, but during the winter the transmission will start at 0700 UTC. You can write to Radiocentras at P.O.Box 1792, Vilnius 19, Lithuania. (26-Sep-91/ANDY SENNITT/SW ECHO)

There is a clear Lithuanian SW outlet on 17605 in English from 0000-0030. SIO 544 here in SF. IS is an organ interlude, sounding at first like a USA religious outfit. (10-Oct-91/Roger Stark/SW ECHO). The transmitter is located at Petropavlovsk-Kamchatskiy, and is 240kW unit beamed at 070 degrees to Western North America. There are another 1000+ entries where that one came from....(14-Oct-91/Andy Sennitt/SW ECHO)

****LUXEMBOURG****

Radio Luxembourg will end its English MW broadcasts (1440 kHz) on 29 Dec; beginning 30 Dec, German will replace the Dutch, Italian, and English broadcasts. SW broadcasts (10kW) in English will continue on 15350 24 hours daily. (28-Nov 91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****MALAYSIA****

Sabah vernacular broadcasts (10kW) on 4970 have been extended to 1700 UTC (from 1600). (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****NEW ZEALAND****

I noted Radio New Zealand International on October 16 announcing a slightly modified schedule: 18-22 on 15120, 22-0630 on 17770 and 0630-12 on 11735. Also, according to Tony King's Mailbag show, on Sat Oct 26 at 18-22 UT RNZI will running a special test on 11735 for possible winter 1992 schedules' use. And now, ongoing for the World Cup Rugby, RNZI is carrying same on 9510 at 12-18 UT.(17-Oct-91/Tom Sundstrom/SW ECHO)

We have an airport radio at Auckland International Airport on 1476, operating 24 hours a day. Every 15 minutes there is info on flights, news, stocks, currency info, etc. Power is 5 kw. (14-Nov-91/Arthur Cushen/R. NEDERLAND MEDIA NETWORK/AI Quaglieri/SW ECHO)

New Zealand: Summer Time UTC +13 commenced 6 Oct 91. (Nov-91/DX Australia/Bruce MacGibbon/SW ECHO).

****PAPUA NEW GUINEA****

Port Moresby is using the new channel 6080 kHz for the national program from sign-on at *2000. Parallel 4890. 6080 is actually assigned to Weira (?), which is in the Western provinces, but that frequency doesn't seem to be used [there]; we can't even hear it on the old channel, 3305. This tip from Leslie Lowe in Queensland. (14-Nov-91/Arthur Cushen/R. NEDERLAND MEDIA NETWORK/AI Quaglieri/SW ECHO)

Gordon Darling has just faxed the very latest information, and I can tell you that 4890 is on the air at 1900-1400 UTC using a 5kW Nodac transmitter. I can also tell you (and anyone else interested) that the NBC also plans to reactivate 3925 with a 2.5kW transmitter at 1900-2200 and 0700-1400 - the transmitter will be a refurbished AWA unit. 9520 will also be reactivated with the 10kW NEC unit previously used by Radio Central as soon as the NBC obtain a Balun to match the 9MHz antenna. It will operate at 2200-0700. (19-Nov-91/Andy Sennitt/SW ECHO)

****PHILIPPINES****

FEBC, Mindoro noted at 1100 on 3350 in local language. Verification states the language is Mangyan aimed at tribal people in the area (1100-1130). Transmitter power is less than 1kW. (Antonia Ribeiro da Motta - Brasil/ Brazil/Sep-91/DXA 'DX'ers Calling/24-Sep-91/Bruce Macgibbon/SW ECHO)

FEBC Manila replaced its south Asian frequency of 11680 with 11995 (1300-1600). (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****SEYCHELLES****

FEBA has a new frequency of 9810 to south Asia: 1400-1500 UTC daily (vernacular) and 1500-1600 (Tue-Sat) 1500-1600 (English). (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****SWITZERLAND****

RED CROSS BROADCASTING SERVICE Sep 91 - Feb 92

The following schedule is Broadcast only on the following days:

SUNDAYS: 12/29, 1/26, 2/23			
MONDAYS: 11/25, 12/30, 1/27, 2/24			
1100-1130	English	7210	Europe
1130-1200	French	7210	Europe
1200-1220	German	7210	Europe
1220-1240	Spanish	7210	Europe
1700-1730	English	7210	Europe
1730-1800	French	7210	Europe
1800-1820	German	7210	Europe
1820-1840	Spanish	7210	Europe

The following schedule is Broadcast only on the following days:

MONDAYS: 11/25, 12/30, 1/27, 2/24			
THURSDAYS: 11/28, 1/2, 1/30, 2/27			
0310-0327	English	13635	East/E Africa
0740-0757	English	9560 13685	17670
		21695	Australasia
1040-1057	English	13635 15570	17670
		21770	Far East
1310-1327	English	7480	Far East (via Beijing)
		11690	SE Asia (via Beijing)
		13695 15505	17830
		21695	SE Asia
1510-1527	Arabic	13685 15430	17830
		21630	Near East/E Africa
1710-1727	FF/EE	9885 11955	15525 17830
		21770	Africa
2210-2227	Port.	9810 9885	15570

****SWITZERLAND (continued)****

12035 S.America
S.America (via Gabon)

The following schedule is Broadcast only on the following days:

TUESDAYS: 11/26, 12/31, 1/28, 2/25

FRIDAYS: 11/29, 1/3, 1/31, 2/28

0110-0127 Spanish 6135 9650 9885
12035 N & Cent America
17730 N & C Amer (via Brazil)

0310-0327 English 6135 9885 12035 N & C America

Address:
Red Cross Broadcasting Service
International Committee of the Red Cross
19, Avenue de La Paix
CH-1202 Geneva, Switzerland
(15-Oct-91/Paul Blumstein/USENET/George Conover/SW ECHO)

****TURKEY****

Voice of Turkey broadcast schedule 07/02/91 through 12/31/91.

Target Areas	Freq	UTC
0300-0400	17880	English Asia
0300-0500	6140	Turkish Balkans
0400-0900	9460	Turkish Europe
0400-0900	11925	Turkish NW Asia
0400-0900	15405	Turkish SW Asia
0700-0800	15365	Azerbaijan SW Asia
0800-1000	11955	Arabic Middle East
0900-1000	15160	Arabic No Africa
0930-1000	11875	Hungarian Balkans
1000-1030	11875	Romanian Balkans
1000-1500	11955	Turkish Middle East
1000-1500	15180	Turkish No Africa
1030-1100	11875	Serbo-Croat Balkans
1100-1130	11875	Albanian Balkans
1130-1200	9710	Chinese Far East
1200-1230	9675	Urdu SW Asia
1230-1300	9675	English SW Asia
1300-1400	9675	Persian SW Asia
1400-1430	11735	Russian NW Asia
1430-1500	7180	Greek Balkans
1500-1600	9665	Azerbaijan SW Asia
1500-1600	11925	Azerbaijan NW Asia
1500-1600	15160	Arabic No Africa
1500-1700	11955	Arabic Middle East
1600-1700	5980	Bulgarian Balkans
1600-2200	9460	Turkish Europe
1600-2200	11775	Turkish No Africa
1630-1730	9795	German Europe
1700-2100	5980	Turkish Balkans
1730-1830	7110	Greek Balkans
1930-2000	9795	German Europe
2000-2100	9795	English Europe
2100-2200	5980	Bulgarian Balkans
2100-2200	9795	French Europe
2200-2300	7225	English Middle East
2200-2300	9685	English Europe
2200-2300	17880	English Asia
2300-0300	9685	Turkish Europe
2300-0300	17880	Turkish Asia

Note that all broadcasts are made during "summer time."
Correspondence should be addressed to the following: TRT - The Voice of Turkey, P.O. Box -333-06.443, Yenisehir Ankara - Turkiye (30-Sep-91/Brian Johnson/Andy Sennitt/SW ECHO)

The VoT took its NA service off the air (until probably 2/92) so that its new 500 kw transmitters can be installed. For English, the best times for NA are 20 UT on 9445, 22 UT on 11710 and 7185, all to Europe. See the October NASWA Journal for more details. The chief engineer told me the schedule [mailed out] was printed and mailed just before the decision to shut down the NA service was made. (07-Oct-91/Tom Sundstrom/SW ECHO)

****USA****

Voice of America Broadcast Schedule W-91, with revisions to Nov. 1, 1991

[NOTE: Botswana xmtrs (BOT) begin operation 06-Dec-91 and have been added to this list. See BOTSWANA for further info. - ed.]

Freq/SB	Site	kW	Azi	Time	Lang	Target
3980	MUN	100	055	0400-0430	BULG	Eur
3980	MUN	100	055	0430-0500	SLOV	Eur
3980	MUN	100	055	0500-0530	CZEC	Eur
3980	MUN	100	055	0530-0600	GERM	Eur
3980	MUN	100	055	0600-0630	ENGL	Eur
3980	MUN	100	055	0630-0700	ENGL	Eur
3980	MUN	100	055	1700-1730	ENGL	Eur
3980	MUN	100	055	1730-1800	CZEC	Eur
3980	MUN	100	055	1800-1900	HUNG	Eur
3980	MUN	100	055	1900-2000	HUNG	Eur
3980	MUN	100	055	2000-2100	CZEC	Eur

****USA (continued)****

3980	MUN	100	055	2100-2400	POLI	Eur
5955	KAV	250	355	0530-0630	POLI	Eur
5955	PHL	250	332	1100-1500	CHIN	As
5965	RHO	50	099	0300-0330	VEUR	ME
5965	RHO	50	099	0330-0530	ARAB	ME
5965	RHO	50	099	0530-0800	ARAB	ME
5965	WER	500	120	1700-1730	ALBA	Eur
5965	WER	500	120	1730-1800	BULG	Eur
5965	WER	500	120	1800-1900	ROMA	Eur
5965	WER	500	120	1900-1930	GREE	Eur
5965	WER	500	120	1930-2000	ALBA	Eur
5965	WER	500	120	2000-2030	BULG	Eur
5965	WER	500	120	2030-2130	SERB	Eur
5970	KAV	250	105	2300-2330	FARS	ME
5975	WER	500	120	1900-1930	GREE	Eur
5975	WER	500	120	1930-2000	ALBA	Eur
5980	WOF	300	172	0430-0530	ARAB	ME
5985	KAV	250	051	0000-0100	UZBE	C.As
5985	WER	500	030	0400-0415	LATV	Eur
5985	WER	500	030	0415-0430	LITH	Eur
5985	WER	500	030	0430-0445	ESTO	Eur
5985	DL	250	272	1000-1200	ENGL	Pac
5995	GR	250	174	0000-0200	ENGL	LA/Car
5995	Tu-Sa	250	174	0200-0230	ENGL	LA/Car
5995	WOF	250	074	0400-0500	ENGL	Eur
5995	WER	500	045	0500-0700	HIND	Eur
6010	KAV	250	105	0030-0100	HIND	SAs
6010	KAV	250	105	0030-0100	HIND	SAs
6010	KAV	250	105	0100-0130	URDU	SAs
6015	KAV	250	105	0130-0215	PASH	SAs
6015	KAV	250	105	0215-0300	DARI	SAs
6015	KAV	250	355	0400-0415	LATV	Eur
6015	KAV	250	355	0415-0430	LITH	Eur
6015	KAV	250	355	0430-0445	ESTO	Eur
6020	GR	250	094	0430-0500	PORT	Afr
6020	GR	250	094	0500-0530	HAUS	Afr
6020	Mo-Fr	250	094	0530-0700	FREN	Afr
6030	BY	250	168	0100-0400	SPAN	LA
6030	Tu-Su	250	205	0600-1000	SPAN	Cuba
6030	GR	250	205	1000-1200	SPAN	Cuba
6030	PHL	250	332	1500-1600	CANT	As
6035	GR	500	094	0300-0700	ENGL	Afr
6040	WOF	250	058	0300-0400	RUSS	USSR
6040	WOF	250	082	0400-0700	ENGL	Eur
6040	Mo-Fr	500	164	0930-1130	SPAN	LA
6040	WOF	250	058	1700-2200	ENGL	Eur
6060	KAV	250	105	0300-0430	FARS	ME
6060	WER	500	045	0500-0700	ENGL	Eur
6060	WOF	250	066	1600-1630	ESTO	Eur
6060	WOF	250	066	1630-1700	LITH	Eur
6060	WOF	250	066	1700-1730	LATV	Eur
6060	WOF	300	105	1730-1800	CZEC	Eur
6060	WOF	300	105	1800-2000	HUNG	Eur
6060	WOF	300	105	2000-2200	CZEC	Eur
6060	WER	500	060	2200-2400	RUSS	USSR
6085	KAV	250	026	2100-2300	RUSS	USSR
6090	GLO	250	059	0300-0500	UKRA	USSR
6095	GR	250	146	1000-1200	ENGL	E.Car
6095	WOF	250	074	2000-2200	RUSS	USSR
6095	WOF	250	074	2200-2400	POLI	Eur
6110	TAN	50	078	0600-0700	ENGL	Naf
6110	PHL	250	200	1100-1300	ENGL	AsOcPac
6110	PHL	250	270	1300-1800	ENGL	AsOcPac
6125	WOF	250	105	0400-0430	BULG	Eur
6125	WOF	250	105	0430-0445	ROMA	Eur
6125	WOF	250	105	0445-0500	SERB	Eur
6125	WOF	250	105	0500-0530	CZEC	Eur
6125	WOF	250	105	0530-0600	HUNG	Eur
6125	BY	250	066	0600-0700	ENGL	Afr
6130	GR	500	145	0000-0100	ENGL	E.Car
6130	GR	500	145	0100-0200	ENGL	LA/Car
6140	WOF	250	074	0400-0700	ENGL	Eur
6140	WOF	250	074	1800-2000	RUSS	USSR
6140	KAV	250	105	2000-2100	GEOR	Cau
6140	WOF	250	074	2100-2400	RUSS	USSR
6150	TAN	100	078	0730-0800	ARAB	Naf
6150	WOF	300	090	1800-2000	HUNG	Eur
6150	WOF	300	090	2000-2200	CZEC	Eur
6150	WOF	300	078	2200-2400	POLI	Eur
6160	WOF	300	078	0300-0500	UKRA	USSR
6160	WOF	300	078	0530-0630	POLI	Eur
6160	KAV	250	105	1600-1700	HIND	SAs
6160	KAV	250	051	1700-1900	FARS	ME
6160	KAV	250	051	1900-2000	AZER	Cau
6160	WER	500	105	2000-2100	TURK	Tur
6160	KAV	250	240	2100-2200	ARAB	ME
6160	KAV	250	051	2200-2400	RUSS	USSR
6180	GLO	250	047	0300-0400	RUSS	USSR
6180	GR	250	094	0430-0500	PORT	Afr
6180	GR	250	094	0500-0530	HAUS	Afr
6180	Mo-Fr	250	094	0530-0700	FREN	Afr
6180	WOF	300	074	1630-1700	ENGL	Eur
6190	GR	500	174	0100-0300	SPAN	LA
6873/U	GR	40	067	0300-0500	UKRA	
6873/L	GR	40	067	0400-0700	ENGL	

USA (continued)

Table listing radio stations in the USA, including call letters, power, frequency, and time zone. Includes entries like 7105 KAV, 7105 WER, 7110 PHL, etc.

Table listing radio stations in international regions, including call letters, power, frequency, and time zone. Includes entries like HIND SAs, URDU SAs, RUSS USSR, etc.

USA (continued)

Table listing radio stations in the USA, continuing from the previous section. Includes entries like 9525 GR, 9525 Mo-Fr BY, 9525 PHL, etc.

Table listing radio stations in international regions, continuing from the previous section. Includes entries like SPAN Cuba, SPAN LA, ENGL AsOcPac, etc.

****USA (continued)****

9760	WOF	250	114	1630-2100
9760	WOF	250	114	2100-2200
9770	PHL	250	270	0000-0100
9770	PHL	250	270	2200-2400
9775	GR	250	205	0000-0200
9775	Tu-Sa GR	250	205	0200-0230
9775	GR	500	094	0430-0500
9840	GR	250	205	0100-0400
9890	PHL	50	280	1230-1330
10235/U	GR	40	067	0330-0530
10235/U	GR	40	067	0530-0630
10380/L	GR	50	067	1330-1430
11580	GR	250	183	0000-0200
11580	Tu-Sa GR	250	183	0200-0230
11580	Mo-Fr GR	250	174	0930-1130
11680	GR	500	146	2200-2300
11695	GR	500	146	0000-0100
11705	COL	35	350	0100-0300
11705	COL	35	350	0100-0300
11710	KAV	250	051	0000-0100
11710	TAN	50	044	0500-0530
11710	TAN	50	044	0530-0600
11710	WOF	250	066	1630-1700
11710	WOF	250	066	1700-1900
11710	TAN	100	044	1900-2200
11710	TAN	100	044	2200-2400
11715	PHL	50	137	1200-1330
11720	PHL	50	137	1000-1200
11720	ASC	250	027	2130-2200
11720	PHL	250	270	2200-2230
11720	PHL	250	270	2230-2330
11735	RHO	50	099	0800-1000
11735	RHO	50	099	1000-1100
11740	KAV	250	051	1600-1800
11740	KAV	250	172	1800-1900
11745	KAV	250	095	0100-0115
11750	TAN	100	044	1800-1900
11750	TAN	100	044	1900-2000
11750	TAN	100	044	2100-2200
11750	PHL	250	021	2130-2200
11755	KAV	250	095	2000-2100
11760	PHL	250	200	0000-0100
11760	WOF	250	114	1900-1930
11760	PHL	250	200	2200-2400
11775	WOF	300	170	0730-0800
11780	ASC	250	065	0400-0430
11780	TAN	35	060	1800-1930
11780	TAN	35	060	1930-2000
11780	TAN	35	060	2000-2030
11780	TAN	35	060	2030-2130
11805	KAV	250	095	0300-0430
11805	KAV	250	240	0430-0530
11805	KAV	250	240	0600-0700
11805	KAV	250	095	1330-1430
11805	WER	500	060	1600-1700
11805	WER	500	120	1700-1730
11805	WER	500	120	1730-1800
11805	GLO	250	057	1800-1900
11805	PHL	250	200	2200-2330
11820	ASC	250	027	2000-2030
11825	KAV	250	095	0030-0100
11825	KAV	250	095	0100-0130
11825	KAV	250	095	0130-0215
11825	KAV	250	095	0215-0300
11825	WER	500	120	0500-0700
11825	GLO	250	058	1800-2300
11830	BY	250	168	0000-0030
11830	BY	250	168	2345-2400
11835	GR	500	091	0300-0430
11835	GR	500	091	0430-0500
11835	GR	500	091	0500-0530
11835	Mo-Fr GR	500	091	0530-0700
11835	PHL	250	283	1130-1230
11835	WOF	250	066	1200-1400
11835	PHL	250	270	1230-1330
11835	WER	500	090	1600-1700
11835	KAV	250	095	1700-1900
11835	KAV	250	095	1900-2000
11840	PHL	250	270	0000-0030
11840	WER	500	180	0730-0800
11845	KAV	250	095	1430-1515
11845	KAV	250	095	1515-1800
11855	GLO	250	058	1600-1800
11865	WOF	300	058	1530-1600
11865	WOF	300	058	1600-1630
11865	WOF	300	058	1630-1700
11865	WOF	300	058	1700-1730
11865	WOF	300	058	1700-1730
11865	TAN	100	044	1730-1800
11870	PHL	250	349	1500-1600
11870	PHL	100	290	1600-1700
11870	PHL	250	150	1900-2000
11870	PHL	250	150	2100-2200
11875	Mo-Fr KAV	250	208	0530-0700
11880	PHL	250	283	1800-1900

ENGL	Eur/ME
ENGL	Eur
ENGL	SEA
ENGL	AsOcPac
ENGL	LA/Car
ENGL	
PORT	Afr
SPAN	LA
VIET	SEA
ARAB	
POLI	
URDU	
ENGL	LA/Car
ENGL	LA/Car
SPAN	LA
PORT	Brz
ENGL	E.Car
ENGL	SAs
ENGL	SAs
UZBE	C.As
CZEC	Eur
HUNG	Eur
ENGL	Eur
RUSS	USSR
ENGL	Eur
POLI	Eur
ENGL	AsOcPac
ENGL	Pac
FREN	Afr
KHME	SEA
VIET	SEA
VEUR	ME
ENGL	ME
RUSS	USSR
AMHA	Afr
TIBE	As
HUNG	Eur
HUNG	Eur
POLI	Eur
KORE	EAs
TURK	Tur
ENGL	Indo
GREE	Eur
ENGL	AsOcPac
ARAB	NAf
ENGL	Afr
ROMA	Eur
ALBA	Eur
BULG	Eur
SERB	Eur
FARS	ME
ARAB	ME
ENGL	NAf
URDU	SAs
RUSS	USSR
ALBA	Eur
BULG	Eur
RUSS	USSR
INDO	Indo
ENGL	Afr
HIND	SAs
URDU	SAs
PASH	SAs
DARI	SAs
ENGL	ME
RUSS	USSR
OAS	LA
OAS	LA
ENGL	Afr
PORT	Afr
HAUS	Afr
FREN	Afr
BURM	SEA
RUSS	USSR
VIET	SEA
ARME	Cau
FARS	ME
AZER	Cau
BURM	SEA
ARAB	NAf
PASH	SAs
DARI	SAs
UKRA	USSR
LATV	Eur
ESTO	Eur
LITH	Eur
LATV	Eur
LATV	Eur
CZEC	Eur
CHIN	As
BANG	SAs
ENGL	Pac
ENGL	Pac
FREN	Afr
AMHA	Afr

****USA (continued)****

11890	BY	250	087	0430-0500
11890	BY	250	087	0500-0530
11890	BY	250	087	0530-0700
11890	GR	500	205	1200-1300
11890	GR	500	205	1300-1500
11890	GR	250	164	1730-1800
11890	GR	250	164	2130-2200
11890	GR	250	164	2200-2230
11890	GR	250	164	2230-2300
11895	GR	500	164	0100-0300
11905	MUN	100	118	0300-0330
11905	MUN	100	118	0330-0800
11905	RHO	50	099	1330-1500
11905	WOF	250	066	1600-1630
11905	KAV	250	095	2000-2200
11905	KAV	250	095	2200-2400
11915	GR	250	146	1000-1200
11920	PHL	250	270	1600-2000
11925	PHL	250	349	0000-0100
11925	PHL	250	349	2100-2200
11925	PHL	250	349	2200-2400
11930	PHL	250	349	0800-1100
11930	PHL	250	200	1230-1330
11930	PHL	250	270	1330-1400
11930	PHL	250	270	1400-1500
11930	GR	250	164	1400-2300
11935	Mo-Fr GR	500	164	0930-1130
11940	BOT	100		0300-0430
11945	DL	250	120	1200-1300
11945	Sa/Su DL	250	120	1300-1500
11945	WOF	250	066	1530-1600
11945	KAV	250	095	1600-1700
11960	RHO	50	140	1600-2000
11960	RHO	50	140	2100-2200
11960	RHO	50	140	2200-2400
11965	PHL	250	021	0800-1100
11965	PHL	250	332	1100-1700
12040	PHL	250	332	1100-1700
13740	BY	250	168	0100-0400
13740	Mo-Fr DL	250	135	0930-1130
13740	BY	250	168	1730-1800
13775	GR	250	205	1200-1300
13775	Sa/Su GR	250	205	1300-1500
14526/U	GR	40	045	1530-1600
14526/U	GR	40	045	1600-1630
14526/L	GR	40	045	1600-1700
14526/U	GR	40	045	1630-1700
14526/U	GR	40	045	1700-1730
14526/L	GR	40	045	1700-1900
14526/U	GR	40	045	1730-1800
14526/U	GR	40	045	1800-1930
14526/U	GR	40	045	1930-2000
14526/U	GR	40	045	2000-2030
14526/U	GR	40	045	2030-2130
15115	GR	500	091	0300-0700
15120	DL	250	126	0000-0200
15120	Tu-Sa DL	250	126	0200-0230
15120	Mo-Fr GR	500	164	2130-2200
15120	GR	500	164	2200-2230
15120	GR	500	164	2230-2300
15125	TAN	100	060	1800-1900
15125	TAN	100	060	1900-1930
15145	KAV	250	095	1330-1430
15145	TAN	35	078	1900-1930
15150	PHL	250	021	0800-1100
15150	Mo-Fr PHL	250	270	1630-1730
15150	PHL	250	270	1730-1830
15155	PHL	250	349	1100-1400
15155	KAV	250	095	1600-2000
15160	GR	250	164	0000-0030
15160	KAV	250	095	0300-0330
15160	KAV	250	095	0330-0800
15160	KAV	250	095	0800-1000
15160	KAV	250	095	1000-1100
15160	PHL	250	349	1400-1500
15160	ASC	250	102	2000-2030
15160	GR	250	164	2345-2400
15165	PHL	250	270	1800-1900
15180	PHL	50	285	1900-2000
15185	PHL	50	285	0000-0100
15185	PHL	250	283	1600-1700
15185	Mo-Fr GR	500	183	1700-1730
15185	PHL	50	285	2100-2400
15195	MUN	100	118	0600-0800
15195	MUN	100	118	0800-1000
15195	MUN	100	118	1000-1100
15195	PHL	250	021	1300-1330
15195	ASC	250	085	1600-1700
15195	TAN	100	060	1700-1730
15195	TAN	100	060	1730-1800
15195	GR	500	094	1830-2030
15195	Sa/Su GR	500	094	2030-2100
15195	Mo-Fr GR	500	094	2030-2100
15195	GR	500	094	2100-2200
15205	Tu-Sa GR	250	174	0000-0200

PORT	Afr
HAUS	Afr
FREN	Afr
SPAN	LA
SPAN	LA
CREO	E.Car
SPAN	LA
CREO	E.Car
CREO	E.Car
SPAN	LA
VEUR	ME
ARAB	ME
ARAB	ME
ESTO	Eur
ARAB	ME
ENGL	ME
ENGL	E.Car
ENGL	Afr
CHIN	As
CHIN	As
CHIN	As
RUSS	USSR
INDO	Indo
KHME	SEA
KHME	SEA
SPAN	Cuba
SPAN	LA
ENGL	Afr
SPAN	LA
SPAN	LA
LATV	Eur
HIND	SAs
ARAB	ME
ENGL	ME
ENGL	ME
RUSS	USSR
CHIN	As
CHIN	As

USA (continued)

15205	GR	250 174	0200-0230	ENGL	LA/Car
15205	KAV	250 095	0500-0600	ENGL	ME
15205	KAV	250 095	0600-0700	ENGL	ME
15205	KAV	250 051	1200-1400	RUSS	USSR
15205	KAV	250 051	1400-1500	ENGL	Eur
15205	WOF	300 082	1500-1700	ENGL	ME
15205	TAN	35 044	1700-1900	ENGL	Eur
15205	TAN	35 044	1900-2200	ENGL	Eur
15205	PHL	50 212	2200-2330	INDO	Indo
15210	PHL	250 283	0030-0130	HIND	SAs
15210	PHL	250 283	0130-0230	BANG	SAs
15215	PHL	250 283	0000-0030	BURM	SEA
15215	PHL	250 021	2130-2200	KORE	EAs
15225	KAV	250 095	1430-1515	PASH	SAs
15225	KAV	250 095	1515-1600	DARI	SAs
15225	WER	500 090	1600-1700	ARME	Cau
15225	KAV	250 095	2000-2200	ARAB	ME
15225	KAV	250 095	2200-2400	ENGL	ME
15230	PHL	50 280	1130-1230	BURM	SEA
15230	PHL	250 283	1230-1300	LAO	SEA
15235	WOF	300 152	0730-0800	ARAB	Naf
15235	WOF	300 062	1200-1400	RUSS	USSR
15235	WOF	300 075	1400-1500	UZBE	C.As
15235	WOF	250 074	1600-1700	RUSS	USSR
15235	WOF	250 074	1700-1800	RUSS	USSR
15245	TAN	100 044	1630-1700	ENGL	Eur
15245	GR	500 055	1800-2000	ARAB	ME
15245	GR	500 055	2100-2200	ARAB	ME
15250	COL	35 350	0100-0300	ENGL	SAs
15250	PHL	50 280	1230-1330	VIET	SEA
15255	GLO	250 057	1600-1800	UKRA	USSR
15265	Mo-Fr GR	500 174	0930-1130	SPAN	LA
15265	Sa-Su GR	500 183	1200-1500	SPAN	LA
15265	TAN	100 060	1600-1800	UKRA	USSR
15280	WER	500 060	1200-1400	RUSS	USSR
15285	PHL	250 270	1330-1500	KHME	SEA
15290	PHL	250 349	0000-0100	ENGL	AsOcpac
15290	PHL	250 349	2200-2400	ENGL	AsOcpac
15305	PHL	35 137	2200-2400	ENGL	AsOcpac
15330	Mo-Fr PHL	250 270	1630-1730	SWAH	Afr
15330	GR	500 146	2200-2300	PORT	Brz
15355	WOF	300 082	1400-1500	UZBE	C.As
15370	BOT	100	0430-0500	PORT	Afr
15370	BOT	100	2200-2300	PORT	Afr
15395	PHL	250 349	0000-0100	CHIN	As
15395	COL	35 350	1400-1800	ENGL	AsOcpac
15395	COL	35 350	1400-1800	ENGL	SAs
15400	PHL	250 349	2100-2400	CHIN	As
15400	GR	500 164	0100-0300	SPAN	LA
15400	KAV	250 095	1330-1400	ARAB	ME
15410	PHL	250 349	0800-1100	RUSS	USSR
15410	PHL	250 349	1100-1700	CHIN	As
15410	GR	500 091	1600-2200	ENGL	Afr
15425	PHL	50 285	1000-1500	ENGL	AsOcpac
15425	PHL	50 212	1100-1500	ENGL	AsOcpac
15445	KAV	250 095	1400-1600	ARAB	ME
15445	BOT	100	1600-2200	ENGL	Afr
15445	WER	500 120	2200-2400	ENGL	ME
15580	GR	250 094	1600-2200	ENGL	Afr
15580	GR	250 094	2200-2300	PORT	Afr
15752/U	BY	50 062	0300-0700	ENGL	Afr
17640	GR	500 094	1830-2030	FREN	Afr
17640	Sa/Su GR	500 094	2030-2100	FREN	Afr
17640	Mo-Fr GR	500 094	2030-2100	HAUS	Afr
17640	GR	500 094	2100-2200	FREN	Afr
17705	Mo-Fr BOT	100	1630-1730	SWAH	Afr
17705	BOT	100	1730-1830	PORT	Afr
17710	Mo-Fr GR	500 174	1700-1730	SPAN	LA
17710	GR	250 174	1730-1800	CREO	Haiti
17715	TAN	35 170	0300-0700	ENGL	Afr
17715	Mo-Fr GR	250 205	2130-2200	SPAN	LA
17720	PHL	100 034	1300-1330	KORE	EAs
17730	Mo-Fr GR	500 174	1200-1500	SPAN	LA
17730	Mo-Fr GR	250 174	1700-1730	SPAN	LA
17730	Mo-Fr BY	250 168	2130-2200	SPAN	LA
17735	PHL	250 150	0000-0100	ENGL	SEA
17735	PHL	250 150	2100-2400	ENGL	AsOcpac
17740	PHL	250 270	0100-0300	ENGL	SAs
17740	Mo-Fr PHL	250 270	1630-1730	SWAH	Afr
17740	PHL	250 270	1730-1830	PORT	Afr
17740	GR	500 067	1900-2000	ARAB	ME
17740	GR	500 067	2100-2200	ARAB	ME
17740	GR	500 146	2200-2300	PORT	Brz
17755	PHL	250 283	1800-1900	AMHA	Afr
17765	PHL	250 349	0000-0100	CHIN	As
17765	PHL	250 349	2100-2400	CHIN	As
17780	PHL	250 283	0030-0100	HIND	SAs
17780	PHL	250 283	0030-0130	HIND	SAs
17780	PHL	250 283	0130-0230	BANG	SAs
17780	KAV	250 051	1400-1500	UZBE	C.As
17785	GR	250 091	1830-2030	FREN	Afr
17785	Sa/Su GR	250 091	2030-2100	FREN	Afr
17785	Mo-Fr GR	250 091	2030-2100	HAUS	Afr
17785	GR	250 091	2100-2200	FREN	Afr
17785	GR	250 091	2200-2300	PORT	Afr

USA (continued)

17790	PHL	100 350	1100-1700	CHIN	As
17800	BY	250 100	1600-2200	ENGL	Afr
17800	BY	250 100	2200-2300	PORT	Afr
17810	KAV	250 095	0300-0330	VEUR	ME
17810	KAV	250 095	0330-0800	ARAB	ME
17810	Mo-Fr ASC	250 245	0930-1100	SPAN	LA
17810	Mo-Fr ASC	250 245	1100-1130	SPAN	LA
17820	PHL	100 034	0000-0100	ENGL	AsOcpac
17820	PHL	100 034	2200-2400	ENGL	AsOcpac
17830	Sa/Su ASC	250 245	1200-1400	SPAN	LA
17855	WOF	300 070	1200-1400	RUSS	USSR
17855	WOF	300 070	1400-1500	UZBE	C.As
17855	TAN	35 060	1600-1800	UKRA	USSR
17865	PHL	250 021	0800-1100	RUSS	USSR
17865	WER	500 075	1200-1400	RUSS	USSR
17870	BOT	100	1830-2030	FREN	Afr
17870	Mo-Fr BOT	100	2030-2100	HAUS	Afr
17870	Sa/Su BOT	100	2030-2100	FREN	Afr
17870	BOT	100	2100-2200	FREN	Afr
17870	BOT	100	2200-2300	PORT	Afr
17875	PHL	250 315	0100-0115	TIBE	As
17875	KAV	250 095	1330-1430	URDU	SAs
17880	Sa/Su ASC	250 055	2030-2100	FREN	Afr
17880	Mo-Fr ASC	250 055	2030-2100	HAUS	Afr
17885	MUN	100 115	1400-2200	ARAB	ME
17885	MUN	100 115	2200-2400	ENGL	ME
17895	WER	500 120	0300-0330	VEUR	ME
17895	WER	500 120	0330-0800	ARAB	ME
17895	TAN	100 060	1600-1700	ARME	Cau
18275/L	GR	50 045	1500-1600	ENGL	
18275/L	GR	50 045	1600-1700	RUSS	
18275/U	GR	50 045	1600-1800	UKRA	
18275/L	GR	50 045	1700-1730	LATV	
18275/L	GR	50 045	1730-1800	CZEC	
18275/L	GR	50 045	1800-1900	RUSS	
18275/U	GR	50 045	1800-2200	ENGL	
18275/L	GR	50 045	1900-2100	RUSS	
18275/L	GR	50 045	2100-2400	POLI	
19261/U	BY	50 062	1600-2200	ENGL	
19379/L	GR	40 045	1400-1500	UZBE	
19379/L	GR	40 045	1500-1600	ENGL	
19379/U	GR	40 045	1530-1800	LATV	
19379/L	GR	40 045	1600-1700	ARME	
19379/U	GR	40 045	1600-1800	RUSS	
19379/L	GR	40 045	1700-1730	ALBA	
19379/U	GR	40 045	1730-1800	BULG	
19379/L	GR	40 045	1800-1900	ENGL	
19379/L	GR	40 045	1800-2000	HUNG	
19379/L	GR	40 045	1900-2200	ENGL	
19379/U	GR	40 045	2000-2200	CZEC	
21455	KAV	250 095	0800-1000	VEUR	ME
21455	KAV	250 095	1000-1100	ENGL	ME
21455	WER	500 120	1330-1400	ARAB	ME
21455	WER	500 120	1400-1500	ARAB	ME
21475	PHL	250 283	0030-0100	HIND	SAs
21475	PHL	250 283	0030-0130	HIND	SAs
21475	PHL	250 283	0130-0230	BANG	SAs
21485	Mo-Fr GR	250 094	1630-1730	SWAH	Afr
21485	GR	250 094	1730-1830	PORT	Afr
21485	GR	250 094	1830-2000	FREN	Afr
21485	GR	250 094	2000-2200	ENGL	Afr
21490	Mo-Fr ASC	250 245	0930-1100	SPAN	LA
21490	Sa/Su ASC	250 245	1200-1400	SPAN	LA
21520	KAV	250 051	1330-1430	URDU	SAs
21520	KAV	250 051	1430-1515	PASH	SAs
21520	KAV	250 051	1515-1600	DARI	SAs
21535	WER	500 120	1500-2200	ARAB	ME
21550	PHL	50 280	0100-0300	ENGL	SAs
21550	PHL	50 260	0100-0300	ENGL	SAs
21550	PHL	50 255	0430-0500	PORT	Afr
21570	PHL	50 290	0100-0115	TIBE	As
21570	WER	500 120	0800-1000	VEUR	ME
21570	WER	500 120	1000-1100	ENGL	ME
21570	KAV	250 095	1500-2000	ARAB	ME
21580	GR	250 174	1200-1300	SPAN	LA
21580	Sa/Su GR	250 174	1300-1500	SPAN	LA
21585	PHL	250 349	1100-1600	CHIN	As
21600	PHL	250 283	0300-0500	ENGL	Afr
21610	Sa/Su GR	250 164	1200-1500	SPAN	LA
21625	GLO	250 065	1200-1400	RUSS	USSR
21625	GLO	250 065	1400-1500	UZBE	C.As
21625	TAN	35 170	1600-2200	ENGL	Afr
21720	KAV	250 095	1330-1500	ARAB	ME
21745	Sa/Su BY	250 168	1700-1730	SPAN	LA

STATEMENT OF PURPOSE

SHORTWAVE ONLINE DIGEST exists to disseminate info found on various computer "bulletin boards" and the Shortwave Echo to print editors, and through them to the general public. I produce SOD on my own time, at my own expense (although stamps/exchanges are appreciated), and issue it on my own schedule. At this time, I have neither the means nor the desire to offer subscriptions or otherwise expand the scope of SOD. - AQ

****USA (continued)****

[Rather than splitting the following up and filing it by transmitter site/country, I'm leaving it intact and plopping it here...ad]

RADIO FREE EUROPE / RADIO LIBERTY

FREQUENCY SCHEDULE No. 122 START DATE: 29.Sep.91/STOP

DATE: 29.Mar.92 24/09/91

Freq	Time	Lang.	Trans.	kW	Antenna
3960	0300-0500	Ukrainian	B5	100	1234567
3960	0500-0530	Estonian	B5	100	1234567
3960	0530-0600	Latvian	B5	100	1234567
3960	0600-0630	Lithuanian	B5	100	1234567
3960	1900-2000	Estonian	B5	100	1234567
3960	2000-2100	Latvian	B5	100	1234567
3960	2100-2200	Lithuanian	B5	100	1234567
3960	2200-2300	Estonian	B5	100	1234567
3970	0500-0559	Romanian	B1	100	123456
3970	1900-2300	Romanian	B3	100	1234567
3985	0330-0359	Latvian	L1	100	1234567
5955	1800-2259	Romanian	B8	100	1234567
5955	2300-0459	Russian	B8	100	1234567
5970	0200-0259	Turkmen	B10	100	1234567
5970	0330-0400	Latvian	G7	250	1234567
5970	0400-0500	Belorussian	G7	250	1234567
5970	0500-0600	Belorussian	B3	100	1234567
5970	0600-0659	Russian	B3	100	1234567
5970	0700-1600	Russian	B3	100	1234567
5970	1600-1659	Russian	L4	100	1234567
5970	1700-1959	Russian	L4	100	1234567
5970	2000-2100	Latvian	L1	100	1234567
5970	2100-2200	Lithuanian	L1	100	1234567
5970	2200-2300	Estonian	L1	100	1234567
5985	0200-0359	Uzbek	L9	100	1234567
5985	0500-0530	Estonian	G19	250	1234567
5985	0530-0600	Latvian	G19	250	1234567
5985	0600-0630	Lithuanian	G19	250	1234567
5985	0700-1659	Russian	B4	100	1234567
5985	1700-1759	Hungarian	B8	100	1234567
5985	1800-2300	Hungarian	G19	250	1234567
6050	0000-0359	Russian	H1	250	1234567
6095	0500-0700	Ukrainian	L9	100	1234567
6105	0600-1759	Russian	L1	100	1234567
6105	1800-2000	Russian	H3	250	1234567
6105	2000-0557	Russian	H1	250	1234567
6115	1700-1859	Bulgarian	B1	100	1234567
6115	1900-2200	Bulgarian	B1	100	1234567
6135	0000-0159	Kirghiz	L9	100	1234567
6135	0200-0359	Russian	B3	100	1234567
6135	1700-1759	Russian	B4	100	1234567
6135	1800-1857	Belorussian	H1	250	1234567
6135	1900-1957	Estonian	H1	250	1234567
6135	2000-2100	Latvian	M1	500	1234567
6135	2100-2200	Lithuanian	M1	500	1234567
6135	2200-2300	Estonian	M1	500	1234567
6160	0100-0200	Azerbaijani	M2	500	1234567
6160	0200-0300	Armenian	M2	500	1234567
6170	0000-0100	Kazak	B3	100	1234567
6170	0100-0259	Kazak	L1	100	1234567
6170	0300-0700	Ukrainian	B10	100	1234567
6170	0700-1459	Russian	B10	100	1234567
6170	1500-1555	Belorussian	H1	250	1234567
6170	1600-1700	Latvian	H1	250	1234567
6170	1700-1755	Lithuanian	H1	250	1234567
6170	1800-2359	Ukrainian	B10	100	1234567
7105	0300-0359	Georgian	G14	250	1234567
7115	0500-0600	Romanian	B9	100	123456
7115	0600-0759	Romanian	B1	100	1234567
7115	0800-1659	Russian	B2	100	1234567
7115	1700-1800	Hungarian	B5	100	1234567
7115	1800-2300	Hungarian	G10	250	1234567
7130	0200-0359	Russian	B1	100	1234567
7145	0000-0259	Kazak	H3	250	1234567
7145	0330-0400	Latvian	G15	250	1234567
7145	0400-0559	Belorussian	G15	250	1234567
7145	0600-0659	Russian	B8	100	1234567
7145	2000-2300	Polish	G15	250	1234567
7155	0230-0300	Pashto	B7	100	1234567
7155	0300-0330	Dari	B7	100	1234567
7155	0400-0459	Tatar-Bashkir	L3	100	1234567
7155	0500-0530	Estonian	G11	250	1234567
7155	0530-0559	Latvian	G11	250	1234567
7155	1900-2100	Bulgarian	B9	100	1234567
7155	2100-2159	Bulgarian	G13	250	1234567
7155	2200-0229	Russian	P3	250	1234567
7165	0100-0200	Azerbaijani	G14	250	1234567
7165	0200-0259	Armenian	G14	250	1234567
7165	0300-0459	Ukrainian	M2	500	1234567
7165	0500-0700	Romanian	M2	500	123456
7165	0600-0700	Romanian	M2	500	7
7165	0700-1000	Romanian	B9	100	123456
7165	0700-1859	Romanian	B9	100	7
7165	1300-1859	Romanian	B9	100	6
7165	1500-1859	Romanian	B9	100	12345
7165	1900-2300	Romanian	G14	250	1234567
7180	0100-0200	Azerbaijani	L5	100	1234567
7180	0200-0300	Armenian	L5	100	1234567
7180	0300-0400	Georgian	L5	100	1234567
7180	0400-0500	Armenian	L5	100	1234567
7180	0500-0559	Azerbaijani	L5	100	1234567
7180	0600-0630	Lithuanian	G11	250	1234567
7190	0000-0159	Kirghiz	L3	100	1234567
7190	0200-0259	Turkmen	B2	100	1234567
7190	0400-0459	Tatar-Bashkir	M1	500	1234567
7190	0500-0659	Polish	M1	500	1234567
7190	0700-1600	Russian	B8	100	1234567
7190	1600-1659	Polish	B8	100	1234567
7190	1700-1959	Polish	G15	250	1234567
7190	2000-2400	Russian	L3	100	1234567
7200	0200-0259	Tajik	L2	100	1234567
7200	1500-1555	Belorussian	H3	250	1234567
7200	1600-1700	Latvian	H3	250	1234567
7200	1700-1755	Lithuanian	H3	250	1234567
7200	1800-1900	Belorussian	G11	250	1234567
7200	1900-2000	Estonian	G11	250	1234567
7200	2000-2100	Latvian	G11	250	1234567
7200	2100-2200	Lithuanian	G11	250	1234567
7200	2200-2259	Estonian	G11	250	1234567
7220	0000-0359	Russian	M1	500	1234567
7220	0400-0559	Russian	L2	100	1234567
7220	0600-2000	Russian	L2	100	1234567
7220	2000-2159	Russian	P3	250	1234567
7220	2200-2359	Russian	H3	250	1234567
7245	0000-0400	Russian	G11	250	1234567
7245	0400-0800	Russian	H2	250	1234567
7245	1800-2400	Russian	B2	100	1234567
7255	0200-0259	Tajik	G10	250	1234567
7255	0300-0459	Ukrainian	P6	250	1234567
7255	0500-0700	Ukrainian	B2	100	1234567
7255	1600-1659	Tatar-Bashkir	L5	100	1234567
7255	1700-1759	Uzbek	L5	100	1234567
7255	1800-1900	Azerbaijani	L5	100	1234567
7255	1900-2000	Georgian	L5	100	1234567
7255	2000-2100	Armenian	L5	100	1234567
7255	2100-2300	Russian	L5	100	1234567
7255	2300-0200	Russian	G10	250	1234567
7275	0000-0259	Kazak	P6	250	1234567
7295	0200-0359	Uzbek	L3	100	1234567
7295	1600-1800	Ukrainian	B7	100	1234567
7295	1800-2359	Ukrainian	P6	250	1234567
9505	0000-0259	Kazak	L4	100	1234567
9505	0500-0530	Estonian	G3	250	1234567
9505	0530-0600	Latvian	G3	250	1234567
9505	0600-0630	Lithuanian	G3	250	1234567
9505	1500-1555	Belorussian	H2	250	1234567
9505	1600-1657	Latvian	H2	250	1234567
9505	1700-1759	Lithuanian	L3	100	12345
9505	1700-1800	Lithuanian	M1	500	67
9505	1800-1900	Belorussian	M1	500	1234567
9505	1900-1959	Estonian	M1	500	1234567
9505	2000-2100	Latvian	G3	250	1234567
9505	2100-2200	Lithuanian	G3	250	1234567
9505	2200-2300	Estonian	G3	250	1234567
9520	0600-1157	Russian	H3	250	1234567
9520	1200-1600	Russian	L4	100	1234567
9520	1600-2059	Russian	P1 + P2	500	1234567
9520	2100-0600	Russian	P1	250	1234567
9530	0200-0259	Tajik	P5	250	1234567
9540	0230-0300	Pashto	B9	100	1234567
9540	0300-0330	Dari	B9	100	1234567
9540	0400-0659	Russian	B4	100	1234567
9540	1900-2055	Russian	P5	250	1234567
9555	0200-0259	Tajik	G13	250	1234567
9555	0300-0500	Russian	H3	250	1234567
9555	0500-0557	Tatar-Bashkir	H3	250	1234567
9555	1700-1800	Georgian	G13	250	1234567
9555	1800-1900	Azerbaijani	G13	250	1234567
9555	1900-2000	Georgian	G13	250	1234567
9555	2000-2059	Armenian	G13	250	1234567
9555	2100-0159	Russian	P4	250	1234567
9565	1600-1759	Ukrainian	B10	100	1234567
9565	1800-2059	Ukrainian	P4	250	1234567
9565	2100-2359	Ukrainian	G19	250	1234567
9595	0300-0400	Georgian	L6	100	1234567
9595	0400-0500	Armenian	L6	100	1234567
9595	0500-0559	Azerbaijani	L6	100	1234567
9595	0600-0800	Russian	L6	100	1234567
9595	1500-1555	Kirghiz	H4	250	1234567
9595	1600-1655	Tatar-Bashkir	H4	250	1234567
9595	1700-1755	Uzbek	H4	250	1234567
9595	1800-1900	Azerbaijani	L6	100	1234567
9595	1900-2000	Georgian	L6	100	1234567
9595	2000-2059	Armenian	L6	100	1234567
9595	2100-2300	Russian	P5	250	1234567
9625	0200-0259	Turkmen	G18	250	1234567
9625	0300-0600	Russian	L4	100	1234567
9625	1400-1659	Bulgarian	B5	100	1234567
9625	1700-2159	Bulgarian	G18	250	1234567
9625	2200-2400	Ukrainian	G18	250	1234567
9635	0500-0659	Tatar-Bashkir	L3	100	1234567
9645	0000-0200	Kirghiz	P5	250	1234567
9660	0000-0259	Kazak	G19	250	1234567

****USA (continued)****

9660	0300-0700	Ukrainian	P5	250	1234567
9660	1800-2359	Russian	H4	250	1234567
9680	0100-0200	Azerbaijani	G9	250	1234567
9680	0200-0300	Armenian	G9	250	1234567
9680	0300-0400	Georgian	G18	250	1234567
9680	0400-0500	Armenian	G18	250	1234567
9680	0500-0559	Azerbaijani	G18	250	1234567
9680	2000-2300	Hungarian	G21	50	1234567
9695	0330-0400	Latvian	G6	250	1234567
9695	0500-0700	Romanian	G13	250	123456
9695	0600-0700	Romanian	G13	250	7
9695	1700-2300	Hungarian	G12	250	1234567
9705	0400-0600	Belorussian	G5	250	1234567
9705	0600-0659	Russian	G5	250	1234567
9705	1600-2300	Romanian	G6	250	1234567
9715	0200-0359	Russian	G3	250	1234567
9725	0000-0200	Kirghiz	H4	250	1234567
9725	0200-0400	Uzbek	H4	250	1234567
9725	0400-0459	Tatar-Bashkir	H4	250	1234567
9725	0500-0759	Romanian	G9	250	123456
9725	0600-0759	Romanian	G9	250	7
9725	0800-1659	Romanian	B1	100	7
9725	0800-1000	Romanian	B1	100	123456
9725	1300-1659	Romanian	B1	100	6
9725	1500-1659	Romanian	B1	100	12345
9725	1700-1759	Romanian	B2	100	1234567
9725	1800-2300	Romanian	M2	500	1234567
9750	0200-0300	Turkmen	B4	100	1234567
9750	0300-0330	Dari	B4	100	1234567
9750	2100-0159	Russian	B4	100	1234567
11725	0400-0559	Russian	G1	250	1234567
11725	0600-1000	Romanian	G1	250	123456
11725	0600-1959	Romanian	G1	250	7
11725	1300-1959	Romanian	G1	250	6
11725	1300-1459	Ukrainian	G1	250	12345
11725	1500-1959	Romanian	G1	250	12345
11770	0200-0359	Uzbek	G12	250	1234567
11770	0400-0600	Belorussian	G12	250	1234567
11770	0600-0659	Tatar-Bashkir	G12	250	1234567
11770	1400-2200	Bulgarian	G4	250	1234567
11780	1700-1755	Uzbek	H2	250	1234567
11815	0230-0300	Pashto	G1	250	1234567
11815	0300-0330	Dari	G1	250	1234567
11825	1600-1759	Georgian	L6	100	1234567
11855	0400-0500	Armenian	L7	100	1234567
11855	0500-0559	Azerbaijani	L7	100	1234567
11855	1800-2059	Russian	H2	250	1234567
11875	0300-0400	Georgian	G4	250	1234567
11875	0400-0500	Armenian	G4	250	1234567
11875	0700-1159	Russian	L3	100	1234567
11875	1200-1300	Azerbaijani	L6	100	1234567
11875	1300-1500	Armenian	L6	100	1234567
11875	1500-1559	Azerbaijani	L6	100	1234567
11875	1600-1800	Georgian	G9	250	1234567
11875	1800-1900	Azerbaijani	G9	250	1234567
11875	1900-2000	Georgian	G9	250	1234567
11875	2000-2100	Armenian	G9	250	1234567
11885	0600-1159	Russian	H1	250	1234567
11885	1200-1559	Russian	L3	100	1234567
11885	1600-1900	Russian	P5	250	1234567
11885	1900-0600	Russian	G2	250	1234567
11895	0500-0700	Tatar-Bashkir	H4	250	1234567
11895	1400-1600	Russian	L7	100	1234567
11895	1600-1659	Tatar-Bashkir	L7	100	1234567
11895	1700-1959	Hungarian	G3	250	1234567
11905	1500-1559	Kirghiz	B10	100	1234567
11925	1600-1659	Ukrainian	L3	100	1234567
11925	1700-1759	Uzbek	L3	100	1234567
11925	1800-1859	Russian	G2	250	1234567
11925	1900-2100	Russian	G20	50	1234567
11935	0230-0300	Pashto	G17	250	1234567
11935	0300-0330	Dari	G17	250	1234567
11935	0400-0500	Tatar-Bashkir	G17	250	1234567
11935	0500-0700	Ukrainian	G17	250	1234567
11935	1700-2000	Ukrainian	P3	250	1234567
11935	2000-2200	Ukrainian	G1	250	1234567
11970	1200-1455	Kazak	H1	250	1234567
11970	1500-1600	Belorussian	G19	250	1234567
11970	1600-1700	Latvian	G19	250	1234567
11970	1700-1759	Lithuanian	G19	250	1234567
11970	1800-1859	Belorussian	G8	250	1234567
1511E	1400-1859	Bulgarian	G14	250	1234567
1513E	1200-1500	Kazak	P4	250	1234567
1513E	1500-1755	Russian	P4	250	1234567
1514E	0500-0700	Tatar-Bashkir	P6	250	1234567
15170	1200-1300	Azerbaijani	G10	250	1234567
15170	1300-1500	Armenian	G10	250	1234567
15170	1500-1600	Azerbaijani	G10	250	1234567
15170	1600-1759	Georgian	G10	250	1234567
15215	0700-0959	Romanian	G5	250	1234567
15215	0700-1759	Romanian	G5	250	7
15215	1300-1759	Romanian	G5	250	6
15215	1300-1459	Ukrainian	G5	250	12345
15215	1500-1759	Romanian	G5	250	12345
15255	1300-1400	Uzbek	G19	250	1234567

****USA (continued)****

15255	1400-1459	Turkmen	G19	250	1234567
15290	0700-1555	Russian	P3	250	1234567
15290	1600-1900	Russian	G21	50	1234567
15340	1200-1300	Azerbaijani	L9	100	1234567
15340	1300-1500	Armenian	L9	100	1234567
15340	1500-1600	Azerbaijani	L9	100	1234567
15340	1600-1800	Georgian	L9	100	1234567
15370	1000-1100	Tatar-Bashkir	H2	250	1234567
15370	1200-1300	Tajik	H2	250	1234567
15370	1300-1400	Uzbek	H2	250	1234567
15370	1400-1455	Turkmen	H2	250	1234567
15370	1500-1555	Kirghiz	P5	250	1234567
15370	1600-1659	Tatar-Bashkir	P3	250	1234567
15380	1200-1500	Kazak	P6	250	1234567
15380	1500-1600	Kirghiz	P6	250	1234567
15380	1600-1759	Ukrainian	P6	250	1234567
15445	1000-1100	Tatar-Bashkir	G19	250	1234567
15445	1300-1330	Pashto	G14	250	1234567
15445	1330-1359	Dari	G14	250	1234567
17725	1300-1330	Pashto	G12	250	1234567
17725	1330-1400	Dari	G12	250	1234567
17725	1400-1659	Bulgarian	G12	250	1234567
17735	1200-1455	Kazak	P5	250	1234567
17750	1000-1100	Tatar-Bashkir	L5	100	1234567
17750	1200-1300	Tajik	L5	100	1234567
17750	1300-1400	Uzbek	L5	100	1234567
17750	1400-1459	Turkmen	L5	100	1234567
17760	1200-1300	Azerbaijani	L7	100	1234567
17760	1300-1500	Armenian	G17	250	1234567
17760	1500-1559	Azerbaijani	G17	250	1234567
17805	1100-1500	Russian	P2	250	1234567
17805	1500-1800	Russian	G16	250	1234567
17835	1300-1459	Ukrainian	G15	250	12345
17895	1200-1300	Tajik	B5	100	1234567
17895	1300-1400	Uzbek	B5	100	1234567
21510	1000-1100	Tatar-Bashkir	G17	250	1234567
21510	1200-1300	Tajik	G6	250	1234567
21510	1300-1330	Pyashto	G6	250	1234567
21510	1330-1400	Dari	G6	250	1234567
21510	1400-1500	Turkmen	G6	250	1234567

KEY TO TRANSMITTER SITES:

- B = Biblis, Germany
 - G = Gloria, Portugal
 - H = Holzeirchen, Germany
 - L = Lampertheim, Germany
 - P = Plata de Pals, Spain
- (Dan Ferguson/VOA BBS)

****USSR****

There is a new private radio station broadcasting from St. Petersburg and using Kaliningrad (and other) transmitters. The station calls itself Radio Ala, the format is Russian "bardic songs" and news. No address available at this time.

0730-1600 684, 1386, 7400 kHz
 1630-0700 5040 kHz
 0700-1200 11925 kHz
 1200-1500 11920 kHz

Here is some more information about this new station, based on a letter sent to me by the Soviet DX'er Fyodor Brazhnikov who lives in Irkutsk. He does not mention whether these times are UTC or Moscow time (UTC + 2).

- They also broadcast 1530-0700 on 6055 KHz.
- Radio Ala started broadcasting on October 1st at 2200.
- Transmitters on 684, 5040 and 7400 KHz are in St. Petersburg (which explains the excellent reception in Eastern Finland).
- Other transmissions are coming from Kaliningrad.
- The station mainly plays acoustic guitar music and, very rarely, news.

OTHER NEW PRIVATE SOVIET SHORTWAVE STATIONS (info from Mr. Fyodor Brazhnikov of Irkutsk):

Radio Dvizenie (=Radio Traffic)
 0730-0900 Moscow time 9695 KHz. At the end of October 7200, 6090 or 9670 will replace 9695 KHz. The station is run by local journalists. Address: ul. Turgeneva, 13, komnata 119, 13-u etazh, Ekaterinburg/Sverdlovsk 620219, Russia (NB. The city plans to change name but according various sources the change has not yet taken place.)

Radio Nezavennost (=Radio 'Independence')
 We & Thu 1600-1700 936 and 11825 KHz and 1700-1800 11825 KHz; from 20.9.1991 5980 KHz was added. Plans to increase broadcasting times & frequencies. Address: ul. Vatutina, 6, Lvov 290005, the Ukraine.

Furthermore, Radio station Vedo (Volgograd) and Radio Echo of Moscow have been on the air on shortwaves for a while with schedules mentioned in this newsgroup. Some stations are using Gosteleradio transmitters and some are using transmitters of their own, many of them seem to be old jamming-transmitters. It seems that the USSR is becoming an interesting SW country, a little bit like

****USSR (continued)****

Brazil in the Western hemisphere. (Jorma Mantyla - Finland/USENET/21-Oct-91/Kirk Baxter/SW ECHO)

Russian radio, which jammed British Broadcasting Corp. programs until only four years ago, will put the BBC's Russian-language service on the air starting early next year. Under the agreement, programs will be beamed to Moscow by satellite for nationwide broadcast. About 13 million people across the Soviet Union listen regularly to the Russian Service. Soviet President Mikhail Gorbachev tuned in the BBC when he was isolated by the August coup attempt. (10 Oct-91/Wall Street Journal/12-Oct-91/Russ Tillman/SW ECHO)

9905USB RADIO MOSCOW feeder noted from 0750-past 0800. (08-Oct-91/Brian Johnson/SW ECHO) [I notice this in standard AM, from around 1500 to past 1900 carrying relay of Russian home service..ed.]

The following is a list of Radio Moscow World Service frequencies in English. The 09-24 UT entries were observations made by me in Vincentown, NJ, on 10 and 11 November. The 00-09 UT entries are based upon the printed schedule provided by Radio Moscow.

- 0000-0030 6000 6045 7115 7150 9600 9870 11750 12050 15355 15425 17665 17700 17720 17840
- 0030-0100 6000 6045 7115 7150 9600 9870 11750 12050 15355 15425 17665 17700 17720 17840
- 0100-0130 6000 6045 7115 7150 9600 11750 12050 15355 15425 17665 17700 17720 17840
- 0130-0200 6000 6045 7115 7150 9600 11750 12050 15355 15425 17665 17700 17720 17840
- 0200-0230 6000 6045 7115 7150 9600 12050 15425 17665 17700 17720 17840
- 0230-0300 6000 6045 7115 7150 9600 12050 15425 17665 17700 17720 17840
- 0300-0330 6000 6045 7115 7150 9600 9765 11730 12050 15425 17665 17700 17720 17840
- 0330-0400 6000 6045 7115 7150 9600 9765 11730 12010 12050 15425 17665 17700 17720 17840
- 0400-0430 6000 7150 7240 7310 9600 9750 9765 11675 11730 12010 12050 15425 17605 17700 17720 17840
- 0430-0500 6000 7150 7240 7310 9600 9750 9765 9895 11675 11730 12010 12050 15425 17605 17700 17720 17840
- 0500-0530 9505 9895 12010 12050 15180 17605 17720 17840
- 0530-0600 7270 9505 9895 12010 12050 15180 15455 17605 17720 17840
- 0600-0630 7270 9505 9895 12050 15180 15455 17720
- 0630-0700 5905 7270 9505 9795 9895 12000 12010 12050 13605 15180 15455 17720
- 0700-0730 5905 7270 9505 9795 12000 13605 13645 15455 17720
- 0730-0800 5905 7175 7260 7270 7345 9505 9795 9825 12000 13605 13645 15455 17720
- 0800-0830 5905 7175 7260 7270 7345 9505 9795 9825 12000 13605 13645
- 0830-0900 5905 7175 7260 7270 7345 9505 9795 9825 12000 13605 13645
- 0900-0930 13705 15580
- 0930-1000 13705 15580
- 1000-1030 6000 13705 15175 15580
- 1030-1100 6000 13705 15175 15580
- 1100-1130 6000 15175 15280 15455 15465 15520 17570 17655 17665 17670 17695 17710 17790 17810 17870 21785 21800
- 1130-1200 6000 15175 15280 15455 15465 15520 17570 17655 17665 17670 17695 17710 17790 17810 17870 21785 21800
- 1200-1230 6000 9705 9855 11705 15350 15435 15465 15470 15480 15490 15500 15535 15550 17570 17600 17605 17610 17635 17655 17665 17695 17700 17710 17780 17790 17810 17840 17870 21725 21785 21800
- 1230-1300 6000 9705 9855 11705 15350 15435 15465 15470 15480 15490 15500 15535 15550 17570 17600 17605 17610 17635 17655 17665 17695 17700 17710 17780 17790 17810 17840 17870 21725 21785 21800
- 1300-1330 9855 11705 13705 15435 15480 15535 17570 17605 17635 17655 17665 17690 17700 17780 17790 17810 17840 17870 21725 21785 21800
- 1330-1400 7380 9560 9855 9885 11705 11920 13705 15435 15480 15535 17570 17605 17635 17665 17690 17700 17780 17790 17810 17840 17870 21725 21785 21800
- 1400-1430 7380 9560 9855 9885 11705 11840 11920 13705 15345 15465 15480 15550 17570 17605 17635 17655 17665 17670 17780 17790 17810 17840 17870 21725 21785

****USSR (continued)****

- 1430-1500 7380 9560 9855 9885 11705 11840 11920 13705 15345 15465 15480 15550 17570 17605 17635 17655 17665 17670 17780 17790 17810 17840 17870 21725 21785
- 1500-1530 7380 9855 9885 11705 11840 13705 15345 15450 15465 15480 17605 17610 17655 17665 17670 17780 17790 17810 17870
- 1530-1600 7380 9855 9885 11705 11840 13705 15345 15450 15465 15480 17605 17610 17655 17665 17670 17780 17790 17810 17870
- 1600-1630 11705 11840 13705 15450 15465 15480 17605 17610 17655 17670 17780 17810 17870
- 1630-1700 11705 11840 13705 15450 15465 15480 17605 17610 17655 17670 17780 17810 17870
- 1700-1730 9685 9720 11840 15450 15485 17670
- 1730-1800 9685 9720 11840 15450 15485 17670
- 1800-1830 7170 9685 9720 11840
- 1830-1900 7170 9685 9720 9765 11840
- 1900-1930 9685 9720 9765 9860 11630 11745 11840 12055
- 1930-2000 9685 9720 9765 9860 11630 11745 11840 12055
- 2000-2030 9685 9720 9765 9860 11630 11840 12055
- 2030-2100 7170 9685 9720 9765 9860 11630 11840 12055 12060
- 2100-2130 7170 7240 9765 9860 11840 12055 12060
- 2130-2200 7170 7240 9765 9860 11840 12055 12060
- 2200-2230 7115 7150 7240 9720 9765 9860 12055 12060 17655 21480
- 2230-2300 7115 7150 7240 9720 9765 9860 12055 12060 17655 21480
- 2300-2330 7115 7150 7240 9765 9860 12055 17655 17720 21480
- 2330-2400 7115 7150 7240 9765 9860 12055 17655 17720 21480

(11-Nov-91/update 12-Nov-91/Tom Sundstrom/SW ECHO)

Radio Tashkent in English at 1200 and 1330 now on 17745, 15470, 9540 and 5945. At least at 12 UT, all are easily heard here. (25-Nov-91/Tom Sundstrom/SW ECHO)

Per the DX program of Radio Espana, here is the sked for the Latin American Service of Radio Moscow (in Spanish), supposedly valid until March 28, 1992: Mon-Fri 0000-0600 UTC 6185 6195 7160 7195 7360 7390 12000 12010 12030 12040 12050 12060 12070 13705 15110 15195 15265 15455 15475 15510 15525 15535 15550. They said the Spanish language DX program is broadcast at 0115, 0415 and 0615 UTC. The 0615 doesn't square with the 0600 sign-off they gave earlier so I don't know about that one. (R. ESPANA DX PROGRAM/28-Oct-91/Bill Oxner/SW ECHO) [Love that carpet bombing from 12 MHz up...ed.]

BBC Monitoring tell me that Moscow's Russian DX show has been alluding to the possible CLOSURE of the Radio Moscow World Service !! (04-Nov-91/Andy Sennitt/SW ECHO)

Radio Moscow replaces its North American Service with the World Service on 1 Dec; this may only affect the West Coast Service, since the East Coast Service is already the World Service. (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****YUGOSLAVIA****

Here are the new times and freqs. of Radio Yugoslavia's programs in English : At 0230-0315 UTC to eastern North America on 9555kHz, and to Western North America on 11885kHz. At 1230-1300 to eastern North America on 17740kHz, to South Asia on 17710kHz, and to Australia on 21605kHz. Then from 1930-2000 and again at 2200-2245, to Western Europe on 6100kHz and to southern Africa on 15140kHz. (26-Sep-91/ANDY SENNITT/SW ECHO)

According to Glenn Hauser, Yugoslavia made a frequency adjustment for the EG to NAM release at 0230-0315 UTC . . . now on 9550, ex-9555 (which had Portugal QRM), in parallel to 11885 kHz. (Glenn Hauser/21-Oct-91/Joe Hanlon, visiting Bruce MacGibbon/SW ECHO)

****ZAIRE****

Kisangani xmtr of LV du Zaire heard with good levels at 0448 to past 0600 on 11454.9 LSB. RTTY QRM minimized with sharp filter, remnants squashed with an audio notch filter. I don't recall seeing this mentioned anywhere, but the USB of this station is almost completely inaudible; they are only modulating the LSB. This would indicate that the transmitter is an old point-to-point beast reluctantly dragged into broadcasting service. (Al Quaglieri/SW ECHO)

****CLANDESTINES****

The Mozambique political organization Renamo, has resumed SW broadcasts under the title of Voice of Renamo. It broadcasts in Portuguese & vernaculars on 9990 from 0500-0530 & 1500-1600. (Radio Nederland's Media Network/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Voice of the Resistance of the Black Cockerel has this current schedule: (dated Oct 15): 0445-0830 on 7295, 9700; 1100-1430 on 9850, 11830; 18-2315 on 4880, 7100. Programming in Portuguese & vernaculars. (Nov-91/BBCMS/Mick Ogrizek/Australian

****CLANDESTINES (continued)****

Radio DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)
Heard A Voz da Resistencia do Galo Negro (Black Cockerel) s/on in
PP @0445 w/rickety anthem, tc, acapella choir, W full ID (incl
"..Jamba, Distrito Central.."), freqs, pgm sked, M quickie blessing,
into pop mx to 0500 when Big Ben chimes, then - I won't swear to
this, but it sure sounded like a relay of the news from Luanda (i.e.
Radio Nacional de Angola). Local program continued after 0520. If
this is so, the May 31 peace agreement between Angola's two
opposing factions (the government/UNITA) must be holding water
quite well! Sigs strong at first, then incr QRM de VOA on freq.
/7295 buried 3 deep. SIO 333 (22-Nov-91/AI Quaglieri/SW ECHO)

Voice of the Oromo Liberation is now heard on 11705 (ex 9540)
from 1000-1100. (Nov-91/BBCMS/Mick Ogrizek/Australian Radio
DX Club/27-Nov-91/Bruce MacGibbon/SW ECHO)

Iran's Flag of Freedom Radio announced this new schedule on Oct
28: 0330-0525 on 9045, 9250, 11470 (I've heard it - Bruce),
15565; 0645-0730 on 11470, 15100; 14-1445 on 11470, 15100;
1630-1825 on 9355, 11470, 15100, 15565. (Nov-91/BBCMS/Mick
Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW
ECHO)

As from October 28th, Voice of Democratic Kampuchea & Voice of
the National Army of Democratic Kampuchea have merged to form
a new station: Voice of the Great National Union From of Cambodia
(VGNUFC). Broadcasts are scheduled 0800-1000, 1200-1500,
2330-0200. Only frequency noted so far is 5408 (frequency
formerly used by the National Army Station). (Nov-91/BBCMS/Mick
Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce MacGibbon/SW
ECHO)

Voice of the Khmer on 6325 (1100-1400); Voice of the National
Army of Democratic Kampuchea on 5408 (1100-1600); Voice of
Democratic Kampuchea on 6010 and 9440 (1300-1400). (28-Nov-
91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO) [There seems to be
a conflict of info between this item and the one above...ed.]

A new anti-Kuomintang-government station, called Voice of Taiwan
commenced broadcasts in last October. The station announces
broadcasts in Japanese at 1500 & in English 1530 on 9990.
According to Radio Japan's DX Corner the station has been heard
at various times between 1300-1600 in Chinese, Japanese &
English. Fax number of the station is Taiwan 886 25322080. (Nov-
91/BBCMS/Mick Ogrizek/Australian Radio DX Club/27-Nov-91/Bruce
MacGibbon/SW ECHO)

A couple of UNID Mideast stations were noted 21-Oct kicking
around the low end of the 40m bands. One station on 7050 was
well heard with a French program around 0316 - poss. mention of
Mujahed or Mujahedeen. At 0330 switched to Farsi or such and
bubble jamming began six minutes later. At 0410 recheck, station
was again in the clear but weaker, while jammer had moved down to
7043.7, covering who-knows-what. Around 0413 another UNID
was spotted on 7075 with a long speech in a regional dialect; with
ham QRM and weak signal (SIO 222) not even a partial ID was
possible. These were noted again on 15-Nov. One is jammed and
shifts about every few minutes to avoid the jammer. I noted this
one with fair signals (until jamming caught up) on 13-Nov-91
around 0415, jumping around from 7049.9 to 7035.5 to 7045.5, at
one time or another on every frequency inbetween. It leaves the air
around 0430. From the slivers of talk I've monitored, I believe this
station to be hostile to Iraq. The other station hovers around 7070
kHz - this night it was on 7069.6 - and is not jammed; it features
lots of talk in possible Farsi and typical music of the region. This
one was noted with fair signals until sign-off at 0446*. So who
can/will tell me who these two stations might be? (AI Quaglieri/SW
ECHO)

****UNIDENTIFIED****

7160.1 2023 UNID station: AA; M speech before live audience,
then he breaks into song (!), back to studio @2031,
tlk & mx to 2100, then 5 lo/1 hi time pips, M ID
(missed). Poor. Anyone? (21-Nov/AI Quaglieri/SW
ECHO)

7852.8 1216 UNID station: ??; only a weak het w/traces of W
tlk. Propagation would suggest somewhere between
Mideast and Southeast Asia. Very poor. (18-Nov/AI
Quaglieri/SW ECHO)

****EUROPIRATES****

Now to Ireland, and a new station has appeared on shortwave.
Harmony 6305 is, as the name suggests, operating on 6305kHz,
apparently 24 hours a day. The station is unlicensed, and informed
sources tell me that the transmitter site is the same as the one
being used by Radio Fax, which operates on 6205kHz. Radio Fax
itself, which was at first reluctant to reveal the location of its
transmitters, has now informed WRTH directly that they are in fact
located in County Donegal. (26-Sep-91/ANDY SENNITT/SW ECHO)

Radio Fax is broadcasting in English 24 hours daily on 3910 and
6205. (28-Nov-91/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****PIRATES AND SUCH****

It was reported that Bob Geldorf (the rock star) is going to invest in
Radio Caroline. They said R. Caroline is reporting that the station
will soon be licensed by a 3rd world country that is not a member
of the ITU. Once they have the license they can legally buy supplies
in the UK, etc. They said the station will also begin "international
service" and will raise money for world hunger. (HCJB DX PARTY
LINE/28-Oct-91/Bill Oxner/SW ECHO)

ANDY SENNITT replies: Well, over here it's an open secret that Bob
Geldorf has been involved with Radio Caroline for at least several
years. A few months ago a production company called Planet Films
(the name of the company that originally set up Radio Caroline back
in 1964 was Planet Productions) sold a one hour documentary
about Caroline to BBC Television. It was so pro-Caroline that the
BBC demanded certain sections be cut out. Planet Films is owned
by Bob Geldorf.

I am fortunate enough to have a very good source. These things
have all been discussed at one time or another, but there are no
definite plans at the moment. The radio ship is silent but is being
manned by a crew of three. The Caroline organization came to an
agreement with the British authorities that they would be allowed to
have people on board, and they would be allowed to receive enough
fuel to provide lighting and heating (and thus conform to safety
requirements), but the moment they switch on the mediumwave
transmitter, they will be boarded and the ship will be towed in.

Ronan o'Rahilly, the founder of Caroline, has often talked about
using the ship for humanitarian purposes. In actual fact, those who
have been out to the ship recently say it wouldn't be sea-worthy
enough to move anywhere else. So indeed there have been efforts
to find a way of turning Caroline into some kind of international
station, probably using shortwave. In fact the "mediumwave"
transmitter on board right now is the old shortwave transmitter that
used to operate on 6215, so it could no doubt be converted back.
An attempt was made to find out how the British authorities would
react if ONLY shortwave were to be used - unfortunately the official
response was that since the situation was hypothetical, they
couldn't say whether or not such an operation would be tolerated.
So that's the way it is at this moment.

The schedule for Free Croatian Radio is 0100-0200 & 0345-0500
on 7315. Although this info has been noted here several times, they
did give a US address which I believe is news:

Free Croatian Radio
3611 Wood St
Chicago, IL 60609
(HCJB DX PARTY LINE/28-Oct-91/Bill Oxner/SW ECHO)

****UTILITIES****

Here's another press update. All the frequencies have been
monitored within the last month. Frequencies and services have
also been added since the last post. Thanks to Tom Sundstrom for
the additional IRNA frequencies. The times that he reported are
given.

High Frequency Press Services BAUDOT AND SITON B (* inactive)

Algerian Press Service	0930	14932.0	850/50	APS	Algeria
Anadolu Ajansi	1055	18040.0	850/50	AA	Turkey
Agence Telegrafike Shqijetara	0945	9133.0	1000/50	ATA	Albania
ZAT	0900	9430.0	500/50		

Agenzia Nazionale Stampa Associata	0830	8030.0	425/50	ANSA	Italy
IRF50	1400	20085.0	425/50		
ISX20	1400	20372.0	425/50		
IRS23	1630	22955.0	425/50		
ISX22	1640	24790.0	425/50		
ISX24	1220	24271.5	425/50		

Agentstwo Petschato Novosti	1250	16145.0	425/100	APN	USSR
RWM77					

Central News Agency	1430	13563.0	850/50	CNA	Taiwan
3MA22	1400	16224.0	850/50		
3MA35					

Dir. des Services d'Info. et de Presse	0400	16106.0	425/50	DIPLO	France
FZM62	0400	20078.0	425/50		
FZN7					

Gulf News Agency	0530	14764.0	350/75	GNA	Bahrain
A9M70					

Iraqi News Agency	1300	14373.0	425/50	INA	Iraq
YIL73*	0830,1630	14699.0	425/50		
YIX70					

****UTILITIES (continued)****

Islamic Republic News Agency	IRNA	Iran
98C23 2152	7960.0 425/50	
98C25 1930	8050.0 425/50	
EPJ2 1600	19980.0 425/50	
Jamahiriyah Arab News Agency	JANA	Libya
5AQ62 1800	12186.0 425/50	
9HC67 0900	14573.0 850/50	
5AQ88 1600	20560.0 425/50	
Korean Central News Agency	KCNA	DPRK
HMF55 2200	11430.0 250/50	
HMF52 0400	11476.0 250/50	
HMF42 0400	12175.0 250/50	
HMF36 0400	13580.0 250/50	
HMF57 0800	14452.0 250/50	
HMF32 0445	14568.0 425/50	
Khaosan Pathet Lao	KPL	Laos
0905	14640.0 425/50	
Kyodo Tsushin News Service	KYODO	Japan
JAG50 0620	10795.0 425/50	
JAL44 0800	14547.5 850/50	
JAL54 0530	14595.0 850/50	
Maghreb Arabe Presse	MAP	Morocco
CNM61 1330	14760.0 425/50	
CNM66X2 1525	15752.7 425/50	
CNM69.1X 1000	15999.9 425/50	
CNM80X11 1350	18496.1 425/50	
CNM85X11 1535	19171.1 425/50	
Ministry of External Affairs	MEA	India
ATP65 1520	14785.0 600/50	
Middle East News Agency	MENA	Egypt
SUA246 2245	10150.0 425/75	
SUA251 2230	10610.0 425/75	
Noticias Argentinas	NA	Argentina
2300	10805.0 850/75	
Pan African News Agency	PANA	Senegal
6VK317 1600	16117.0 425/50	
Polska Agencja Prasowa	PAP	Poland
SOV228B 1410	20286.5 SITOR-B	
SOV293B 1400	20933.5 SITOR-B	
Prensa Latina	PL	Cuba
CLN219 0930	8140.0 425/50	
CLN451 1400	14901.0 425/50	
CLN530 1430	16348.0 425/50	
Sudan News Agency	SUNA	SUNA
1730	18788.0 250/50	
Telegraf. Agentstvo Sovietsk. Soiuz	TASS	USSR
RNK36 0600	14490.0 425/50	
REB24 1200	14700.0 425/50	
REN30 0450	15575.0 425/50	
RBI78 1600	15930.0 425/50	
RGW28 1320	16140.0 425/50	
RQV70 1615	18050.0 425/50	
RND70 1430	18125.0 425/50	
RRQ20 1510	18385.0 425/50	
Telenoticiosa Americana	TELAM	Argentina
LRO2 2300	4004.5 850/50	
2305	7428.5 850/50	
LRB39 2305	10893.5 850/50	
Telegraf. Agencija Nova	Jugoslavija TANJUG	Yugoslavia
40C2 0200	5240.0 425/50	
YZD 0415	7658.0 425/50	
YZD7 2345	7806.0 425/50	
MFA 0630	9046.0 425/75	
YZJ5 0400	13440.0 425/50	
YZJ6 1255	15705.0 425/50	
YZJ4 1320	16343.0 425/50	
YZJ4 1610	19865.0 425/50	
YZJ 1330	20204.0 425/50	
Vietnamese News Agency	VNA	Vietnam
XVM3 1400	13656.0 425/50	
New China News Service	XINHUA	China
BZP54 1255	14367.0 425/75	
BZR66 1245	16136.0 425/75	
(09 & 19-Nov-91/Mark Burkart/SW ECHO)		

****UTILITIES (continued)****

Call : - - - Content: Cyrillic text newspaper
 Freq : 17,000.0 MHz I have no listing for this station. Does
 Date : 11/01/91 anyone have information on this station.
 They
 Time : 00:01 UTC send a full page at 00:00 UTC everyday.
 Mode : FAX 60/288
 Location : - - - (04-Nov-91/Mark Burkart/SW ECHO)

The FAA has an entirely separate SelScan-type HF system all their own, it's not part of the Customs HF (COTHERN) system. There are, by the way, only 10 frequencies in the COTHERN system that use the SelScan tones... other "discrete" channels aren't part of the COTHERN scan system.

Customs Over The Horizon Enforcement Network HF SelScan Frequencies:

- 7527.0
- 8912.0
- 10242.0
- 11494.0
- 13907.0
- 15867.0
- 18594.0
- 20890.0
- 23214.0
- 25350.0

These are Channels 1-10, in order of frequency, for the SelScan system of US Customs. Of course, much of the traffic on these channels is scrambled with TDM Scramblers. (The "gobbling" sound with digital bursts front and rear). Propagation test data braps are sent every 15 minutes or so by the C3I center in Florida and the C3I center in California, working up from channel 1 to channel 10, in order... you can use that to discover how high in frequency the propagation is good to you from each of them (if you can figure out which set of bursts is from which C3I center). (03-Nov-91/Skip Sanders/SW ECHO)

BARRY ROWAN: Can anyone tell me the location of the US Air Force FAX transmitters that broadcast weather charts? I caught them on Sunday 10/13 on 19328 kHz from at least 1700-2000 UTC. The charts did have the NOAA symbol on them as well as US Department of Commerce and Air Force. None of my listings have this.

GEOFF CHESTER: The USAF FAX transmitter is located at Offutt (sp?) AFB, near Omaha, Nebraska. The frequencies currently in use are 19328, 11121, and 6905 kHz. They started operations about a year and a half ago and so are not in many of the frequency guidebooks.

****AIRBORNE BEEB****

The BBC and Cathay Pacific Airlines have cobbled together a system for providing live BBC World Service broadcasts to in-flight passengers. Cathay currently has one 747 running trials and they hope to have all of their 747 fleet with the service by next spring. Apparently, it's computer driven. The computer software checks the plane's current location and then searches its database for the most likely "best" signal for that time and place - which it then tunes to. It sounds like a higher-tech version of what Sony does with the SW-77 with timer events and strongest signal searches. (11-Nov-91/BBC WAVEGUIDE/Bill Oxner/SW ECHO)

****BRUCE AND GLENN'S EXCELLENT ADVENTURE****

If you have never been to China and would like to accompany me on a Shortwave Radio Listeners Tour to Shanghai, Beijing, Chengde, and Xian for 10-14 days in the Fall of 1992, please send me your name. Glenn Hauser will also be accompanying and promoting this tour. When we arrive in China, we come under the auspices of the "China International Travel Service" who will be providing a guide so we see a lot of excellent tourist sites. The travel agency handling this trip is Inter-Tour of America, Inc., located in Indiana. The advertisement I saw from Inter-Tour showed a 10 day tour for around \$1400.00. The flight will be on Air China and you can pick it up in New York or San Francisco. After being in China July 29-Aug 5 and listening to Shortwave Radio (basically on my own, as the other 5 people were not that much into the 10-15 hour monitoring I like to do, it would be nice to go with some SWL's.). We will also go sightseeing so if you have a video camera bring it. I can assure you it will be an experience you will never forget. If you are married, bring your wife. If you have a girl friend bring her. It is a trip worth going on. Right now, I am just compiling a list of names of people that would be interested in going. It would be nice to have around 15-30 people. (Yes, China would never be the same with all those strung up wires and shortwave radio's). Please either send me a message on SW Echo or send me your name and address to: Bruce MacGibbon 2295 NE Juniper Ave, Gresham, Oregon. Note: Neither Glenn nor I are being paid to promote this tour to China. (11-Nov-91/Bruce MacGibbon/SW ECHO)

****C-SPAN ALERT****

On Thanksgiving Day and Black Friday, C-Span television has been carrying extensive coverage of life in the Soviet Union. The final item was a fascinating interview with Richard Alibegov, Yuri Kostin and Yuri Pronin of Radio Moscow. Alibegov, a native Georgian whose voice is very familiar from the Radio Moscow World Service in English, revealed that he was amongst the crowds that prevented four tanks from reaching the "White House" where Boris Yeltsin was based during the abortive coup attempt. Kostin, a much younger man (who looks about 25 years old) is also with the English service, and he referred to Yuri Pronin as his "boss" which presumably means Head of the English service. Pronin himself did not say much, but mentioned that he is 45 years old. Alibegov and Kostin described in graphic detail the events of the three days - how they learned about the coup by watching CNN in the office, and listening to the BBC and Radio Liberty. VOA was notably NOT mentioned. They also referred to the "battle" going on inside Radio Moscow when the journalists insisted on being allowed to tell the whole story. If you missed this interview, the good news is that C-Span will be continuing its look at the Soviet Union on THURSDAY DECEMBER 19th AT 4.PM EASTERN TIME (2100 UTC) with a program about the Soviet media. Based on what I saw on Friday, this program is a must for those of you interested in what goes on behind the scenes at Radio Moscow (and who isn't?). Those of us outside North America won't be able to see it, but no doubt those who do will be eager to post comments in the Echo. Finally, C-span revealed that it is negotiating with Radio Moscow to relay its output on Audio 1, and this will hopefully start "quite soon". (29-Nov-91/Andy Sennitt/SW ECHO)

****GETCHA BBC SOUVENIRS HERE!***

RUSS TILLMAN: I've visited the BBC shop at Bush House and recommend those visiting London do the same. They have a lot of variety for sale ranging from books to clothing.

ANDY SENNITT: Good point, Russ. But you might also have mentioned that they have a worldwide mail order service, as only a small number of BBC listeners can visit London. The address is BBC World Service Shop, Bush House, The Strand, London WC2B 4PH. Or you can call a 24h answer line on +44 71 257 2575. They claim to stock every radio and TV related book in print in the UK. And yes, you can buy the WRTH there!

****FCC APPLIES MOUTH TO MOUTH TO AM BAND****

ACTION IN DOCKET CASE
FCC AMENDS RULES TO IMPROVE THE QUALITY OF THE AM BROADCAST SERVICE
(MM DOCKET 87-267)

The Federal Communications Commission has concluded an important phase of its long-term program designed to transform and revitalize the AM broadcast service. Numerous revisions and adjustments, both major and minor, to the existing AM rules and policies have been adopted. It is expected that today's action will go a long way toward improving the health and ensuring the survival of the AM service. The strategy relies upon the application of three mutually supporting elements designed to reduce congestion and interference in the AM band:

The elements are:

- Technical Standards which implements new and revised AM technical standards designed to reduce interference to AM broadcasters' primary service areas;
- Migration which selectively opens 10 newly available frequencies in the expanded band, 1605 - 1705 KHz, to those AM stations which significantly contribute to congestion and interference in the existing band;
- Consolidation which affords broadcasters greater latitude and incentive for reducing interference through non-technical means.

TECHNICAL STANDARDS

A number of steps were taken to improve the quality of service in the existing AM band. Specifically, the Commission:

- increased the first and second adjacent channel protection ratios to reduce adjacent channel interference and to promote the development of receivers with higher audio fidelity;
- refined the methodology for calculating nighttime coverage and interference so as to more accurately measure interference effects, thus improving nighttime reception; and,
- will selectively require a 10 percent interference reduction when voluntary modifications are made to AM station facilities, thus gradually reducing the overall presence of interference.

MIGRATION

The Commission adopted rules for the expanded band that are designed to reduce interference in the existing band, while facilitating the prompt initiation of high quality service in the new broadcasting spectrum. By taking this action, the Commission intends to manage the migration process to maximize the benefits to AM service as a whole. Rules have been established to

****FCC/AM BAND (continued)****

encourage those existing stations whose migration would achieve the greatest interference reductions in the existing band to move to the expanded band. The Commission reiterated its commitment to creating a model AM broadcasting. To accomplish this goal, the Commission will:

- adopt an allotment plan for the AM expanded band that is based on wide station separations and low interference levels, in order to facilitate the universal establishment of service in the expanded band;
- rank competing migration proposals from existing licensees using factors related to interference reduction and service currently provided;
- offer an eligibility preference to AM stereo broadcasting in the expanded band to ensure that the competitive benefits offered by the expanded band are more fully realized; and,
- allow dual ownership and operation of existing and expanded band stations for a transitional period of five years, with a corresponding waiver of duopoly and national ownership rules during permissible period of dual operation.

Attached as an Appendix to the Report and Order will be a Sample Allotment Plan for the expanded band. Its contents are based on the "letters of intent" received in response to the Notice of Proposed Rulemaking. This Sample Plan is for illustrative purposes only and does not represent an official allotment of channels.

Our action here initially restricting eligibility for expanded band authorizations to existing AM licensees is intended to redress the unique technical problems present in the AM service. It should not be taken to suggest any generalized Commission policy favoring existing licensees over new entrants in other services where new or expanded opportunities may arise.

CONSOLIDATION

Several non-technical rules were adopted also. First the Commission will issue tax certificates in conjunction with voluntary arrangements among licensees to reduce interference by discontinuing the operation of marginal stations. Second, it will relax its multiple ownership rules for applicants proposing facilities changes that would result in a significant reduction of interference to co-channel stations.

The Commission also stated that it may be appropriate to impose some restrictions on the duplication of programming by AM-FM combinations. However, because conditions in the AM service may substantially change during the next few years, the Commission concluded that it may be premature to limit program duplication at this time. Rather, the Commission will revisit this issue at the end of three years.

As to related matters, the Commission will also:

- relax the rules pertaining to Travelers Information Stations to allow for the authorization (on a secondary basis) of such stations on any assignable frequency in the AM band; and,
- promote efforts by the broadcast industry to encourage manufacturers to comply with new industry receiver standards.

Finally, as a result of these rule changes, the Commission will lift the freeze on AM applications on the effective date of the rules which, in turn, depends on Office of Management and Budget approval.

Action by the Commission September 26, 1991, by Report and Order. Commissioners Sikes (Chairman), Quello, Marshall, Berrett and Duggan.

Mass Media Bureau Contact: Larry Olson, (202) 632-6955 or William Hassinger at (202) 632-6460. Courtesy of: jwr September 27, 1991. (28-Sep-91/Bill Sepmeier/SW ECHO)

****WHAT THE HELL IS THAT??****

Can anyone tell me what is the source of the noise that appears about every 15 minutes or so while listening to the BBC on 9915 kHz at 0000? It starts as a 2 second tone, then goes into what I would describe as a sound like a large diesel engine idling for about 5 seconds. Sort of a repeating rumbling sound. This happens every day. Any ideas? I live in the Southeast U.S. if that helps any. (26-Oct-91/Dan Yertzell/SW ECHO)

Tuning into WWCR's new 7490 operations last night, I heard a sort of "bubble machine" that must be a sounder or such. It runs for only a few seconds about every 5 minutes and has a semi-musical burbling sound to it. It's not new: I've heard it a number of times over the years, particularly atop of BBC/12095 U.S. evenings. Interesting sound, apparently not tied to the HF broadcast directly. I guessed it's some kind of forward-scatter sounder used to check optimum transmitter antenna elevation. Anybody out there have a positive identity for this? (27-Oct-91/Oon Kimberlin/SW ECHO)

****THE MOTOROLA MUSEUM****

SCHAUMBURG, Ill., September 3 — Motorola, Inc. announced today that it has dedicated and officially opened a major new museum devoted exclusively to electronics. Five years in planning and development, the museum will combine the latest in video and computer/interactive technology with historical displays to highlight achievements in electronics and communications during this century. The 75,000-square-foot facility is called the "Motorola Museum of Electronics," and is located at the company's suburban Chicago headquarters in Schaumburg, Illinois.

Robert W. Galvin, chairman of the company's Executive Committee, said, "Our industry has progressed in 63 years from the relatively simple radio business to high-technology electronics. We feel the electronics revolution is a subject worthy of a major industrial museum.

"It will grow as an educational institution for generations, alongside the company and industry it serves," he added. "An important purpose is served by creating an institutional memory via this new museum."

The Motorola Museum of Electronics is the product of a collaboration of experts from the scientific, historical, educational, and museum fields. It will be open to the public by appointment, and will have special programs designed for Chicago-area school groups.

The museum's 20,000-square-foot exhibition is arranged thematically in two major sections. One section is devoted to electronics history as experienced by Motorola since its founding in 1928; the other explores current electronics technology.

The history section includes more than 500 artifacts in exhibits devoted to early car and home radios from the 1930s, military and industrial communications from the 1940s, the "golden age" of television in the 1950s, the "transistor revolution" of the 1960s, and the rise of the integrated circuit and "information age" in the 1970s and 1980s.

Key exhibits in the current technology section include displays on radio communications, microelectronics, automotive electronics and cellular telecommunications; an exhibit demonstrating electronics manufacturing techniques; and multi-media interactive workstations where visitors will explore engineering principles and scientific concepts via interactive video stations.

The Motorola Museum of Electronics is the most recent expression of the company's commitment to employee and public education. In December 1989, the company announced the formation of Motorola University, dedicated both to meeting educational needs of Motorola employees and to creating stronger relations with community schools.

The museum is physically connected to Motorola's corporate education facility, opened in 1986, forming a unique educational complex that combines exhibition space, company archives, classrooms and laboratories.

"We want visitors to leave the Motorola Museum of Electronics with fresh insight into the world around us, which relies so heavily on electronics, and with a heightened awareness of the necessity this new environment creates for lifetime education," said Sharon Darling, director of the museum. "We plan to make this both a corporate resource, for Motorola employees, and a community resource serving school groups and other special audiences.

The museum building was designed by the Chicago architectural firm of Booth/Hansen & Associates. Exhibit design and fabrication were carried out by General Exhibits and Displays of Chicago. Motorola is one of the world's leading providers of electronic equipment, systems, components and services for worldwide markets. Products include two-way radios, pagers, cellular telephones and systems, semiconductors, defense and aerospace electronics, automotive and industrial electronics, computers, data communications, and information processing and handling equipment. Motorola is a winner of the first annual Malcolm Baldrige National Quality Award, in recognition of its superior company-wide management of quality processes.

* * *

If you are in the area, the museum is well worth seeing. Plan to spend two hours for an average tour. Lots of early televisions, radios, semiconductor, and defense electronics are on display. There are working demos of some equipment, lots of video tapes, and interactive exhibits. There is a nice demo of the Integrated Vehicle Highway System (IVHS) and of a cellular system. Early cellular prototypes are shown. There is a demonstration of the STU-III secure telephone in use by the U.S. Government. Explanations are on multiple levels to hold the interest of everyone from grade school student to telecom engineer. The exhibits are very well done.

Please direct any questions to Margot Brown at (708) 576-5304. (29-Sep-91/John Gilbert KA4JMC/Secure and Advanced Conventional Systems Division, Astro Systems Development, Motorola Inc., Land Mobile Products Sector, Schaumburg, Illinois/SW ECHO)

****STOOPID RADIO TRICKS****

(This was a lengthy exchange of broadcast pranks and gaffes from the Fido BROADCAST Echo, much too long to reproduce in whole. Here's a good short one towards the thread's end, plus a long one which also serves as a preview for Keillor's new book...)

JOHN ROSS: I was home listening to the volunteer announcer/board operator one night, when he came on and read off the tape box, "The next program is 'Tails Out.'" And that's what it was--the tape was tails out, and he ran it backward. Took only a minute or so to figure it out...

JOHN DANIEL: Got me laughing! I work as an announcer in commercial radio and that's not unlike a spot I heard on this little AM in Sumter S.C. while travelling: (at the end of a carpet commercial - local announcer tag) "Available at Carpet World in Sumter, Columbia, and Charleston. This portion not for air - be sure tag cities match your location!" Yep, every word got on the air.

BILL SEPMEIER: This thread has caused me to search my desk for an article written by Garrison Keillor and published in the New Yorker magazine some months ago. It is a very long, and VERY funny, piece, entitled "Studio B" and I'd love to re-print it all...but I can't due to space and copyright laws. However, I must put in a small portion of it, since the article deals an infamous radio studio, Studio B; a jinx-ship of sorts, and with all we have discussed in this thread, and then some. I'll pick up during a conversation between two veterans of the Studio B experience, Ray and Leo:

Ray: "I tell you, the worst things that happen in radio aren't as bad as you think. The only unforgivable sin is to not show up. Punctuality. The First Law of Radio: BE THERE. Don't miss the train. Remember that. Not that many people were fired for not being brilliant, but the list of brilliant guys who have been fired because they came in late for the show is as long as your leg. We had a fellow once named Burns L. Stout, who overslept one snowy morning and as a result "The Early Birds" wasn't there at 5 a.m., not the theme song, 'Bugle Call Rag,' or the cheery voice saying, 'Morning, early birds! And a beeeeeeyoooootyful morning it is, too!' The voice that was supposed to say this was in the sack, dead to the world, having been out until 3 a.m. climbing into a whiskey bottle. He woke up with a hangover that felt like his head had melted and came hightailing it into the studio at 5:07 with terror in his watery blue eyes, and hurled himself toward the chair like a sinking ship, a sheaf of weather forecasts and livestock reports in hand, and he looked at his engineer, Itch - his real name was Mitch, but he was always a little late turning on the microphone, so we called him Itch - and Burns hit the chair, landing on his hemorrhoids, and his brains sioshed. He moaned and swore and said, "Why in the flaming Hell can't I hear the music, you Son of a Bitch?" The reason, of course, was that the microphone was on. Itch had put him on-the-air the moment his butt hit leather.

"Well, as you can imagine, out in Radioland all the Friends and Neighbors woke up in a flash. Dithering around the kitchen, and suddenly this deep horrible voice says, "Son of a Bitch!" Then they heard this awful breathing, and a bout of throat-clearing like a swamp being drained, big globs of phlegm rattling, and then he retched, a big dry heave, and you can imagine out in the Friends and Neighbor's kitchens, where the good folks are cooking breakfast, the sound of a man retching on the radio - it's memorable. Well, Itch leaped out of the chair and waved at Burns that your microphone is on, and Burns, who was operating in dim shadows, looked up and said two words never heard on WLT before. I had just arrived in the control room. Burns saw me, and he didn't say a word, and neither did I. He got up and went out the door and became a shoe salesman. That was five years ago. He's still down at Thom McAn, smelling the feet, and we're here in radio, Leo, which is preferable."

"Did you get a lot of complaints that time?" asked Leo.

"If we'd apologized for it, we'd have gotten an avalanche, but without an apology people couldn't be sure they had really heard what they thought they'd heard. It was 5 a.m. People don't exactly hear the radio at that hour. It's more like a thing that is warm and hums and reminds you of your mother."

"Did this happen to take place in Studio B?" asked Leo.

"Of course," said Ray. "Just remember, BE THERE. And, never curse around a microphone. Never. Now, I've got a train to catch...."

****SOVIETS SHAKE LOOSE WITH THE POOP****

(quoting a previous message from Kirk Baxter):

KB> By the way, the director of the Soviet State Electric Communications Inspection told a Lithuanian delegation that transmitter sites published by the Soviet administration are "not corresponding to reality and in some cases pure phantasy".

ANDY SENNITT: Hi, Kirk. I know in the above you were quoting someone else's message, but you have presented me (for which much thanks) with an opportunity to inform everyone here that, while the above has been true for many years, WRTH is at last able to publish a list of USSR External Service sites, frequencies, powers, beams and target areas that does indeed correspond to reality. Because of constant changes we do not claim that the listing will be 100% accurate, but the information does seem to be much better than what has been published elsewhere.

****SOVIET INFO (continued)****

The information was furnished at the recent EBU/OIRT shortwave frequency coordination meeting in Romania, and there seems little reason to suppose that they would have arrived bearing inaccurate data - there wouldn't be any point in it! Initial comparisons of announcements, monitoring observations and the data they supplied are very encouraging, and auger well for the overall accuracy of the information.

I have just finished copy typing the information into a database of a little over 1000 records - that represents about 8 pages of listings in WRTH based on one listing per line, and I am pleased to say that we have been given extra pages to ensure that we can include this information without cutting anything else.

In the coming weeks we shall be scrutinising the data closely, and updating it as necessary, so that the data we will publish in WRTH92 really will be based on what is actually happening! It is very exciting for me, having been an SWL for over 20 years, to have the opportunity of working with this data for the first time!

RICHARD URENA: That will be most welcome, a sign of the times that they no longer feel they need to keep this information secret. Nice job!

ANDY SENNITT: Yes, and since I posted that message we received a list of agreed changes which will be reflected in the schedules published in WRTH. It's nice to know WHY stations suddenly change frequency without notice. You can expect more changes - many of the clashes have not yet been resolved, and are annotated "remains subject to monitoring". But what we have is a big step forward from the total chaos of a few years ago!

ANDY SENNITT (in a later message): I've been talking to our USSR section editor Olle Alm, and he reckons there is still a lot of misinformation in the engineering schedule. Some of the sites listed do not exist, and some which do exist are not listed! That is a disappointment, but there is still some value in publishing the information as the actual sites are generally in the same part of the USSR as the listed ones. I guess old habits die hard - and Olle is certainly a diehard! <grin>

****EUROPEAN BUSINESS RADIO****

From ELECTRONIC DESIGN, August 22, 1991:
The Commission of the European Community has officially designated frequencies from 880 to 890 MHz, and 933 to 935 MHz, for Digital Short Range Radio (DSRR). The announcement heralds the arrival of business citizens-band radio in Europe. The frequencies will be available, without license, for point-to-point communications over distances up to about 6 km maximum, depending on antenna height. DSRR uses a trunking scheme, in which a pair of handheld transceivers can grab an available channel for the transceivers' exclusive use during a conversation to ensure security. DSRR radios will be available soon from Motorola-Storvo and Philips. (10-Oct-91/Al Quaglieri/SW ECHO)

****VOA PRO AND CON****

FRANCIS TOY: At the end of each VOA broadcast, the last 10 minutes or so are dedicated to editorials that "reflect the views of the United States government" as the announcer would say, prior to reading them out on the air. Opinions emanating from these "editorials" are why people accuse the VOA of being a propaganda machine. Unlike the B.B.C., the VOA is run by people at govt. level, and its primary objective is to voice to the world what it wants to say - hence the name Voice of America! Try catching one of these editorials, and you'll find they're usually biased in favor of the United States...many times it goes as far to harshly criticize an antagonist! Of course, one would expect that coming from a broadcaster explaining that they "reflect the views of the United States government."

PATRICK CRUMHORN: I don't have any problem with this, per se. Many commercial broadcasters, not to mention daily newspapers, have editorials, clearly labeled as such, to distinguish them from the (presumably more objective) news content. And naturally, since the USIA/VOA are under the control of the US State Department, their editorials are going to reflect the views of the executive branch.

DAN BENNETT: They may now, but they haven't in the past. There've been times when VOA has been so interested in "objectivity" that they sounded more like Radio Moscow than an American propaganda organ.

PATRICK CRUMHORN: Now, of course, there's an old-fashioned, outmoded, idealistic concept that says the people are supposed to be the "government" in this country. As I've never been asked my opinion by the VOA, I'd feel better if they said "This editorial reflects the views of the political appointees of the Executive Branch" rather than having them claim that such editorials reflect the collective opinion of all the citizens of our politically diverse country. But, like I said, they didn't ask.

RALPH COOK: Was listening to the VOA today, and, you know, it didn't seem to me to be the "propaganda

****VOA PRO AND CON****

machine" people make it out to be.

TOM KASHUBA: I have to agree with you. They have been changing over the last couple of years. I think the main contributing factor that helps to maintain that wide-held opinion is their main male English announcer. He sounds like a CIA agent they sent to broadcast school. The sound of his voice comes across so dry and boring that one immediately conjures up the image of THE STATE. I had a good chat with the VOA last year and it was explained that a high emphasis was placed on absolute intelligibility by even those who have a limited knowledge of English. Though I can understand that rationale, I countered that this was no reason to exclude intonations that convey humanity, candor, and interest. I also suggested a far more "down home" type of programming such as man-on-the-street interviews. Just a few months ago, I noticed the use of more female announcers and a somewhat less dry commentary. So, they seem to be changing - but ever-so-slowly. I think all they'd have to do to greatly improve their image would be to emulate a little of the BBC, CBC, RNED, and CSN, and they'd be a few 1,000 miles ahead of where they are now. But, what more can we expect by an outfit run by an organization with the ear catching title of "The United States Information Agency". Images of a darkened room with in bright lightbulb "vee vant dee infoema-shun!" I suggest they spin off the radio outfit and simply call it the USWR "US World Radio". At least that would be a little more in "tune" with current activity.

EDWARD PIECEWICZ: I have to admit, VOA has some good programming. What I would like to see on VOA is a program similar to the Crossfire program on CNN, where you would get a liberal on one side, a conservative on the other, and let them duke it out on the air.

JEROME VAN DER LINDEN (AUSTRALIA): I am quite impressed with Monitor Radio, and will always prefer it to VOA. I often listen to their News which does have an international rather than a US flavor to it; though sometimes the bulletin seems to be curtailed and doesn't run its allotted time.

FRANCIS TOY: Not DX'ing long enough to remember, I have a question: After Reagan came into office, were all of the more liberal elements of VOA fired, and replaced by more conservative ones? Did they all leave on their own, or phased out a little at a time? Other users here have commented on the VOA's past & present reputation, and I'd like to know how it arrived at its current stage.

JOE KOFRON: From what I understand the Reagan Admin. thought it was a waste of money to just broadcast the truth, when for the same money the people of the world could be told what a great job Reagan and the other "holes were doing.

FRANCIS TOY: Well, if anyone out who voted for Reagan/Bush have any complaints about this, then they could start from the point of origination. After all, it was they who put him in power.

HENRY MENSCH:..while those of us usans who have lived abroad wished that the VOA offered programming like you might find on NPR,

DAN MORISSEAU: Well, SOME of us might Henry

HENRY MENSCH: Yeah ... so what? When I lived abroad VOA didn't provide this function, either; its charter forbids it. Maybe next time you can read articles for content?

DAN MORISSEAU: WHOOA! Henry! Grab the reins there, buddy! My comment was NOT directed at you personally. What I meant was that the too obvious liberal slant and partisan viewpoint that permeates the "...programming like you might find on NPR..." is not to everyone's taste; ESPECIALLY when they are obliged to foot the bill and have the broadcasts aimed at (and intended to influence) a domestic audience. If you like that kind of thing, great! Enjoy it! I'm happy for you (and I'm hope you're happy I help pay to bring it to you). Please though, don't jump down MY throat when I suggest there might be something else I'd rather listen to. My tastes may be a bit pedestrian; but they are mine and I like 'em. In the meantime, just let me wallow here in my uncouth, redneck ignorance, OK?

****HATED THE PROGRAMS, LOVED THE INTERVAL SIGNAL****

ROGER STARK: But then you listen to the programs and --whew--! The VOA now sounds more stodgy than Radio Moscow. I didn't think I'd ever have to make that observation. I guess Yankee Doodle is okay, but it comes across to me as being so military-oriented. After all, it was sung to make fun of our soldiers. If it weren't for the military aspect, the song would be fine. How about "Loving You Has Made Me Bananas" by Guy Marks? Remember? "Your red scarf matches your eyes, you closed your cover before striking, father had the ship fitter blues, and loving you has made me bananas..." (A medley of big band songs.) Anyhow, I think it's time to overhaul the VOA and make it sound a little more like real radio stations here in the USA. I mean, heck, Radio Nederland sounds more American than the VOA!

****INTERVAL SIGNALS (continued)****

RICHARD DALE: Why do they use serious music for interval signals? Well the one from Radio Netherlands is pretty nice, but during fades or phase shifts it gets on my nerves. Tune 1.5-2 kHz away and you'll see what I mean. Anyway, for my money, some of these countries ought to lighten up and use something like "Gimme Dat Ding" for a national anthem. Even better - "Meh-nuh Meh-nuh" (remember _that_ one?) . . .

FRANCIS TOY: Then, I suggest "Spirit of America" sung by Samantha Fox on her latest album "Just One Night".... Just don't know how well Americans will take kindly to a Briton singing their National Anthem.

ROB BRANNON: Please! Don't even think about having the VOA do away with "Yankee Doodle" for their theme! It's perfect, a song originally written to annoy Americans, and we adopted it as our own, silly words and all. Its funny and irreverent, like most Americans. Most SWBC stations have something serious or beautiful for a theme song, only Americans would choose something that actually makes fun of themselves. No, no, no, change anything else you don't like about VOA, but don't take away my "Yankee Doodle"! (With a big grin and a feather in my hat!)

DON KIMBERLIN: Well, until the VOA changed to Yankee Doodle, they used a few bars of, "Columbia, The Gem of the Ocean." It was really pretty American-patriotic-sounding, and done in a rather impressive style. When you note it was changed during Jimmy Carter's presidency, the change was probably significant ... who else but Jimmy asking Roselyn, Amy and Miz Lillian what would sound nice on VOA?

ROBERT DAVIS: But what of us who preferred "Colombie, the Gem of the Ocean"? Are 'ya old enough to remember the early Willis Conover LIVE jazz shows?

ROB BRANNON: Most SWBC stations have something serious or beautiful for a theme song, only Americans would choose something that actually makes fun of themselves.

ANDY SENNITT: Wrong I wrong I You obviously don't know of the origins of Lilliburlero - which the BBC plays before many of its news bulletins. The Irish used to sing some very rude words about the English to it!

BILL OXNER: Lyrics, from a 1689 version reprinted in 1893, are:
"Hol brother Teague, dost hearde decree?
Lil-li bur-le-ro, bul-len a la,
Det we shall have a new deputie,
Lil-li bur-le-ro, bul-len a la.

Hol by my shoul it is de Talbot, [James II's Lord Deputy of Ireland]
Lil-li bur-le-ro, bul-len a la,
And he will cut ail de English throat;
Lil-li bur-le-ro, bul-len a la,

Tho', by my shoul, de English do praat,
De lew's on dare side, and Creish knows what.

But, if dispenca do come from de Pope,
We'll hang Magna Charta and demselves in a rope.

And de good Telbot is made a loard,
And he with brave lads is coming aboard,

Who all in France heve tauken a sware,
Dat dey will have no Protestant heir.

O, but why does he stay behind?
Hol by my shoul, 'tis a Protestant wind.
[N.b. the rhyme of "behind" and "wind" reflects an illogical historical vowel shift, also seen in Shakespeare, which became poetic in the mid-18th century and eventually died out.]

Now Tyrconnel [Talbot] is come ashore,
And we shall have commissions gillore;

And he dat will not go to mass
Shall turn out, and look like an ass.

Now, now de hereticks all go down,
By Creish and St. Patrick, de nation's our own.

Agein, the material above is from Melvin New's edition of "Tristram Shandy," and should not in any way be construed as my own.

DON KIMBERLIN: How convenient you should post this, Bill, when all my British spouse could say was she didn't know them but knew they weren't very flattering to the English!

****INTERVAL SIGNALS (continued)****

BILL OXNER: We've had several comments here about Lilliburlero - the tune used by the BBC - and no one seemed to have conclusive evidence for its origins. So, I asked the question on the HISTORY echo and the resident English historical scholar there came up with the following: "The history of both the tune and the songs set to it is detailed by Claude M. Simpson, 'The British Broadside Ballad and Its Music' (New Brunswick, N.J.: Rutgers UP, 1966), pp. 449-55." It started in Ireland in 1687 or 1688 as an anti-Catholic ballad, supposedly by Thomas Warton (i.e. against James II, "The Pretender"). Bishop Burnet recorded: "A foolish ballad was made at that time, treating the papists, and chiefly the Irish, in a very ridiculous manner, which had a burden, said to be Irish words, lero, lero, lilibulero, that made an impression on the army, that cannot be well imagined by those who saw it not. The whole army, and at least all people both in city and country, were singing it perpetually. And perhaps never had so slight a thing so great an effect." The quotation (which I take from New) is from "History of His Own Time, 1724-34" [1823], III: 319. New provides another contemporary reference, from Anthony Collins's "A Discourse Concerning Ridicule and Irony in Writing" (1729), where Collins uses "Lilli-bullero'd" as a verb, meaning "ridiculed," to apply to the defeat of James II. Henry Fielding, when writing an anti-Pretender song for the first issue of "The True Patriot," had it set to the "Tune of Lillibullero." In the first half of the 18th century, the tune appears in 12 ballad operas, including "Beggar's Opera." It seems to be constantly associated, after the disappearance of the Pretender and Young Pretender, with the army, but in the early part of the 18th century, it associates with the English Settlement.

ANDY SENNITT: Interesting, Bill! I suggest you send that to Andrew Piper, Head of World Service Presentation! It might even make them think of changing it - but it will be up to Andrew's boss to decide because as the old saying goes "He who pays the Piper calls the tune". <diver for cover>.

BRIAN CARLING: OH! Is that what it's called - always sounds a bit like "When the bough breaks the cradle will fall and down will come baby, cradle and all." How long ago did they drop the "DING, DING DONG!" sound, with the musical notes of B,B,C ???

ANDY SENNITT: I didn't know they had. I think they still do that in some of their European services (which I never listen to). There was nice headline earlier this year when the domestic service stopped using Big Ben for a while because it had been repaired and the main bell sounded a bit odd - one newspaper came up with "BBC Bans Big Ben for Wrong Bong".

ED DICAMILLO: OK, I know about that particular IS, but there's another one that I think is BBC's. It goes "duh-duh-duh-dummm". Does anyone know what this is?

RICH VERAA: Looks like the first four notes of Beethoven's Fifth Symphony, which I've heard on SW, but I can't for the life of me remember who used it..

ELTON BYINGTON: Ed -- The BBC European Service uses the musical notes B-B-B-C played on what sounds like a cross between a xylophone and a badly tuned electronic piano to form the letter "V" in Morse code: di-di-di-DAH.

JOHN ROSS: The interval signal in question is (or was at one time) indeed used by the BBC for its European services. It's the first four notes of Beethoven's Fifth Symphony, which is also Morse "V" (which is of course, Roman Numeral for five). During WWII, that snatch of Beethoven was a musical "V for Victory". Seems to me that the Beeb continued to use it as an interval signal for a number of years after the war. Maybe they're still at it. I've just pulled my 1972 WRTH off the shelf, and it says under BBC: INT-SIG: World Sce. for Europe: Morse Signal "V" (V for Victory) played on Timpani (i.e. . . .). I didn't bother to look in later books to see how long that IS lasted, but I suspect it continued for a number of years after that. As an aside, WTIC radio in Hartford (owned by Travelers' Insurance) used to use the Morse "V" for their on-the-hour time tone.

FRED HATFIELD: As George Burns was once described as "older than dirt", some of us echo participants that were around during WWII recall that cw version of the "V" for "Victory" was widely used as a 'psychological' boost for the Allied Forces. It was heard constantly on broadcasts and public performances. And it was repeated whenever the Nazis were within earshot of anything that might be able to reproduce it -- auto horns, doorbells, clock chimes, etc. Watch some of the movies of that era and you will find it popping up in the plot every now and then.

****INTERVAL SIGNALS (continued)****

RICHARD URENA: The World Service puts out some horrible sounding bells as interval signal

DON KIMBERLIN: Better watch it there, Bunkie. Those pealing bells are the "Bow Bells" of London's Church of St. Mary-le-Beaune, a name that gets Anglicized into Merylebone Stion, one of London's five British Rail stations. To be a true Cockney, one is supposed to be born within the sound of the Bow Bells. Insulting that sound could get you in as much trouble as insulting a Brooklynite - say, how about a punch up the bracket, Yank? (And stuff it up your jumper while you're at it!)

ANDY SENNITT: What is this, Richard? You been on some kind of substance recently? How could you describe the bells of the church of St. Clement Dane as "horrible". Don't you know the tingle of pride that an expatriate Englishman feels when hearing those bells crackling through the ether? No, of course you don't, you come from the Dominican Republic <grin>.

RICHARD URENA: Stimulus, response; stimulus, response.... HAH! I knew a comment like that would set the loyal British subject's heart atwitter <grin>

ANDY SENNITT: But, you ask, why does the WRTH list them as "Bow Bells"? Simple, my dear fellow. Originally the BBC used the bells of St. Mary le Bow, but between 1939 and 1945 there was a little altercation with the Germans, and the bells of that church were destroyed.

RICHARD URENA: See? It's not just me!

ANDY SENNITT: But since they were known as Bow Bells all over the world, the name was retained. Just as the Greenwich Time Signal not only doesn't come from Greenwich, it doesn't even come from a Time Signal station any more. It is produced by the BBC - who no doubt employ dozens of people working in shifts with morse keys and tone oscillators keeping the world supplied with pips. So why the old names - tradition, my dear fellow, tradition!

RICHARD URENA: Too bad. My little brother does a fair rendition of the said time pips. Guess that job opportunity is lost...But I guess the tradition bit explains the persistent use of "Greenwich Mean Time" instead of "Coordinated Universal Time" in their announcements.

JURGEN BARTELS: At the Greenwich Observatory it was written that the pips are from the BBC. When asking the museum people no one could provide an answer. How does the BBC generate the time signal and to whom do they deliver it?

ANDY SENNITT: To be honest, I don't know. The observatory stopped providing the pips a few years ago, I think due to budget cuts (presumably the BBC were paying for each pip). I haven't asked anyone at the BBC - mainly because it didn't occur to me. I remember on student radio we had a 1000Hz tone oscillator on one of the channels on our console, and we just flicked the switch on and off six times. It didn't matter if we were 30 seconds late - students don't worry too much about time. It just sounded impressive! <grin>

****IT AIN'T RADIO, BUT IT'S SUCH A GREAT SCAM I HAD TO SHARE IT WITH YOU****

The following is from the Laurel Amateur Radio Club Newsletter for September 91: The latest telephone scam is being directed at pagers. If you get a page with the phone number of 212-540-xxxx (where xxxx can be any four numbers), don't call it! 212 is the area code for New York City and the 540 exchange acts the same way as a 900 number, where the phone you are calling from is automatically billed. The fee for calling these 540 numbers is \$55.00 and the people with these numbers are calling around the country inserting these numbers into pagers to get them to call so they can collect the fee. This area is a good target since Washington DC has the area code of 202, and being similar might answer the 212 page without thinking. (07-Oct-91/Paul Lukas/SW ECHO)

****CALLING ALL SHORTWAVE SHAKESPEARES****

Needed immediately - original articles or interesting stories for a start up radio magazine, the Short Wave Listeners Post. The first issue will be published for November, 1991, and will be distributed free of charge through the mail and at radio stores. We are also looking for individuals or groups who would like to author a monthly column in the magazine. This is an opportunity to get in on the ground floor and help shape what will become a national publication for shortwave hobbyists. The Short Wave Listeners Post will be published in Houston, Texas. The editorial office mailing address is 7520 Hornwood, Suite 1406, Houston, Texas, 77036. The editor can be reached by telephone at 713 774-1717 between the hours of 5 PM to Midnight CST.

****CALLING ALL SHORTWAVE SHAKESPEARES (continued)****

If you or someone you know is interested in receiving a copy of the SWLP, please call or write the editorial office and leave your name and address. (09-Oct-91/Harry Haines/SW ECHO)

****IN-A-GADDA-DA-WHO?***

Ok guys. Since you all listen to shortwave, and morse code seems to be a form of communication, I'll try this room. Who worked "I love you" in morse code in at the end of the Iron Butterfly Theme song? The local newspaper historian can't even find this tidbit. (27-Oct-91/Frank McJunkins/SW ECHO)

****ALL THE FUN OF RAT SHACK, MINUS THE HIGH PRICES AND DITZY SALES PEOPLE****

Several folks in the Shortwave Echo have discussed MARYMAC, a mail-order outlet which offers Radio Shack merchandise at substantial discounts. This message provides the necessary info:

Marymac's number is (800) 231-3680. They are actually listed as Marymac Industries, so that might have been the confusion. Wonder why it isn't named something a little more descriptive, like Radio Shack Discount Store. Probably would result in a revolution amongst its franchisees and store managers. Good luck! (30-Oct-91/John Smullen/SW ECHO)

****THE STORY BEHIND THE OLD WABC/KOB FEUD****

ROGER STARK:.... why did the FCC make such a fuss over the WABC/KOB sharing of 770 and make KOB directional after years of fighting?

DON KIMBERLIN: The WABC/KOB case was not the FCC making a fuss so much as the licensees, who battled it out in front of the FCC for literally decades. In a 1939 (or so) overnight rearrangement of all the AM frequencies; one in which many AM stations shut down one night to appear the next day on their new channels, in a new four-tiered "system" that lasted into the 1970's and still has vestiges today, the conflict between KOB and WABC was overlooked. Both claimed to be "primary" on their frequency. I once visited the WABC transmitter across the Hudson River from Manhattan, and found the FCC had issued neither station a license for some 30 years. They were operating with a lettered postcard on the wall that acknowledged receipt of their renewal application from 30-odd years before, under the FCC rule that says you may do so while your application is pending. Long pendency, eh? Anyway, the 50 kw main transmitter was chugging away, full of dust, dead bugs and you-name-it, because the station management had issued an edict that WABC was never to operate on its 10 kW standby unless the 50 kW died ... not even to shut it down to dust it out. That was part of the station management's view; that not one square inch of territory was to be given to KOB or anybody at any time. They feared someone for the opposition would at any time make field strength measurements that could be used in a pleading before the Commission to reduce WABC's authorized power level. So, I didn't see it so much the FCC as the two licensees duking it out.

JOHN ROSS: I had never heard the story about WABC never shutting down the 50 kw transmitter...thank you! But...if they never shut the thing down, didn't the final tubes go soft after awhile? And wouldn't a soft tube reduce signal strength, thus adding more fuel to KOA's case? I'm so confused....

DON KIMBERLIN: Well, from what I got from Winston Lloyd, the Chief Engineer at the time, it was, "you only put the 10 kw on the air when the 50 dies." I don't think the bosses even wanted to consider things like making what they wanted work right. Bosses can be funny that way, you know.

****LW BEACONS IN EUROPE****

I partly solved a long lasting mystery! During MW DX events I noticed a long time ago signals on 10 kHz increments that only carried slow morse code transmissions similar to those on the higher end of LW. I never knew where they came from. When I was in CSFR and near Poland I heard few of them at different locations and frequencies, they were very strong, probably not far away from where I was. The modulation was the same what I heard during DX conditions. Apparently they are beacons, but for what? Why are they in the middle of the MW band? At night time they must be useless when they get overridden by other radio stations. Is there any list available which contains freq, morse-code and location? Should be very interesting when receiving them during DX condition. You would know how far you get just by identifying them. (11-Oct-91/Jurgen Bartels/SW ECHO)

****WHAT'S GOING ON DOWN THERE?***

Recent talk here from all the folks who find interest in tuning in many kinds of non-broadcast signals like FM subcarriers and TV vertical interval stuff brought a thought to mind; one that might challenge more people who are already equipped. The thought provides a way for people in North America to listen to something other than aircraft and marine beacons - or hang a mile of wire to try to get some transatlantic LW broadcast. It's the "power line carrier" run by electric companies on high-voltage long transmission

****WHAT'S GOING ON DOWN THERE? (continued)****

lines. Been there since the 1930's, you know, and it does radiate a pretty fair field up to a quarter-mile or so from those power lines. Range is 150 kHz to 300 kHz or so, with SSB channels spaced every 4 kHz or so. What will you hear? Well, a lot of the channels have what power people call Supervisory Control and Data - SCADA for short, a lot like multichannel RTTY, but just holding mark or space, to remotely control those big circuit breakers you see in the powerco switchyards. But, they also put talk channels in there, and sometimes even dial telephone circuits....I've heard them several times while traveling in the car, passing a large high voltage line....Interesting to ponder: This may be something ECPA doesn't cover, since the signal you tune in is not from a licensed transmitter and isn't intended to radiate anywhere. So it isn't an "emission," is it? Kinda like the occasional person you hear of pointing an antenna at the cable TV and tuning in its leakage, eh? ...And just watch some character on here think up some new bizarre kind of QSL's. (Like WAP - Worked All Powercos, or sumthin'!)(05-Nov-91/Don Kimberlin/SW ECHO)

****MIAMI OVERSEAS RADIO AND OTHER MARINE LIFE****

Some years back, I was an employee of AT&T in one of their few HF stations. The term "correspondent" was jargon from there about the "phone company" on the other end of the HF link. In this case, it was Compania Dominicana de Telefonos, more recently called CODETEL. At that point in time, their only links with the outside world were a microwave across the Mona Passage to Puerto Rico, a two-channel VHF link to Haiti that rarely worked, and 9 channels of SSB HF radio to us in Ft. Lauderdale. They kept those puppies busy, too...all day every day! The VHF rhombics were on a multichannel link between the telephone building in Santo Domingo and the HF transmitter/receiver plant about 12 miles away. The HF ran on two four-channel LSB links and one single-channel SSB link to us at Ft. Lauderdale, where we put them on wirelines down to the overseas operators at Miami. Joe Public didn't know we existed or that he was talking on shortwave radio. All he knew was somebody called the "Miami Overseas operator" connected them somehow.

As a general tendency for international "ute" operations, our AT&T "station" at "Miami" (actually Ojus, FL at the time) had a separate callsign for every frequency - but not every combination of every frequency and every transmitter. (And on some frequencies, there were limitations as to what bearings we could radiate on.) There was a kind of sense to the issuance of them, too. All our callsigns were WI, meaning AT&T at "Miami," while NY and San Francisco had different prefix. RCA and others similarly had unique prefix for each of their locations.

Following the first two letters of WI, a third letter indicated where in the HF spectrum it was, A for below 10 MHz, B for 10-20 MHz and C for above 20 MHz. Thus WIA69, one I recall we used for the Dominican Republic regularly was something like 6782.5 kHz or such, while WIB20 we used daily to Antigua was around 10720 kHz and WIC42, as I recall it, was about 20725 kHz used for Trinidad most days. Our correspondents had similar unique callsigns for each frequency, and on the links we'd ask for the callsign, not the frequency, when we wanted a change. It seems most did this, and you can see the ute reporters on here show a string of callsigns for the RTTY and CW test messages they copy, one call for each frequency. < war story mode on >...We took terrific interference once for weeks on end with the Cubans trying to set up a link for hours every afternoon, and wiping out a channel or so of one of our systems to elsewhere. The details escape me now. At any rate, even though a number of our "old-timers" of the day had been to Cuba to help set their plant up in the 1950's, they all said, "Well, looks like we can't do anything about it." One day, out of sheer meanness, I placed an official service call via the Miami traffic operators, simply asking for the Technical Operators at Havana. The naysayers all said, "What did you do that for? They won't talk to gringos any more!"...Well, sonofagun, about a half hour later, our phone rang, and it was the Technical Operator from Havana! He had been one of the "visitees" when our old timers had been there 10-15 years before, and wanted to know if Sr. Adams was around, and if Sr. Lazear was around and all sorts of people, so we ran through a fast series of greetings on the phone with all of them, and then he finally said to me, "Now what frequency was that you're getting the trouble from?" I told him it was CML38 each afternoon. He said, just a minute," and Zap! CML38 disappeared, never to bother us again from that day on. The Cuban said, "Any time you ever get any trouble from us, just ring up and say so!" < war story mode off >

One other point: For whatever different reason, our High Seas ship frequencies all had the same callsign, WOM, no matter where on the band they were. There's probably some rhyme and reason behind all this, but I never scoped it out. I do recall broadcast callsigns like WLWS, WLWO and such, but didn't notice any variation by frequency. Could be they went through a transition from a combination of transmitter and frequency to just transmitter alone, and finally none broadcast at all, even if they do have different ones licensed now. (12-Oct & 17-Nov-91/Don Kimberlin/SW ECHO)

****CHIQUITA BANANA REDUX****

Continuing a thread documented in SOD 4 re United Fruit and Chiquita Banana:

JOHN ROSS: WAIT A MINUTE HERE!!! This is out of control! I posted the comment about the antenna in Chiquita's hat as a joke related to United Fruit's participation in the original RCA consortium. I made it up. I did not expect people to take me seriously. Have I unwittingly created a new myth?

DON KIMBERLIN: Wow! See how easy it is to create an urban myth? I just took your remarks for the truth, because they seemed so plausible. But, in the TV commercial I saw, Chiquita does pick a stick that materializes out of her hat to use as a stir stick.

RICH VERRA: Maybe the guys at the ad agency believed John's post too.

****HARMONICS****

AL QUAGLIERI: Poking around the 20m ham band, noticed some broadcast harmonics:

14220 poss. Tirana (2x7110) unid lang
14310 poss RFE (2x7155) E. Eur. lang
14560 RFrance Int'l. (2x7280) in French

These were all around 0520-0600 or so, and all checked to be in parallel with their fundamental, 41m frequencies. There were others I did not bother to check. I thought international broadcasters had certain technical standards to meet concerning harmonics, and was kind of surprised to find the "big boys" on loud harmonics. (18-Oct-91)

ANDY SENNITT: I have always been interested in harmonics (I mean the radio sort - not kids) and in my opinion this is a much neglected aspect of the hobby. The skill is in determining which signals are genuine transmitted harmonics. A very strong mediumwave signal can overload your receiver and give the appearance of a harmonic - for example, here in Holland I get the second harmonic of the 400kW transmitter at Flevo on 747 at about S7 on 1494. The first time I heard it I actually thought it was a Dutch pirate! But your logging on 2200 is almost certainly a genuine second harmonic produced at the transmitter site, and as such it may be of very low power. If you can ID it, that's a good achievement and in my opinion ought to count as a legitimate logging. The problem is getting it verified - radio engineers have their pride, and don't like to admit they're putting out a signal on a frequency they shouldn't be on! Occasionally harmonics can be useful - I once fed Algiers on 19370 to an Arab monitor at BBC Monitoring because there was severe co-channel interference on the fundamental, while the harmonic was weak but 100% readable. For many years too, we could hear Albania's FIFTH harmonic on 25285kHz (5 x 5057) during the day when the fundamental was inaudible.

BOB GLEASON: Why do people refer to kids as HARMONICS which are MULTIPLES of ONE frequency. Should we call them HETERODYNES which are produced by "beating" two frequencies against each other?? Think about it. :-)

****A VISIT TO BAUTA****

DON KIMBERLIN: It's a fair bet that Fidel has plenty [of transmitters] that were made in Russia.

MICHAEL MATUS: Don, I have visited the Cuban main transmitter site at Bauta. The main battery of transmitters are British made "Brown Boveries". The rest of the transmitters are Russian "Sniegs". The Boveries are about 20 years old and the Sniegs vary from about 4-10 years old. The Cuban techs love the British equipment and have little to say about the Soviet made units except the price was right.

DON KIMBERLIN: You got to visit Bauta? Golly, tell us all about it. How DK >>many transmitters, how large, what kind of antenna farm, etc. Do they run international point-to-point as well as broadcast from there? Inquiring minds want to know!

MICHAEL MATUS: Yep, was in Cuba April and may of this year. You can get a thumbnail sketch if you read my article on RHC in the Sept. issue of M.T. I wish I was as technically minded as most of you folks so I could give you the information you really want. I'll give you what I have, a few things from my notes and images I still retain (the ol' grey cells don't seem to last as long anymore).

The antenna farm is huge, I would guess it's at least 3 miles on a side. 32 broadband dipoles a 550 ton tower with antennae cut to every length, microwave dishes. The transmitter room contains no less than 20 transmitters. The bulk of them are 10KW "Brown Boveries" (I think Swiss made) they are old (my notes indicate they are about 28-30 years old) but put out a clean signal and are prized by the Bauta technicians. The Soviet units are newer and more powerful but seem to be down a lot. They are called Sniegs (Russian for snow) and a rated at 250KW. They also have a few Soviet units by the name of MOGI. When I have more time I'll dig deeper into my notes, and if I find anything interesting I'll post it.

****A VISIT TO BAUTA (continued)****

ANDY SENNITT: I assume you made a typo there, and meant to write 100kW, not 10kW. According to technical details from Arnie Coro, passed on to me by Tom Sundstrom, some frequencies run at 50 or 75kW, some at 100 and some at 250kW. You may well be right that all the BB's are rated at 100kW, and they run at reduced power on some transmissions. The BBC does this with its oldest transmitters to conserve the life of the output tubes.

DON KIMBERLIN: 10kW is a common size for international point-to-point telephone or telegraph transmission, rather than broadcast. Kinde sounds like the plant is the one that was (and may still be) running the phone and telegraph traffic. Oh, and marine phone calls, too, of course. Brown-Boveri is a Swiss company that's been at making even the high-power tubes for transmitters since WW I days. In the U.S., RCA and the lot were busy monopolizing commercial radio equipment and operations to an extent they'd like people to forget. They had it wrapped up so you couldn't get a power tube if you didn't own a transmitter they made, and so on. Meantime, the press people were getting nailed double rate by the submarine cable telegraphers for "press urgent" traffic that would back up 16 hours waiting for time on the cables. The press services in the U.S. finally got together to form a radio cooperative called "Press Wireless"...PreWi, as they became called, imported Brown-Boveri power tubes to the U.S. and designed their own transmitters, receivers and antennas. They even built (and ran for years) their own transmitter plant at Brentwood on Long Island (to avoid need for RCA's Rocky Point transmitters) and a receiver station at Southampton at the tip of Long Island (to avoid need for RCA's Riverhead receivers) and had a rather illustrious history of pioneering a lot of shortwave radio for the U.S. Many of the early illustrations and examples shown in U.S. technology books were drawn from PreWi work and experiments, like how do you maintain a circuit from Buenos Aires to the U.S. 24 hours a day, 7 days a week and such. If it was an RCA example, there would always be an RCA blurb crediting RCA. If there was no credit in the book, you'd find out it was something PreWi had done, not demanding any credit....Perhaps a pinnacle of PreWi's heyday was that THEY were the ones who dragged WWII-type 50 kw transmitters ashore on D-Day to provide the European end of Eisenhower's HF links to the US, as well as transmit those famous WWII "foxhole correspondent" reports back to the U.S. from the front. I have a photocopy of a letter signed by Eddie Rickenbacker about 1947 to the President of PreWi, turning down an offer to put a public telephone transmitter on Eastern planes to Latin America, because the planes just couldn't handle the extra payload at that time. ...Anyhow, Brown-Boveri tubes were staples of PreWi operations. EXCELLENT goods, they are. (And HF gear is only part of what B-B makes. Electrical power machinery is a bigger line with them.)

****MOMMY, HOW DOES OUR MAIL GET TO CUBA?
SHUT UP AND HOLD THAT PIGEON STEADY...****

MICHAEL MATUS: When I was at RHC's mailroom late April this year, they were just receiving January's and February's mail from the states. I have just started to track down how the mail, U.S. - Cuba works (curiosity). Since we have no diplomatic relations with Cuba, we have no direct mail. When you mail a letter to Cuba it lands in a low priority center somewhere in the states. It sits there until we have a plane with extra room. This plane goes to a country that has diplomatic relations with Cuba. Again it sits around as low priority stuff. If your lucky it is sent to Canada and will be in Havana in less than a month. It may, just as easily find its way to France and lounge around for 4 or five months. If the same thing is happening at their end....This is based on a few calls to the U.S. Postal Service. I have gotten conflicting info from the same Dept... I'm still digging. Arnie is indeed sending out first day covers. I saw him sign an mail a few. If anyone has any more info on how the postal system works I would like to hear from you.

DON KIMBERLIN: There seems to be no consistency with which the USPS handles mail to nations with which it has no direct routes. While I was doing business with South Africa, for example, the odds were about 50% that my mail would come back months later stamped, "No Service" from a place like Kenya or even Zambia. You could guess that a USPS clerk somewhere either ignorantly or deliberately tossed it into a sack going to a place that certainly would not forward it to South Africa. I maintain correspondence with a chap who's in the Peace Corps located in the really remote Central African Republic, and what we've learned to do is to address the whole thing properly, and add in capitals BELOW the country name, "VIA PARIS, FRANCE." That is a totally uncalled-for instruction so far as the U.P.U. is concerned, simply to direct USPS underheads about getting it to a relay point that works! ...I suggest it might be useful for mail to RHC to add the line, "VIA, MONTREAL, CANADA," as they wouldn't know where Quebec is, either.

****ANOTHER RADIO BOOKLIST****

Here's my list of most of the books I consult first for items of history and technology about telecommunications. Most are out of print, so the most complete bibliographic info I have is added for those who want to try to get any on inter-library loan.

A LIST OF BOOKS ON HISTORIC RADIO

Here is a list of books held by Donald E. Kimberlin containing information on the history of radio as a telecommunications science. Many have been out of print for years, so complete bibliographic information is contained for interested parties who might want to request searches for library loans. A few also have later editions, but these early editions contain descriptions of contemporaneous methods that later editions omit. The early technologies often provide simple explanations of principles that later books omit.

Terman, Frederick E., Sc.D., "Radio Engineering," Second Edition, 1937, McGraw-Hill, New York. (The definitive textbook of radio engineering for many years, with a first edition dating to 1932. The earlier editions describe many aspects of radio communications no longer even mentioned in textbooks.)

Hoag, J. Barton, Ph.D., "Basic Radio," 1942, Van Nostrand, New York. An average general textbook, but still calls frequencies above 30 MHz "UHF," and has some early notes on microwave; an interesting overview of navigational and direction-finding devices of the period.)

Ghirardi, Alfred A., "Radio Physics Course," Second edition, tenth printing, 1942, Radio Technical Publishing Company, New York. (A very broad-scope, almost 1000-page textbook primarily for maintenance technicians and consumer goods repair people; goes as wide as motion picture sound systems, intercoms, and early public address systems with many mechanical details like the double-button carbon microphone widely used in early radio studios. Earlier editions of this book date to 1930.)

Federal Telephone and Radio Corporation, "Reference Data for Radio Engineers," Second Edition, 1946, Little & Ives, New York. (An early edition of ITT's standard handbook for its employees, sold to the public. Still printed today by Howard Sams & Co. in seventh edition that is thousands of pages long, but has lost much of the simple early radio information these first versions focus on. Since Federal was a pioneer in UHF and microwave techniques, this edition has considerable basic microwave information. It shows the FCC made determinations in 1943 that 30 MHz to 300 MHz was VHF, 300 MHz to 3 GHz was UHF, and that 3 GHz to 30 GHz was SHF. No plan is shown beyond that frequency.)

Hund, August, "Frequency Modulation," First edition, Fourth printing, 1942, McGraw-Hill, New York. (An early in-depth treatise on FM and its first use, broadcasting, with detailed descriptions of how different makers realized FM by either "direct" or "indirect" methods, no small part of the debate Armstrong had about his patents; also opens with discussion about the difference between "FM" and "PM," another area of debate that involved AT&T's microwave systems.)

Prentiss, Stan, "Basic Color Television Course," First Edition, second printing, July 1974, TAB Books, Blue Ridge Summit, PA ISBN 0-8306-2601-8 (hardback) and 0-8306-1601-2 (paperback), Library of Congress 73-189960. (Not very historic, but an excellent simple treatise of television systems at the technician level, including many various world systems.)

Bucher, Elmer E., "Practical Wireless Telegraphy," Revised Edition, 1921, Wireless Press, Inc., New York. (A fascinating textbook of the beginning of radio's real expansion, written by a ranking engineer of the former American Marconi Company, transitioned to the newly-formed Radio Corporation of America. Shows considerable of the network of Marconi's gigantic spark-gap transoceanic stations as well as American Marconi shipboard apparatus.)

Ladner, A.W., "Short Wave Wireless Communication," Fourth Edition, 1943, Wiley, New York and Chapman & Hall, London. (A textbook by principals of the British Marconi Company, detailing considerable of the work of C.S. Franklin in antennas, indicating that Marconi found the means to "beam" short waves in 1896, but focused on lower frequencies until returning to experiments with short waves in 1916. A complete treatise on SW radio up to just before WW II.)

Kiver, Milton S., "Television Simplified," Second Edition, Fifth Printing, 1948, Van Nostrand, New York. (An excellent textbook on the beginnings of today's "Standard" television systems, including a good primer on VHF propagation; an understanding of both the CBS and RCA color methods - and a complete schematic of the RCA Model 630 TV receiver!)

Edelman, Philip E., "Experimental Wireless Stations. Their Theory, Design, Construction and Operation," New 1922 Edition, the Norman W. Henley Publishing Company, New York. (A complete treatise of the "electromechanical" era of radio communications by amateurs, including full details on how to make virtually every part

****ANOTHER RADIO BOOKLIST (continued)****

of a radio transmitter and receiver for spark use. Contains an interesting closing chapter on the "rights of the radio experimenter" as concerned patents and licensing in that era.)

Leinwoll, Stanley, "Shortwave Propagation," 1959, John F. Rider Publisher, New York. Library of Congress Catalog 59-15080. (An excellent modern-era basic book on HF propagation as exploited by broadcasters, since Leinwoll was the radio frequency and propagation manager of Radio Free Europe. A complete explanation of how to compute your own HF propagation forecasts manually, for purists who won't use MINMUF on a PCI)

Muchmore, Robert B., "Essentials of Microwaves," 1952, Wiley, New York and Chapman & Hal, London. Library of Congress Catalog 52-8991. (An early-days practical engineering treatise on microwave and radar by an early Hughes researcher. Good, simple explanations of microwave filters and waveguide transmission modes.)

Loomis, Mary Texanna, "Radio Theory and Operating," 1928 edition, Loomis Publishing Company, Washington, DC. (with editions dating from 1925, this textbook written for use at the Loomis Radio College has many excellent contemporary examples of radio of the era of all types, including claims that her grandfather, Mahlon Loomis, had invented and demonstrated radio communications in 1865, as well as a description of "underground radio propagation" by means of buried antennas in the 1920's. A rather complete description of the developments in vacuum tubes to that time is an example of the many interesting tidbits this book contains.)

Signal Corps, U.S. Army, "The Principles Underlying Radio Communications," Revised to May 24, 1921, Radio Communication Pamphlet Number 40 (pamphlet? 619 pages in hardcover!), U.S. Government Printing Office, 1922. (Price: \$1.00 from the Superintendent of Documents!) (The Army official textbook on how radio works, with a first edition dated 1918. Amazingly practical and descriptive of how radio works, even though ionospheric propagation was not thoroughly understood at the time. The text does mention that nighttime fading is noticeable at "the time when the sunset line is passing between two communicating stations," and such curiosities as "Ground telegraphy," used in WW I are covered.)

Pierce, J. R., "Symbols, Signals and Noise," 1962, Hutchinson of London. (A simple, non-mathematical explanation of Information Theory and encoding; a superb book for the non-technician involved in telecommunications systems.)

Crowley, Thomas H., Harris, Gerard G., Miller, Stewart E., Pierce, John R. and Runyon, John P., "Modern Communications," 1962, Columbia University Press, New York and London, Library of Congress Catalog Number 62-18618. (A very good top-level description of telecommunications systems for the low-tech reader from the heyday of Bell Laboratories and the expanding monopoly-era Bell System, with minimal mathematics. Explains considerable about telephone transmission and electronic means used by "the phone company" of the era.)

Head, Sydney W. and Sterling, Christopher H., "Broadcasting in America," Fourth Edition, 1981. Library of Congress Catalog 81-83274, ISBN 0-395-28657-3, with editions dating to 1956. A college textbook for broadcasting/journalism students with very good non-technical explanations, and a rather fair history of the beginnings of radio broadcasting, its personal pioneers and the corporations that grew to dominate it, right up to the satellite era.

Dunsheath, Percy, "A History of Electrical Engineering," 1962, Faber & Faber, London. (A broad-scope history of electricity and electronics, describing the methods of pioneers in every branch of electrical art, with considerable insight into power and radio branches of transmission. Also gives a different view to many "inventions" than the usual American textbooks.)

Fike, John L., and Friend, George E., "Understanding Telephone Electronics," Texas Instruments, Dallas, 1983, sold by Radio Shack as stock # 62-1388. (A complete textbook on how both analog and digital local telephone systems operate.)

Cannon, Don L. and Luëcke, Gerald, "Understanding Communications Systems," 1980, Texas Instruments, Dallas, sold by Radio Shack as stock # 62-2018, ISBN 0-89512-035-6, Library of Congress Catalog 79-92683. (A very understandable explanation of not only the "how," but the "why" of communications systems, with examples and analogies often not found in other books.)

Bell Telephone Laboratories, Inc., "Transmission Systems for Communications," Fifth Edition, 1982, with previous editions dating to 1954. (The textbook from which young graduate electrical engineers are taught how electronic communications is realized, particularly by "the phone company." Excellent description of almost every sort of telecommunications transmission method the "phone company" uses.)

****ANOTHER RADIO BOOKLIST (continued)****

Bell Telephone Laboratories, "Engineering and Operations in the Bell System, Second Printing, 1978. Library of Congress Catalog Number 77-84418. (a later, "final" edition for the monopoly Bell System is dated 1983> This is a complete description of all of the systems used by "the phone company" to plan, operate and maintain itself. Read this book to understand the truth behind silly things you are told by the local repairman or business office clerk!)

Hamsher, Donald H., Editor, "Communication System Engineering Handbook," 1967, McGraw-Hill, New York and worldwide locations. (An excellent series of chapters on the last of the "historic era" of most every kind of telecommunications system. Its chapter on "High-frequency Communication Circuits" by E. D. Becken of RCA Communications is one of the most complete one will ever read on shortwave radio propagation.)

...There are others beyond these 23, including books on submarine telegraph cables and private publications of AT&T and Western Union, as well as a number of monographs of manufacturers like RCA, Lenkurt and various history researchers, but that list would be entirely too long for this report. (22-Sep-91/Don Kimberlin/SW ECHO)

****BERNHARD GRUENDL****

"Received a nice letter from Anker Petersen in reply to mine asking information about the tragic accident in which Bernhard Gruendl died. It seems that no other vehicle was involved - Bernhard's car ran off the road at a highway exit near his home late at night. It was some hours later that the wrecked car was discovered. He had either seen the exit late or maybe gone to sleep at the wheel. An 800 kilometer drive from Denmark would have been very tiring." (Harry Weatherley/Garry Bowles' "Musings" column, DX Australia/Sep-91/Bruce MacGibbon/SW ECHO)

****REMEMBER LAST ISSUE'S LETTER FROM PYONGYANG?***

TIM TYLER: I received virtually the same letter about two months ago, only in mine, the guy started talking about how decent medicine was restricted to government VIPs. The he says his brother was very ill with some disease, & wanted me to send him some penicillin!

J.J. HITT: Thank you. I had suspected that the letter was a hoax of some sort. Or rather a counter-propaganda effort on SOMEONE'S part. You're message only re-enforces my suspicions. The request for penicillin is unusual. My letter made no appeal other than that I write the N. Korean address.

TIM TYLER: I'm not sure what to make of the whole situation. All I can say is that I find it strange that the letters had to be mailed from Japan, yet he asks us to write back to his N. Korean address...

J.J. HITT: Funny, ain't it? I wonder who REALLY is at that N. Korean address? My own guess, though admittedly far-fetched, is that the letter is authored by some Japanese Right Wing group that can intercept the mail between here and N. Korea. My guess is that the return address belongs to some government official who has been slated for embarrassment by receiving strongly anti-communist mail from western nations. Guesswork I'll admit, but I doubt the letter was everything it claimed to be.

****WHAT'S NEW FOR WRTH '92?***

Well, we will not be publishing a printed newsletter three times a year any more - the concept is out of date, and we have to charge too much in order to cover our costs. What we plan to do is make available more frequent updates which will be placed in the public domain through bulletin boards and (possibly) a very limited mailing to DX clubs and DX programmes, and also to journalists such as yourself who could use the info in another publication. We are still working on the details of this, but the intention is to make the information more widely available at a lower cost to the individual reader. We hope that we can incorporate material from Media Network in this arrangement.

As far as Listen to the World is concerned we have bench tests of four heavyweight receivers (naturally including the NRD-535 and the R8), backed up by the usual full lab measurements. There is also an article by Oldrich Cip (Peter Skala) of Radio Prague, some software evaluations and an article on satellite reception for beginners.

Huge changes in the reference section include masses of new info from the USSR and Eastern Europe, full detailed entries for the newly independent Baltic states, and the usual compressively updated sections - including one on Australia done by some character called Rob Williams, about whom I had better not say a great deal... <grin>. (29-Oct-91/Andy Sennitt/SW ECHO)

[response to humorous query about CD-ROM WRTH]
Actually we have done a bit of research and I reckon the CD version of WRTH (which I am determined WILL happen one day!) could contain a heck of a lot of text AND audiovisual material. The 30 page SW stations of the world only takes up half of a 360K floppy, and we're talking about more than 300 Megabytes! The only problem is, how am I going to have enough time to update all that

****WHAT'S NEW FOR WRTH '92? (continued)****
stuff. (30-Oct-91/Andy Sennitt/SW ECHO)

FRED HATFIELD: Good show, Andy! I had never had a CD in my hand about a year ago. Since then I installed a CD-ROM reader on my computer and now own about two dozen CD-ROMs on a multitude of subjects. I can see how SWL and frequency information would be ideal for that media.

ANDY SENNITT: Yes, I get excited just thinking about it (the story of my life - grin). Apparently Billboard recently issued its first CD-Rom, so the concept is not something we'd have to sell as a new idea. What I do need from the guys on here are lots of suggestions about what we could include - because I'm sure the first question I'll get is "yes, but what would you put on it?".

BILL OXNER:

- o Everything that's in the current book
 - o interval signal music
 - o antenna designs for listeners
 - o ENTIRE catalogs from radio companies like Icom (ads!)
 - o great color maps of each broadcaster's country
 - o photographs of the broadcast studios and transmitters
 - o photos of interesting QSL cards
 - o copies of the freebie booklets from R. Netherlands
 - o daily PROGRAMMING info from broadcasters (could be scanned in or photographed and digitized - this alone could take up most of the disc)
 - o the ability to sort all entries by time, or by language
 - o sample reception reports in various languages
 - o grayline maps for every day of the year
 - o detailed explanation of propagation - with maps and charts
 - o full-motion video displays of various receivers - showing how one tunes them, programs them, etc
 - o schematics for popular receivers
 - o full-motion video interviews with leading DX personalities (I'd love to see Arthur Cushen on video)
 - o sample sound snippets of various languages (to help us identify unknown languages heard)
 - o full-motion video tour of BBC Monitoring
- How's this for a START! <grin>

DAVID SNYDER: Well you can put all the loggings for the past year from all the sw clubs on it. You can put full schedules with azimuth and antenna information. You can put sample reception reports and technical information in all of the major languages. You could put articles about every SW subject cross-referenced with a good program to help select information. If you need any help assembling the data or programming for a CD-ROM please tell the swlers in the SW ECHO. I am a professional programmer and there are others here who have lots of info and good ideas. What do you think?

RICHARD URENA: Well, the obvious choice is all the listings for all stations in all languages, etc., in machine format. But the question of format is the crucial one: how is the data to be presented? One suggestion: it should be in standard ASCII (no high-order characters, precluding, unfortunately, special characters), so that it can be used by any kind of computer out there. Software could be included to convert this ASCII data to database format. One piece of software for each of the popular operating environments. By "operating environment" I mean the combination of: (1) a particular CPU (Intel 80x86, Motorola 68000, etc.), (2) a particular operating system (DOS, OS/2, and whatever the Mac and Commodore OS's are called); (3) a particular database program (dozens of them out there, at least for the PC DOS standard). The advantage of this scheme is that the raw ASCII data is the common denominator to all computers (mostly, anyway), and the additional software can accommodate the endless variety resulting from different combinations of (1), (2) and (3) above. WRTH can simply supply the ASCII data and leave it up to shareware writers to develop software to interface with it (the data). Or, WRTH could undertake to supply the software itself, but that would be a rather daunting task, considering the potential permutations involved so this would probably not be feasible. (The ASCII data should be formatted, by the way). Of course, WRTH being a commercial enterprise, this leaves the question of how will the powers-that-be at Billboard react to the idea of making this data available to be further used by independent software authors. This could be dealt with by including in the CD a notice to software developers, notifying them of the copyright nature of the data included, and directing them to the appropriate place to arrange for royalties, etc. But it is far better to leave it to us computer geeks <grin> out there to write this software, in response to the demands of the marketplace (there may be no need to adapt the data to DBASE on the Amiga if no interested party uses it, for instance), and with

****WRTH CD-ROM TANGENT (CONTINUED)****
technical expertise that WRTH would otherwise have to pay for. Does any of this make sense?

****ANOTHER SATISFIED CUSTOMER****
This story was reported by Tuesday by the AP:

- = Hostage Praise Pleases BBC = -

LONDON (AP) - The British Broadcasting Corp. said Tuesday it was "deeply moved" by the praise of released Western hostages in Lebanon and happy to know its radio broadcasts helped keep their hopes alive.

In the first news conference after Terry Waite and Thomas Sutherland were released Monday, Sutherland heaped praise upon the BBC World Service, whose programs had kept him and fellow hostages informed about events in the world outside their cells. Waite echoed his comments Tuesday at a news conference after arriving in Britain.

"In the last 12 months," he said, "the World Service helped keep us alive both spiritually through the work of the religious departments and mentally through the variety of cultural and news programs."

Bob Jobbins, the editor of the World Service News, said: "It gives us great satisfaction to know we should get so much appreciation, and from people who have taken the trouble to acknowledge it at a time when they must have so much else on their minds. It is very rewarding."

The service's managing director, John Tusa, said everyone there "has been deeply moved."

The BBC World Service broadcasts in English and 36 other languages to audiences around the world.

When hostage John McCarthy was released in August he disclosed that the hostages were given a radio by their captors a year before. After this, the BBC World Service stepped up broadcasts aimed directly at all Middle East hostages, including several editions of the Outlook magazine program hosted by Waite's cousin, journalist John Waite.

During the failed hard-line Soviet coup in August, President Mikhail S. Gorbachev said he relied on the BBC World Service and other international news services for information while he was detained, and said the BBC's reception was best of all. (20-Nov-91/Elton Byington/SW ECHO)

****FCC SNAGS A BIG ONE****

An Extra Class amateur radio operator, who is a nationally known communications writer, has been caught operating a clandestine radio station.

On Sunday, October 6, officials from the FCC's Denver Office and the Colorado State Patrol apprehended Mr. Don Bishop, the editor of Mobile Radio Technology magazine, for operating a pirate radio station from his car. Bishop was mobile near the town of Limon, Colo., on Colorado Route 86 when he was stopped by authorities. Bishop, who holds the amateur call sign NOEA, was reported as having travelled across Kansas and Colorado, broadcasting almost continuously for 13 hours with an output power of 1000 watts. Bishop apparently turned the transmitter off only during stops for food and gasoline. He was reported as broadcasting satirical tapes of another pirate station, the "Voice of Laryngitis." Bishop was caught through team work done by an extensive network of FCC HF monitoring stations. The direction finding technology used is state-of-the-art, and quite impressive. Even a sudden change in frequency done by Bishop didn't elude the Commission's monitors. Bob Weller, Engineer-in-Charge of the Denver FCC Office, said "I can't divulge the specific accuracy of our network, but it is very good." Bishop's illegal broadcasts were initially monitored by the FCC's Laurel, Maryland, station at 7:24 a.m. Mountain Daylight Time. Calls were then made to activate other stations in the FCC network. The transmissions, which were on 15.050 MHz USB, were soon determined to be mobile, and heading west on Interstate 70 from Kansas City to Denver. Bob Weller says the Denver FCC Office was contacted at 2:30 p.m. "At the time," Weller says, "the signals were determined to be coming from Hays, Kansas, which is not in my [Denver] district. I asked to be called back when the signal approached the Colorado border. Three hours later, about 5:30 p.m., they (the FCC network) called back, and I was told that the pirate was now crossing into Colorado." At this point, Weller took one of the FCC's low-profile (unmarked) direction finding vehicles, and started heading east on Interstate 70. "I couldn't pick up the signal direct due to 15 MHz skip," said Weller, "but I was in [cellular] phone contact with offices that were listening to him. As I got near the town of Limon, Colorado, the 15 MHz signal went off the air and he came back on 7 MHz ...around 7420 [kHz]. "It was just getting dark at the time and he [Bishop] changed frequency ...just like a professional broadcaster would. When he switched to 7 MHz I could hear him. From that point it was just a matter of homing in on him." At approximately 8:30 p.m., the chase ended

****FCC BEATS THE BISHOP (continued)****

when Weller had the Colorado State Patrol stop Bishop's automobile. Weller then inspected the station in Bishop's car. "He was running an ICOM amateur-type HF transceiver and a 1000 watt amplifier," Weller noted. "The tapes were in his automobile tape deck. The microphone was connected to the transceiver. I saw no evidence of hard wiring between the tape deck and the transmitter." Weller was amazed how the equipment held up. "As far as we can tell, the signal was on essentially continuously [for 13 hours] ... It is remarkable that the station was on for that length of time." The FCC says that Bishop now faces fines and penalties that could be between \$8,000 and \$100,000, as well as imprisonment. They went on to state that they were astonished at his actions. As a professional communications writer, he was no doubt aware of the seriousness of his activities and the ease with which he could be caught. Bishop has apparently in the past, in conjunction with his employer, Intertec Publishing, worked to report unlicensed radio operation. Ironically, Don Bishop was to be the featured guest speaker at the Radio Club of America (RCA) annual banquet on the subject of clandestine radio. His talk has been canceled. Bishop's name also appears on RCA's election ballot for 1992-1993 as a candidate for the position of Director. Whether Bishop will withdraw his nomination is not known. Bishop also used to be president of the Denver (Amateur) Radio Club. It may a while before charges are filed against Bishop. While the FCC has stepped-up their enforcement actions, the Commission's monitoring stations have recently caught so many rule violators, that there is currently a 60 day backlog of cases to be filed. Legally, the statute of limitations require that rule violators must be charged within one year of the alleged offense. (Rocky Mountain News/N8NYO/W5YI/Merk Huff/SW ECHO)

****YO HO HO FANTASIES****

ROBERT M. BRATCHER JR.: I have read all about those elusive pirate stations but have never managed pick one up. What are the secrets to hearing those US & European pirates? I have thought about running one myself with, say, 1kW of power. How do you run one without getting caught by the FCC? I'd love to play oldies rock, classical & Christian rock on shortwave (like 7.4 to 7.5 MHz). Any input will be very helpful. The station (if I ever build a transmitter) would be called Bootleg Radio.

DARWIN TEAGUE: I'm not sure, but I think the way NOT to do it would be talking about it on a national echo! Why didn't you give the FCC your address while you were at it, to save them from looking it up later? I think most of us have thought about it at one time or another. Me, I'd play Frank Zappa music, non-stop!

CHUCK MANDUS: I do admit I have my own fantasies for a pirate radio station. I think on my station, I would play disco music and 1970's rock music and the format would be of a Populist bent. Naturally, I would never operate one since I don't want to get in trouble with the law and lose my ham license, but it isn't a crime to fantasize. Maybe we could get a thread going on what we would play if we had our own radio station.

ROBERT M. BRATCHER JR.: If I ran one (and I doubt I ever will) I would play Classical, oldies rock, country & big band swing. Plus a little Christian Rock! And you would hear some of the preachers I have recorded in church plus the tapes I bought of some of them. It would sound as professional as I could make a one man operation. My question is, Who would care to listen to it? I doubt very seriously that it will ever go "on the air" as I don't care to be heavily fined nor spend time in prison. I would rather do it legally as in shipping tapes to WWCR And I'm sure that might be expensive in airtime!

AL QUAGLIERI: If I had my own pirate radio station, it'd be a parody of pirate radio stations. I'd feature programs of really awful music, hosted by amateurish jocks with stupid alias names. There would be crude, juvenile attempts at humor, sophomoric political diatribes, and many private messages to my "buddies" who I presumed were listening. My audio bandwidth would be limited to the range 150-3000 Hz, and my modulation would be grossly distorted. After the "end" of the program, I'd mimic the inevitable round of inane two-way comms between pirate stations which traditionally follows every broadcast.

On second thought, were the parody done right, no one would get the joke. It'd sound like just another pirate station. I guess some things in life (and radio) are just satire-proof.

****NEW TOYS - ARE YOU LISTENING, SANTA?***

SW55

There was a VERY positive review of the new Sony ICF-SW55 receiver on MEDIA NETWORK this week. Basically, they seem to like it better than the more expensive SW-77 model - except for the lack of a synch detector. The SW-55 unit they tested had better reception qualities than the SW-77, more memory pre-sets (125 compared to 100), a more compact design, etc. The memory system sounds really great. You can enter the names of 25

****NEW TOYS (continued)****

broadcasters (alpha-numeric characters on the LCD screen) and then 5 freq's per broadcaster (including mode). I seem to recall that the SW-77 does a search for the strongest signal - not sure if the SW-55 does also. By this I mean that if you punch in the code for the BBC, the radio will search the 5 freq's you've entered and will then lock onto the strongest signal of the 5. Another possibly great touch is that the SW-55 has a small map of the world as part of the LCD display. Major world capitals are pinpointed on the map with time zones marked. Since there are two clocks (local & UTC) you can, probably with a magnifying glass, check the times in various cities. The other revelation was that the world map shows areas of darkness adjusted by time! Greyline right on your display! However, they didn't note whether this was modified by the seasons - unlikely, unless the radio allows you to input the month and date. If you'd like more info on the SW-55, call 1-800-222-SONY and ask for their Consumer Products Catalog. Media Network said that the SW-55 would be introduced into Europe sometime in December. (R. NEDERLAND MEDIA NETWORK/08-Nov-91/Bill Oxner/SW ECHO)

SW77

Yesterday I picked up Sony new ICF-SW77 receiver. I have only spent one evening with the unit so info about its performance will have to appear in a subsequent post. I purchased the unit for Ham Radio Outlet, here in Sunnyvale, Ca. for \$499. I believe the Grundig Satellite 500 is the only other more expensive portable you can buy. The box contains the SW-77, a Preset Frequency Sheet, a 22-page propagation primer called "How to Catch the Wave," a programming guide, a 128-page programming/station guide called "Wave Handbook," a 170-page multilingual manual, a 6V AC adaptor, earphones (not earplugs or headphones), a shoulder strap, and a Sony AN-71 Compact Antenna (more on this later). Looking at the unit I counted a total of 57 things in which you can turn, slide, push, twist, or plug. Recessed down a tube along the left side of the unit is a 30 inch telescoping antenna. On the left side are a 6V DC power jack, earphone jack, Tape remote output, Tape Line out, and an AM external Antenna input. There is also a sensitivity switch for DX/Normal/Local gain. From the back, the unit takes 4 C size cells (down from the hefty D size cells of the 2010). Inside the battery compartment is a switch for changing the tuning steps from 10kHz to 9kHz. This switch is poorly placed not only because it is in the back but also because you must remove the batteries to flip it. There is a portion of the back panel that flips down to provide a back stand for the unit to rest on. In conjunction with this the bottom of the unit has a rubber strip to prevent the unit from sliding a smooth surfaces. The right side of the unit has two rotary controls for bass and treble. The volume control is here also and is a slider with a large contoured handle. The top of the unit flips up to reveal time controls. There is a miniature world map that slides across the top to help you determine your hour offset relative to UTC. There is a small chart of the unit's frequency range, LCD contrast control, and a RFreeS button that tells you how much memory is left. Time controls are for setting local time, UTC offset, and timer programs. Changing of the time requires pressing a button on the top while spinning the tuning disk on the front. A little tricky. Now for the front. Yikes! There are two LCD displays. The first one displays local time and offset to UTC. The display can be toggled to show UTC and UTC offset but not UTC and local time together (ARRRGH!). Along the bottom of this display is a LCD bar that has tick marks for hours 0-23. When you program a station you can set which hours that station broadcasts. The hour bar shows which hours the preset station is on the air. More about that later. The display also holds info for timers, keylock, and low battery. The second display is tuning central. There is a large 6 character area for station names. Yes, station names! Below that is the frequency area. Below that is a bank of numbers (1-10) that hold different frequencies for the same station name. And below this is a five cell row that is selected by five push buttons below it. Hold on, we'll get to it in a moment. To the right of the display is a signal meter, end indicators for scan, on air, slow/fast tuning, and auto tune. To the left are indicators for wide/narrow bandwidth, upper & lower sync, USB & LSB, and sync lock. Below the display are five buttons labeled S1-S5 and a keypad for direct frequency entry. Along the left of the front panel are switches/buttons for power, sleep, timer standby, key protect, timer page, quick page, and page up/down, cursor left/right, slow/fast tuning, and a tuning disk. I'll be damned if I will explain each of these buttons. Getting down to tuning: The range of the unit is FM 76.0-108MHz and 150-29,999.9kHz. Missing is the Air band that was on the 2010. The range actually differs depending upon which TYPE of unit you get. The TYPE of unit you can buy is related to the country you live in and what that country's laws are. Sony werns of difficult tuning of 455kHz, 1004kHz, 3640kHz, and 6275kHz because of internal oscillators. There is the usual tuning features of direct entry or via the disk. Tuning can be in course 10kHz increments or slowed down the 50Hz increments although the display will only show 100Hz increments. Gone is the ability to scan across memories or between to frequencies like on the 2010. You can only scan a frequency band. As stated before, there are buttons to toggle wide/narrow and upper/lower sync. The sync lock indicator will come on if it can lock on the upper or lower sync. The SSB button toggles the USB/LSB. There are 162 memories total in the SW-77. The memories are handled in pages. There are 20 pages of stations and one page can hold 5 station names for 100 total. Furthermore, there can be up to 10 different frequencies assigned to each station name. There are two sets of specialty pages named RQuick PagesS

****NEW TOYS (continued)****

and RTimer Pages. The Timer pages hold info on the 5 timers of the SW-77 and the Quick pages are for frequently listened to stations so that you do not have to scroll through 20 pages to find what you want. You just hit the Quick page button and then the S1-S5 buttons for the station.

Setting memory: Basically, you tune in the frequency, bandwidth, and AM/FM. Then you set the time that the station is on the air. You set the starting time and the ending time. This on-air time setting is option but is a nice feature I'll describe in a moment. Then you can select the page in which you wish to store the stations. You then use the tuning disk and cursor keys to spell out a 6 character name for the station. Lastly you press S1-S5 to place the station in one of the five memories on that page. It is much easier done than said. Now for multiple frequencies per station and those on-air times. The SW-77 lets you log in the times that a station is on the air and at what frequency. Therefore, you can set up to 10 different frequencies for the BBC depending upon the time of day. All of this info would then show up under the station name RBBCS. So when you wish to listen to the BBC you just find RBBCS on one of the pages and press the button. The SW-77 checks to see what time of day it is and then goes to the proper frequency. Major neatness! This feature can be manually overridden. The feature can also be set so that instead of it selecting a frequency based on the time of day it will scan all the frequencies for that station name and settle on the one that comes in the strongest. Finally, when you tune in a station name and its broadcast times match fall within the current time and ROn-AirS indicator will appear. This is very nice because then you know if that station is actually broadcasting or you just can't tune it. Other items: The 6 character display serves some nice uses for errors. For example, when you try to enter and invalid frequency, it will flash RTry AgainS. It will also say RTIMERS when a timed program is active and RMemory FullS when you have run out of memory. Lastly, there is a RDEMOS mode that tunes into each memorized station for 3 seconds. Like I said, I have only had the unit for one evening so more info will follow if there is a demand for it. Would I recommend the SW-77. So far, definitely!

Over the weekend I had a chance to do some concentrated channel chasing. Let me preface this post by saying that I am by no means an expert at judging performance. All I can tell you is what I heard and what I thought. (Thank you for observing this "bone-head" clause) The first thing to note is that this test was performed in Northern California - USA, San Jose to be specific. According to many radio guides, this area of the country is one of the worst areas for DXing.

The SW77 comes with an 22ft wire antenna that neatly rolls up into a small disk like reel. Sony suggest you use the antenna when inside a steel or concrete building. I suggest that you always use it. From inside my non-concrete & non-steel house there was an excessive amount of noise to overcome before easy listening could be obtained. However, it was a whole different story when I went out on my back patio and strung up the wire antenna. Not only did being outside reduce a lot of noise, but the wire antenna boosted signal strength from 4 to 6 notches on the scale. It made the difference from being able to not hear a station to being able to hear it clearly. Now I know that better reception comes with a better antenna. All I am saying is that the manual suggests that you don't really need to use the wire antenna for good reception. I say, that once you try it, you will never want to listen without it. For the attached telescoping antenna there is a gain switch which has local, normal, and DX settings. Local is useless. It does cut out all noise but if you are listening local, to my experience, there isn't much noise to deal with. Normal setting is OK but then you miss the far off stations. DX setting is what I leave it one. You do pay the price of excessive background noise when tuning. This means that you have to turn down the volume when tuning, to save your ears, but then turn up the volume to listen. Like the dummy I am, I didn't try grounding the antenna. It probably would have helped a lot. OK. So here we go. For a one hour period on Saturday 10/5 at 0600UTC I tried out the factory programmed stations and did some random dial twisting. The following is what I heard.

Freq	Station	Signal Strength & Notes
7255	VO Nigeria	3 My best score of the night. Tough to lock in & hear but the Narrow band width setting helped out.
5000	WWV	10 Booming! Never heard it better.
17825	JAPAN	10 Crystal Clear. This is a pre-prog one
17795	Australia	10 Pre-programmed
9630	SPAIN	7-10 Pre-prog
6165	HOLLAND	10 Pre-prog
9575	VOA	7-10
9670	Antigua	5-9
9640	BBC	10 Solid as a rock! Also on 5975
6015	Radio Austria	4-10
9705	WRNO	10
7315	WHRI	7-10
15155	EDUCADO	8-10 pre-prog
9690	Argentina	9-10
15425	R. Moscow	10
1000	KOMO	4-6 Seattle Wash. No big deal however, because a friend was able to pick KOMO

****NEW TOYS (continued)****

with my GE SuperRadio. Go SuperRadio!

Sensitivity on the SW77 is great. Selectivity is good. The fact that you can go from wide to narrow bandwidth greatly helps out. Overall, I think the SW77 will keep me busy for a long time. There is just so much out there that it picks up that I hardly know where to begin. How does it compare with the 2010? Well I had a 2010 for a while and found it about equal. There is no indication from Sony or my experience that suggests that any major receiving improvements were done to the SW77. (15-Oct-91/Brian Parry/USENET/Kirk Baxter/SW ECHO)

Drake has had the VHF converter on sale for a few weeks now. Price is just under \$200. (Mine is on order, so I have no comments).

Drake has a new EPROM that enhances the R8 option. The price is under \$20 (inc. shipping & handling). Features are:

- 3 frequency step sizes rather than 2
- User defaults rather than factory defaults. That is: if you are on AM with your filter set to 4 kHz & AGC set to fast, the switch to sideband, then back to AM, you used to have your filter set to 6 kHz and AGC set to Slow (which are the factory defaults). With this EPROM, the AGC & Filter settings will return to what they were when you were last on AM.
- You now have a "clear" key on the keypad. (shift-period).

[The last one is very important to me, the 2nd one slightly important, the 1st one was not a problem (for me). These changes were the result of user requests.]

The speaker will ship early November. It will be priced around \$50-60. (21-Oct-91/Paul Blumstein/USENET/Kirk Baxter/SW ECHO)

I don't fully understand the value of one of the enhancements Drake is offering with the new prom. Specifically, when you switch modes and change the AGC, then switch another mode, the R8 remembers the last AGC setting in the new mode. Obviously that could be different than the first mode. Going from AM to either sideband in the tropical bands is usual business. Sounds like the user will have to be switching back and forth to the agc mode, if I understand the posting correctly. The enhancement sounds like unneeded automation. A manual option sounds like the ideal. (22-Oct-91/John Smullen/SW ECHO)

****WHY DO SHORTWAVE BROADCASTERS BOTHER?***

BILL OXNER: I have a question that I've been pondering for awhile and thought you might be able to help answer. The question is why nations expend scarce resources on shortwave transmissions? I know some of the answers but others are more elusive:

- 1) For ideological reasons - to spread their version of the ultimate truths. The VOA, Radio Moscow (previously), Voice of Iran, R. Pyongyang, etc, would fall into this category.
- 2) To prove that they exist as a nation, much as some African countries HAVE to have a national airline, even if it's just one 747 that may even be shared with others. I'm not sure which countries fall into this category but maybe you can suggest some.
- 3) To increase awareness of a nation for trade reasons. I suspect that R. Japan, R. New Zealand and a few others fall into this category. I don't think they expect New Zealand exports to jump because of shortwave broadcasts but they may hope for a subtle impact as shortwave listeners simply become aware of New Zealand and hear the name over and over. Much like American companies utilize simple announcements of their name on PBS programs.
- 4) To influence public opinion in other countries. This one is even MORE subtle. I suspect that Japan hopes the broadcasts of R. Japan will make listeners in other countries more sympathetic to Japan in general. If we listen to their broadcasts then we'll get a warm fuzzy feeling and when our legislators try to enact legislation that would restrict Japanese imports then we won't be as quick to support them. Kol Israel is a good example on this one.
- 5) To serve their expatriate population. South Korea broadcasting to keep Korean-Americans in touch with the home country (and to encourage them to send money back to the home folks), Portugal to the expatriate Portuguese community, etc. However, this item would seemingly only be justified with broadcasts in the native language - it wouldn't explain R. Portugal's English language programming.
- 6) Tradition and bureaucratic inertia. A nation has had sw services for 40 years and no one has recently questioned the rationale for its continued existence. I suspect the BBC falls into this category. In fact, I suspect more than 50% of ALL national shortwave broadcasters fall into this category! It ONCE had a reason to exist and now it's been around so long that no one seriously questions whether the original rationale still exist - at least until the budgets get so bad that politicians are forced to re-examine ALL items, which is when RCI (and others) get nailed.

****WHITHER SHORTWAVE? (continued)****

I know there must be other reasons but these would seem to be the major ones. What got me to thinking were the cutbacks in service by RCI, Kol Israel and many others. It occurs to me that if anyone really asked tough questions that it would probably be hard to justify large expenditures for sw for anything other than reason #1 - ideology - which doesn't require an economic justification.

For example: suppose there was no BBC shortwave service. How would a British politician explain to voters, or to other politicians, why it was economically beneficial to spend many millions of pounds (in tough economic times) simply to broadcast news around the world? Unless I'm missing something, the above rationales might justify a relatively minor investment but certainly nothing like the current scale of spending. The same is true of the VOA. Since ideology is disappearing as a rationale, I doubt Congress would authorize anything other than a minor operation if it had to be started from scratch today. With apologies to John Vodenik, if I were working for the VOA today I would be nervous about the future.

I know this is all rather philosophical but we seem to take international swbc's for granted. They've "always" been there and we assume they will continue forever. I don't think that's necessarily the case. I just thought I would toss out the questions and see what ideas others may have.

RICHARD URENA: A very interesting and thought provoking post. Let me throw in a couple of ideas:

Economics. For the most part, shortwave radio is a fairly cheap way of advertising a country and making it known around the world.

DON KIMBERLIN: I think you're right on target, Richard. There are certain things it is politically "fashionable" for politicians in various nations to have at certain points in their "development," like an airline, a satellite earth station, or such. These go through waves, as the technology develops and marketplaces evolve. Hard measures of the economic payback may well be less important at the times of these events than political "fashion" at the moment.

RICHARD URENA (continuing): Of course, I'm not talking about behemoths like Radio Moscow or the BBC, whose yearly budgets must be larger than many a Third-World GNP. A more modest enterprise can still put out listenable signals over great distances and reach a well-motivated audience.

BILL OXNER: This falls into my category about encouraging tourism. However, advertising is only economically rational when the target audience has the ABILITY to buy the advertised product. If R. Netherlands is spending large sums to broadcast to Central Africa in hopes of encouraging tourism then that would seem a waste of money. Most of the listeners can barely afford a radio, much less afford to travel to Holland. The Netherlands would be better served printing colorful brochures to send to travel agents in those countries.

RICHARD URENA (later reply): What I meant by "efficiency" is the number of listeners reached per dollar invested. I think the experience of WRNO proves that shortwave radio is not commercially viable. In that sense I agree with you that shortwave radio is not viable, in a strictly commercial sense.

BILL OXNER: My question didn't really relate to "efficient" or "inefficient" ways to reach people - I was curious about the rationales for trying to reach people at all. Take an extreme example. It may be that sw is the most "efficient" way to distribute cooking recipes to peasants in SE Asia. So, a broadcaster does nothing but broadcast recipes for 24 hours a day in various Asian languages. It may be "efficient" but (to me) it's an irrational waste of resources. There ARE clear rationales for some broadcasters. The US spends money on the VOA to spread the gospel of capitalism and the American way of life. Some European countries probably do it as a way to encourage tourism. R. Japan probably does it to make listeners feel good about Japanese exports and Japan in general. However, there are many broadcasters for whom there really doesn't appear to be a good rationale for the amount of money spent on sw, except perhaps as a form of foreign aid. When the local economy is strong no one pays much attention to foreign aid. When times are tough people begin to question ALL forms of foreign aid, including sw.

RICHARD URENA: But I think it is a GOOD thing that shortwave radio is not commercial. An analogy: look at the pitiful quality of the evening TV news

****WHITHER SHORTWAVE? (continued)****

broadcasts these days (in the USA at least).

BILL OXNER: I agree with your sentiment but that's what capitalism is all about. I wonder if you would be equally supportive of non-commercial broadcasting if you had to pay for it directly. The BBC's money comes from television and radio license fees. If you own a tv or radio you pay a yearly fee to the government. Suppose the US started a system of charging television and radio license fees in order to support the VOA? Would you still appreciate the wonderful (and efficient) work done by the VOA? I suspect that few people would be thrilled to pay directly for VOA broadcasts to peasants in Asia and Africa so that those people would have better news sources. Some people DO contribute to their local PBS and NPR broadcasters but I doubt if many Texans contribute to PBS stations in South Dakota so that those poor folks can have better news sources.

RICHARD URENA: Under commercial pressure, news have become "news segments," fed to an audience that is already jaded by lots of visual effects, fancy commercials, etc. In order to capture the viewer's attention, TV news has lost all its depth. Something similar is beginning to happen to CNN. How did TV (CNN) cover the recent peace conference? With a 30-second report that featured the Syrian delegate holding up a picture of Shamir as a wanted terrorist. If you are looking for in-depth analysis, you have to go elsewhere. I could go on and say that this superficial quality has fed back into real life, and now politics is handled by advertising specialists trying to devise the catchiest 20-second "sound byte" but I shall not. Where can you find good news coverage? Only in places like the BBC's Newshour, or Monitor Radio, or on your local Public TV station. None of this should be taken to mean that I oppose competition as a concept. I won't elaborate, but I'm NOT arguing for totally autonomous radio or TV stations, wasting resources, etc. Another good reason for shortwave radio is domestic concerns. In many countries, large and small, shortwave is the only efficient [there's that word again :]] way of reaching the domestic audience, which may be too spread out in remote and undeveloped areas to be efficiently reached by any other means. Canada is a prime example of this, along with the dozens of stations in Africa, Latin America and South Asia that populate the tropical bands. If the CBC's Northern Quebec service were to be in private hands, for example, I seriously doubt it would be "commercially viable" in the strict sense of generating enough advertising revenue to make a profit. But, IMHO, the service shouldn't have to be judged by those standards.

BILL OXNER: What standards do we use? There has to be some rationale behind expenditures. Suppose the VOA currently spends 500 million a year. If sw is efficient should we spend 50 billion a year? 5 million a year? How does Congress (and other foreign legislatures) actually decide what is the "proper" amount to spend on sw broadcasting? If the money comes directly from YOUR pocket (as in Great Britain) would you be happy to see the VOA double their budget so they could add 48 more hours of programming in Urdu? Actually, we do pay for the VOA but it's buried in the general budget and no one pays much attention. I don't know all the rationales which national broadcasters use and that was one reason I was hoping some of the pro's here might be willing to share some of their expertise.

RICHARD URENA (continuing): Economics can also be looked at from the audiences' viewpoint. Lots of people in the world can't afford satellite dish, cable TV, or TV of any kind for that matter. Lots of people in the world live in remote areas where there is no press, or the press is controlled, or they can't read. My educated guess is that for significant numbers of people in the world, shortwave listening is not a "hobby" but it's part of the daily routine of their lives, and often the best or only way to get information about the world and, not infrequently, about their own countries.

DON KIMBERLIN: I've talked to missionaries who are on the other end of operations like HCJB or TWR or FEBC. They openly state that the cheap pocket-sized shortwave radio has offered them explosive interest. More to your point: I maintain correspondence with an American who's with the Peace Corps, teaching

****WHITHER SHORTWAVE? (continued)****

beekeeping to the natives in the Central African Republic. He misses things like teabags and toilet paper. Life is pretty elemental, and he's not prepared to get into ham radio (probably from a place that active hams would love to get to!). But, he lives by his Sony ICF- whatever-model-it-is. He found out enough to get a battery hookup from his vehicle, so he's not running out of dry cells, and he experimented with a spool of doorbell wire to string an antenna. He says that contact with the "civilized" world helps him maintain his sanity while he completes his Peace Corps tour in a very remote location, with almost no other contact from the outside world. He's certainly a minority, but I can understand from three years of traveling that continent, even to the capital cities for 4 to 6 weeks at a time. I needed that shortwave receiver in my baggage, just to stay in touch, when even what local radio or TV there was came in some local language I couldn't fathom at all.

BILL OXNER: I absolutely agree but this has nothing to do with the rationale from the BROADCASTER'S viewpoint. It would be wonderful for viewers in South America if the US government launched a satellite to provide free television programming to those areas but it would be ridiculous from the US taxpayer's viewpoint - looking at the question from a strictly economic orientation. As things stand, many sw broadcasts fall more into the "foreign aid" category, an humanitarian gift to areas where local broadcasting is inadequate. There's nothing wrong with foreign aid but the amounts can certainly be questioned when they reach the levels expended by broadcasters like the VOA and BBC. People in the Sudan might like a few less hours of VOA programming and a bit more food.

RICHARD URENA (continuing): Radio New Zealand is an example of what I'm talking about. And I can only wonder at the large number of Arabic signals on the bands, and the correspondingly huge number of Arabic speakers and/or Muslims around the world. I don't speak Arabic, but I suspect this applies to the Arabic broadcasts out there. Even tiny Radio Monte Carlo has an Arabic program (which in fact is relayed by R. Canada here in North America.)

DON KIMBERLIN: There are probably more "lost" Arabic speakers per square kilometer out around the world than we have "lost" English speakers out there. Same for Spanish, French, Italian, German, Chinese, Japanese and the many lesser languages.

RICHARD URENA (continuing): Listening only to broadcasts aimed at North America in English can't convey the dimensions of what I'm talking about. But try to listen to the mailbox programs of the Christian Science Monitor, or other religious stations with English language broadcasts beamed overseas. Over and over again, you'll hear testimonials of people from all over the world thanking the station for reaching out to them. The listener feedback is most illustrative.

BILL OXNER: I do listen to these programs and I know what you're talking about. However, it's again looking at the question from the listener's viewpoint (he's getting a free service) rather than from the viewpoint of the taxpaying public of the broadcaster. I'm obviously limiting the discussion to national broadcasters - religious and commercial broadcasters are a totally different ballgame. This type of listening will illustrate my point. I also speak Spanish and French (and understand Portuguese as well). I regularly listen to Latin American or African services from all sorts of stations (from the VOA, all the European giants and from several Africans and Latin Americans as well.)

RICHARD URENA (continuing): So I have to disagree somewhat with the general assumption in your post that shortwave broadcasting is a waste of resources. In some cases it is (I've griped about Radio Moscow long enough on this echo). But generally speaking it strikes me as very efficient, in terms of listeners per dollar.

BILL OXNER: Actually, I wasn't assuming that it was a waste of money but only trying to spark a discussion about the rationales behind the entire concept. When you talk about a process being "efficient" it generally means that there is an economic investment being made in hopes of making a profit. Since there doesn't seem to be a profit motive behind much (if any) national sw broadcasting, the efficiency or inefficiency is immaterial. Suppose R. Netherlands wants to expand service to India. A R. Netherlands official goes to the Dutch legislature and asks for 1 million guilders to pay for it, saying it's an "efficient" way to reach Indian listeners. To me, the politician has a rational reason to ask, "So what?". What benefit will it bring to a Dutch taxpayer to efficiently reach Indian

****WHITHER SHORTWAVE? (continued)****

listeners? If the argument is increased tourism then I would ask for some data to support that theory, especially compared to brochures, magazine advertising, etc. If the argument is foreign aid then it gets more complicated, especially if the target is Australia rather than India.

RICHARD URENA (continuing): What has happened to Radio Canada is an example of politics at work, not economics. I laughed pretty hard hearing that the official reason for the cutbacks was the Canadian budget deficit. The proposed and enacted cutbacks at RCI were well under 1 percent of Canada's budget deficit. The thing is, foreign listener's don't vote, so it's easy to wreak havoc with a shortwave station's budget and use this as Exhibit A of the ongoing heroic campaign to trim the budget deficit, by eliminating a source for a whopping 0.5 PERCENT!! Amazing, simply amazing.

BILL OXNER: As much as I hated losing RCI I have to say that I think the Canadian government did make an economically correct decision, regardless of the exact amount saved. It's obvious you can't solve a national deficit with ANY one item, you have to add several small ones together. I don't recall that Mulroney was arguing that cutting RCI alone would solve Canada's budget problems, it was just one of many measures. It IS true that sw listeners don't vote in the countries they listen to and that's a valid domestic argument. I don't have a God-given right to have DUTCH taxpayers support MY pleasure in hearing Media Network. I'm thrilled that they do and I hope they continue, but if Dutch taxpayers (and politicians) decide to stop supporting my listening habit then I don't have any legitimate reason to complain. When I start paying Dutch taxes THEN I can complain. PLEASE note that my original posts weren't intended to attack sw broadcasting, I was just curious to know what rationales were used (at the highest levels) to support the expenditures. I will say that as much as I love the free signals I receive (and hope they continue) that I think these questions will be asked more and more as world economic conditions worsen and I suspect that the spectrum will be less crowded in the future. I will admit that I have serious questions about OUR high levels of expenditures for such dubious broadcasters as Radio Liberty, Radio Free Europe, Radio & TV Marti, etc. I want the US to have a presence in sw broadcasting but I don't think we need as much as we're spending now - especially on such stupid ideas as the balloon transmitters for TV Marti. Just food for thought!

J.J. HITT: I suspect that the motive behind RNZI is tourism. Those weather reports "DO" sound nice. (Outside temp here in Houston is 40 F). But I do wonder about other nations. Last time I heard them the English Service for UAE Radio And Television was 30 minutes of programming. 10 minutes of news and the balance being Islamic religious instruction.

RICHARD URENA: Well, last time I heard R. Dubai they had a program, part of a series, analyzing "orientalism", a western academic discipline devoted to the study of "oriental" (meaning east of Europe) things. I thought it was a neat thing to hear another culture taking a critical look at how the West looks at them. Only on shortwave!

J.J. HITT (continuing): (While I did find it interesting, I am at a loss as to WHY they broadcast it. If they are soliciting converts, 20 minutes a day is a mere drop in the bucket compared to the 100's of hours a day put out by the MegaWatt Jesus Hooters.)

RICHARD URENA: Aimed not only at seeking out converts, but also at English-speaking Muslims, of which there are quite a few in places like India, Pakistan, as well as in Europe and the US. And a small off-topic comment: among the several religions that I know of, none compares to Christianity (especially evangelical Christianity) in its urgency to seek converts. A fundamentalist interpretation of the gospels leads many Christians to honestly believe that if you don't accept Jesus, you are condemned to hell forever, therefore from their point of view the 100's of hours a day of missionary preaching are analogous to reaching out to save a drowning person: something they cannot avoid doing. This attitude is peculiar to Christianity. Islam does not have quite the same teaching, in fact Islam recognizes both Jews and Christians as "People of the Book" (i.e. the Bible and the gospels) and recognizes Jesus as a prophet (the Qur'an refers to him as "our lord [not capitalized, they do NOT accept Jesus' divinity] Jesus, peace be upon him." For this reason alone, any "missionary" type of activity from an Islamic station is bound to be a bit more laid back in its approach than, say that of WHRI.

JOHN ROSS: I think part of the reason for many international shortwave broadcasts from industrialized countries (e.g., North America, Western Europe, Japan, etc.) is what I would call "cultural imperialism." Those countries want a visible position in the international marketplace, and in many places outside of the urban West, the "opinion leaders" and intellectual elite are the ones who may be listening to shortwave. Also, there is a sense that there is a

****WHITHER SHORTWAVE? (continued)****

potential advantage in foreign public opinion to provide an alternative service to the controlled domestic media in much of Africa and Asia. I think the British Foreign Office sees the BBC World Service and Transcription Service as a form of "foreign aid" in which they supply a quality journalistic and cultural product to "underdeveloped" countries who would not otherwise have access to that kind of information. It's also true that many of the major international broadcasters (with a handful of exceptions like RCI) are from countries who had extensive colonial empires before that kind of thing went out of fashion.

****IT'S NO QSL, BUT IT'S SOMETHING, I GUESS****

FRANCIS TOY: You oughta see the front cover of this tourist magazine Radio Finland recently sent to me! It's a picture of a guy dressed in attire for cleaning, pushing along a funky-looking machine on tires. Poking out of it is a small tube, connected to the guy's workclothes, entering where his "ss would be located while standing with his legs widely spread! Being the curious person that I am, I flipped to the table of contents to look for a description of the artwork pictured on the front cover. Finally flagging it down, I found to my amazement that it read "Industrial heavy-duty fert-producing machinery, 1990" !!!!! Like, what more can one say for Scandinavian humor?

****NAMING NAMES... ****

Via SW ECHO participant Rich Vereas comes this listing of active participants in the ECHO. Many hundreds who do not appear on this list are known, in BBS circles, as "lurkers," i.e. folks who lurk in the background and read all the traffic but leave none of their own. This list is sorted by number of messages posted.

Birdsoft Poster Record for Area: SHORTWAVE
 Messages received at 1:135/907
 Sat, Nov 23, 1991 - Sat, Nov 30, 1991

Posts	Name
66	ANDY SENNITT
44	Fred Hatfield
38	Don Kimberlin
32	J.J. Hitt
29	Bill Cheek
25	Bill Oxner
23	John Ross
18	Brian Johnson
16	David Stark
16	Charles George
15	Chuck Mandus
15	Glenn Josephson
15	Brian Carling
14	Jurgen Bartels
12	Bruce Macgibbon
12	Dick Dillman
11	Frederick Vobbe
11	Pioni Almoni
10	Paul Knupke, Jr.
10	Kevan Coleman
9	Henry Mensch
9	Mark Burkart
8	Tom Sundstrom
8	Roger Stark
8	Dave Plumb
7	Fred Smith
6	Ed Dicamillo
6	Tom Napolitano
5	Richard Urena
5	Al Quaglieri
5	Havana Moon
5	Paul Scalzo
5	Francis Toy
5	mario gongolsky
5	John Vodenik
4	Scott Royall
4	Jerome Van Der Linden
4	Andy Wallace
3	Kevin Callahan
3	Sander Davidson
3	Ralph Cook
3	Bob Burns
3	Todd Hockert
3	Rich Burns
3	James Rosenzweig
3	Richard Dale
2	George Moshier
2	Gary Yount
2	Kirk Baxter
2	Bill Theroux
2	Jose Bloise
2	Umesh Joshi
2	Jim Geith
2	Robert Davis
2	Mark Arnold
2	Bill Kelsey
2	John Grove
2	Mark Huff

****WHAT'S IN A NAME? (continued)****

2	Bob Barnes
2	Lee Laird
2	Ross Cochrane
2	Jimmy Cullen
2	Kuble Khen
2	Rich Vereas
2	Lynn Hollerman
2	BILL KELSEY
2	Jim Pogue
2	Tim Johnson
2	Tim Tyler
2	Christopher Otto
2	Andy Newman
2	Edward Dunne
2	David Tie
2	Albert Appel
2	Alan Johnson/n4lus
2	Chris Brougham
1	Steve Coletti
1	George Hiotis
1	Steve Lowery
1	Mark Samwick
1	ERIC MUMFORD
1	Barry Rowan
1	Bob Gleeson
1	Alan Boritz
1	Dave Hultberg
1	Jerry Berrier
1	Dave Marshall
1	Joe Kofron
1	Mike Donovan
1	Larry Stralow
1	Skip Senders
1	Robert Sully
1	Carl Langford
1	Roger Benz
1	Brian Murray
1	Jesse Michaels
1	Carter Snider
1	Lee Greer
1	Frank McJunkins
1	Ken Storm
1	Fred Mckenzie
1	Werner Funkenhauser
1	Tom Mcgee
1	Darwin Teague
1	Ross Miller
1	Jim Hayward
1	Jim Groenke
1	Dennis Wren
1	Hank Turner
1	Phil Mangone
1	Eddie Bull
1	Harvey Hammer
1	Alex Wellner
1	Mike Wolfson
1	Vladimir Steblina
1	Bill Eareckson
1	David Snyder
1	Bob Whiston
1	Elton Byington
1	Paul Moor
1	Wayne Heinen
1	Edward Piecewicz
1	Bud Jamison
1	Frank L.
1	Sten Slaughtert
1	Jim Wright
1	Michael Schuster
1	George Thurman
1	Paul Lukas
1	Petrick McDonald
1	TRAPPER

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Gorilla saves zookeeper with CPR



RESCUED BY a smart ape: Ernst Dietrich.

By FRANZ REICH

A German zookeeper is alive and well thanks to a TV-watching gorilla named Gunther.

Gunther is the lone gorilla in a small zoo near Essen. Zoo officials put a TV set in his cage 18 months ago to keep him from being lonely and bored.

"His favorite shows were American action programs like *Emergency* and *Rescue One*," reported a zoo official.

One morning earlier this month, zookeeper Ernst Dietrich was cleaning Gun-

Big ape learned kiss of life watching TV

ther's cage and suddenly had a heart attack.

"The pain came on so fast," Dietrich said. "I screamed once and then I must have passed out. The next thing I

remember is waking up while I was lying flat on the floor of Gunther's cage.

"He's pounding on my chest with those huge fists — thump! thump! — one after another," Dietrich said.

Other zoo workers, alerted by Dietrich's scream and Gunther's howls, ran to the cage, pulled Dietrich out and called for paramedics.

"At first, they thought Gunther was attacking me," Dietrich said. "I had to explain that he had saved my life!"

Zoo officials plan to reward Gunther with special desserts — his favorite: Six banana cream pies!

"Thank God we put that TV set in there," Dietrich said. "It's obvious Gunther learned CPR just by watching."

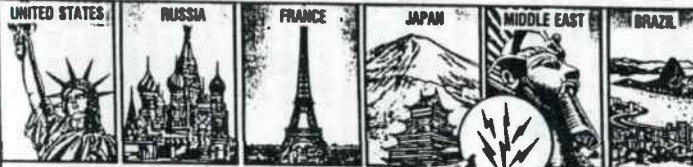
Dietrich's doctors theorize the gorilla saved the zookeeper's life.

"I think Gunther also applied mouth-to-mouth resuscitation," Dietrich said. "While I was lying on the floor of his cage, I vaguely



DO-GOODER GUNTHER, a massive gorilla, learned CPR by watching television.

remember feeling his lips on mine. I feel like Gunther and I have been a lot closer since that incident," Dietrich said.

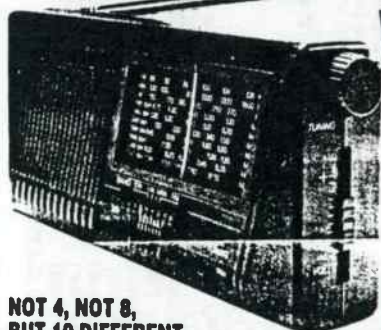


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Tattooed teens are big trouble

Beware of teenagers sporting tattoos! The marked youths are more likely to be involved in delinquency, devil worship and drugs, according to a study by researchers at the University of Washington Medical School.

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USA

To: //

Shortwave Online Digest

Compiled by Al Quaglieri, NN2U
 P.O. Box 888
 Albany, NY 12201-0888

****AFGHANISTAN****

We're hearing Kabul at a different time here than Victor Goonetilleke heard it. 6145 is the best channel here in English, from 1800 through to 1900. (01-02-92/Arthur Cushen/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

BBC noted that RADIO AFGHANISTAN's domestic first program has been traced on 7200 kHz and 1107 kHz, with the SW frequency running from 0300 to around 1600 UTC. RADIO AFGHANISTAN's external service is no longer being relayed by Russian transmitters. English at 1900 UTC is now only heard on 9635 kHz which is coming directly from Afghanistan. The RADIO AFGHANISTAN service for national minorities in neighboring countries is now only heard on 6100 kHz. (01-09-92/RN MEDIA NETWORK/01-10-92/Bill Kelsey/SW ECHO)

****ALBANIA****

ALBANIA: Radio Tirana has drastically cut back its schedule. It seems the only way to keep the station going will be to use foreign sponsorship. At least three well-known international broadcasters have expressed interest in hiring the mediumwave frequency of 1395 kHz. (19-Mar-92/Andy Sennitt/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

In an English-language broadcast on Radio Tirana, the Director of the External Service indicated there was a danger that the process of restructuring of the station could not take place unless there was, as he put it, "powerful and concrete material support. All broadcasts of Albanian Radio and Television," he said, "risk being closed down at the moment because of shortages of spare parts, and even of printing paper." The situation was described as getting "worse and worse. However, all journalists on the staff were trying their best despite difficulties, and doing their utmost to convey to audiences the Albanian reality, however shocking it might be. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/Al Quaglieri/SW ECHO)

****ALGERIA****

I've just checked with BBC monitoring, and it seems there are currently two English transmissions a day, one at 1700 to 1800 UTC on 17745 and 9535 kHz, for listeners in east Africa and the Middle East, and another at 2000 to 2100 UTC on 11715 kHz, beamed to Europe. (13-Feb-92/Andy Sennitt & Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

Schedule for Radiodiffusion-Television Algerienne, Algeria. 21, Boulevard des Martyrs, Alger, ALGERIA Period: J-1992

FREQ	GMT	LANGUAGE	DEG	TARGET
6145	1700-2200	Arabic		East/West
7145	1900-0000	Arabic	98	Middle East
7245	0500-0600	Arabic		East/West
7245	0600-0700	K (?)		East/West
7245	2200-0000	French		East/West
9510	1700-0000	French		East/West
9535	1800-1900	English	98	Middle East
9535	1900-0000	Arabic	98	Middle East
9640	0000-0100	Spanish	235	South America
9640	1900-2000	Spanish	235	South America
9685	1800-0000	French		North (France)
11715	0600-0800	Arabic	20	Central Europe
11715	1500-1900	Arabic	20	Central Europe
11715	2000-2100	Arabic	20	Central Europe
11715	2100-2200	English	20	Central Europe
15160	1400-2200	French	20	Central Europe
15205	1700-0000	Arabic	98	Middle East
15215	0000-0100	Spanish	235	South America
15215	0100-0500	Arabic		West Africa
15215	1900-2000	Spanish	235	South America
17745	1700-1800	French	146	East Africa
17745	1800-1900	English	146	East Africa
17745	1900-2200	French	146	East Africa

(03-Feb-92/Andy Wallace/SW ECHO)

****ANTARCTICA****

AFAN McMurdo (American Forces Antarctica Network) has also been silent for a while. Now the station plans to reactivate 6012 KHz in February, 1992, after new equipment is received. (01-05-92/Jorma Mantyla - Finland/USENET/Kirk Baxter/SW ECHO)

****AUSTRALIA****

AUSTRALIA: The ABC mediumwave stations have changed many of their callsigns. They're using a Radio National network, an 14 of the stations have now got an "RN" callsign. For instance in Sydney, the old 2FC - established in 1924 - is now called 2RN.

There are three changes of interest: on 693 kHz we have 3EE in Melbourne; on 1008 we hear 4TAB (Totalizer Agency Board) which carries nothing but racing from Brisbane; and on 1395 5AA Adelaide, a frequency change from 1386. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

Moving on to AUSTRALIA, there are some interesting callsign developments as the Australian Broadcasting Corporation look at their networks. And they're trying to align new callsigns to stations after - one, for instance, 3AR, Melbourne [621 kHz], which has been a call for the last 68 years, is to be known as 3RN, RADIO NATIONAL. 4QG, Brisbane, 792 [kHz], also of course has the same system of 4RN, RADIO NATIONAL. We mentioned a couple of broadcasts ago, in Melbourne that 3XY has closed. Well, the license is being taken over in February by a new station, and that one's to be 3EE, and broadcasting on 693 [kHz], which is a new frequency. (01-02-92/Arthur Cushen/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

In Sydney, two MW stations acquired FM frequencies; 2UW [ex-1107kHz; Commonwealth Broadcasting Corp Pty Ltd, Neutral Bay] paid \$9.4 million and 2WS [ex-1224kHz; Wesgo Communications Pty Ltd, Seven Hills] paid \$8 million. One cleared MW channel will be used for a network of Parliamentary broadcasts, and the other for print-disabled radio on the other. For the latter, Sydney will have a 5kW transmitter next year; Canberra will use 2kW on 1125kHz; Perth will use 2kW on 990kHz; and Hobart (7RPH [Broadcasting Services for the Print-Handicapped, Newton Tas]) will use 2kW on 864kHz. These "reading service for the disabled" broadcasters will be moving from 1620 and 1629kHz into the standard broadcast band. With so many MW broadcasters going to FM, each major city now has two clear MW channels, which will be used by the government and the RPH [Radio for the Print-Handicapped] services. (12-12-91/Arthur Cushen/RN Media Network/Bill Kelsey/SW Echo)

The following extracts have been taken from the 1990-91 annual report for the ABC with respect to Radio Australia. I hope it is of some interest.

The ABC's priorities, which are outlined in the Corporate Plan 1991-94 are:

1. Develop RA's position as the most authoritative independent provider of international news and current affairs specializing in the Asia-Pacific regions.
 2. Reach new audiences and increase target audiences in the Asia-Pacific regions.
 3. Enhance RA's role as an international communicator by diversifying into methods of communication additional to shortwave broadcasting.
 4. Acquire access to additional modern, reliable transmission facilities, including off-shore facilities.
- RA's target zones are:
1. South-west and Central Pacific
 2. South-East and South Asia
 3. North Asia

RA has five functional broadcasting units, one for each listed above as well as a news and current affairs Department and an English

****AUSTRALIA (cont.)****
Language Service.

Audience research indicates that over 25% of the population in the Pacific listen to RA's broadcasts..

In 1991 RA became a member of the Peacesat satellite network, which covers the South Pacific and some countries in South East Asia. Peacesat is intended for non-commercial use for the purpose of disseminating educational programs and other information services for the benefit of "user communities".

RA broadcasts to an estimated audience of more than 30 million listeners in South-East and South Asia. In recognition of RA's important role in Indo-China, steps were taken to expand and upgrade the Vietnamese service, despite tight financial constraints.

Transmitter Facilities

RA's transmission facilities at Cox Peninsula and Shepparton are to be upgraded following the Federal Government decision in 1990 to allocate \$11.6 million to improve reception in target regions. The upgrade will increase the number of frequencies available and thus improve reception of services broadcast to Asia, especially in peak morning and evening listening times, and extend the geographical reach of transmission to the Pacific. Planning commenced for the construction of five one-octave aerials at Shepparton. In conjunction with a new aerial switching system the new aerials will increase the geographic range of RA signals right across the Pacific, from Micronesia, where the present signal is weak, to French Polynesia which currently gets only fringe area reception. Tenders have also been called for the supply of two 250 Kilowatt transmitters and auxiliary systems for installation at RA's Cox Peninsula transmitter site near Darwin. These transmitters will assist in meeting the demand for transmission time during peak listening periods in North and South-East Asia. (9-Feb-92/Rob Williams - Australia/SW ECHO)

****BELGIUM****

Here is the Spring-Summer 1992 schedule of the BRT as reported by Frans Vossen at 00:45 on Saturday March 14, 1992 on the Radio World Program. Schedule effective as of March 29, 1992

0500-0600	5910 Europe, 17545 Africa
0600-0730	5910 Europe, 11695 Europe and Australasia
0730-0900	9905, 11695, 13675 Europe, Mo-Sa
0730-1130	9905, 13675, 21815 Europe, Sun Only
0900-1200	9905, 13675 Europe
1000-1200	21815 for Africa
1200-1500	21810 SE Asia, 17555 for N America, Mo-Sa
1130-1230	21810, 17555 Sun Only
1400-1600	9905 Europe, Mo-Sa
1230-1600	9905 Europe, 13710 SW Europe, 21815 Africa
1600-1800	9905 Europe, 21815 Africa
1800-2000	9905 Africa, 17550 Africa
2000-2130	5910, 9905 Europe, Mo-Sa
2030-2130	5910, 9905 Europe, Sun only
2130-2000	9930 North America, 13655 South America

"Brussels Calling"

0630-0655	11695 Australasia, 5910 Europe
0900-0925	9905, 13675 Europe, Mo-Sa
1130-1155	17555 North America
1300-1325	17555 North America, 21810 SE Asia, Mo-Sa
1800-1825	17550 Africa, 9905 Europe
2100-2125	5910, 9905 Europe
2230-2255*	9930 North America, 13655 South America

*I don't know if I heard this wrong or Frans Vassen read it wrong, it's usually 2330-2355 in the spring and summer. (17-Mar 92/Larry Nebron/SW ECHO)

Radio 4 Internationale RTBF Radio schedule

0500-0730	7140 17680 starts at 0700 on Sat & Sun
1200-1230	9925 21460
1700-1815	15540 21460

(26-Feb-92/Paul Blumstein/USENET)

927 BRT Wolveterm plans to decrease power from 300 to 150 kW to save energy.

540 BRT Waver is building a diplexer (combining) unit to get the 540 tx on the 621 mast radiator. The original aerial collapsed some years ago.

1512 BRT Wolveterm is now using 25 kW during the day while 300 kW during the night. All on 80 meter vertical antenna. The big dipole is not used now.

(Aart van Eck - Holland via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

BRT 5th program with commercials and aimed for younger people will start on March 28th on 927 kHz. It is expected that a new name will be adopted at some time in the future. (WWH via WB via SWN/BRT via BE via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

BRT Brussels has a MW frequency of 1512 which can be heard

****BELGIUM (cont.)****

outside the country in dark hours of the day and therefore the station hopes to get a second MW frequency so it can be heard outside the Belgium during daytime too. (MN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

****BHUTAN****

There is a chance to get BHUTAN verified; they carry UNITED NATIONS RADIO programs on Tuesdays from 1430 to 1445 on 5025 kHz. In the actual UNITED NATIONS RADIO schedule, these broadcasts are listed on Thursdays, but I observed the UNITED NATIONS RADIO on Tuesdays. Bhutan is audible almost daily in Germany, but the reception quality is always very poor. The frequency is extremely congested, and the only chance to hear Bhutan is on USB mode. Correct reports on UNITED NATIONS RADIO programs -- programming are verified by UNITED NATIONS RADIO with a full data QSL card. Of course, I would prefer a direct verification from Bhutan, but this is better than nothing. I hope this tip may help the QSL hunters to add a new country to their list. (Martin Elway - Germany/16-Jan-92/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****BOTSWANA****

I hear two new Botswana frequencies: 11995 kHz at 1600 s/on with English to Africa; at the same time I hear 15495 (ex-15445). Reception as good as the old Monrovia transmitter. (12-Mar-92/Victor Goonelleke - SRI LANKA/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****BOUGAINVILLE****

Radio Free Bougainville on 3880 is still operating from 0800-1110, sometimes as late as 1150. Still a fair signal, with power undisclosed. Sam Voron will still verify reports from his Australian address. English news is broadcast daily at 1000. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

HAM FACES TERROR CHARGE

Here's the article, titled as above, and appearing in last week's Sydney Morning Herald, written by Keith Gosman.

A Sydney ham radio operator at the center of an international terrorist storm returns home today from Papua New Guinea 'to face the music.' Sam Voron, 38, of Roseville, has spent the last month deep in the jungles of war-torn Bougainville establishing a rebel radio network. A furious PNG Government has accused Voron of helping the Bougainville Revolutionary Army with 'terrorist activities.' And Foreign Affairs Minister Senator Gareth Evans says Australian authorities will consider criminal charges against him under the Foreign Incursions Act.

Voron's parents, George and Mary, were unaware of the danger their son faced--or of the brewing diplomatic storm--until last week. 'A few days ago we received a phone call from an amateur radio operator in Los Angeles who had spoken to Sam on the air,' Mrs. Voron said yesterday. 'He told us fighting had broken out, Sam was safe, and the natives had run into the jungle. My husband and I were extremely worried.'

Three people were killed and two seriously injured in this fighting between the BRA and pro-government villagers in central Bougainville. Mr. Voron said Sam had stepped on PNG's toes by broadcasting on Radio Free Bougainville that PNG forces were involved in the latest fighting.

This has been denied by both the PNG Government and the Australian Department of Foreign Affairs, he said. 'They're saying by son is a terrorist. But he's not a hot head. He's very placid and doesn't want violence.'

Sam has been involved in humanitarian rescue work in China and Bangladesh and was in the peace camp on the Saudi-Iraqi border during the Gulf War.

But his father said Sam had crossed the line into politics this time and would have to 'face the music.'

===== Those of us in Sydney have known of Sam for many years now, as he has won awards for his ham radio operations in relation to various major disasters. (17-Feb-92/Patrick McDonald -Australia/SW ECHO)

****BULGARIA****

R. Blagoevgrad's local programs at 0400-0800 and 1300-1600 via powerful 500 kW transmitter at Petrich on 747 kHz. On 864 the transmitter near Blagoevgrad at the present is acting only as a relay of 2nd National program. (BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The new 1000 Kw transmitter north of the city Varna will probably be used for broadcasts by VOA, DW, RFE or R. Moscow. (Rosen Boev via Bulgarian DX Bulletin via BE via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

R. Varna on 1143 in English, French and Russian for tourists. Address: Primojski 22, 9000 Varna. (EA via SWN via El Dial/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

****CAMBODIA****

VO the People of Cambodia Home Service is currently being heard in Japan on 918, 4985v & 6090 kHz. (9695 kHz, formerly used by the Foreign Service, is now inactive.) No times for these transmissions were given. (Hiroshi Fujita - JAPAN/ADXN/17-Mar-92/Patrick McDonald - AUSTRALIA/SW ECHO)

****CANADA****

BRUCE MACGIBBON: Ken, seems to me that CKWX is no longer being simulcast on 6080 contrary to the World Radio TV Handbook 92. Could you check this out for me?

KEN MCKENZIE: Bruce, as I write this (02-Feb-92/1500UTC) it is being clobbered by Radio Australia. Mind you it's not much of a fair fight 100KW vs 10Watts!!! Not only is it still on, but the ODXA (Ontario DX Assc) is now their QSL manager. By the way I believe the 6080 call sign is CKFX. The one big story I read about CKFX mentioned something about the engineers replacing the tube (note that tube as in 1) when the power had dropped off. I'm probably only 5 to 7 miles from the transmitter site and it took me a few weeks to log it! I guess the power was way down and when they changed the tube I had the whole 10 Watts to work with.

BRUCE MACGIBBON: Thanks for the information. Now I know why I haven't been hearing them. About the Ontario DX Association being their QSL Manager, isn't that CFCX in Montreal or CFRX in Toronto, they are the QSL Manager for. I know I saw that info somewhere but not being that heavily involved in shortwave radio anymore, somehow it slipped by me.

The ONTARIO DX ASSOCIATION reports it has been appointed QSL manager for the CFRX low power [1kW] SW relay of CFRB (Toronto) MW broadcasts. CFRX is on 6070 kHz 24 hours a day. Reception reports of broadcasts between 0854 Saturday, 21 Dec and 0854 Monday, 23 Dec, qualify for a special QSL certificate. Reception reports should be set to:

CFRX
Box 161
Station A
Willowdale, Ontario M2N 5S8

CIQC is at 1200 McGill College Ave., not 200 as listed in the 92 WRTH. (07-Feb-92/Andy Wallace/SW ECHO)

****CHINA****

Radio Beijing is heard on a new frequency 6950 kHz at 2030 in English. (12-Mar-92/Julius Hermanns? - HOLLAND/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

From 1330-1400 there are two different English broadcasts being relayed by Chinese transmitters: SRI/7480 & 11690, and RCI on 6150 and 9535. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

The country's first provincial-level English language radio station went into operation officially on the 28-February in Guangzhou, the capital of China's Guangdong Province. Only trial broadcasts are at present being transmitted, with news, economic reports, and scientific and technical coverage as well as tourism. Eventually program is planned to cover 13 hours daily. BBC Monitoring says the Guangzhou English language station has been heard on 603 kHz. (09-Mar-92/AUSTRIAN SW PANORAMA/Quaglieri/SW ECHO)

According to Radio Beijing on their English Broadcast at 0000 UTC on 3/7, China has suspended Daylight Savings Time this year. (06-Mar-92/Bruce MacGibbon/SW ECHO)

VO Pujiang (?) has made a rare frequency change [although it wasn't made clear from what frequency...] and is now on 7115 in Chinese from 0955-1545. (Craig Seager - AUSTRALIA/ARDXC/08-Mar-92/DX ASIAWAVES/AI Quaglieri/SW ECHO)

Central People's Broadcasting Network 2 now has the "Hookup News" at 1430 UTC (10:30 PM Beijing Time) ex 1400 UTC. I noticed it missing at 1400 on Jan 30 but it may have changed time since the first of the year as according to Renmin Ribao in Chinese, as of January 1st CPBS has adjusted their programming. The best frequency I heard CPBS-2 on (listed in the WRTH 92 as CPBS-1) is 7516. The parallel frequencies I heard listed in the World Radio TV Handbook 92 as CPBS-1 frequencies but have been CPBS-2 frequencies for quite awhile were: 11610 and 9064. (23-Feb-92/Bruce MacGibbon/SW ECHO)
Heilongjiang PBS Program 2 at 1028 on 7350 on Jan 11 in Chinese. At 1029 they ID'd and at 1055 they were unable to be heard due to WYFR in Florida signing on, on 7355. (07-Feb-92/Bruce MacGibbon/SW ECHO)

WBI on Jan 3 said Heilongjiang PBS Second Program is aired 0355-1130 and 2055-2330 on 5950 & 873 kHz. (03-Jan-92/BBCM/07-Feb-92/Bruce MacGibbon/SW ECHO)

****COLOMBIA****

I heard Radio Nacional last night (1/4/92) from 23:45 - 00:10 GMT on 11822.5 kHz (AM mode) with an English broadcast till 00:00. Had a show about the exports of Colombia, then listener's letters. Announced an address of either Avenue El Dorado, Bogota, or P. O. Box 94321, Bogota, Colombia. I don't know if this is a daily thing but I'll check again tonight. Don't know yet when the English broadcast starts. Certainly an interesting development! They announced that they were sending QSL cards, too. (01-05-92/Andy Wallace/SW ECHO)

JONATHAN MARKS: Turns out that the program is heard on two SW frequencies; 11822.5 kHz, and also 17865. The line to Miami, Florida has come up now, where JEFF WHITE's been doing some research into this new program. Is it all that new, Jeff?

JEFF WHITE: Well, it's a fairly new program, Jonathan, although it's actually been produced since October 12th of last year, to kick off the celebrations of the 500th anniversary of Columbus' discovery of the Americas. But perhaps the reason that people are just now starting to report it is because, it appears to me, at least, that RADIO DIFUSORA NACIONAL DE COLOMBIA has just recently managed to put a good signal on SW with a fairly regular schedule. As you mentioned, they're using 11822.5 and 17865 kHz right now, and the signal strength here in Miami is very good, although that split frequency of 11822.5 produces an annoying heterodyne. The new English program is a half hour each Saturday from 2330 to midnight UTC. It's called COLOMBIA DX, and it's produced by two Colombian journalists and DXers, JUAN CARLOS PARDO(?) and JAIME MOLINA(?).

JONATHAN MARKS: It turns out that COLOMBIA DX has two versions. English goes out at 2330 UTC on Saturdays, and there's a Spanish version which is broadcast at 0115 on Sundays. Both programs a half hour at present, and reports go to PO Box 94321, Bogota, in Colombia. That's PO Box 94321, Bogota, Colombia, South America.

****CIS****

The following list of Radio Moscow World Service frequencies were observed in use between March 3 and 7. The location: southern New Jersey, on the edge of the Pine Barrens, 30 miles east of Philadelphia. The receivers: a Japan Radio Company NRD-535D and a Kenwood TS-940S. The antennas: a 350-foot inverted-L at 90 feet running NW, a 250-foot wire peaking at 90 feet running SE, and a Skywaves WAS-50 N-S at 50 feet.

Some notes:

- (1) There has been an obvious shift to the higher frequencies, and the lower frequencies are noisier now. You may wish to use this list in conjunction with the transmitter site listing in the 1992 WRTH (highly recommended!).
- (2) I haven't done any listening between 06 and 11 UT.
- (3) This list is an extract of the receiver data file for the JRC NRD-535 receiver control program that I sell.
- (4) For comparison purposes over time, previous lists are available for download from the SWL directory on the Pinelands RBBS (609-859-1910).

- 21825 RMWS: 11-13
- 21820 RMWS: 04-06
- 21790 RMWS: 2230-06,11-13
- 21785 RMWS: 11-14,15-16
- 21770 RMWS: 00-06
- 21755 RMWS: 11-13
- 21750 RMWS: 14-17
- 21725 RMWS: 11-13
- 21690 RMWS: 23-06,12-16
- 21625 RMWS: 00-06
- 21615 RMWS: 05-06,12-13,14-16
- 21600 RMWS: 14-16
- 21585 RMWS: 01-05
- 21575 RMWS: 14-15
- 21565 RMWS: 1130-13
- 21530 RMWS: 2230-06
- 21505 RMWS: 04-05
- 21480 RMWS: 22-01
- 17890 RMWS: 23-06,11-14
- 17870 RMWS: 00-01
- 17860 RMWS: 1230-15
- 17840 RMWS: 12-14
- 17835 RMWS: 04-06
- 17825 RMWS: 00-06
- 17810 RMWS: 17-19
- 17775 RMWS: 11-12,13-14
- 17755 RMWS: 03-06
- 17745 RMWS: 05-06,11-13,14-16
- 17735 RMWS: 04-06,11-13,14-15
- 17720 RMWS: 05-06 WNA: 05-06
- 17710 RMWS: 11-13
- 17700 RMWS: 23-04,05-06
- 17690 RMWS: 21-23 WNA: 05-06

****CIS (cont.)****

17670 RMWS: 14-19
17660 RMWS: 11-15
17655 RMWS: 21-06,11-12
17635 RMWS: 05-06,11-14
17615 RMWS: 11-13
17610 RMWS: 23-06,13-16
17605 RMWS: 11-14,22-23
17590 RMWS: 14-15
17570 RMWS: 22-06,11-13
15550 RMWS: 13-14
15545 RMWS: 00-02,04-06,1330-14,20-21
15540 RMWS: 1230-17
15535 RMWS: 11-12,13-14,19-21
15520 RMWS: 1230-13,14-16,18-19
15515 RMWS: 11-13,14-16,22-23
15510 RMWS: 11-13,18-21
15490 RMWS: 05-06,11-12,13-14
15480 RMWS: 22-03,11-13,14-16
15470 RMWS: 04-06,21-23
15465 RMWS: 11-13,14-16
15450 RMWS: 1330-17
15440 RMWS: 11-15
15435 RMWS: 14-16
15425 RMWS: WNA: 05-06
15415 RMWS: 17-18
15395 RMWS: 15-16,18-19,21-24
15375 RMWS: 04-06
15345 RMWS: 13-16
15340 RMWS: 04-05
15315 RMWS: 04-06
15295 RMWS: 21-22
15280 RMWS: 03-06,11-16
15230 RMWS: 01-05,11-15
15220 RMWS: 14-15
15210 RMWS: 13-16
15200 RMWS: 14-18
15175 RMWS: 14-15
15140 RMWS: 01-02,05-06,11-12
15130 RMWS: 13-17,20-21,22-24
13670 RMWS: 03-05
13615 RMWS: 11-12
12070 RMWS: 11-13,20-23
12055 RMWS: 00-05
12020 RMWS: 11-13
12010 RMWS: 15-16
11995 RMWS: 14-16
11980 RMWS: 13-14 WNA: 05-06
11975 RMWS: 2230-03,04-05
11965 RMWS: 23-03
11950 RMWS: 22-01,05-06
11880 RMWS: 03-05
11870 RMWS: 13-17,20-22
11860 RMWS: 01-02,04-06,22-23
11850 RMWS: 16-17,00-05
11840 RMWS: 1330-22
11820 RMWS: 16-19
11815 RMWS: 01-04
11770 RMWS: 18-19,20-23
11755 RMWS: 23-01
11735 RMWS: 22-04
11730 RMWS: 11-12
11725 RMWS: 21-22
11700 RMWS: 22-23
11695 RMWS: 15-16,20-21
9890 RMWS: 15-16,21-02
9845 RMWS: 11-14
9825 RMWS: 12-13,14-16
9775 RMWS: 03-06,1830-19,21-23
9765 RMWS: 04-06
9755 RMWS: 14-16
9740 RMWS: 19-22
9720 RMWS: 1930-20
9685 RMWS: 1930-23,05-06
9640 RMWS: 15-16
9600 RMWS: 11-13
9540 RMWS: 15-16
9530 RMWS: 2230-06
9480 RMWS: 00-02,04-05
7400 RMWS: 22-23
7370 RMWS: 12-14
7295 RMWS: 22-03
6045 RMWS: 22-04
5920 RMWS: 22-23
5905 RMWS: 12-13

(07-Mar-92/Tom Sundstrom/PINELANDS RBBS)

Radio Moscow World Service said on 23-February in a Russian language broadcast that its management had been transferred to the Russian State Teleradio Broadcasting Company, and given the name Gonis Rossiye, Voice of Russia. New signature tunes and IDs will be introduced starting on the 29th of March. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

NEW COUNTRIES : The Soviet Union ceased to exist in late 1991. Thus all the ex-Soviet Republics became new countries in the

****CIS (cont.)****

December 26th, 1991. Those in Europe are Belorussia, Moldova, Russia and Ukraine. Note that the area west of River Ural in Kazakhstan is in Europe but the country is counted in Asia (cf. Turkey). (16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

<BELARUS>

R. Minsk in German: Mon-Sat 2030-2100 on 1215, 5960, 6010, 6090 and 7240 kHz. Address: R. Minsk, Ul.Krasnaja 4, 220807 Minsk, Republik Belarus. Be careful, the transmitter of 1215 kHz is in Kaliningrad. (RKO/R. Skala/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

<GEORGIA>

Radio Georgia's External Service from Tbilisi has been heard briefly with poor reception, signing on in English at 0600 on 21-February on 11803 kHz. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

<MOLDOVA> The Republic of Moldova is testing an international service in English, Spanish, French, and Russian. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

AM broadcasting, official information plus monitoring :
234 Grigoriopol 0200-0000 (adjusted for the January time zone change, other times may be one hour earlier) Moscow R-1. 594 Grigoriopol 0100-1730 Mayak.
873 Chisinau 0400-0100 Moscow R-2 + R. Rossii.
999 Grigoriopol 0400-2200 national 1st program.
1449 Chisinau, 1467 Grigoriopol, 1494 Edine + Cahul all 0400-2300 national 2nd program (Lucaferul)
1548 Grigoriopol 1800-0000 R. Moscow FS.
1594 Chisinau 0200-0100 Mayak.
(BT via OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

<UKRAINE>

Radio Kiev is now broadcasting in German at 0000-0030 on 4825 kHz, and not up to 0100 as announced. (Guenther Bardolf via SCDX/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

891 Uzhgorod now Kijiv 3rd program 1600-2100 except for R. Kiev programs. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

936 Lviv: Kijiv 1st program 0735-1730; R. Kiev: German 1800-1900, 2100-2200, 0000-0100, English 2200-2300, 0100-0200, Ukrainian 1900-1930, 2000-2100, 0200-0330, 0400-0730. All R. Moscow relays have been dropped. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

972 Mikolajiv (Nikolajev) 0100-0200 Kijiv 2nd program (Promin), all FS programs dropped. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

1431 Mikolajiv 0300-1600, 2100-0200 Mayak; 1600-2100 Kijiv 3rd program; all FS programs have been dropped. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

1602 Kijiv 2nd program (Promin) often heard here, location unknown. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

<RUSSIA>

Russia will change to summertime on March 29th. (WBI via DX-Fokus/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO MOSCOW

Radio Moscow's German service on 1386 kHz ends at 2100, one hour before the WRTH schedule. At 2100, Radio Ala started on frequency, which is a new one for them. (JM says it's not new.) (12-Mar-92/Julius Hermanns? - HOLLAND/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

Changes are coming to RADIO MOSCOW at the end of March. The new name for the RADIO MOSCOW WORLD SERVICE in Russian will THE VOICE OF RUSSIA, GOLAS ROSSIJI. RUSSIA'S RADIO will remain as the name of the domestic service. There'll be considerable frequency and programming changes at the end of March. Russians in the Ukraine are complaining, especially in the Crimea, where some 70% of the population is Russian speaking. This is because many parts of the Ukraine have now switched off the relays of RADIO-1, MAYAK, and RUSSIA'S RADIO from Moscow, and replaced them by programs coming from Kiev. (27 Feb 92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

The R. Moscow MW transmitter in Moscow is to be hired to various foreign radio stations including the BBC and R Liberty and possibly Christian Science Monitor and VOA. The

****CIS (cont.)****

transmitter at the moment is on 930 kHz but will move to 927 kHz. Power is to be raised to 75 kW. At weekends it will be available to religious organizations. (Jacobs/RNMN via Communications via Distance 2-92/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

ADVENTIST WORLD RADIO

From Siberia, ADVENTIST WORLD RADIO this month has started broadcasting on a 100 kW transmitter, and they're broadcasting 24 hours a day, and in 13 Asian languages. The transmitters are to be stepped up to 250 kW, and the recordings are made at their new studios south of Moscow, from which the transcriptions are received. (06-Feb 92/Richard Measham - BBCM/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

The "DX Asiawaves" program of 1-February gave the following schedule for AWR programs via Novosibirsk in the former USSR, effective from March:

English	
0100-0200	11855
0700-0800	11855
1300-1400	11855
1900-2000	9835

Burmese	
0000-0100	11855
1200-1300	11855

Hindi	
0200-0300	11855
1400-1500	11855

Russian	
0500-0700	11855
1700-1900	9835

Mandarin	
0900-1200	11855
2100-0000	9835

(Craig Seager - Australia/02-Feb-92/Patrick McDonald - Australia/SW ECHO)

ADYGEY RADIO

Adygey R., Maykop, Fridays 1930-2000 in Adygey on 7130. Kabardino-Balkar R., Nalchik, in Kabardin, Sundays on same frequencies. (M.Times/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

ALL UNION RADIO ONE

All Union Radio One relays for instance following "stations": Novaya Volna, Smena, Yunost. (M.Times/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

DEUTSCHE WELLE

DW is using transmitters in Russia at 0200-0250 on 12055 and 1600-1650 on 7305 kHz. (MWN/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

7315 DW Kuybyshev (Samara) is using an ex-jammer transmitter at 1400-. (Jari Korhonen/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

EKHO MOSKVY

Ekho Moskvyy is on 6035 and 9535 at 0400-0700, 1500-1700 weekends, 1700-2100, and perhaps weekends only also at 2100-0300. (M.Times/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

MURMANSK RADIO

Murmansk R. is on new 6905 kHz, USB at 1720-1730. (P Muller via SWN via M.Times/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

NEW WAVE RADIO

New Wave Radio, Moscow, on 11830 at 0700-0800 on Tue, Wed, Fri, Sun only (Jerry Berg/25 Feb 92/Andy Wallace/SW ECHO)

A follow-up about the NEW WAVE radio station, in Russia. The bulletin EURONEWS, edited by Finnish DXer RISTO KOTALAMPI, and distributed through USENET, mentions a single sideband (SSB) outlet for this station, which is heard in Finland between 1600 and 0100 UTC daily. The frequency varies slightly from day-to-day, but it's nominally on 5775 kHz USB. The bulletin suggests this may be a feeder to another transmitter site. (13-Feb-92/Andy Sennitt & Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

An UNID Russian station (maybe feeder?) is heard on 5775v USB daily 1600-0100. ID : "R St New Wave". Relays All-Union R. news at 1700 and 2000. Describes itself as the "artists channel having a potpourri of music and cultural programs."

****CIS (cont.)****

Announces often times that aren't corresponding to actual time. Bible class on Sat at 2200. Sign on and off times are quite abrupt. (MB via Contact - UK/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO) (Martin Reynolds via Contact - UK/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

NIZHNYI NOVGOROD

828 Nizhnyi Novgorod noted with 150 kW. (EBU via BE via ARC/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

PAMYAT RADIO

Russian radio station called "Pamyat", which means "memory" is run by a royalist organization, and is on the air at 2300-0030 on 6145 kHz to Siberia and the Far East, 1430-1600 on 7230 to Europe and Western parts of Russia, and 1600-1900 on 12060 kHz to the Moscow area and the northwestern parts of Russia. (K.Ringel via SCDX/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO ALA

R. Ala is named after a famous Russian female singer Alla Bokatschova. Studios are located at Gostelradio Moscow address, not in St. Petersburg (Ul. Pyatniskaya 25, MOSKVA 113326); another address is Postbox 159, MOSKVA 125047. (Distance Jan-92/16-Jan-92/Risto Kotalampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

Several listeners to our AnswerLine have noted that the lovely Russian music that RADIO ALA is playing in the 60 meter tropical band is coming in very well at the moment. It identifies very clearly at 2130 UTC on 5040 kHz. [music, male announcer: Russian, something like "noya programma, RADIO ALA"; simple melody played on a single (stringed?) instrument, repeated once] That sounds like the interval signal, and a caller to our AnswerLine has more:

JH: Hello, this is Julius Herrmans, from Flokan(?), in Holland. RADIO ALA, or the STATION OF THE BARDS(?), as they call them themselves, can be heard on a new frequency of 6015 [kHz], that's 6015 [kHz]. They use this frequency at night, and this frequency is in parallel with 5040 [kHz]. So that's RADIO ALA on 6015 [kHz] at night, in parallel with 5040 [kHz]. (01-09-92/RN MEDIA NETWORK/01-10-92/Bill Kelsey/SW ECHO)

Some sources says that R Ala's 1386 kHz is coming from Tver (ex-Kalinin). Some sources says that this is false information, caused by mixing of Kalinin and Kaliningrad. (DISTANCE & BBCMS & WB via DSWCI via ARC/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

RADIO ARHEI

1125 "R. Arhei" at 0700 is heard in Finland. Broadcasts classical music //1359. (Jari Korhonen/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

RADIO BALTICA

R. Baltica began regular broadcasts on April 2, 1991 on 747 kHz. Address: Kamennooostrovsky (Kirovsky) pr. 67, St. Petersburg 197022. Tel. 812-2349433. (Mijail Timofeyev via SWN via EIDial/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO DELOVAYA VOLNA

R. Delovaya Volna ("Business Wave") is a new commercial station with business format, broadcasting 0500-0800 and 1200-1700 (until 1900?) on 1539 kHz with 300 kW. Address is Ul. Akademika Koroleva 19, Moscow 127427. Heard in Finland. (Ekoie via DX-Fokus/MTM/Anatoli Klepov via OA via ARC/R. Moscow via BDXC and BBCMS via BT via ARC/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO GALAXY

According to BBC Monitoring, RADIO GALAXY has been located on 9720 kHz from 2000-2300 in Russian only, and aimed only at Moscow. (19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/AI Quagliari/SW ECHO)

RADIO KRASNODAR

1089 R. Krasnodar, Ul.Radio 5, Krasnodar 350630. Local in RR Mon-Fri 0230-0300 and 1400-1440. (Rumen Pankov via BE via ARC/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

RADIO NADEJZDA

1575 R. Nadejzda (Hope), Moscow area is pirate, 1300-1600. (Rumen Pankov via BE via ARC/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

RADIO NOSTALGIE

R. Nostalgie, the independent commercial station associated

****CIS (cont.)****

with the French Nostalgie network, broadcasts 0600-1400 daily on 963 kHz. A Russia's R. Nostalgie is expected to begin broadcasting soon. (MN via BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO PERM

R. Perm v/s is B.Shubin, Glavny Inzhener. (OA/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO POLIS

There's a new private station in St. Petersburg, R. Polyus is on 6045 and 1260 kHz. On 1260 station is heard 0330-0730, after 0730 R SNC. Shares the transmitter of 1260 with R. SNC. (R Moscow via BBCMS via SCDX/Anatoli Klepov via OA via ARC/RKO/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

ERIK KOIE(?), who lives in Denmark, faxed us with a report on a new radio station he can hear from St. Petersburg, called RADIO POLIS. The format is Western rock and commercials, with frequent identifications; at least every half an hour. It's very strong on 6045 kHz, in parallel with 1260 kHz MW. The name may come from "metropolis". It's on the air from very early in the morning, here in Europe, until late afternoon, around 1500 UTC. (06-Feb-92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO) We've had two reports, one by RADIO MOSCOW WORLD SERVICE, and also we've actually listened to the radio station ourselves, and we think the name of the radio station is RADIOSTANSYA POLYUS, and "polyus" is Russian for "pole", as in "North Pole", "South Pole". RADIO POLYUS is heard on 6045 kHz throughout the day in Europe. (13-Feb-92/Richard Measham - BBCM/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

RADIO REZONANS

Rezonans, the station for businessmen with ads in several languages, is on 11850 at 0500-0700, 1300-1400, 2000-2200 originating from Olympic Radio & TV Centre in Ostankino. Editor-in-Chief is Yelena Danilava. Address: Ul. Koroleva 19, 127427 Moscow. Tel. 215-6456 or 217-9454. Fax. 215-0174. (BBCMS via M.Times/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO SNC

RADIO SNC has been heard on 11735 kHz at times between 1300 and 2000. (BBCMS via SCDX/MN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Another pop music station has also appeared on SW, RADIO SNC has been around for about a year, it seems, but BBC Monitoring have traced the station on 11735 kHz between 1300 and around 2000 UTC. 11735 kHz is severely overcrowded anyway, and in the evening is the main channel for RADIO SOFIA, Bulgaria. "SNC" stands for "Stas Nomen Center", STAS NOMEN being a very famous rock promoter in Russia. His radio station is on the air 22 hours a day, featuring Russian rock music and Western rock music. They broadcast in Moscow on 1260 kHz MW, and now they are on 11735 kHz, broadcasting from St. Petersburg to listeners in that area. (27 Feb 92/Vasily Strelnikov/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

RADIO SPACE

R. Space, a new commercial station in Moscow, went air on Sunday, March 1st. They are broadcasting at 1500-1545 on 11945 kHz with a 20 kW transmitter, broadcasting from a former jamming site in a place called Balashikha, just outside of Moscow. Reception reports are welcome, and they are verified by a QSL card. The address is: R. Space, Butirskaya 23, Moscow 125015. Fax: 285-2860. The station came very strongly on March 1st in Finland. (MN/RKO/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIOSTANSIYA LONG PLAY

BBCM have discovered another new station called "Radiostantsiya Long Play" which has been monitored on 11735kHz from 1500 UTC to past 2000. (Richard Measham - BBCM/24-Feb-92/Andy Sennitt/SW ECHO)

RADIOSTANSIYA PAMYAT

Radiostantsiya Pamyat (Radio Station Memory) is now broadcasting on shortwave. The transmission in Russian is entitled "the Fatherland, Memory & You program" (Russian: Radioprogramma Otechestvo, Pamyat i Ty). Pamyat is a right-wing Russian movement. The sked: 0000-0130 on 6145 for Siberia & the Far East & 1530-17 on 12040 for European part of Russia. All programs in Russian. Transmitter is located in Ekaterinburg(ex Sverdlovsk). QTH: ul. Valovaya, 32-4 Moscow 113054 or Pamyat, Moscow 113 535, PO Box 23. (WBI Oct 25 & Shigenori Aoki/Japan SW Club "SW DX Guide," 12-91/12-07-91/Bruce Macgibbon/SW Echo)

****CIS (cont.)******RADIO VEDO**

Latest schedule of R. Vedo is 1500-1900 (Mon/Tue/Wed) on 11760, 13710 and 1600-1900 (Th/Fri) on 11760 and 13710, 0700-1000 (Sat/Sun) on 5915 and 7125, and 0500-0800 on 1161 kHz. (MWN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

R. Vedo, Volgograd has a new mailing address : P.O.Box 1940, VOLGOGRAD 400123. (G.Grigoriev in Communication via Distance 2-92/30-Jan-92/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO WITHOUT BORDERS INTERNATIONAL

R. Without Borders International (pirate?) is on the air on Sundays at 1000-1200 and 1430-1800 on a frequency between 6230 kHz and 6240 kHz. They use a 100 watt transmitter located 50 kilometers east of Moscow, and RWBI, as they refer to themselves, verify reception reports with a QSL card. The address is: P.O.Box 55, Moscow 119633. RWBI plans to broadcast tapes of European pirates, such as the French pirate Radiowaves. (MN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO WITHOUT BORDERS plans to broadcast tapes of European pirates, such as the French pirate RADIO WAVES. (27 Feb 92/Vasily Strelnikov/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

RADIO YUNOST

RADIO YUNOST, or "Youth", is part the RADIO-2 network. They carry English announcements and ads. I was listening to 4740 kHz on Tuesday night when I heard them carry an English language advertisement for Polish airlines. (27 Feb 92/Vasily Strelnikov/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

TRAFFIC RADIO

Dvizheniye (Traffic) station, Yekaterinburg, now uses 7200, 50 kW, Tue/Thu/Sat 1200-1400. (R. Moscow via BBCMS via MTimes/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Traffic R. in Ekaterinburg is now heard 1200-1400 on 7200 on Tue, Thu and Sat only. The power is 50 kW. Reports to Sergei Biryukov, Poste Restante, Main Post Office, Ekaterinburg 620 000. (BBCMS via BDXC via Contact - UK/30-Jan 92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Other source gives following schedule for Traffic R. (Radiostudiya Dvizheniye): 0200-1300 on 6200 and 1300-1700 on 6090 kHz. (G.Grigoriev in Communication via Distance 2-92/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

The Oct 14-20 editions of 'Sem Dney' printed a list of radio stations in the RSFSR which Russia's Radio. Most freqs are also believed to carry local programming. SW freqs are:

4050 19-17 Sakhalin oblast
4485 19-17 Kamchatka oblast
01-23 Bashkir SSR
4520 01-23 Khanty-Mansiysk, Tyumen
4610 21-20 Komsomoksk-na-Amure
Khabarovsk kray
4895 01-24 Tyumen oblast
5015 21-19 Maritime kray
5290 23-21 Krasnoyarsk kray
5930 03-01 Monchengorsk, Murmansk
5940 19-18 Magadan oblast
6165 01-14 Perm oblast
7200 03-1515 Mari-El SSR
7210 21-20 Khabarovsk, Khabarovsk
7230 19-18 Magadan oblast
9530 19-18 Magadan oblast
9550 03-17 Magadan oblast
9550 03-17 Samara, Samara oblast
9600 19-18 Magadan oblast
11770 15-23 Perm oblast
11840 19-17 Sakhalin oblast
15120 01-23 Chaykovskiy, Perm oblast
15165 1545-01 Mari-El SSR
15215 1730-11 Samara, Samara oblast
(WBI Oct 25/Japan SW Club "SW DX Guide,"
12-91/12-07-91/Bruce Macgibbon/SW Echo)

****COSTA RICA****

The SW relay station for SPANISH FOREIGN RADIO, being built in Costa Rica, is nearing completion. No test frequencies have been released yet. (06-Feb-92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****CROATIA****

Croatian Radio has been heard on a new frequency of 6210 kHz, instead of 7240. The schedule is now 0600-1900 on 9830 and 7240 kHz and 1900-0600 on 9830 and 6210 kHz. (BBC Monitoring via SCDX 2147/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Croatian Radio news in English at 0900. Transmitter power and location are secret. Address: Hrvatski Radio, Odasiljaci i veza, Radnicka c. 22, 41000 Zagreb, Croatia. (Rainer Henrich - Switzerland/INTERNET/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Almost all transmitters in Croatia are destroyed. Now on 1134 Zagreb 135 kW (ex-1143), 1557 Tovarnik 300 kW (ex-1125). 1557 relays Studio Osijek periodically. (Rumen Pankov via BE via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****CUBA****

Via Arnie Coro, Radio Havana Cuba is planning a test transmission in the 11-mb, on 25800 kHz. This is a 5-kw transmitter operating in upper sideband. This should be on the air weekends in May, as RHC celebrates 31 years on the air. A special QSL will be offered. Schedule will be 2000-2100, and this is parallel the regular English broadcast to Europe at the same time on 17705; possible also from 2200-2300 in parallel with 9620, used for English to the Caribbean. (19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

Effective Tuesday March 17 00 UT (Monday evening in NA) Radio Havana Cuba will carry English to eNA 00-05 UT on 11970 kHz. This frequency replaces 11950 that has been suffering severe interference from a Ukrainian transmitter site carrying Radio Moscow and Radio Kiev starting at 21 UT. (15-Mar-92/Tom Sundstrom/PINELANDS RBBS)

****CZECHOSLOVAKIA****

R. Prague will change the name to R. Czechoslovakia on May 4th. (MN via DX-Fokus/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Some frequency changes of CR: 1233 Nitra (ex-1521); 1521 Karlovy Vary, Hradec Kralove, Strakonice and Mnichovo Hradiste (ex-1233). (Ceskoslovensky DX Club via DX Megeze via EIDial/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Six transmitters have entered service: Broumov 558 2 kW, Strakonice 900 4 kW, Karlovy Vary 954 7 kW, Ostrava 1233 30 kW, Praha 1287 200 kW and Presov 1287 14 kW. Michovo Hradiste 846 has moved to 1233 with 50 kW, Praha-Mesto 1071 has moved to 1233, Hradec Kralove 1071 has moved to 1233 and Praha-2 1233 has moved to 1287 with 400 kW. (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****DOMINICAN REPUBLIC****

Radio Clarin is back on shortwave. Heard on 06-MARCH between 0200-0230 on 9950 kHz. (Mertin Elber - GERMANY/DX WINDOW/Andy Sennitt/19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****EL SALVADOR****

In a Spanish language broadcast, Radio Venceremos said it was making technical adjustments to increase output power in an effort to cover most of the national territory and beyond the borders. There are also plans to increase the length of broadcasting hours from 4 to 7 hours daily. Radio Venceremos' objective is defined as "reconciliation and peace in El Salvador." (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

****ESTONIA****

ESTONIA: Mulgi Raadio 1602 v/s is Priit Noorhani, editor. They have added some programs to their schedule: Fridays "Living Interview" at 1115-1200 and every first Friday of the month "Muhti" for Viljandi's youth at 1620-1700. (EJH/OA/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Liivi Raadio Kuressaare at 1039-1100 on 711 (K(r)dia) and 810 (Haapsalu). Liivi is the old name for the area of South Estonia and North Latvia. Kuressaare is another name for the town of Kingissepp (do not mix with Kingissepp that is in Russia). Also the name "Saaremaa Raadio Kuressaare" has been used. (EJH/RKO/BEFF via DIS/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

810 Värur R.: Mondays 1610-1630, Tuesdays 1040-1100, Wednesdays 1040-1100 and 1610-1630, Thursdays 1610-1630 and 1915-1930 and Fridays 1040-1100 and 1610-1630. (BT/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

A coverage map published in Raadioleht shows some power differences from the WRTH: 711 Tallinn 5 kW, not 50 kW, Pärnu 10 kW or more; 810 Haapsalu 1 kW, 1566 Tartu 1 kW; 1035 is located 33 km SW of Tallinn at 59.11N/24.23E, estimated tower height is 227 metres. (BT via ARC/OA via ARC/Risto Kotlampi -

****ESTONIA (cont.)****

FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The second program on 711/810/1602 now relays VOA Europe 2300 or 0000-0200. (BT via OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The new address of R. Tallinn is Gonsiori 21, EE-0100 TALLINN. (BT via OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The Russian (4th) program continues on 1512/1566. R. Rossii and other Moscow channels are used as fillers. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RADIO TALLINN says it hopes to start English transmissions on Thursdays very shortly, in addition to the ones going out on Monday. (01-02-92/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

Radio Estonia broadcasts in English Mondays and Thursdays at 20:30-21:00 hrs UTC on 1035 and 5925 kHz. Swedish is broadcast daily at 20:00 hrs. The broadcasts are also carried locally on two FM channels: 69.32 MHz in the Eastern European FM band, and on 101.6 MHz in the Western FM band. That last frequency is also used for the special Radio Tallinn service for tourists during the summer. The rest of the time it relays Estonian Radio's Channel 2 domestic service. (12-03-91/Sweden Calling DXers/Tom Sundstrom/SW Echo)

R. Tallinn new English DX-px 1st Monday of the month 2130-2200 on 1035. New 1 kW transmitter for domestic service on 810 and 1602 kHz. (WB via DSWCI via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****FRANCE****

Radio France International's English Broadcasts started Friday February 14, 1992 ID'ing as RFI-World Radio or Radio France International-World Radio. (16-Feb-92/Larry Nebron/SW ECHO) ANDY SENNITT: Thanks for the tip, Larry - as long as they only say "World Radio" and don't add "TV Handbook", they're safe! <grin>

RADIO FRANCE INTERNATIONALE has opened a 24 hour telephone number in Washington, DC, with a 3.5 minute news bulletin produced by Radio France Internationale's English service. The number to call, if you want to try, is 202 -- that's the area code -- then 944-6075. (01-02-92/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

RFI availability in Canada and USA on Satellite, Cabelnets, FM and AM-Mediumwave (Ondes Moyennes)

Canada:

* Satellite: -ANIK D2 110°W, transponder 9a
* Mediumwave -CKAC AM 730kHz, Montreal
* FM: -CHUO 89.0MHz

USA:

* FM: -WNYE 91.5MHz New York, 6.30-9.00 & 23.00-1.00 local time, every day
* Satellite: -SCOLA Satellite SPACENET 2, 69°W, 24h/day, originally for Universities etc. (01-11-92/mario gongolsky/SW Echo)

The newest Radio France booklet lists following frequencies for Radio France local stations. The booklet doesn't give any times for local programs and it isn't even sure those exists (except on Alsace).

603 RF Lyon, 15 Rue des Archers, 69292 LYON CEDEX 02
711 RF Armorique, 9 Avenue Janvier, 35000 RENNES
945 RF Toulouse, 1 Rue du Poids de l'Huile, 31000 TOULOUSE
1278 RF Alsace, 4 Rue Joseph Massol, 67080 STRASBOURG CEDEX
1404 & 1494 R Corse Frequenza Mora, 4 Rue Favalelli, 20200 BASTIA
1494 RF Pays Basque, 20 Rue Orbe, BP 8455, 64184 BAYONNE CEDEX
(16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

RF Alsace has address: 4 Rue Joseph Massol, 67080 STRASBOURG CEDEX. Locals at 0559-0645 (on Sunday until 0900???) and 1100-1300. (Esa Hänninen & Risto Kotlampi/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO). RF Alsace has local news on FM as follows: 0500, 0545, 0600, 0615, 0645, 0700, 0800, 1100, 1130 and 1700 (Mon-Sat). On Sundays only at 0600, 0700, 0800, 1100 and 1130. So, at these time there is a slight chance to hear local news on AM (603, 711, 945, 1404 and 1494 kHz) on other local stations mentioned in the last bulletin. (30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****GERMANY****

The following is from an Associated Press story of February 29th: "Schwerin, Germany -- People protesting the demise of (sic) an radio station in eastern Germany hurled rocks and bottles at government buildings on Saturday and smashed a police car, authorities said. (Bill Oxner/SW ECHO)

This is a very awful story! The station is DT64 a youth radio, which covered the whole ex-GDR. After the wall fell, they changed their political attitude and "really" spoke for their audience, and were beloved by the young people. At the beginning of 1992 all ex-East-German stations had to be closed and new organisation had to be introduced which were incorporated in the existing ARD, that's the organisation of all public stations of our states. That meant DT64 had to be closed, while no exact replacement was planned. The closure was headed by a very conservative guy from Bavaria, rumours have it, that he took some decision in favour of the commercial stations which are later to be introduced. The young East Germans are already in big trouble due to unemployment saw their only voice be silenced by West Germans. They already made a lot of noise last year but were simply ignored!! But this year they got louder, and in some of the new states the officials began to think about it. In some states DT64 can still be heard, but rumours say, only as long as the first commercial stations take over the frequencies. I think this whole process has shown again, that in our public radio there's simply too much ignorance present. At least public radio is supposed to be there for the people, not for some people with influence (political or economical) (13-Mar-92/Jurgen Bartels - GERMANY/SW ECHO)

R. Volga v/s is Nikolai Rjasanow, Chefredakteur. Reception reports are welcome, but don't forget to include 2 IRC's. The address is Menselsstrasse 5, D-O 1560 Potsdam. Also Pawel Norenko has replied to reception reports. (R. Volga/MTM/M. Paltenghi via Play-DX/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

792 NDR Lingen noted with 25 kW. (EBU via BE via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Due to a massive protest from mostly young people of East Germany, Jugendradio DT64, which closed at the end of 1991, will re-open mid-February on a MW frequency leased from ODR Brandenburg. (SWN via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

DS Kultur reduced power on 177 to 100 kW from Königswesterhausen instead of 500 kW from Oranienburg. (MN via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RIAS Berlin will cease its transmissions this year. (Frans Vossen via BE via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

1107 AFN Munich was closed on February 14th. Augsburg will continue on the frequency. (JP/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The American Forces station in Munich shut down last Friday, earlier than expected, as part of the US troop withdrawal from Germany. It was setup shortly after the end of the Second World War. Stations in other parts of Bavaria will continue to operate for the time being. (20 Feb 92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)
February 14th was the last day of broadcasting for AFN Munich, which first went on the air in June, 1945. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quagliari/SW ECHO)

DS-Kultur has a DX-program on Fridays 2115-2200 on 177 kHz. The program is not a local programme! Rather a split program on LW only. (Jari Korhonen, Jari Vanhatalo, Jyrki Hytönen & Risto Kotlampi/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

SDR is broadcasting 1900-2220 "ARD-Ausländerprogramme mit Regionalinformationen aus Baden-Württemberg" daily on 576, 711, 1413 and 1485. (SDR Magazin via Kurier/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Transmitters of Eastern Germany were reorganized on January 1st as follows :

Mitteldeutscher Rundfunk (Sachsen, Sachsen-Anhalt and Thüringen): MDR Info: Leipzig 531, Burg 783, Wachenbrunn 882, Dresden 1044 and Reichenbach 1188.

MDR eins/R Thüringen: Weida 1458.

Ostdeutscher Rundfunk (Brandenburg)/Antenne Brandenburg: Berlin 693.

Norddeutscher Rundfunk: NDR 4: Rostock 558, Schwerin 576, Neubrandenburg 657 and Putbus 729.

****GERMANY (cont.)****

Deutschlandsender Kultur: Oranienburg 177.

DLF: Berlin 810, Berlin 1359 and Burg 1575.

SFB: SFB1 567 and SFB2 1449.

RIAS Berlin: RIAS1 990 and RIAS2 855.

Only on FM: MDR Life, MDR Kultur, MDR eins/R Sachsen, MDR eins/R. Sachsen-Anhalt, ODR/R Brandenburg, NDR1/R Mecklenburg-Vorpommern, NDR2, NDR3, MDR/Jugendradio DT64, ORB/Rock Radio Brandenburg and private stations in Berlin. (Esa Hänninen/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

783 Mitteldeutscher Rundfunk (MDR) since 1.1.92 with news/info programs at morning/evening. (OA in DXcl Jan-92/16 Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

A press conference in Cologne, Germany, was given yesterday by DEUTSCHE WELLE's Director-General, DIETER WEIRICH(?). He said DEUTSCHE WELLE wants US\$18-30 million to increase broadcasts to eastern Europe, to compete with similar operations currently running by the BBC, RADIO FRANCE INTERNATIONALE, and the VOICE OF AMERICA, to name but few. Powerful united Germany wants to play a bigger role in Europe, and sees democratization in the east as a chance to assert itself politically, economically, and culturally. The DEUTSCHE WELLE expansion plans include leasing an FM station in Sofia, Bulgaria to reach an estimated 2 million Bulgarians, and increasing cooperation with the local radio stations to broadcast DEUTSCHE WELLE programs in German and east European languages. WEIRICH also said that the German and US governments were close to signing an agreement handing over control of RIAS TELEVISION, in Berlin, to the DEUTSCHE WELLE. The Americans setup RIAS RADIO AND TELEVISION in their zone of divided Berlin just after the war, and the station's become a staple of the German airwaves. WEIRICH said that he expects that the handover of RIAS will be completed by May, and that the German-run RIAS TELEVISION will then provide the information service promoting German-US relations. RIAS RADIO will be sold off. (30-Jan-92/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****GUAM****

We've received details of the Final Frequency Schedule for KTWR (Guam) for the Z92 Period, commencing 29 March 1992, and running to 27 September 1992. A new language service in Korean is shown: 2330-0000 (Thursdays only) on 11580 and 1300-1315 (Fridays only) on 11700. A rearranged schedule applies for Amoy, 2330-0000 (Thursdays only) on 15485f and 1300-1315 (Fridays only) on 9870. Hakka will be available 0815-0900 on 11665. Russian Languages are shown from 1600-1645 on 9785. (Bob Padula - ARDXC/24-Jan-92/Bruce MacGibbon/SW ECHO)

I should give details about the regular DX program via KSDA, which is sponsored by the Australian Radio DX Club. It goes to air on Saturdays each week, on 15610 kHz at 2315 UTC. Compilers are Craig Seager and Mick Ogrizak, two of the club's most experienced DXers. The ARDXC in fact offers a special QSL card for correct reception reports, which should be sent to PO Box 227, Box Hill, VIC 3128 in Australia. I think a couple of IRCs are highly appreciated. (02-Feb-92/Patrick McDonald/SW ECHO)

****HUNGARY****

Due to financial problems R. Juventus in Balanton on 810 has been closed down. (I. Hegedus - Hungary/Play-DX 675/30 Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Dennis Hoerner(?), founder of the RADIO BUDAPEST SHORTWAVE CLUB, recently died after a heart attack. Marks noted that Hoerner had appeared on Media Network earlier in 1991, and said that "Dennis had fought a one-man battle to get some kind of contact going between listeners in eastern and western Europe during the height of the Cold War. Despite extremely limited resources, he ensured that many thousands of shortwave listeners around the world could exchange listening tips via a free monthly bulletin put out by the station. For many listeners living in countries with strict censorship, this bulletin was the only way of knowing what stations were being heard. The shortwave industry has lost a pioneer. I'm glad to hear that Radio Budapest has decided to carry on his work." (12-12-91/RN Media Network/Bill Kelsey/SW Echo)

STATEMENT OF PURPOSE

SHORTWAVE ONLINE DIGEST exists to disseminate info found on various computer "bulletin boards" and the Shortwave Echo to print editors, and through them to the general public. I produce SOD on my own time, at my own expense (although stamps/exchanges are appreciated), and issue it on my own schedule. At this time, I have neither the means nor the desire to offer subscriptions or otherwise expand the scope of SOD. - AQ

****INDIA****

JONATHAN MARKS: Well, last time we talked to you, Victor, you mentioned that the time signal station in New Delhi [India] had gone off the air. Has it come back?

VICTOR GOONETILLEKE: Well, Jonathan, we got in touch with the ATA, NEW DELHI authorities, and Professor DAS GUPTA(?). He was surprised that people are listening to the station, and he did tell us that in December they decided to shutdown their SW time signal frequencies, but suddenly we are hearing the station back on the air. So it seems the special interest shown in ATA by RADIO NETHERLANDS has put it back on the air. (Victor Goonetilleke - Sri Lanka/30-Jan-92/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****INDONESIA****

The following Indonesian stations have been heard in Scandinavia during 1990-91. You will also find veri-signers, plus info about those stations that has answered reception reports from Scandinavia, under "QSL".

Freq.	Station	Prov	Hrd	QSL
2376.9	RRI Surabaya	JE	C	X
2390	RRI Cirebon	JW	C	-
2432.5	RRI Banda Aceh	SA	C	-
2433	RRI Palembang	SS	C	-
2478.1	Radio Pancaran	JJ	C	-
2490	RRI Ujung Pandang	CS	C	X
2583v	RPDT2 Timor Tengah Selatan	LE	C	-
2616	RDK Sambas	KW	C	-
2693.9	RPDK Ende	LE	C	-
2904v	RPDTs Ngada Bajawa	LE	C	-
2963	RKPD2 Manggarai	LE	C	-
3144v	RPKDT2 Belitang	SS	C	-
3204.5	RRI Bandung	JW	C	X
3215	RRI Manado	CN	B	X
3223.1	RRI Mataram	LW	C	-
3225	RRI Tanjung Pinang	SR	A	X
3231.9	RRI Bukittingi	SW	A	X
3241.5	RRI Ambon	MM	C	-
3249.8	RRI Banjarmasin	KS	B	X
3265v	RRI Gorontalo	CN	C	-
3265	RRI Bengkulu	SB	B	X
3277	RRI Jakarta	JJ	C	X
3286	RRI Madiun	JF	C	-
3306.1	RRI Dili	LT	B	-
3325	RRI Palangkaraya	KC	B	X
3345	RRI Ternate	MM	B	X
3385	RRI Kupang	LE	B	X
3395	RRI Tanjungkarang	SL	A	X
3447.1	RRI Pontianak	KW	B	X
3460v	RPDT2 Aceh Timur	SN	C	-
3904.9	RRI Merauke	IJ	C	-
3905	RRI Banda Aceh	SA	B	X
3934.6	RRI Semarang	JC	C	-
3945	RRI Denpasar	BA	B	-
3945.8	RRI Tanjungkarang	SL	C	X
3959.8	RRI Palu	CC	B	X
3975.8	RRI Surabaya	JE	B	X
3986.3	RRI Manokwari	IJ	B	X
4000.2	RRI Kendari	CE	A	X
4002.7	RRI Padang	SN	A	X
4607.3	RRI Serui	IJ	B	X
4699.1	R KIP	JE	C	-
4719.3	RRI Ujung Pandang	CS	A	X
4753.2	RRI Ujung Pandang	CS	A	X
4774.7	RRI Jakarta	JJ	A	X
4789.7	RRI Fakfak	IJ	C	-
4855.8	RRI Palembang	SS	A	X
4871.1	RRI Wamena	IJ	C	X
4874.7	RRI Sorong	IJ	B	X
4910.9v	RRI Bukittingi	SW	A	X
4927v	RRI Jambi	SJ	B	-
4931.9	RRI Surakarta	JC	A	X
4992v	RRI Gorontalo	CN	B	-
5044.7	RRI Yapapura	IJ	B	-
5046.2	RRI Yogyakarta	JY	A	X
5055.6	RRI Nabire	IJ	C	X
5256.4	RRI Sibolga	SN	B	X
5500.8	RRI Biak	IJ	C	-
5984v	RRI Pekabaru	SR	-	i

A - often heard
B - occasionally heard
C - seldom heard

SA - Daerah Istimewa Aceh
SW - Propinsi Sumatera Barat
SN - Propinsi Sumatera Utara
SR - Propinsi Riau SJ - Prop. Jambi

SS - Propinsi Sumatera Selatan
(Hermod Pederson - Sweden, in "Frekvensnytt"/USENET/Kirk Baxter/05-Feb-92/Ed DiCamillo)

RADIO REPUBLIK INDONESIA (RRI), Dili (Timor) is coming in well on 3305 at 1100 (news from Jakarta), with normal local programming by 1115. (12-12-91/Arthur Cusken/RN Media Network/Bill Kelsey/SW Echo)

****INDONESIA (cont.)****

A 30 million contract has just been signed between GEC Marconi and the Indonesian government station RADIO REPUBLIK INDONESIA [RRI] in Jakarta. The contract is for 9x250kW transmitters and 20 directional antennae to be installed at two existing shortwave sites, one out-side Jakarta and the other on the island of Sulawesi. A Marconi spokesperson said that the transmitters will initially be used for domestic services, providing two national programs to the 170 million Indonesians living on 13,000 islands. Currently, RRI programs from Jakarta are uplinked to the Palapa satellite, and regional RRI stations must relay part of the programming, particularly the news bulletins. (12-12-91/RN Media Network/Bill Kelsey/SW Echo)

****IRELAND****

Sunshine R., Carrickarnon Co., Louth is a new name for Rainbow R. It was on 1152 kHz on February but has moved now to 954 kHz. (SWN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

North Atlantic R. has now moved to former R. North frequency of 846 kHz as North Atlantic R. bought R. North. The address is NAR, Bridge Street, Cardonagh, County Donegal. (SWN/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

R. Dublin has a new address: Box 2077, Dublin 8. (L.Skonglund via Play-DX/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Active pirate/private stations in Ireland :

R Dublin on 1188 and 6910 (400W)
Dunladerie Local R (Dublin) on 1125.
R Star Country (Monaghan) on 981.
R North (Redcastle) on 846.
North Atlantic R (Carndonagh) on 954.
KLAS R (Monaghan) on 828.
R Fax on 3910, 6205 and 12255.
(FRS Goes DX via DX-Fokus/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

The company which has operated the collapsed Century radio station for the past two years was formally wound up and had a liquidator to it by the high court in Dublin yesterday. The winding-up petition for Century Communications Limited, with registered offices at Christchurch Square in Dublin, was presented to Mr. Justice Lardner by a barrister, acting for company director James Stafford.

Meanwhile, the Chief Executive of the IRTC, Michael O'Keeffe, last night confirmed that a decision on withdrawing the license from Century had been deferred to a future meeting. However, it is understood the deferral is only to allow for proper procedures to be followed. The only creditor to be represented in court yesterday was the Revenue Commissioners. A solicitor for them said that they were creditors for the sum of IRP154,493 and were supporting the winding-up petition. On application of Mr Stafford's solicitor Mr Bill Shipsey, Mr Neil Payne from Ormsby Rhodes, Accountants was appointed liquidator.

A small number of staff from Century were present during the hearing, which lasted less than five minutes. Mr. Stafford, in an affidavit read by Mr Shipsey, said the company incorporated on November 30, 1988. The nominal share capital of the company was IRP500,000, divided into five million Ordinary Shares of 10 pence each. The amount of capital paid up, or credited as paid, was IRP2.4 million.

Mr Stafford said he was the registered owner of 825,000 Ordinary Shares of 10 pence each. (12-03-91/John Maddock/Irish Independent/Edward Dunne/SW Echo)

A few weeks ago Media Network reported the demise of RADIO CENTURY, so the new WRTH was revised to remove it. Then a rescue package was announced, with the station back on the air by January, so WRTH was revised again, to restore the listing. Last week, however, the rescue plan failed, so Century Radio will be in WRTH - but not on air. (12-12-91/Andy Sennitt/RN Media Network/Bill Kelsey/SW Echo)

HARMONY RADIO, on 6305, has suspended operations, apparently because its US backers were unable to sell any airtime, and have pulled out. There are rumors a new religious operation will soon begin. (12-12-91/Andy Sennitt/RN Media Network/Bill Kelsey/SW Echo)

****ISRAEL****

For anyone who might be interested, here's the Kol Israel EG broadcast sked as announced today, 2/4/92:

0500-0515	Eu, NAm	11588
1100-1130	Eu	17545
1430-1500	Eu, NAm	15640, 11587
	WNA, EEu	17590, 11605
1800-1815	Eu, NAm	15640, 11587
	WNA, EEu	11675
	Af	17575
2000-2030	Eu, NAm	11605, 11587, 9435, 7465
	WNA	11675
	Af	17575
2230-2300	Eu, NAm	11605, 11585, 7465
	WNA	11675
	LAm	17575, 9435

(04-Feb-92/Rich Burns/SW ECHO)

****ITALY****

Tele R. Stereo, Roma is reactivated on 6011.9 kHz. (Play-DX/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

R. Europa International has not been heard on 9420 for months, so maybe it is inactive or caught by GPO Police, because 9420 is not an allowed frequency. The new address: via Franco Gerardi 6, I-25124 Brescia. (Dario Monferini via Play-DX/BEFF via DIS/Risto Kotalampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The Voice of Europe is heard on 13666 kHz, with brief English announcements noted around 1900. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO) Voice of Europe testing on 13666 at 2200 (Jerry Berg/25 Feb 92/Andy Wallace/SW ECHO)

IRRS is on the air on 7125 kHz from Milano, Italy according to the following schedule : 0600-1000 daily, 1930-2045 daily, 0600-1600 Sundays, 1400-1600 Saturdays, 1000-1500 daily (irr). Address: IRRS-Shortwave, P.O. Box 10980, I-20110 Milano, Italy. Phone: +39-2-266 69 71 / +39-337-2977 88. Fax: +39-2-706 38 151. Email : 100020.1013@CompuServe.com. (Alfredo E. Cotroneo - Gen.Mgr of IRRS/INTERNET/30-Jan-92/Risto Kotalampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

I finally figured out why RTV Italiana never wrote me back. According to their latest program schedule(thanks in part to Italian-American Radio/RAI), instead of writing to the Italian address as listed in Passport To World Band Radio, all correspondence should be directed towards the following: DIREZIONE SERVIZI GIORNALISTICI E PROGRAMMI PER L'ESTERO

RADIO ROMA
Casella postale 320
CENTRO CORRISPONDENZA
00100-ROMA
ITALY
(16-Dec-91/Francis Toy/SW ECHO)

****JAPAN****

Via John Grimley of the Ontario DX Association: Radio Japan's DX CORNER program celebrates its 10th anniversary next month [April], and on the 11th and 12th the program will change its name to MEDIA ROUNDUP. Its focus will expand beyond hobbyist DXing to include media and satellite news. (19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

RADIO JAPAN BROADCAST SCHEDULE (M92-2) [Apr. 6-May 2]

GENERAL SERVICE

Japanese 0200-0300, 0400-0500, 0600-0700, 0800-0900, 1000-1100, 1200-1400, 1600-1700, 1800-1900, 2000-2100, 2200-2300, 0000-0030
English 0300-0400, 0500-0600, 0700-0800, 0900-1000, 1100-1200, 1400-1600, 1700-1800, 1900-1930, 2100-2200, 2300-2400, 0100-0200

To Southeast Asia
0100-0900 17810*
0500-0600 21610
0800-1000 21610
1000-1400 11815*
1400-1500 11815
1600-1700 7210
1600-1800 11815*
2000-2100 11840*
2000-0030 15430
2100-2200 11840
2100-0030 17810*

To Asian Continent
0100-0200 15195*
0100-0300 17835
0400-0900 17765*
0900-1000 11840
1000-1200 11840*
1300-1400 7210
1600-1700 9580
1600-1800 7140*
2000-0030 11815*
2200-0030 15195

To South Asia
0000-0030 17845*
0100-0200 11840S
0100-0300 17845*
1300-1500 9535S
1800-1900 9535*

To North America
0100-0300 5960C
0200-0700 11870
0400-0700 17825*
1000-1200 6120C
1200-1930 11865*
1800-1900 17825
2000-2100 17825*

****JAPAN (cont.)****

To Central America
0200-0300 15325F

To South America
0000-0030 21635G
0200-0300 15350F
0800-0900 9675F, 11875*
1000-1100 15350F
2200-2300 9685F

To Oceania
0500-0900 17860
1800-1930 9640, 11850
2000-2100 15280
2000-2200 17890

To Europe, Middle East, and Africa
0400-0430 9645G
0400-0500 17820S
0700-0800 15250*
0700-0830 21575G
0800-0900 21640G
1600-1700 21700G
1700-1900 15210S
1900-1930 9645G
2200-2400 11735G

REGIONAL SERVICE

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Arabic	Middle East & North Africa	0330-0400 1930-2000	17820S 9620*, 15210S
Burmese	Southeast Asia	1115-1145	15300, 17820
Bengali	South Asia	0200-0230 1530-1600	11840S 9535S, 11880
Chinese	Asian Continent	0300-0400 1130-1230	17765*, 17835 7210, 9580
	Southeast Asia	1245-1345	15300
	Asia	1500-1600	7210, 9580, 11840
English	N/C/S America	0300-0330	17825*, 21610
	Central America	0300-0330	15325F
	Oceania	0900-1000	15270, 17860
French	Europe	0630-0700	15250*, 15355G
	Middle East & North Africa	1830-1900	9620*
	Europe	2030-2100	15375G
German	Europe	0600-0630 2000-2030	15250*, 15355G 15375G
Hindi	South Asia	0230-0300 1600-1630	11840S 9535S, 11880
Italian	Europe	0545-0600 2115-2130	15250*, 15355G 15375G
Indon.	Southeast Asia	1015-1115 2300-0000	15300, 17820 11840, 17785
Japan.	N/C/S America	0200-0300	17825*, 21610
Korean	Asian Continent	1030-1130 1400-1500	7210, 9580 7210, 9580
Malay	Southeast Asia	1145-1215	15300, 17820
Persian	Middle East	1900-1930	9620*, 15210S
Port.	South America	0900-0930	9675F, 11875*
Russian	Europe	0500-0530	15250*, 15355G
	Asian Continent	1230-1300	7210, 9580
Swedish	Europe	0530-0545 2100-2115	15250*, 15355G 15375G
Spanish	Central America	0330-0400	15325F
	South America-West	0330-0400	15350F
	Central & South America	0330-0400	17825*, 21610
	South America	0930-1000	9675F, 11875*
	Europe	2130-2200	15375G
Swahili	Eastern Africa	1715-1745	7180G, 9535*
Thai	Southeast Asia	1215-1245	11875*, 15300, 17820
Urdu	South Asia	0300-0330 1630-1700	11840S 9535S, 11880
Viet.	Southeast Asia	1345-1415 2230-2300	11875*, 15300 11840, 17785

Regarding Frequencies:

The attached with *: Transmitter Power 300kW (Yamata, Japan)
The attached with G: Relay From Moyabi, Gabon, Power 500kW
The attached with F: Relay From Montsinery, Fr. Guiana, 500kW
The attached with C: Relay From Sackville, Canada, Power 250kW
The attached with S: Relay From Ekala, Sri Lanka, Power 300kW
Others: Transmitter Power 100kW (Yamata, Japan)
(07-Mar-92/Toru Yamashita, Korean Service, RADIO JAPAN/PINELANDS RBBS)

Domestic radio programs for foreign residents: (1) News headlines in 7 languages(in Thai, Chinese, Persian, etc) are expected Sun-Thu at 2115 over Bunka Hoso; (2) English programs at 0900 over NHK network is planned from next April; (3) Portuguese/Spanish programs over Radio Nippon, Tokai R. Shizuoka Hoso & FM-Gunma are expected to start soon; (4) Portuguese programs are on Saturday at 2130 over FM-Tokyo, FM-Aichi & FM-Shizuoka since Apr, and on Sunday at 1300 over Shizuoka Hoso, Bunka

****JAPAN (cont.)****

Hoso & CBC; (5) Tagalog programs is on Thur at 1730 over FM-Tokyo since Oct 4. (Nihon Keizai Shimbun via Takahito Akabayashi/Japan SW Club "SW DX Guide," 12-91/12-07-91/Bruce Macgibbon/SW Echo)

****JORDAN****

BBC Monitoring reports an announcement on R.Jordan that effective Feb 15th they would be starting a new Arabic service beamed to South America at 2200-2330 UTC on 15435kHz. NB : Care is needed when identifying Arabic on this frequency, as it is also used earlier in the day by Libya! (25-Feb-92/Andy Sennitt/SW ECHO)

****KASHMIR****

The clandestine VOICE OF INDEPENDENT KASHMIR introduced a new transmitter for its 4 daily broadcasts: the operation appears to be backed by Pakistan, with new broadcasts on 6300 originating in Rawalpindi. Broadcasts are for 1 hour, at 0230, 1100, 1430 UTC on 6300 and 50000 (5mHz), both in "a sort-of" AM-compatible SSB (LSB is always missing). The fourth daily broad- cast is announced as being at 1630 on 5900, 6300, and 50000, "but so far it hasn't been traced". (12-05-91/Rajiv Sandhu(?) - India/RN Media Network/BILL KELSEY/SW Echo)

Sedai Hurriate Kashmir can be heard at 02:30-03:30, 11:30-12:30, and 14:00-15:00 hrs on 5000 kHz and 16:30-17:30 hrs on 5000 and 5900 kHz. (Kanwarjit Sandhu in "Union of Asian DXers Newsletter")

The Voice of Independent Kashmir is active 1630-1730 on 6300 and 5000 kHz; the occasional English language commentary is heard around 1700. Azad Kashmir Radio (Muzaffarabad) is again being heard at 0045 w/on on 3664 kHz, and about 1630 fade-in to 1830 signoff. The Trarkhal transmitter 4790 0045-fade-out at 0130, and again 1415-1810. We cannot hear any English on either of these frequencies. (12-Mar-92/Victor Goonetilleke - SRI LANKA/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****KUWAIT****

We understand that they plan to run English at 1800-1900 UTC. According to what they told Media Network, any delay is due to staff shortages, but I'm not sure why this would be so, as the English is a relay of the local service which I understood to have resumed some time ago. (16-Mar-92/Andy Sennitt/SW ECHO)

According to a report from the Kuwaiti News Agency, via BBC Monitoring, RADIO KUWAIT will resume broadcasting on SW as from next Monday, the 17th of February. One 500 kW transmitter will be on the air from 0400 to 1305 UTC on 6055 kHz, beamed to the Gulf, and from 1315 to 2545 UTC on 11990 kHz, beamed to the eastern Mediterranean. These will be relays of the domestic service in Arabic. A service to North America and Europe, in Arabic, is also scheduled between 1700 to 1800 UTC on 15505 kHz. English start is targeted for February 25. (13-Feb-92/Andy Sennitt & Jonathan Marks/ RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

The actual schedule is now :

0400-1305 to the Gulf on 6055kHz
1315-1745 to the Middle East on 11990kHz
1800-2300 to Europe and North America on 15505kHz
According to Belgian teletext, there may be an hour of English starting soon at 1800-1900 on 15505, but the press release only mentions the Main Arabic Program. (24-Feb-92/Andy Sennitt/SW ECHO)

Radio Kuwait in Arabic is heard at 1600 on 11990, with some QRM from VOA/11995. Mediumwave is still heard well on 1134 and 540. 666 kHz, which formerly carried Radio Kuwait in Exile, has reverted to Saudi Arabian broadcasts. (12-Mar-92/Victor Goonetilleke - SRI LANKA/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****LITHUANIA****

Three independent and private commercial stations on the air in the country: Radiocentras on 1107, Vilnius Varpas ("Bell of Vilnius") on 1107 and 1134 and R. M1 on FM only. (MN via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Kauno Radiofonas, which broadcast from Kaunas on 1107, has gone bankrupt. The license has not been cancelled and the owner is waiting "for some better times." (R. Vilnius via BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

R. Centras now broadcasting on the last Saturday of each month on 9710 in English 0700-0740, German 0740-0750 and Esperanto 0750-0800. (Chris Lobdell in Boston Area DXers Log & AWSP via Contact - UK/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

-- RADIO VILNIUS [Edvinas Butkus, RV Editor-in-Chief] --

EB: Yes, they are back. And, in fact, there are three rather popular independent -- in fact, private and commercial -- radio stations operating on FM and MW. They are RADIOCENTRAS, another one is VILNIUS VARPOS(?), "Bell of Vilnius", and the third one is M-1. At least two of them have very big programs of pop music, but VILNIUS VARPOS only tried to -- to play as well just classical music and traditional music, and they are somehow more culture oriented people.

JM: So, what happens now? Will RADIO VILNIUS be able to continue its relays via Russian transmitters? The transmitter in Kaunas is not as well heard as the Russian senders, so RADIO VILNIUS really needs that relay very badly.

EB: But, it used to be just a kind of ideological or whatever agreement,

****LITHUANIA (cont.)****

because it previsited that the Soviets transmit RADIO VILNIUS by their transmitters, and that the Lithuanian authorities would care about transmitting Moscow TV programs in Lithuania.

JM: So, it was a sort of swap.

EB: Yes, and now it's [a] purely economical agreement, so we are happy to have access to Soviet transmitters, though they claim four or five times more than the price the Lithuanian authorities paid before. And it was exactly 300,000 rubles per year; now it's more than a million. But, in Lithuania they are not obliged to transmit Soviet TV programs, but they still do.

JM: Now, you say "Soviet", I mean, the Soviet Union doesn't exist.

EB: I would agree; Russian, Russian.

JM: It's just the Russian?

EB: No [not] Soviet.

JM: Right.

EB: And you are quite right, saying Russian transmitters, because the Russian Minister of Communications is now in -- in control of -- of the transmitters, and not GOSTELERADIO or RADIO MOSCOW, which used to be, for decades.

JM: About a month ago, RADIO MOSCOW suggested to the various former republics that they might like to form a group to coordinate external broadcasting. But RADIO VILNIUS says it wants to keep its independence and the Lithuanian government wants to keep its external radio voice alive. There are no plans to change the times of the transmission, because the external service can only broadcast when the domestic service has closed down for the night.

EB: Usually we get about 2,000 letters per year, coming from 50 countries over the world.

JM: And the English section is just 11 people. (16-Jan-92/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****LUXEMBOURG****

In response to a note from Wayne Walsh - Australia, JM calls Radio Luxembourg and confirms the latter's power on 15350 kHz as being 10 kw. (12-Mar-92/Jonathan Marks/RN MEDIA NETWORK/Quaglieri/SW ECHO)

1440 seems to be 24h now. (OA via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

****MALAYSIA****

VO Malaysia continues its English broadcasts from 0555-0825 on 6100, 9750, and 15295 kHz. The latter frequency is the one best heard in Australia. (Craig Seager - AUSTRALIA/ARDXC/08-Mar-92/DX ASIAWAVES/AI Quaglieri/SW ECHO)

****MONACO****

TRANS WORLD RADIO, Monte Carlo, seems to have changed its 49 meter band channel to 6200 kHz for transmissions in the European evening hours. (20 Feb 92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****NETHERLANDS****

Radio Nederlands English schedule from March 29

0730	Pacific	11895 9630
0830	Pacific	11895
0930	Pacific	11895 9720
1330	S Asia	21665 17605
1430	S Asia	21665 17605 15150 9890
1530	S Asia	17605 17580 15150 9890
1730	S&E Africa	21590 21515 9605 6020
1830		21590 21515 9605 6020
1930	W Africa	21590 17605
0030	E N America	11835 6165 6020
	S Asia	13700 11655 9860
0130	S Asia	13700 11655 9860
0230	S Asia	13700 11655 9860
0330	W N America	9590 6165

MEDIA NETWORK SCHEDULE from March 29

Thu 0150-S Asia, 0750 & 0950-Pacific, 1350 & 1550-S Asia, 1750 & 1950-Africa, 0050 UTC Friday-N America/S Asia, 0250-S Asia, 0350 UTC Friday-W North America. (12-Mar-92/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

Mind you, hardly a day goes by without letters or faxes coming into our office asking about our English service to EUROPE. Our SW transmitters are simply too close to the UK and IRELAND to give adequate service in the evenings. And our Flevo [Netherlands] SW transmitter site can't broadcast at frequencies lower than the 49 meter band. A possible MW service has been floated several times, but at present this can't be realized because of usage by the Dutch domestic radio organizations. We're still hopeful that things might change, but not for the Summer period of 1992. Rather than struggle on, offering a second rate coverage, we've decided to suspend our EUROPEAN service in English at 1130, and also the release at 1430 UTC. We're now part of a project to set something up to replace it. (01-09-92/RN MEDIA NETWORK/01-10-92/Bill Kelsey/SW ECHO)

****NEW ZEALAND****

One of the interesting aspects of broadcasting here is the success of "XXX's Radio." This is the type of station where individual society groups have free air time on various stations established under the auspices of Radio New Zealand. There are several stations operating: 558 in Invercargill which is also on (96?) FM; on 783 in Wellington they're trying to raise \$140,000 for a 10-kw xmt; 810 is in Auckland, 900 Dunedin, and 1206 is down for Hamilton. The Wellington station runs at least 21 languages per week.

Radio New Zealand has some changes as we go back to standard time on the 15th of March: 1650-1900 on 9670, 1900-2138 on 15120; 2138-0758 on 17770, and 0758-1200 on 9700 kHz. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

The Prime Minister, Jim Bolger says Radio New Zealand is in very difficult financial circumstances, and the government is "working through the options." But Jim Bolger was quoted by Radio New Zealand International as saying the station's spending is greater than its income. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/Al Quaglieri/SW ECHO)

Here in NEW ZEALAND, RADIO RHEMA, New Plymouth, opened in December. It's the 14th station in the Rhema network of gospel radio stations. It's on 774 [kHz]; power is 5 kW, and it's 2XNR. (01-02-92/Arthur Cushen/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

And something, Jonathan, that listeners may not know, the composition of call signs, they mean something. In New Zealand, an X-class station is a private radio station, a Y-class station is a RADIO NEW ZEALAND non-commercial station, and a Z-class station is Radio New Zealand's commercial. So, the districts, 1ZB, "1" would be in Auckland, "2" in the Wellington district, "3" in the Canterbury district, "4" in the Otago(?) Southland. So a station like 4ZA must be in the Otago Southland area, must be Radio New Zealand commercial.

In Australia, of course, they use the same system as far as the numerals go. "2" stations, with a "2", are in New South Wales, stations with a "3" are in Victoria, "4" in Queensland, and so on. (01-02-92/Arthur Cushen/RN MEDIA NETWORK/01-08-92/Bill Kelsey/SW ECHO)

****NIGER****

The State-run radio in the capital, Niamey, has been evacuated. A journalist on the station phoned the Agence France Presse last week to say that the country's provisional Prime Minister, Hammadou Sheffu (?), who was upcountry in the town of Maradi, 500 km east of Niamey, intended to return to the capital, which has been in the hands of rebel army units. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/Al Quaglieri/SW ECHO)

[From the Boston Globe, 3/2/92]
SHOOTING BREAKS OUT AS NIGER SOLDIERS VIE TO CONTROL RADIO (Reuters)

Niamey, Niger - Shooting broke out yesterday in Niger's capital as rival groups of soldiers tried to take control of the national radio, residents said.

Shortly before 8 p.m., soldiers led by Sgt. Hassane Ide, who led two brief mutinies Thursday and Friday, retook control of the radio from Capt. Oumarou Soumana Gouro, who two hours before appeared to have been staging a coup d'etat.

"The statement by the captain is null and void. We are blocking a real attempt to stage a coup d'etat," Ide said in a communique read twice over the Voice of the Sahel radio.

"All soldiers are requested to return to barracks," he said.

Shooting was heard coming from an infantry barracks and the fire service headquarters in the capital, and soldiers threw up roadblocks on the road leading to the two locations.

Ide's statement followed one read on radio by Gouro in which he appeared to be staging a coup after four days of tension in Niger.

Ide's group seized the radio Thursday and again Friday to press their demands for settlement of pay arrears and other grievances. They withdrew after the interim government pledged to resolve the problems.

The outcome of the conflict yesterday appeared to have favored Ide, although confusion remained. Some gunfire was reported after Ide's radio message.

In addition, a group of Ide's men stormed into the luxury Gaweys hotel, briefly ordering staff and guests at gunpoint to line up against the lobby wall, a correspondent reported from the hotel. (02-Mar-92/Andy Wallace/SW ECHO)

****NORTHERN MARIANAS****

KFBS (Saipan) Broadcast Schedule
KFBS Radio
P.O. Box 209
Saipan, MP 96950 USA

UTC	FREQ	LANGUAGES
0855-1059	11650	Russian
0925-1229	15380	Indonesian (Buginese, Sudanese, Javanese)
1100-1359	11650	Russian
1110-1500	9495	Mandarin
1125-1145	11705	Mongolian
1145-1159	11705	Russian
1200-1444	11665	Russian
1230-1300	15380	Malay
1300-1430	9670	Vietnamese
1400-1830	9465	Russian
1430-1530	9670	Burmese
1445-1530	11665	Ukrainian, German, Romanian, Uzbek, Kazakh, Kirghiz
1500-1515	9495	Uighur (Chinese)
1830-1930	9465	Ukrainian, German, Polish
1900-1929	9475	Hausa (African)
1929-2000	9475	Yoruba (African)
1930-2000	9465	English
2155-2259	15320	Indonesian
2300-2400	15320	Vietnamese

(Paul Blumstein/USENET/03-Feb-92/Kirk Baxter/SW ECHO)

****NORWAY****

RADIO NORWAY INTERNATIONAL
Schedule March 29 - October 3, 1992

ENGLISH (Saturday and Sunday ONLY)

1200	17870 21705	Asia, Australia, India
1300	9590 15270	Europe, Africa
1600	15230 17720	Middle East, India, Africa
1700	9655	Europe
1900	17860 21705	West Africa, S. America, Far East, NZ
2100	17735 21705	South America, Australia, NZ
2300	11795	North and Central America
0000	15165	North and Central America
0100	9615	North and Central America
0200	11930	North America
0400	9560 11865	North America

NORWEGIAN

0600	9590 15175 17780	
0700	9590 11740 17755 17740	
0800	17740 21595	
0900	17740 21705	
1000	15165 21595	
1100	17785 21705	
1200	15355 17795 17860 21705	
1300	9590 15270 15355 17860	
1400	15355 17795 17860	
1500	15355 17860	
1600	15230 17720 21705	
1700	9655 15220	
1800	15220 17720 17760	
1900	15250 17860 21705	
2000	11740 15165	
2100	17735 21705	
2200	17735 21705	
2300	11795 15165 17730	
0000	11770 11795 15165 17730	
0100	9615 11930	
0200	9565 11720 11930	
0300	9560 11720 11865	
0400	9560 11865 11870 15175	
0500	7215 9590 15175 17780	

(08 Mar 92/Al Quaglieri/SW ECHO)

Bjorn Ehrfort(?) checked into reports that RADIO NORWAY is broadcasting stereo MW. He asked at the Kvitsoy [Kvits/oy] MW site, and was told that they never had and never intended to broadcast stereo MW. However, along with the German system, they have been testing broadcasting station identification data information with the carrier. These "AM data systems" will allow radios to display the name of the station to which they are tuned, although such radios are not yet available. Ehrfort said he was told that such receivers may "soon" be available in Germany. (12-12-91/RN Media Network/Bill Kelsey/SW Echo)

****PAPUA NEW GUINEA****

National Broadcasting Corp. Schedule

3220	R. Morobe	1930-2230,0700-1300
3235	R. W. N. Britain	1930-2230,0700-1300
3245	R. Gulf	1930-2230,0700-1300
3260	R. Madang	1930-2230,0700-1300
3275	R. S. Highland	1930-2230,0700-1300
3285	R. West Sepik	1930-2230,0700-1300
3290	R. Central	1930-2230,0700-1300
3295	P2K3	1930-2230,0530-1400
3305	R. Western	1930-2230,0700-1300
3315	R. Manus	1930-2230,0700-1300

****PAPUA NEW GUINEA (cont.)****

3325	R. N. Solomon	1930-2230,0700-1300
3335	R. E. Sepik	1930-2230,0700-1300
3345	R. Northern	1930-2230,0700-1300
3355	R. Simbu	1930-2230,0700-1300
3365	R. Milne Bay	1930-2230,0700-1300
3375	R. W. Highland	1930-2230,0700-1300
3385	R. E. N. Britain	1930-2230,0700-1300
3395	R. E. Highland	1930-2230,0700-1300
3405	R. N. Ireland	1930-2230,0700-1300
4890	P2K4/P2T4	1930-1400
5965	R. W. Highlands	1930-1400
5985	R. E. N. Britain	1930-1400
6040	R. Milne Bay	1930-1400
6080	R. Western	1930-1400
6140	R. East Sepik	1930-1400

(26-Feb-92/Paul Blumstein/USENET)

Bob Padula of the ARDXC has received information from the NBC in PNG that Radio Western Highlands in Mt. Hagen is definitely no longer using 5965 kHz for daytime programming. The frequency is used instead by Radio East New Britain in Rabaul in the 2230-0630 UTC time slot, presumably relaying the Port Moresby Karai service. The 1992 WRTH shows these outlets to be inactive. However, 5965 kHz isn't audible hear in Sydney (nor Melbourne) so direct confirmation isn't possible. (Bob Padula/ARDXC/20-Feb-92/Patrick McDonald - Australia/SW ECHO)

****PORTUGAL****

Lisbon is now using 15375 kHz (ex 15295) for Portuguese to the US in the 1300-2100 UTC slot, Saturdays and Sundays only. This was effective as of March 1st. (Bob Padula - AUSTRALIA/ADSN/17-Mar-92/Patrick McDonald - AUSTRALIA/SW ECHO)

Well, another update to the Handbook. The time of RADIO PORTUGAL's 30-minute English transmission to the Middle East has changed, and it's now on the air at 1630 UTC, instead of 1500; that's on Monday to Friday only. The frequency, though, remains the same, 21515 kHz. (13-Feb-92/Andy Sennitt & Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****ROMANIA****

RADIO EXTERIOR DE ESPANA is going to have another relay station for broadcast to eastern Europe. Sometime this month, they will sign an agreement with ROMANIAN RADIO AND TV to maintain and use transmitters that were previously in use by the former RADIO INDEPENDENT SPAIN. No frequencies announced, but the typical frequencies they used in 1977, when the station closed down after 36 years, were 7690, 10110, 12140, 14585, and 15505 kHz. (06-Feb 92/Richard Measham - BBCM/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

****SPAIN****

The latest schedule from January 1992 gives following times for RNE R5 local programs: Mondays to Fridays at 0733 and 1350. And on Saturdays and Sundays at 1350. Regional programs Monday to Friday at 0655, 0755 and 1605. Local commercial breaks on Mondays to Fridays at 0827, 0857, 0927, 0957, 1027, 1057, 1657, 1727 and 1757. On Saturdays at 0857, 0957, 1057, 1127, 1157 and 1227. On Sundays at 0927, 0957, 1027, 1127 and 1257. (RNE via TIL/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RNE1 "Boletin Regional" at 0655, 0755, 1005 and 1605. (RNE via TIL/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The v/s for Radio Euskadi from Bilbao (1071) is Goio Torrontegi, Jefe Tecnico. (Jean Burnell/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

693 RNE R5 in Tortosa now here (ex-1395). (Horst Rauch via Play-DX via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

1377 & 1404 Spanish stations heard by EBU Lisbon. (EBU via BE via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

900 RP de Bilbao and RP de la Coruna both heard on the frequency. (Jaramillo Blasco via EIDial/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

Stations in Burgos on AM are : 801 RNE R1, 837 COPE, 1017 RNE R5 and 1584 SER R. Castilla. (Felipe Rodriguez via EIDial/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

RP de Badajoz is now on 1269 (ex-1134). SER R. Badajoz is on 1008 (ex-1260, ex-Extremadura). (Horst Rauch - Germany/Play-DX 675/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

SER has a regional programme for Catalunya on 828, 1026, 1341, 1485 and 1521 at 2300-0059. (Dario Monferini - Italy/Play-DX 675/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1026 R. Asturias v/s is S.Martin, tecnico. (I.Hegedus - Hungary/Play-DX 675/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****SPAIN (cont.)****

Following Spanish stations heard in Finland on November- December:

558	RNE5 La Coruna at 1855
657	RNE5 Madrid at 1830
729	RNE1 Asturias at 1606
729	RNE1 Castilla y Leon at 1608
774	RNE1 Pais Vasco at 1606
774	RNE1 Comunidad Valenciana at 1606
792	R. Sevilla at 1824
837	R. Pop de Sevilla at 1945
1026	R. Asturias at 1827
1098	RNE5 Lugo at 1833
1098	RNE5 Almeria at 1855
1125	RNE5 Vitoria at 1810
1125	RNE5 Castellon at 1844
1134	R. Pop de Jaen at 1729
1224	R. Pop de Granada at 1656
1224	R. Pop de Huelva at 1658
1224	R. Pop de Caceres at 1559
1224	R. Pop de Mallorca at 1557
1224	R. Pop de San Sebastian at 1733
1269	R. Pop de Figueras at 1935-1959
1296	R. Pop de Valencia at 1931
1395	RNE5 Alicante at 1727
1395	RNE5 Ciudad Real at 1806
1413	RNE5 Salamanca at 1727
1413	RNE5 Jaen at 1807
1485	R. Santander at 1827
1584	R. Elche at 1957
1584	R. Jerez at 1957
1584	R. Castilla at 1958
1584	R. Gandia at 2014

(POS in Frekvenyyti/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1314 R5 Tarraga has closed its studios. (J.Brunet/Play-DX/Distance Jan-92/16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

900 COPE Bilbao with lots of local programs. Also another COPE-station noted with regional programs from Galicia. (Hykan Sundman/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1143 COPE Asturias with Oviedo-wx in local break noted here. (Hykan Sundman/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1152 RNE5 Malaga now here (ex-1008). (Hykan Sundman/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1395 R5 Tortosa has quit its local services. Now relays 24h R5 en Tarragona. (J.Brunet/Play-DX/Distance Jan-92/16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

1341 Terrassa, 1485 Girona and 1521 Manresa all carry regional service "Parlar per parlar" at 0000-0200. (J.Brunet/Play-DX/Distance Jan-92/16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

R 5's latest schedule for local and regional services (from early December) : Mon-Fri : regional 0730-0740, local 0741-0759, regional 1350-1359, regional 1850-1855. R5 local news 1855-1859. R1/R5 local news 0750-0755, 1005-1009, 1605-1609. Local spots : 0725-0728, 0757-0759, 0827-0829, 0857-0859, ... , 1657-1659. Sat & Sun : only 0827-0829, 0857-0859, ... 1327-1329. (M.Molano - R5 Salamanca/Play-DX/DIS/16-Jan-92/Risto Kotlampi - European DX News, Finland/USENET/Kirk Baxter/SW ECHO)

****SRI LANKA****

Sri Lanka inaugurated their North American Service on February 26th, and that was during their broadcast to Southeast Asia between 1030 and 1130 UTC. However, the real broadcast on the air, beamed to North America, will commence on the 3rd of March, and there'll be two 30 minute blocks going to North America. The first transmission will go on the air 2330 to 2400 UTC on 15425 kHz, using a 300 kW NHK transmitter at Ekala, and the second transmission will go on from 0445 to 0515 on two frequencies, 15425 and 9720. Now, these two transmitters - the first one, 15425 will be on a 35 kW and the second, 9720 kHz, will be 100 kW - they will be on a beam heading of 35 degrees from Colombo, towards the west coast of North America. (27 Feb 92/Victor Goonetilleke/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

There's a very interesting development here at SLBC, or the SRI LANKA BROADCASTING CORPORATION. A very helpful engineer is back at SLBC and he is the Deputy Director-General of Broadcasting now. He's LAL HERATH, and he's a friend of SW DXers, and he's verifying all reception reports to the SLBC. So, if you have had problems getting a QSL, you could send a report to Mr. LAL HERATH; he's the Deputy Director-General of Broadcasting at SLBC, PO Box 974, Colombo. He's especially interested in the external service reception of SLBC, and he also informs me that a special test transmission will take place in early February, from 0030 to 0400, that's 0030 to 0400, the frequency being 11825, with the all-Asia Hindi service running parallel to 11800. (Victor Goonetilleke - Sri Lanka/30-Jan-92/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

Early in 1992, TRANS WORLD RADIO, Sri Lanka, plans to use 2x300kW

****SRI LANKA (cont.)****

transmitters of NHK in the mornings before Radio Japan uses them for its relays to India. TWR is also planning for a 100kW SW transmitter to broadcast to south Asia, to be located in Puttalam, Sri Lanka. They have reliable MW broadcasts to south and central India, but not to northern India, northeastern India, Tibet, and Pakistan. (12-12-91/Victor Goonetilleke/RN Media Network/Bill Kelsey/SW Echo)

Two SW transmitters for TRANS WORLD RADIO, SRI LANKA, are being sent from the TWR station in Swaziland, which will imminently begin using two new 100kW transmitters built by TRW and HCJB [Voice of the Andes; Quito, Ecuador] technicians in the USA. (Marcel Rommerts - Neth./19-Dec-91/RN Media Network/Bill Kelsey/SW Echo)

Talking of relays, there've been protests in Sri Lanka these past couple of weeks even though the official go-ahead's been given to the VOICE OF AMERICA to build a relay station at the coastal town of Chulau(?). The first objections came from Sri Lanka's nearest neighbor, India. The government, led by the late Rajiv Gandhi, protested in 1985 and again in '87. New Delhi's main fear has been that such an elaborate communications setup might be used for intelligence gathering and defense surveillance, which would compromise India's regional superpower status. It was sensitive enough for Rajiv Gandhi to have made it part of an exchange of letters between the two heads of government that followed the Indo-Sri Lanka Accord of July 1987. The US government's repeatedly stated that the facility's meant solely for public broadcast purposes. Now, Victor, it appears the protests are from the church!

VG: Oh yes, Jonathan! Once again, VOA is having problems with its VOA expansion program in Sri Lanka. Two weeks ago the Roman Catholic Church staged a large demonstration and prayer vigil, showing its protest at the VOA relay station in Irrinavilla(?), Chulau, about 50 miles north of Colombo. Along with the VOA project, an Australian hotel chain is to build a tourist resort close to the VOA relay station.... This is an unspoiled Christian community area, and the Church is protesting, saying that the hotel project and the VOA relay station will disturb the cultural standards and the moral standards of the people, as demonstrated by [the] expanding tourist industry in Sri Lanka. The Church thought that it's a "now or never" sort of attitude towards the project.

JM: What about the current transmitters in Sri Lanka? I mean, they're still running, aren't they, the old 35 kW transmitters and even 10 kW transmitters in Ekala?

VG: That's right, Jonathan. The present antiquated [VOA] Colombo relay has two 35 kW's and one 10 kW unit. And, indeed, the 10 kW is the rarest of VOA DX these days, and the 10 kW transmitter is on 7 MHz. Anyhow, the schedule goes: English, ... 0100-0300 UTC [on] 7115 kHz, 11705 kHz, and 15250. And again 1400-1800 [on] 7125, 9645, and 15395. And, once again, the 7 MHz frequencies [are] just 10 kW. (12-26-91/RN MEDIA NETWORK/12-28-91/Bill Kelsey/SW ECHO)

****SWAZILAND****

TWR, Swaziland heard at 1556 on 9510 NF with interval signal and ID. Unable to catch language broadcast at 1600 due to Radio Japan QRM on 9505. Might be Chewa, a move from 9520. (07-Feb-92/Bruce MacGibbon/SW ECHO)

****TANZANIA****

Dutch DX'er Martin van Delft sends me news from Dar es Salaam after a visit to Zanzibar. Radio Zanzibar facilities are in a terribly poor state, but a Chinese team is now working on the transmitters. They're also helping in construction of a new radio house which should be ready by the middle of 1992. "I heard the station in Holland in early December on 11734.2 around 1700 and got a QSL by playing a recording for them; but they told me this transmitter had been moved to 6015 in the middle of December because that outlet had broken down. Mediumwave 585 has been off for several months, which leaves only 6015 active. They soon hope to be back on their usual schedule, on 585 and 6015 at 0300-0500 and 1100-2000, with 11734.2 in parallel at 1530-1830. This outlet is meant for Zanzibarians living in Oman and Muscat, with which there are strong historical ties. There are plans for programs in English and Arabic on this frequency too. In the not too distant future, Zanzibar hopes to increase its broadcasting time to 18 hours per day. (via Glenn Hauser) (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

Radio Tanzania noted in Australia on 9685 after 1530 when Iran vacates the frequency. (Craig Seager - AUSTRALIA/ARDXC/08-Mar-92/DX ASI WAVES/AI Quaglieri/SW ECHO)

****TONGA****

The SW xmtr on 5030 has been off the air since December when hit by the hurricane, but a Senior Technician tells me it was the building that was hit, not the transmitter, which is still intact. He plans to move the transmitter to the building housing the 1017 kHz transmitter. The shortwave transmitter is 1000 watts, and it should be on by the end of March. The schedule will be 1730-1000 UTC daily. The Technician is short-staffed, but will try to answer QSLs himself. (12-Mar-92/Arthur Cushen - NEW ZEALAND/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****UK****

Parliament elections will be held in United Kingdom on April 9th. Many stations will broadcast local election programs that evening, so be ready! (RKO/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

****UK (cont.)****

BBC Northampton v/s is J.Saunders. (JJS/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The Radio Authority has received five applications for the Cheltenham license, which will be on 603 kHz. Three applications were received for the Barnstaple station (FM or AM optional). (R. Authority via Broadcast/MET via BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

BBC R. Gloucestershire's MW transmitter on 603 closed on January 31st. It will be used in the future by the planned ILR station. (BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The "mandatory sites" for the planned INR2 network include most existing BBC R3 transmitters on 1215 and 1197 kHz, plus Stockton 1548, Nottingham 1521, Northampton and Wallasey 1107 and Oxford 1485. The "optional" transmitters are those in Essex 729, Burghhead, Redruth, Tywyn & Londonderry 1215, Enniskillen 1197, Sheffield 1035 and Stoke 1503 kHz. (R. Authority via BDXC via ARC/Risto Kotlampi - FINLAND/USENET/16-Mar-92/Kirk Baxter/SW ECHO)

The country's first all-female radio station. Femme FM, is broadcasting [sic] to the Bristol area as from this Sunday, International Women's Day. The station is the brainchild of Caroline Mitchell, a lecturer in radio and media studies, and Trish Kavli (?), a radio producer. The aim, they say, is to give women experience in radio. As opposed to women news-readers, women are under-represented in technical jobs, management and presentation, and that's a significant proportion of the work, the station's organizers say. (09-Mar-92/AUSTRIAN SHORTWAVE PANORAMA/AI Quaglieri/SW ECHO)

Following stations will close their AM-transmitters :

January 31st: 603 BBC R. Gloucestershire
March 31st: 756 BBC R. Shropshire, 819 BBC R. Hereford & Worcester
April 17th: 1548 BBC R. Cleveland, 1107 BBC Northampton, 1521 BBC R. Nottingham and 1485 BBC R. Oxford.
(Dave Porter via Contact - UK/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

The Radio Authority has invited tenders for the ILR franchise in mid-Wales (Montgomery) and they have allocated 756 kHz, presumably to be surrendered by BBC R. Shropshire. The RA has also said that the Scottish highlands franchise (R Heartland) will be on FM only; an amazing choice considering the terrain! (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

G9CFD on 1512 kHz 1 W, SSC, Ludlow is not an amateur call sign. The G9 series are reserved in the UK for test transmissions and has been so since early 1950's. Other test stations on the air at the moment are Bessemer Broadcasting, Sheffield 1413 50 mW, and a station in Scotland near Aberdeen on 1404 with 50 mW. (cf. next item/RKO) (HJM in DSWCI via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO) 1512 SSC is closed down. (Arto Mujunen in DXtra 28-Jan-92/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1458 BBC GLR is operated out of the 2200-2400 slot network South East programme which is carried by 10 BBC local stations. The station will have a phone-in program (Mon-Fri) hosted by Mike Carson who presents an afternoon phone-in show on LBC. (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

Morecambe Bay with a potential audience of 180,000 is the latest station to be advertised by the Radio Authority. The winner will be allowed to choose whether to broadcast on AM or FM. (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

The Radio Authority says that the fqs to be used by the recently advertised Independent National Radio station to broadcast on AM - and which could be on the air by April, 1992 - are as follows. In addition to the R 4 fqs of 1215 and 1197 the following BBC local fqs will be used : 1107 Northampton, 1485 Oxford, 1485 Merseyside, 1521 Nottingham and 1548 Cleveland. These stations will broadcast on FM only when the new station comes on air. (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1530 Classic Gold v/s is Diane Kitching. Reports to Radio House, 900 Herra Road, Sheffield S6 1RH. (Jan Oscarsson - Sweden, in Distance 2-92/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1584 & 1521 BBC R. Nottingham v/s is Richard Buckby. (Jan Oscarsson - Sweden, in Distance 2-92/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

1449 BBC R Peterborough v/s is Steve Somers, Senior Producer. (Jukka Soini/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

BBC RADIO GLOUCESTERSHIRE on 603 kHz is leaving MW the end of January, and BBC HEREFORD & WORCESTER on 819 kHz and BBC RADIO SHROPSHIRE on 756 kHz are both leaving MW the end of March 1992. (26-Dec-91/James Robinson/RN MEDIA NETWORK/12-28-91/Bill Kelsey/SW ECHO)

The British DX Club published the most detailed list of radio stations in the

****UK (cont.)****

UK we've seen. The 32 page booklet is now in its 10th edition, and costs 2 pounds sterling, US\$4, or 5 International Reply Coupons, including postage anywhere in the world. Details from the BDXC, 54 Birkhall Road, Catford, London SE6 1TE, UK (12-26-91/RN MEDIA NETWORK/12-28-91/Bill Kelsey/SW ECHO)

****USA****

JM: In the heart of Kentucky, USA, DON POWELL is the station manager of a 100,000 watt religious radio station, on FM, with the call sign WJCR. From around February the 29th, you can expect this station to appear on SW, as well.

DP: It's going to be here, in Upton, Kentucky.

JM: Will there be actually building there?

DP: There'll be four 50,000 watt transmitters. They're going to be delivered next week. It's going to take about three days, or four, to - for the mechanical and electrical work to get them running. But we have everything ready for them.

JM: The transmitters will operate as two pairs. Broadcasts to Europe will be beamed on an azimuth taking them through Gdansk [Danzig], in Poland. The other beam is towards South America. Test frequencies of 7485 and 15660 kHz have been submitted to, although not yet approved by, the US Federal Communications Commission [FCC]. So, what about a typical day's output on the new station?

DP: Probably about 20 hours of gospel music and probably about four hours of Bible teaching.

JM: And what about the call sign? Does it mean anything, WJCR?

DP: WJCR, yes. It means "Where Jesus Christ Reigns". (20 Feb 92/Jonathan Marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

The first of WJCR's four 50 kw transmitters is on the air. The next will start in about six week's time. They'll broadcast gospel music around the clock. [recording of signal on 7490 at 0617 UTC: "from North America to the world, WJCR Radio. You're listening to Voice of the World, originating in ...Kentucky 42784, USA. Call our 24-hour prayer line, area code 502-369-8614. Stay tuned for the world's greatest music."] (19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

THE WORLD SERVICE OF THE CHRISTIAN SCIENCE

MONITOR REVISED

W-91 SHORTWAVE FREQUENCY SCHEDULE

0100 UTC 02/17/1992 to 0100 UTC 03/29/1992

WCSN	045.08.06N	068.33.35W	
0000	9850	90	C. & S. Africa
0200	9350	75	E.Africa/Mid E
0400+	9840	105	South Africa
0600	9840	45	Europe
0800	9840	60	Europe
1000*	13770	60	Europe/Af/M.E.
1200*	21670	60	Europe/Mid E.
1400	21670	45	Europe
1600	21640	75	N. & E. Africa
1800	21640	105	E. & S. Africa
2000	13770	60	Europe/Mid E.
2200	13770	75	Eur/N. Africa

OCCASIONAL USE FREQUENCIES

WCSN		
9850	0200-0400	75 DEG
7395	0600-0800	60 DEG
21545	1800-2000	105 DEG

WSHB - 1+2 032.41.02N 081.07.51W

0000	+13760	167	So. America/Car
	7395	25/173	ENAm/Caribbean
	13760	167	So. America/Car
0200	+ 9455	245/315	WNAm/Mex/C. Am.
0400	9870	230	Mexico/Carib.
	9455	315	West. No. America
0600	9870	245	Mexico/Carib.
	9455	315	West. No. America
0800	13615	260	Aus/Oceania
	9455	152	Cent. So. America
1000	9495	25	East. No. Am.
	9455	152	Cent. So. America
1200	9495	25	East. No. Am.
	13760	182	Central America
1400	*15665	173/25	ENAm/Carib.
	13760	245/315	W. N. Am/Mex
1600	*15665	173/25	ENAm/Carib.
	*17555	245/315	W. N. Am/Mex
1800	15665	25	E.N. Am/Europe
	*17555	245/315	W. N. Am/Mex
2000	15665	25	E.N. Am/Europe
	17555	137	Brazil
2200	9465	173/25	ENAm/Carib.
	17555	152	Cent. So. America

****USA (cont.)****

OCCASIONAL USE FREQUENCIES

9870	0400-0600	230 DEG
13760	1000-1200	152
17555	1400-1600	245/315 DEG
15610	1400-1800	173/25
15610	1800-2200	25 DEG
21780	1800-2000	25 DEG
13760	0400-0600	230 DEG

KHBI - 1+2 015.07.20N 145.41.37E

0000	*17865	355	Japan/Ea. USSR
	17555	270	S.E. Asia/Phill.
0200	*17865	355	Japan/Ea. USSR
	*17555	270	S.E. Asia/Phill.
0400	17780	340	Japan/Kor/USSR
	*17555	270	S.E. Asia/Phill.
0600	17780	310	China
	17555	270	S.E. Asia/Phill.
0800	17555	355	Japan/Ea. USSR
	15665	165	Australia/New Zeal
1000	17555	310	China
	13625	240	Indonesia
1200	13625	285	India/Indo-Chn
	15665	195	Australia
1400	13625	285	India/Indo-Chn
	9530	310	China
1600	13625	285	India/Indo-Chn
	11580	310	North India/China
1800	13625	285	India/Mid East
	13625	165	Australia/New Zeal
2000	9455	340	Japan/Kor/USSR
	13625	180	Australia
2200	15405	310	China/Japan
	13625	240	Indonesia

OCCASIONAL USE FREQUENCIES

15610	0800-1000	165 DEG
15610	1200-1400	195 DEG
13710	0800-1000	165 DEG
13710	1200-1000	195 DEG

+ = CRASH START

* = SATURDAY/SUNDAY ONLY

Rev. 9

Effective February 17, 1992

(14-Feb-92/Michael Batchelor-WSHB engineer/Kirk Allen/SW ECHO)

I was truly amazed and appalled to stumble upon WWCR on 5935 kHz a few nights ago. I am bitterly disappointed that its now virtually impossible to receive Radio Riga here in the northeast U.S. - especially considering the kind of garbage that's now found on Riga's frequency. On top of all that, the sideband splatter from WWCR/5935 will make hearing Radio Talinn (Estonia) even more difficult than it already is. Grrrr ... (01-05-92/Ben Krepp/INTERNET/Kirk Baxter/SW ECHO)

****VENEZUELA****

Radio Rumbos on 4970/9660 with closing announcement in English at 0605 (Jerry Berg/25 Feb 92/Andy Wallace/SW ECHO)

****YUGOSLAVIA****

NEW COUNTRIES : Slovenia and Croatia are new countries since January 15th, 1992. (30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

YUGOSLAVIA: Tom Sundstrom faxes the new Radio Yugoslavia schedule to Andy Sennitt: from March 29, English to Asia 1130-1200 on 17710, to Central North America on 17740, and Australia on 21605. At 1830-1900 to Europe on 6100 and to Southern Africa on 15140 kHz. At 2100-2130 to Europe on 6100 and 11735. From 0030-0100 and 0130-0200 to North America on 11870 kHz. (19-Mar-92/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

****CLANDESTINE****

In the British DX Club, editor Dave Koenig reports hearing something like "Holy Medina Radio" - "Izzat al-Medina al-monarawah," probably actually originating with Saddam Hussein. On 7205, best between 2000-2100, but there's QRM from VOA Arabic and then Turkish on the same channel. (via Glenn Hauser)

****INTERNATIONAL WATERS****

Ros Revenge, the Caroline ship, is in serious trouble. During storms in early hours of Nov 20 the anchor chain snapped and the ship drifted for several hours before running aground at 4 am, 17 miles south of usual mooring in S Falls Head. First lifeboat rescue failed as it also ran aground, 2nd lifeboat needed to rescue the first. RAF helicopter eventually winched all crew at 7.15 am. Ship was successfully salvaged by Dover Harbour Board on Nov 22. Most unlikely to return to sea as R Caroline ever again. (Medium Wave News via ARC/30-Jan-92/Risto Kotlampi - FINLAND/USENET/Kirk Baxter/SW ECHO)

****UTILITY****

CQ CQ DE WLO WLO
FULL WLO INFO AT 0200 0800 2000 UTC AFTER TFC LISTS
CW QTC/WX QRG 434 2055.5 4343 6416 8514 12886.5 17022.5 AND 22487 KHZ

CW WORKING QRG:

****UTILITY (cont.)****

434 2055.5 KEYED TOGETHER
4257.5 6446.5 8445.5 8473.5 8658 12660 12704.5 13024.9
16969 17173 22686.5 AND 26123 KHZ

DELETE 22318.5 AND 22320 KHZ FROM OLD LISTS

ADDITIONAL CW WORKING 12/01/XX THROUGH 05/31/XX: QRG
4462.5 6344 8534 12992 16997.6 AND 22688 KHZ

NOTE

WARC 1987 EFFECTIVE 07/01/91
WLO RADIO GUARDS FOLLOWING CW SHIP CALLING:
WORLDWIDE C3 4184 6276 8368 12552 16736 22280.5 25172 KHZ
WORLDWIDE C4 4184.5 6276.5 8369 12553.5 16738 22281 25172 KHZ
GULF MEX C5 4183 6278 8367 12551 16735 22281.5 25171.5 KHZ
GULF MEX C6 4183.5 6278.5 8367.5 12551.5 16735.5 22282 25171.5 KHZ

NOTES

SHIPS USING SSB EQUIPMENT FOR CW PURPOSES SHOULD NOTE THAT THEIR TRANSMITTER EMITTED SIGNAL FREQUENCY IS EQUAL TO THE SUPPRESSED CARRIER FREQUENCY PLUS THE FREQUENCY OF THE AUDIO KEYED TONE. WINDOW OR DIALS MUST BE OFFSET ACCORDINGLY TO APPEAR WITHIN THE PASSBAND OF COAST STATION CALLING CHANNEL GUARD RECEIVERS.

WARC 1987 NEW FREQUENCY ASSIGNMENT PLAN BECAME EFFECTIVE JULY 1, 1991 AND IS NOW IN FULL EFFECT WORLDWIDE

S H I P T E L E X S E R V I C E S

WLO RADIO

MOBILE MARINE RADIO, INC
7700 RINLA AVENUE
MOBILE, ALABAMA 36619 USA

TF: 205 666-5110

TELEX: 50 5444 (KEY CTRL G TO GET OPR)

HOURS OF SERVICE.....: HH 24 CONTINUOUS
FEC RADIO TFC LISTS/WX: HH PLUS 35 (ON TSB FREQUENCIES)

TSB FREQUENCIES:

NON-HURRICANE SEASON 12/01/91 THRU 05/31/92
4343.0 6416.0 8514.0 12886.5 17022.5 22487.0 KHZ

WLO FULL INFO BROADCASTS FEC TSB FREQUENCIES DAILY AT 0235 0835 2035 UTC AFTER FEC TRAFFIC LIST.

WLO FULL TIME NBDP ARQ CENTER FREQUENCY LISTINGS

ITU CHAN	XMIT	SHIP RECEIVE	REMARKS
405	4174.5	4212.5	DELETE
406	4175.0	4213.0	
410	4177.0	4215.0	
411	-----	-----	WARC-87 MOVED TO ITU CH. 415.
415	4179.5	4217.0	NEW FULLTIME ARQ - PLEASE ADD TO WLO
417	4180.5	4218.0	NEW FULLTIME ARQ - PLEASE ADD TO WLO
606	6265.5	6317.0	
610	6267.5	6319.0	
611	-----	-----	WARC-87 MOVED TO ITU CH. 624.
615	6270.0	6321.0	
619	6272.0	6323.0	
624	6274.5	6325.5	NEW FULLTIME ARQ - PLEASE ADD TO WLO.
805	8378.5	8418.5	DELETE. WLO MOVED TO ITU CH 829.
806	8379.0	8419.0	
810	8381.0	8421.0	
811	8381.5	8421.5	DELETE. WLO MOVED TO ITU CH. 832
815	8383.5	8423.5	
826	8389.0	8429.0	
829	8390.5	8430.5	NEW FULLTIME ARQ - PLEASE ADD TO WLO.
832	8392.0	8432.0	NEW FULLTIME ARQ - PLEASE ADD TO WLO.
1205	12479.0	12581.5	
1211	12482.0	12584.5	
1215	12484.0	12586.5	
1225	12489.0	12591.5	
1229	12491.0	12593.5	
1234	12493.5	12596.0	
1240	12496.5	12599.0	
1250	12581.5	12684.0	DELETE. WLO MOVED TO ITU CH. 1261.
1251	12502.0	12604.5	
1254	12503.5	12606.0	
1261	12507.0	12609.5	NEW FULLTIME ARQ - PLEASE ADD

****UTILITY (cont.)****

TO WLO.

1605	16685.5	16809.0	
1611	16688.5	16812.0	
1615	16690.5	16814.0	
1625	16695.5	16818.5	
1629	16697.5	16820.5	
1640	16703.0	16826.0	
1644	16705.0	16828.0	NEW FULLTIME ARQ BEAMED TROP ATLANTIC.
1650	16708.0	16831.0	
1654	16710.0	16833.0	
1661	16713.5	16836.5	NEW FULLTIME ARQ BEAMED NORTH ATLANTIC.
1810	18875.0	19685.5	=
2210	22289.0	22381.0	
2215	22291.5	22383.5	
2254	22311.0	22403.0	
2256	22312.0	22404.0	
2260	22314.0	22406.0	
2262	22315.0	22407.0	
2272	22320.0	22412.0	=
2284	22326.0	22418.0	=
2510	25177.5	26105.5	NEW FULLTIME ARQ = UNDER CONSTRUCTION

FULL WLO INFO AFTER TFC LISTS AT:

0200 0800 2000 UTC CW MODE
0235 0835 2035 UTC FEC MODE

END DE WLO .-.-.

(31-Dec-91/Tim Johnson/SW ECHO)

Royal Flying Doctors Service (RFDS) SW freqs as follows:

8035 shared with the School of the Air
7550 Kalgoorlie
7517 WA
7475 Mt. Isa
7465 Qld.
7410 Qld.
7392 Qld.
7307 Charleville
6950 Alice Springs/Mt. Isa
6945 Derby
6920 Broken Hill
6890 Carnarvon
6880 WA
6866 Cairns
6845 Cairns
6825 Kalgoorlie
6785 Qld.
5845 SA & NT
5740 WA
5731 Katherine
5445 Mt. Isa
5410 Alice Springs
5370 Alice Springs
5360 WA
5300 Cairns
5230 Carnarvon
5227 Charleville
5145 Qld.
5110 Qld.
5011.5 Qld.
4981.5 Charleville
4936.5 Outpost Stations
4927.5 WA
4881.5 Cairns
4607.5 Mt. Isa
4351.5 Alice Springs
4045 WA
2806.5 Wyndham
2657.5 Kalgoorlie
2281.5 WA
2261.5 Outpost Stations
(18-Jan-92/Patrick McDonald - Australia/SW ECHO)

(In a response to a query by Vancouver DX'er Ken McKenzie:) Ken, what you are hearing is our ground to air radio telephone service called "Skycorn". The service is run by our Overseas Telecommunications Corp. (OTC), soon to be merged with Telecom Australia. They run voice calls and auto-calls on 5160, 8140, 11132. Autocalls are only on 9040, 17440, 20160 and 23070. Auto-calls allow the customer into the telephone network, otherwise you need to call in and go thru the Skycorn operator. (22-Jan-92/Rob Williams - Australia/SW ECHO)

****UTILITY (cont.)****

HF Interpol Frequencies
Frequencies are in KHz

4632.5	11538.0
4837.5	12224.5
5208.0	13520.0
5305.0	13820.0
6792.0	14187.0
6905.0	14607.0 BC
7401.0	14817.0
7532.0	14607.0 BC
8038.0	14817.0
8006.5 BC	14827.0 BC
9200.0	15684.0
9285.0	18190.0
10295.0	18380.0
10390.0	19130.0

(08-Jan-92/Mark Burkart/SW ECHO)

High Frequency Press Services BAUDOT AND SITOR B (* inactive)

Algerian Press Service		APS Algeria	
0930, 11-12, 13-14	14932.0	850/50	
Anadolu Ajansi		AA Turkey	
TCY4	1055	18040.0	850/50
Agence Telegrafike Shqijetara		ATA Albania	
ZAA6	1000	9132.9	1000/50
ZAT	09, 1800	9429.8	500/50
Agenzia Nazionale Stampa Associata		ANSA Italy	
IRF50	0830	8030.0	425/50
IRJ50	1800	12083.0	425/50
????	1800	16067.0	425/50
ISX20	12, 15	20085.0	425/50
IRS23	1500	20371.8	425/50
IRU58	1800	22892.1	425/50
ISX22	12, 15	22954.7	425/50
ISX24	12, 15	24789.8	425/50
ISX25	12, 15	25271.5	425/50
Agentia Romana de Presa		AGERPRESS Romania	
YOJ27	1000	9797.0	550/50
Agentstwo Patschato Novosti		APN USSR	
RWM77	1250	16145.0	425/100
Central News Agency		CNA Taiwan	
????	1340	10959.7	775/50
3MA22	1340	13563.0	775/50
3MA35	1400	16224.0	775/50
Dir. des Services d'Info. et de Presse		DIPLO France	
FZM62	0400	16106.0	425/50
FZN7	0400	20078.0	425/50
Gulf News Agency		GNA Bahrain	
A9M70	0530	14764.0	300/75
Iraqi News Agency		INA Iraq	
?????	1250	13523.9	425/50
YIL73*	1300	14372.9	425/50
YDX70	0830, 1250, 1630	14698.9	425/50
Islamic Republic News Agency		IRNA Iran	
9BC23	1930	7959.0	425/50
9BC25	1930, 2200	8049.0	425/50
EPJ2	1600	19980.0	425/50
Jamahiriyah Arab News Agency		JANA Libya	
5AQ62	1747	12186.0	425/50
9HC67 (Malta)	0900	14573.0	850/50
5AQ88	1600	20559.9	425/50
Jiji Tsushin Sha		JJI Japan	
JAE50	1140	10200.0	850/50
Korean Central News Agency		KCNA DPRK	
HMF46	1005	10580.0	425/50
HMF55	2200	11430.0	250/50
HMF52	0400	11476.0	250/50
HMF42	04, 22	12175.0	250/50
HMF36	0400	13580.0	250/50
HMF57	0800	14452.0	250/50
HMF32	0445	14568.0	425/50
HMF26	0630	15633.0	250/50
Khaosan Pathet Lao		KPL Laos	
---	0905	14640.0	425/50

****UTILITY (cont.)****

Kyodo Tsushin News Service		KYODO Japan	
JAG50	0600	10795.0	425/50
JAL44	0800	14547.5	850/50
JAL54	0530	14595.0	850/50
Maghreb Arabe Presse		MAP Morocco	
		10213.0	425/50
CNM61	12-14	14760.0	425/50
CNM66X2	12-14	15752.7	425/50
CNM69.1X	1000	15999.9	425/50
?????	12-14	18220.5	425/50
CNM80X11	1350	18496.1	425/50
CNM85X11	1535	19171.1	425/50
Ministry of External Affairs		MEA India	
ATP65	10-1030, 1520	14784.3	600/50
Middle East News Agency		MENA Egypt	
????	2000	7609.8	425/75
SUA246	2245	10150.0	425/75
SUA251 0630, 2000		10609.8	425/75
SUA291 1130, 15, 18		15935.0	300/50
Noticias Argentinas		NA Argentina	
---	2300	10805.0	850/75
Pan African News Agency		PANA Senegal	
6VK317	1030-1215, 14	16116.6	350/50
Polska Agencja Prasowa		PAP Poland	
SOV228B 1410		20286.5	SITOR-B
SOV293B 1400		20933.5	SITOR-B
Prensa Latina		PL Cuba	
CLN219	0930	8140.0	425/50
CLN451	1400	14901.0	425/50
CLN530	1430	16348.0	425/50
Sudan News Agency		SUNA SUNA	
---	1700	18788.0	250/50
Telegraf. Agencija Nova Jugoslavija		TANJUG Yugoslavia	
4OC2	0200	3240.0	425/50
YZD 0030, 0415, 1930		7657.9	425/50
YZD7	2300	7805.9	425/50
MFA	0630	9046.0	425/75
YZJ5	0400, 13, 15	13439.9	425/50
YZJ6	1255	15704.9	425/50
YZI4	1320	16343.0	425/50
YZJ4	1610	19865.0	425/50
YZJ	1330	20203.8	425/50
Telenoticiosa Americana		TELAM Argentina	
LRO2	2300	4004.5	850/50
---	2305	7428.5	850/50
LRB39	2305	10893.5	850/50
Vietnamese News Agency		VNA Vietnam	
XVM37	1400	10599.9	500/50
XVM3	1320	13655.4	500/50
New China News Service		XINHUA China	
BZP54	1130-13	14367.0	425/75
????	0200	14759.9	425/75
BZP44	0045	14922.6	425/75
BZR66	0855, 1030-1330	16135.8	425/75

(09 & 19-Nov-91/Mark Burkart & Tom Sundstrom/SW ECHO)

ILITY (cont.)**

MAGHREB ARAB PRESS (MAP, RABAT, MOROCCO) SCHEDULE
RTTY NEWS 425/50 Baudot

ARABIC			
0900-1030	18496.1	CNM80/X11	Middle East/Africa
0330-0500	18496.1	CNM80/X11	Middle East/Africa
FRENCH			
1000-1130	7842.4	CNM20/1X	Western Europe
	10213.0	CNM29	Eastern Europe
	14760.0	CNM61	Western Europe
	15752.7	CNM66/X2	North America
	15999.9	CNM69/1X	Southern Africa
	18220.9	CNM76/X9	Western Africa
	19171.1	CNM85/X11	E. Europe/Asia
0330-0500	7842.4	CNM20/1X	Western Europe
	10213.0	CNM29	Eastern Europe
	10634.1	CNM37/9M	Western Europe
	15752.7	CNM66/X2	North America
	15999.9	CNM69/1X	Southern Africa
	18220.9	CNM76/X9	Western Africa
	19171.1	CNM85/X11	E. Europe/Asia
ENGLISH			
1200-1400	7842.4	CNM20/1X	Western Europe
	10213.0	CNM29	Eastern Europe

****UTILITY (cont.)****

14760.0	CNM61	Western Europe
15752.7	CNM66/X2	North America
15999.9	CNM69/IX	Southern Africa
18220.9	CNM76/X9	Western Africa
18496.1	CNM80/X11	Middle East
19171.1	CNM85/X11	E. Europe/Asia

(20-Dec-91/Mark Burkart/SW ECHO)

The call sign of our [Greenpeace] coast station is KMC237 (antennas going up as we speak).

I don't have the listing of the ship's call signs here with me at home. The ships of interest would probably be the S/V Rainbow Warrior (now in San Francisco for refit), the M/V Greenpeace (which left Singapore about a week ago) and the M/V Gondwana (preparing to relieve the crew at our Antarctic base). All are Dutch registered and all calls have a PC prefix. I'll have to look up the calls.

A smaller ship, the M/V Moby Dick/DIKK is operating in U.S. waters but uses mostly VHF. The river boat M/V Beluga is back in Germany and also uses VHF. The M/V Sirius has been assigned as a training ship and operated in Europe. The sailboat S/V Vega is being sold.

That's the fleet as it now stands. Of those it's the Rainbow Warrior and the Greenpeace which we expect to work regularly from San Francisco. (12-07-91/Dick Dillman/SW Echo)

****SHUTTLE MONITORING****

Amateur Radio Retransmission of Shuttle Audio/Video

The Goddard Space Flight Center Amateur Radio Club usually transmits NASA Select audio on the following amateur frequencies: 3860 7185 14295 21395 28650

AO-13 (AMSAT OSCAR-13) Satellite; 145.945 MHz. Primary; 145.955 MHz. Alternate. This Mode B requires a satellite-high gain antenna.

NASA Select Audio also transmitted via the following amateur radio repeaters:

Birmingham, AL	145.380 & 145.150	N4AHN
Huntsville, AL	147.100 & 145.100 MHz	Marshall Center ARC
Phoenix, AZ	449.000	
Los Angeles, CA	145.460	
Mt. View, CA	145.580	Ames ARC
S.Joaquin Val, CA	52.220	WD6BNO/R
Cape Canav., FL	146.940	K4GCC
Ashburn, GA	147.285	WD4EVD
Cedar Rapids, IA	146.400 & 444.300	NNOV
Minn/St. Paul, MN	145.150 & 147.120	WBOBQ/R 3M ARC
Dayton, OH	145.110	WB4LA
Houston, TX	146.640	W5RRR Johnson Space Ctr

People in the greater San Francisco Bay area and Sacramento can view the mission via the W6NKF Amateur Television repeater on Mt. Diablo which operates on 427.250 MHz with vertical polarization. Those with cable ready TVs and VCRs or cable TV converters can tune this equipment to channel 58 in the CATV format and by hooking up an outside TV antenna should be able to receive the telecast. This makes the service available to the general public, including schools, colleges, etc.

>From Ron Parize, ASTRO-1 Shuttle Astronaut:

Hi Folks!

This is in response to the question about shuttle frequencies. I tried to reply the other day but apparently it didn't work. The space shuttle transmits on three frequency bands, UHF, S-Band, and Ku-Band. The UHF frequencies are simple AM voice and very easy to copy. These frequencies are used for launch and landing operations, EVA communications, (i.e. from the spacesuits back and forth to the shuttle), and as an additional voice downlink when other channels are in use or the current ground station has no S-Band capability. The frequencies in use are:

296.8 MHz	- air to ground, or orbiter to suit
259.7 MHz	- air to ground, or suit to orbiter
279.0 MHz	- suit to orbiter or suit to suit
243.0 MHz	- standard Mil aircraft emergency freq.

The S-Band system is one of the primary orbiter downlink bands. The voice channels are digital slope delta modulation and are mux'ed in with the rest of the orbiter telemetry, very difficult to copy. Much of the downlink TV is on S-Band also but it is wideband FM and should be easily copyable. The frequencies are:

2287.5 MHz	- primary digital downlink
2250.0 MHz	- wideband FM with either main engine analog

telemetry during launch, or TV during orbit operations.

The Ku-Band system is used in conjunction with the tracking and data relay satellites and is used much more heavily in Spacelab flights than in others. The data is *very* high rate digital (50 Mbits/sec range) and therefore essentially impossible for you to demodulate and decommutate in your basement. Nevertheless the shuttle transmits on 15.003GHz. You should also note however that these transmissions are directed toward the TDRS satellite with a high gain antenna and would therefore not be copyable on the ground.

****SHUTTLE MONITORING (cont.)****

The UHF frequencies are fun to listen to but are not heavily used except during EVA's. You will almost always hear some activity on them however sometime during a mission but you just have to be patient.

Happy Listening!

Ron WA4SIR

Other Frequencies of interest:

USAF/NASA Frequencies

4.510 MHz	9.974 MHz
4.760 MHz	10.780 MHz
4.855 MHz	11.104 MHz
4.992 MHz	11.414 MHz
5.350 MHz	11.548 MHz
5.810 MHz	14.615 MHz
6.727 MHz	19.303 MHz
6.740 MHz	19.984 MHz
8.993 MHz	20.191 MHz
9.315 MHz	20.475 MHz

HF USED AT KENNEDY SPACE CENTER : 2.182 MHz 3.023 MHz

Search/Rescue (Aircraft):	164.800 MHz
(Ships):	148.500 MHz, 149.100 MHz, 162.000 MHz
S-Band Microwave	
Air-to-Ground:	2205.0, 2217.5, 2250.0, 2287.5 MHz
Ground-to-Air:	2041.9, 2201.4 MHz

NASA Aeronautical Frequencies VHF/UHF in MHz

KENNEDY SC PATRICK AFB EDWARDS AFB

117.8	118.4	116.4
121.7	121.7	120.7
126.2	125.1	121.8
126.3	126.2	126.1
284.0	128.7	127.8
138.3	236.6	
138.45	269.9	
149.925	290.3	
162.6120	318.1	
273.5	390.1	
335.8		
340.9		
348.4		
358.3		

KSC Ground Support VHF in MHz

148.480	163.510	170.350
149.170	163.560	171.150
162.610	165.190	171.260
163.460	170.150	173.560
163.480	170.170	173.680

(From NASA SPACELINK, Provided by the NASA Educational Affairs Division Operated by the Marshall Space Flight Center/Students for Explorations and Development of Space/16-Feb-92/Matt Sands/SW ECHO)

****PRINTED MATTER****

Dave Rosenfeld gives a positive review of a new propagation book which nicely bridges the gap between basic texts and weighty, mathematic tomes on the topic. "The Ionosphere, Communications, Surveillance and Direction Finding," written by Dr. Leo McNamara, and ionospheric physicist formerly with Australia's IPS Radio and Space Services and now working in the private sector. 237 pages, cost US \$59.50. Although half the book concerns itself with direction finding, there are excellent chapters on the ionosphere, propagation, and how the sun's activities effect reception. "McNamara provides clear, lucid explanations that hold the keys to taking that next step beyond what hobby-level publications offer." It's not for beginners, but it's worth the money for someone seriously interested in HF radio propagation. Publisher: Krieger Publishing, PO Box 9245, Melbourne, FL 32902. Price is \$59.50 & \$5 ship to North America, \$6 ship outside North America. There is also a European distributor; write Radio Nederlands for details on the latter. (12-Mar-92/Jonathan Marks/RN MEDIA NETWORK/AI Quaglieri/SW ECHO)

****RECEIVERS****

SONY ICF-SW77 RECEIVER UPDATE: In Holland and Germany, Sony has suspended deliveries to dealers of its new ICF-SW77 for the next couple of months to allow quality control tests on production models currently in Japan. Marks reminded callers that a couple of months ago MEDIA NETWORK tests on the ICF-SW77 revealed that medium wave performance and the synchronous detection facility are inferior to the Sony ICF 2001D/2010. Marks said that there are sufficient stocks of the ICF-2001D/2010 to "market it alongside the ICF-SW77 for the first part of next year". (12-05-91/RN Media Network/BILL KELSEY/SW Echo)

The GRUNDIG YACHT BOY 206 and YACHT BOY 204 are new analog receivers designed by Grundig and manufactured in Taiwan. Grundig product manager for audio Manfred Liches(?) described the YB-206 as "a 15 band analog receiver with a big speaker, extremely good sound, with 12 SW bands, MW, FM, and LW, and with a clock function." The YB-206 has a timer that will turn the radio off after a pre-set period. It will list for below DM150. The clock functions are deleted in the YB-204, which will list for

****RECEIVERS (cont.)****

about DM100. Both sets will use single conversion; Grundig found it impossible to include dual conversion for these prices. Marks remarked that Grundig ought not be apologetic offering an analog receiver, since many of the inexpensive synthesized receivers "make a lot of noise, and as a result the reception isn't so good. So it's better to have a good analog receiver than a bad synthesizer." Liches agreed, saying "it is better to have a good analog set than a lousy synthesizer set." According to Marks, the YB-206 and YB-204 offer 15 bands: mono FM, LW, MW, and SW (120, 90, 75, 60, 49, 41, 31, 25, 22, 19, 16, 13m bands, with "plenty of coverage either side of the official bands"). The set weighs 555 grams, including 4 AA batteries (1 for the clock & timer, 3 for power), and includes a plastic stand on the back, allowing the radio to be tilted when on a table. The stand is designed to "pop off" without breaking if the radio is accidentally dropped, and is easily replaced. Power consumption is extremely low, averaging about 25 mA at a comfortable listening volume (even on FM). The bandspread is good, and the tuning knob has just a slight backlash. The image rejection is quite good for such a receiver; "listening in the evening ours here in Europe to the 49m band, there were surprisingly few ghost signals."

BOTTOM LINE: "For a price of around US\$75 in Europe for the Grundig Yacht Boy 206 version, we think this set offers excellent value for money, especially for the traveler looking for a no-nonsense shortwave radio." Copies of the full test can be obtained from Media Network. (12-12-91/RN Media Network/Bill Kelsey/SW Echo)

In the latest issue of the German shortwave magazine "Weltweit Hoeren" I read a note about plans of Drake to start a new receiver in 92, which is higher in price and performance than the successful R-8. The same source reports from a further project of Drake. A receiver in the price-class around about 400\$US, which means a competitor to Sony SW 77 and Grundig Satellit-700. Unfortunately "www" did not mention their source!! Is there somebody out there in the US, who is able to verify these suppositions?? (12-24-91/Mario Gongolaky - Germany/SW ECHO)

Japan Radio Company/New York released the following information last week:

[NRD-535D Bandwidth Control Upgrade Kit]=====

The BWC Upgrade Kit is a modification kit for NRD-535D HF receivers with serial numbers lower than BR56005. This upgrade will modify the variable bandwidth control as follows:

- o Variable bandwidth operation in AM mode. Previously, AM mode operation was not possible.
- o BWC operation with the WIDE filter position. The range of the BWC is now 5.5 kHz to 2.0 kHz with the WIDE filter and 2.2 to 0.5 kHz with the INTER filter. Previously, only the INTER filter was variable.

The BWC Upgrade Kit will include:

1. A new crystal filter to replace FL-1 on the BWC circuit board (CFL-243).
2. A new set of PROM ICs to update CPU firmware.
3. A new CFL-D6S ceramic IF filter to replace FL3 on the IF FILTER circuit board (some units may not require this filter).

Installation requires desoldering of the IF filters, minor disassembly of the radio's front panel to change one PROM IC, and removal of the CPU board to change the other PROM IC (both ICs are plug-in type). Complete instructions will be provided for user installation.

Price: \$169.00 Available 1st quarter 1992. (20-Jan-92/Tom Sundstrom/SW ECHO)

REVIEW OF DAK VS SW20 VS DX380

This weekend, I obtained the \$49 shortwave radio from DAK (can't remember the model number, and it's not with me), the \$100 Sony ICF-SW20, and the \$180 Radio Shack DX-380. I have done side by side comparisons of these radios, on all bands, for a couple of days now. Here are the results:

Don't even consider the DAK radio. It's sensitivity is so poor that it can't receive even some local stations on MW and FM. It can't receive signals on SW that come booming in on the other 2 models. It has such poor selectivity that for some local MW stations, it receives them both simultaneously. There is a severe problem with images throughout the SW band, and local MW stations show up everywhere, sounding like SSB. (They don't show up on the other 2 receivers.) This is an *extremely* poor performer on *all* bands.

The Sony ICF-SW20 has excellent sensitivity and selectivity as an earlier poster noted. It's a fine performer. It is a little more sensitive than the DX-380 on all SW bands. The MW receiver is very comparable with the MW receiver in the DX-380. The FM receiver, however, is poor. The FM receiver suffers both from lack of sensitivity, and lack of selectivity. The DX-380 has a superior FM receiver. It does far better on it's whip than my stereo receiver does with the antenna on the roof. It is very sensitive, and selective enough to receive very weak distant stations 400 kHz away from strong local stations. The DX-380's MW receiver is comparable to the ICF-SW20. The SW receiver, however, is a little less sensitive. By guess, I would say that the noise figure is about 2 dB higher on the DX-380's shortwave receiver. The difference only shows up when listening to very

****RECEIVERS (cont.)****

weak signals. The DX-380 has a narrow(er) filter, but I found it to be mostly useless. The ICF-SW20 does much better with interference, with its own built in IF filters. The speaker on the ICF-SW20 is so small, that it does not reproduce bass well, and some very useful filtering is done by the speaker. (Using the supplied earphone, or wide frequency response headphones, destroys this advantage.) Sometimes, it was difficult to understand the announcers on SW stations, with heavy interference and heterodyning, with the good bass response (comparatively) of the DX-380. The LW receiver on the DX-380 is basically useless, because of severe image problems with the local MW stations. One feature/bug of the DX-380 that I really didn't like is that the audio is interrupted while tuning, on all bands. I'm not sure yet, but the DX-380 appears to eat batteries.

Here is a list of advantages, side by side:

- | | |
|---------------------------------------------|---------------------------------------------|
| DX-380 | ICF-SW20 |
| - better FM rcvr | - \$80 cheaper |
| - digital freq readout | - better SW rcvr |
| - digital freq entry | - much smaller (shirt pocket size) |
| - more bands (LW, 120, 90, 75, 60, 21, 11m) | - probably nicer on batteries |
| - general coverage 150kHz-30MHz | - poor audio freq response (great for talk) |
| - 2 clocks (with standby and sleep mode) | |
| - 45 memories (9LW, 9MW, 9FM, 18SW) | |
| - scanning | |
| - far better sound quality for music | |
| - FM stereo when using headphones | |

The DX-380 has a built-in jack for an external antenna, and the performance may be significantly enhanced by a trimmed dipole as compared to the built-in whip. With an external antenna, the DX-380 may outperform the ICF-SW20 (which doesn't have an external antenna jack) on shortwave. However, an external antenna *could* be attached to the ICF-SW20 by means of alligator clips, between the built-in whip and the outside of the earphone connector (ground).

Both radios have a built-in audio filter, but I found them mostly useless.

The DX-380 isn't very large, but it is large enough that I'd like it to have a handle. It doesn't have one. (Kenneth Hendrickson/BITNET/29-Jan-92/Kirk Baxter/SW ECHO)

The editors of the WORLD RADIO TV HANDBOOK have released a press statement this week from their editorial offices in Amsterdam. It announces the 1991-92 WRTH Awards, which this year have been given in four categories. And here are the results.

The BEST ANALOG PORTABLE RECEIVER OF 1991 was the GRUNDIG YACHT BOY 206. Grundig was complimented for designing a simple portable radio for those with a tight budget. This set combines good audio with a wide choice of SW bands. And it's easy to forget that the vast majority of SW listeners still buy a cheap, portable, analog set. Why not? Only a relatively small percentage are able to afford more than US\$100.

The next category was the BEST DIGITAL PORTABLE RECEIVER FOR 1991; that went to the PANASONIC RF-B45. Nicely styled, this radio combines ease of tuning with pleasant audio, for the price. And now that Panasonic have adjusted their pricing structure, in most parts of the world, this set's becoming excellent value.

Much further up the price scale, the BEST COMMUNICATIONS RECEIVER OF 1991 went to the JAPAN RADIO COMPANY for their NRD-535. High performance, excellent computer connectivity, and ease of use, made this set a clear winner. In fact, it's continually being added to, with a number of extra options being released in the course of this year. If they're all realized -- well, this will make the NRD-535 quite amazing.

Last and not least, the award for the MOST INNOVATIVE SOFTWARE OF 1991 went to BANDVIEW 1.5. This is a very versatile computer program for IBM computers, and compatibles, and owners of either the NRD-525, the 535, or Kenwood's R-5000. Author TOM KASHUBA has worked very hard to make this program work completely independently from the radio. Now the NRD-535 edition of the computer program is by far the best. (01-09-92/RN MEDIA NETWORK/01-10-92/Bill Kelsey/SW ECHO)

RADIO SHACK DX-390

I thought y'all would be interested in some comments on this receiver. I might mention that I have previously been an owner of many of the rather "old" type of tube SW radios, such as various Hallicrafters and their like, and assorted old ham gear, and my actual hands-on experience with the more modern PLL/digital receivers has been limited to an old (not the newer) Sony ICF-2001. I was quite happy with that radio until it recently died. So, I figured I'd get the DX-390 and give it a try.

Features:

1. PLL synthesis.
2. LCD display with separate indicators for most functions.
3. Dual clocks with 1 alarm.
4. 4 tuning modes: auto scan, manual scan, direct frequency entry, and rotary dial with two increment levels.
5. 45 memories (18 SW, 9 FM, 9 MW, 9 LW).
6. 2 control locks. (one for the tuning knob, and one for all buttons +

****RECEIVERS (cont.)****

- tuning knob).
- 7. Sleep timer.
- 8. RF gain control.
- 9. "AM narrow/wide" switch selectable selectivity.
- 10. BFO for SSB/CW reception.
- 11. AC/DC power options with battery backup.
- 12. Battery level indicator.
- 13. Stereo headphone jack.
- 14. Rotary volume and tone controls.
- 15. Whip antenna and external antenna jack.
- 16. LCD bar-graph signal-strength indication.
- 17. Frequency coverage (tuning increments): FM 87.5-108 MHz (1 or .05 MHz); LW 150-519 kHz (9 or 1 kHz); MW 520-1710 kHz (10 or 9 or 1 kHz); 10 and 9 are switch-selectable behind the main batteries) SW 1.711-29.999 MHz (5 or 1 kHz)

"Plus's" and "Minus's" (mainly the latter):

1. SW broadcast sub-band limits are pre-programmed into the receiver, so you can access a band with a couple of button pushes without having to memorize the frequency limits of the band. Unfortunately, these limits are not changeable, which leads to some rather irritating consequences, due to the fact that the auto-scan feature sees these limits as boundaries that it will not cross. These limits do not effect manual tuning (other than a beep occurring when you cross one...cute.) (See below for more on this aspect.) Since there are plenty of stations operating outside of these limits, you have to be careful when tuning to these stations with the scan buttons so that you don't activate the auto-scan feature. Also, if these band limits change in the future (and I suspect that they will) the "features" tied to these limits become, to some extent, obsolete. The limits for this model are (in MHz): 120M: 2.3-2.495; 90M: 3.2-3.4; 75M: 3.9-4.0; 60M: 4.75-5.06; 49M: 5.95-6.2; 41M: 7.1-7.3; 31M: 9.5-9.9; 25M: 11.65-12.05; 21M: 13.6-13.8; 19M: 15.1-15.6; 16M: 17.55-17.9; 13M: 21.45-21.85; 11M: 25.67-26.1

2. The "AM WIDE"/"AM NARROW" switch (which you aren't told if it means RF or AF selectivity, although I suspect it's AF) is a nice idea, but I think it isn't nearly as narrow in the "narrow" setting as I'd like. So far, about all I can use it for is as a kind of mushy addition to the tone control, to cut off some occasional high squeals and hisses that can be irritating.

3. The, IMHO, lousy RF selectivity has got to be one of the "features" of this radio that I really don't like. A strong station 5 kHz away (on the SW band) can make a weaker station very hard to receive. I also found there to be way too much intermodulation, across the entire LW-MW-SW bands. Lowering the RF gain can help to some extent, (and thank G'd it's there) but only at the expense of the signal strength of that weak DX station you're trying to pull in. I have found that of an evening, when the frequencies from, say, 5-10 MHz really "open up", you can hear a mush of several strong signals simultaneously across a huge range of frequencies. IMHO, I would have been happier to trade off a few of the "bells and whistles" this receiver has for an improved front-end design in the RF section.

4. The receiver has a number of different ways to tune, and I'm sure that everyone's opinion will vary, but while I personally don't have too much trouble keeping all the differences in mind, I think that others might have a legitimate complaint in this department. As an example, when you tune via the rotary knob, you need to be aware of which tuning increment you've set for the knob. (These increment settings mean different things on different "bands" - see point 17 in the "Features" above.) Further, if you decide to tune with the "Manual/Auto" scan buttons, this setting has no effect, and you are limited to the coarser of the two. Also, as I noted above, you have to be careful when using the scan buttons not to switch over to the "auto" mode when you want to tune in the "manual" mode. (Auto mode is activated by holding down a scan button for a "couple" of seconds.) The auto scan mode, I have mentioned, does not allow you to set its limits, and so you have a real problem if you would like to scan outside of the built-in limits. It will happily scan along, until it gets to one of these, and then it will stay inside this built-in sub-band. For example, I can start an upward scan at, say 5.900 MHz. When the scan reaches 5.950 MHz, a beep informs me I have "hit" a band limit and the LCD display tells me this is the "49" meter band. The scan continues upward until it hits 6.200 MHz and then starts over again at 5.950 MHz. If I want to scan above 6.200 MHz, I have to interrupt the scan, manually set the frequency to something greater, and re-start the scan. I think it's a shame that these limits are not changeable. Of course, apart from this I think it is handy to be able to tune to a frequency in the xx-meter broadcast band without having to memorize a conversion table from xx meters to yy frequency. (Or divide into 3 in my head. :-))

5. The radio has two clocks, but only one clock display, fortunately separate from the frequency display. (BTW, I think the entire display is, on the whole, nicely done.) The main disadvantage here is that the alarm works for whichever clock is displayed, rather than being selectively tied to just one or the other clock. Fortunately, the button that switches clocks is recessed, so once you set it up you won't accidentally switch to the wrong clock. I found, rather to my surprise, that the clock cannot be set to a time signal precisely! It has its own idea of when the minute is going to change, and resetting the time doesn't change this. I haven't tried the experiment yet, but I assume that the clock starts when you insert the backup batteries, so if you want your time to be more than +/-30 seconds accurate, you need to tune into WWV on another radio (!) and try to insert the backup batteries on the correct time tick. Again, there will be plenty of people who don't care about this, but I think this is the dumbest design flaw of the whole radio. After all, a \$2.95 wrist-watch can do better. battery level indication, which activates for a few seconds when you shut off the radio, and uses the signal-strength

****RECEIVERS (cont.)****

display for its indicator, gives different readings on my unit, depending on which band I am receiving when I power down! (Upon further investigation, I find that this seems to occur when the batteries' strength is just at a point where the display is "quantized". Some bands will indicate differently than others at this point. Weird...but only minor)

6. I found the FM section to be quite good. It would pick up some medium-range stations better than other portables I own, and I am personally quite pleased with the audio performance, although I would have liked a "balance" control.

7. Another minor point, but one I would like to add. I much prefer the rotary controls on the DX-390 for volume, BFO, RF gain, and tone, as opposed to the sliding controls which I lived through on the old ICF-2001. The controls on the ICF-2001 got old, and "noisy" due to actual wear (as opposed to dirt) and you could "blow your ears off" trying to adjust the volume. Although I am sure that the DX-390's controls will also eventually wear, I don't think this will involve patches of FULL VOLUME sound like I got on the '2001.

8. Apparently, you are stuck with the built-in ferrite antenna on the MW and LW bands, so I would guess that real DXing on these bands is out, or at least, rather inconvenient. The FM band also uses only the whip, so the same goes for FM DXing.

9. The rotary tuning "chuffs", ie, when you tune too fast, you don't hear any audio until you stop tuning. Quite annoying.

Summary:

On the whole I would rate this receiver as a reasonable performer. It has a number of "bells and whistles" which seem to be sensibly thought out with an uncluttered display. I think it would do all right for just tuning around the standard SW BC bands and listening to medium distance FM and MW stations. It has a real problem with intermodulation and poor selectivity (IMHO, anyway), but seems to be all right for listening to the major "players" on the SW bands. I wouldn't say it was any better on this last score than my old ICF-2001 was. As far as sensitivity goes, I find that 50 feet of wire strung around my house (an old wooden dump) brings in lots of stuff, certainly quite better than the '2001 did, but also invites the above intermodulation. This is, IMHO a net gain. Not having any of the competitors' current models, I really can't compare the DX-390 to other radios in its "class", although I can say that I am pleased personally with the radio. I do think that Radio Shack is less than proud of this unit, based on the simple fact that the "Specifications" published in the manual conveniently neglect to give any "figures-of-merit" vis-a-vis sensitivity, selectivity, etc., etc. Assuming that they even bothered to measure these properties, it doesn't take being a rocket scientist to guess why these aren't published in the manual. (L. Gene Battin/BITNET/14-Feb-92/Kirk Baxter/SW ECHO)

ICOM R-1

KIRK BAXTER: I've called EEB to see whether they planned any mods, and of course - no news. The R1 would be a great radio if it just had better selectivity, and it looks like that might be possible with some of the ongoing research.

BILL CHEEK: Kirk, don't miss my lengthy technical review under the subject, Icom R-1 Problems, as posted yesterday. Overall, things look grim for any substantial improvements to the R-1. That England firm may be solving one problem only to create another elsewhere. The jury is still out, but is leaning 11-1 for conviction and hanging. There may be a brighter ray of hope. I heard something to the effect that Icom-America has applied to the parent company in Japan for permission or authorization to do some field changes to the R-1 here in the USA. This may or may not mean anything, of course, and it might not even be true in the first place. But that's it up to the moment.

KIRK BAXTER: If you hear anything more about this, please pass it along!!! It is rather annoying to think that Icom released a radio (at a rather expensive price), that they will be upgrading (probably for a good price also). One would think that the RF conditions in Tokyo would be just as bad as any other city (if not worse), and they should have had a good idea how the radio performed. Oh well, I think it's still too early to count the R1 out yet. It's been on the market too short of a time, and EEB may yet come out with some type of mod. Do you recall seeing the message a few weeks ago about Alinco, and their plans to come out with a DR-1 wide band receiver (basically an R1 clone?) Do you get any inside news on Alinco?

KIRK BAXTER: The modification that RayComm in England (I think that's their name) does to the R1 supposedly fixes the problem I mentioned first. Once fixed, the radio then becomes useful as a scanner. As it currently is, since the unit locks up on strong signals that are 100-200 kHz away, scanning is useless. The scan and store feature is also useless. I've tried the R1 in less signal dense areas, and it works much better, so that I could see where people in rural areas might not be experiencing these problems on VHF/UHF - but they are still there on HF. (i.e. you'll still hear WWCR on 15890 in addition to them on 15690). The modification that RayComm performs also reportedly clears up a fair amount of the synthesizer noise in the radio. (This according to a fellow who sent this overseas for their modification.) g the R1 up to If you become satisfied that you have found a solution, I'll send you my radio to work on. From the stories that the folks at EEB were telling me about RayComm (such as radios coming back DOA, and with the cases badly damaged), I'd rather not

****RECEIVERS (cont.)****

send my radio to them (plus all the hassles of customs, etc...)

BILL CHEEK: Amazing.....that your above message was composed and sent well before you could have received my lengthy Technical Evaluation of the R-1, and more amazing some of the correlation between the above, my report and the previous message from you that I responded to this morning. You'll note my concern for errors in any serious hacking of the R-1. You did note EEB's observation that some of RayComm's work appeared to be defective. This correlates 100% with my concerns. To be perfectly honest about it, I am concerned that I would make an occasional serious error when hacking the R-1....and I have mastered some microsurgical techniques. I am not at all confident of my ability to work 100% error-free in that wee little beastie, and I am very good at what I do. Even being good, I make occasional errors in the easier to work on stuff, but which (fortunately) are easy to rectify; not quite so easy (or inexpensive) in the R-1. Hence, until I have more data and experience with the R-1, I'll not be doing any serious work on them.

By all rights, I should go out and buy one but that kind of investment has to serve a number of purposes, else it would be a waste, and I can't afford waste in my operation. There are a lot of people involved in the R-1 project, however, and among us, maybe something pertinent and useful can evolve. You are perfectly free, by the way, to take that Technical Evaluation on the R-1 that I posted here yesterday and spread it around the various BBS's and networks on which you participate. I do not see R-1 solutions as ultimately being creditable to any one person; that a group effort will be best; and I think maybe there is something of general value to the Group in that Evaluation, so share it with whomever you come in contact that might be interested. I understand there are people on Prodigy, CompuServe and other networks all engaged in a focused effort. I am represented on GENIE, so that end has been taken care of. I don't say that it's impossible to remedy the R-1's problems, but it is something that we ought not to just jump into headfirst without carefully testing the waters. This is where the Group Effort will be of immense value. The bottom line is that I would feel awful sorry for myself if I boogered up someone's R-1 because I didn't know what the hell I was doing. As it is, I have two on my bench right now and came mighty close to making some terrible mistakes. Whew.....caught myself just in the nick of time, too!!!

As I see it, the adjacent channel rejection problem can probably be remedied in due time without robbing Peter to pay Paul. I have strong convictions that it will be impossible to remedy the strong signal overload problem,

KIRK BAXTER: If the adjacent channel selectivity can be improved that would be a GIANT step forward with the R1. It would render the unit MUCH more useful as a scanner, and make it more pleasant to listen to (without so much squelch popping from signals 200 kHz away). As far as fixing the strong signal overload problem, as an intermediate fix, I picked up a couple of extra rubber duckie antennas at the Dayton Hamfest, and cut them until they were about 1" and 2" long. The R1 is so sensitive that all stations still come in quite well, but it has reduced the signal strength so that overload is much less of a problem. NOW, if the adjacent signal problem could only be fixed so easily.....

BILL CHEEK: ...and to my way of thinking, this is the more severe problem of the two. Drats! But then, as I said earlier, Icom-America is up to something so maybe there is a ray of hope somewhere. Let's keep our fingers crossed! Nice to rap with you, Kirk. Take care.

BILL CHEEK: I have completed an intermediate technical evaluation of the ICOM R-1 DC-to-Daylight pocket scanner; a most awesome little package of dynamite! The focus of my investigations was on the alleged and much-talked-about weaknesses & deficiencies of this unit; not on its strengths and good points, which are numerous and well documented elsewhere. The bottom line of my analytical effort is that I will not be adding the R-1 to my arsenal of monitoring equipment at any time in the near future; not because of any new discoveries or terrible shortcomings but because the danged thing is so tiny and miniaturized that it is next to impossible to do anything with it, either to cure its few shortcomings or to add anything new and exciting.

Here is the deal in a technical sense: the R-1 has two serious problems: (1) Very subject to strong signal overload, and (2) extremely susceptible to adjacent channel interference, mostly on the LF-MF-HF AM bands where selectivity is more than desirable; it's a necessity. Poor Adjacent Channel Rejection in this unit results from the wide 455 KHz IF filter on the DET-A board, which is used in common with both AM and NFM modes. The 15 KHz width of this filter is more or less satisfactory for VHF & UHF NFM requirements but much too wide for LF-MF-HF AM shortwave bands where channel separation can be as little as 3 KHz. Imagine then, up to five different signals on one channel. No thank you!

So what about a remedy for inferior Adjacent Channel Rejection? It does seem that a company in England, (RayComm), is doing a mod that essentially replaces FL-1 on the DET-A board with a narrower much sharper IF filter. I am amazed that they dare do this, but more power to them. I won't attempt that approach at this time for several reasons. The problem as I see it, is two-fold: first there is the matter of space or available real estate in the R-1; zilch. All decent IF filters of which I am aware are somewhat larger than the stock FL-1, and therefore will not find an easy residence to replace FL-1. But even if one is found, and RayComm apparently knows of one, a serious problem still remains!

****RECEIVERS (cont.)****

A useful IF filter for LF-MF-HF AM operation, say with a 6 KHz bandwidth, will be too narrow for some NFM signals, especially at 800 MHz and up! A narrow IF filter will result in clipping of FM signals which are FM-deviated more than 3 KHz as is usually the case for 800 MHz & up. Therefore, the ideal remedy for excessive Adjacent Channel Rejection is the installation of a narrow IF filter that is auto-switched INTO the circuit whenever the AM mode is selected and OUT for NFM. An ideal approach that won't cause more problems than it resolves is not yet at hand because of space limitations and probable unavailability of a suitable miniature IF filter.

I am uncomfortable at performing mods that can't be made rather professional as if they were designed there in the first place. Therefore, I will not be performing modification services to the R-1 in the near future, and at least not until more information and experience on the unit become available to me. At this time, I see a remedy of the poor Adjacent Channel Rejection as causing other problems where there were none before; i.e., limiting the utility and usefulness of the UHF-hi bands where the full bandwidth of the NFM IF filter is required.

Then there is the matter of invading and hacking the R-1. After careful review of the innards of the R-1, I can only conclude that due to its compressed design and lack of working room, there is a substantial chance of serious error, mechanical and/or electrical, associated with an invasive effort. This makes a commercial hacking venture quite unfeasible and at best, very risky to the hacker. Not many pro's can afford to replace a mis-hacked R-1 at its current cost, you see. Neither can most hobbyists, therefore any amateurish invasion with the idea of correcting Adjacent Channel Rejection problems is ill-advised at this time. I do not say that it's "impossible" since further investigations, research and development may yet disclose a viable approach. Any such are not apparent right now.

There is the matter of strong signal overload which pretty much eliminates the use of external antennas and preamplifiers for the R-1. It will be virtually impossible to remedy this serious deficiency. The singular reason for the overload problem is that the RF Front End of the R-1 does not employ AGC (Automatic Gain Control), therefore it can operate only over a limited range of amplification before it is driven into cutoff and saturation, either/both of which produce symptoms of overload including clipping, distortion, desensitization, spurious & pseudo signals across the band. The only practical remedy for this deficiency is to reduce the signal strength into the R-1, either by a less efficient antenna or by use of an attenuator between the antenna and the receiver. Neither remedy is what I call very appropriate for this serious of a receiver.

One possibly viable approach to remedying the Adjacent Channel Rejection problem of the R-1 (for you adventuresome hackers, myself included), will be to intercept a signal trace in series with FL-1 on the DET-A board, either into or out of the FL-1 filter. A suitable point on this circuit trace will be broken and a narrow, sharper 455-KHz IF filter will be inserted in the cut so as to be in series with FL-1. To make this new filter switch in and out, depending on AM or NFM mode, the IN & OUT terminals of the new filter will also be connected to the IN & OUT terminals of a CMOS bilateral switch such as a 74HC4066, with the control terminal of the switch connected to the Collector of Q-7 or either Base of Q-5 on the DET-A board. This is a +3v control signal for the NFM/WFM modes (0-v for AM) which will enable the 4066 switch to bypass the new filter in the NFM/WFM modes, and to be inactive in the AM mode. Some refinement to this approach may be necessary for ultimate best results, but it sure seems the way to go at the moment for the researcher. For those who can't visualize this technique, imagine a simple SPST switch connected to the IN & OUT terminals of the new filter. When the switch is closed, the filter is effectively shorted out, thereby routing any signal around the new filter. When the switch is open, signals must pass through the filter. OK, the Collector of Q-7 or either Base of Q-5 on the DET-A board have this Mode Control Signal available, which can be used to control a 4066 CMOS bilateral switch to bypass the new filter as desired; i.e., OUT for AM, and IN (shunted) for NFM & WFM. NOTE: A 4066 chip is rather large for the R-1, so a suitable alternative might be a TC4S66F (IC-10 in the PRO-2006) or a replacement TC4S66F (IC-2 on DET-A of the R-1). The TC4S66F is a very small single section SMT CMOS bilateral switch.

In closing and summary, any improvement of the Adjacent Channel Rejection in the LF-MF-HF AM bands will degrade the performance of the NFM mode in the VHF-UHF bands. Depending on your interest, the tradeoff of one serious problem for another is not a good way to go. More research and analysis is required before we settle on a solution. I keep hearing that RayComm of England has solved the problem, so I would like to hear from those who had this procedure done; specifically, I want to know how performance was affected on the Cellular Mobile Telephone bands where the FM deviation is in excess of 5 KHz. I would also like to scrutinize and test an R-1 that was modified by RayComm. At this point, I am concerned that in solving one problem, they may have created another, possibly worse one.

This concludes my intermediate technical analysis of the R-1 and any pending solutions to its deficiencies.

KIRK BAXTER: That's quite a summary Bill!!! The R1 is such a small package that I was afraid that it would be too hard for much of anything else to be put in that case. It would take someone with a lot more skill and careful hands than I have to make any modifications to that radio. Too bad the R1 doesn't lend itself to some of your improvements. It does need help in the selectivity area, and you could probably have had quite a business doing after-the-sale mods on the unit.

****RECEIVERS (cont.)****

BILL CHEEK: Perhaps it may yet be, but I'd prefer on this one to disseminate any and all info as widely as possible so as to benefit the greater majority! I prefer to do it that way with virtually everything I develop anyway. Once in a rare while, I'll hold a certain mod or procedure under copyright or proprietary status for a limited period so as to recoup a part of my investment of time and resources. This rarely results in any semblance of a "land-office rush" though, and actually the market is much better with wide dissemination because more people can do it themselves and talk about it to others who can't do it for themselves, etc., etc. And in the greater perspective, the more people who are helped, the farther Hobby Radio advances. Sometimes the big picture is more important than any small piece of it. In the case of the R-1, it will be much better to evolve a generic solution so as to encourage sales of the damned thing and therefore successive evolutions of the R-1 may become better designed, lower in cost, and more people will buy them, and I will be stimulated to concoct more things useful for them. It is a vicious circle, you see. By the way, I don't know if I ever told you or anyone else, but I HATE HACKING! The three loves of my life are in order: wife/family; using good equipment; and writing about radio and other things. Since the manufacturers don't provide me with decent equipment worth the money, I have to torch up my soldering pencil; run the equations on the computer; slave over the bench until my radio is hacked the way I want it. I hate the process of getting there, but it's the rewards at the end that make it all worthwhile. The bottom line is that I can then write about things....and I'd sooner sit here at the keyboard and write all day long as eat. So the more things I develop and concoct, the more I love whatever it is that I hacked and then I get the sheer fun of being able to write about it. Kind of weird, huh? Anyway, I think a solution to the R-1's problems will come about, but I want others involved in the development of that solution. RayCom of England took the lead and my best role in this process may be that of facilitator, coordinator and public relations than in the engineering and hacking of that minuscule little puppy. Don't despair, though....

JIM GEITH: What bugs me, is that the R-1 was in fact out for a year or two before it hit the USA. AND it was still goofy and only had limited memory. Between you and me, that is quite enough time to at least get some "clean up work" going. IMHO.

KIRK BAXTER: I heard that there were R1's sitting in warehouses waiting to be distributed during this year delay. As you may have heard, the R1 delay was caused by Uniden (the great scanner monopoly in the US) which had filed suit against Icom for patent infringement. Uniden, which bought Regency, now holds most of the US patents on scanning circuits, and they were the main force keeping the R1 in the warehouse instead of in the stores. During this time, lawyers were making their money, and nothing was done to the radio. Still, I agree that Icom knew from the start that the R1 had shortcomings. It would behoove them to produce quality radios that live up to their reputation.

SCOTT HARVEY: I have seen several messages of late that refer to Raycomm in England that does mods for the selectivity problem to the R1. I would like to know what they charge, in \$ not pounds please, and what anyone has found to be the turn around time.

BILL CHEEK: I *think* the charge is around US\$100 plus shipping. Turnaround time is disappointing, according to reports that I have received, though 90%+ seem to be satisfied with the results, there have been some to report completely inoperable receivers upon receipt. If I were you, I'd wait just a little while. I am exploring solutions to the selectivity problem and will make the information available in the public domain when I've hit upon something concrete. If you can do the work yourself, great; if not, you can take the procedure to someone who is technically inclined. Have a good think about things as other replies come in and don't do anything rash until you've sorted through all the pro's & con's.

SCOTT HARVEY: Thanks for the info. What I would like to know is what did they do to the R1 and is it a big improvement? Also did your unit come back in good shape or battered like some rumors I have read here?

MICHAEL SCHUSTER: It primarily improves the adjacent channel selectivity and removes images of strong signals a few hundred kHz away that seem to plague some (but, apparently not all) R1's (Hi, Bill C!). They mangled the tops of some of the screws on the case, and the radio appears to have been held in a vise without protection (there are jaw marks on the sides). The rumor about being "battered" probably stems from a report form Usenet, which I posted here, from a guy in California who sent five R1's to Raycom for modification. One returned dead, because one of the tiny wires used to connect the new filter had broken loose. Rather than send it back, he tried to repair it and ended up turning it into a paperweight. The R1 is =not= a fun radio to work on.

KIWA FILTER MOD FOR THE SONY 2010

I just finished replacing the wide filter in my Sony 2010, supplied by Kiwa Electronics. Let me screw it back together and see how it sounds (just kidding, that's already done).

The verdict is that I'm totally thoroughly completely pleased with the mod, couldn't be happier, well worth the 14 bucks, my first impression is that it sounds twice as good as before, etc.

****RECEIVERS (cont.)****

Note that I'm a software guy, and the chip swap was a fairly painstaking hour and a half for me since I'm no wizard with a soldering iron and as the board (and I) started to smolder under the heat of the iron (think "Salvador Dali"), I wondered whether I was turning my quite beloved 2010 into a plastic box full of project parts. So to really understand the point of this note, you have to realize that my elation is a combination of the fact that I didn't destroy my radio (as much as I can judge at present, having rifled through its functions), the fact that I got it back together without having any pieces left, the fact that it seems to work in the manner that it did before, and not only that, it sounds, well, considerably better. (Note that the Dali bit was a touch of exaggeration, but I still wondered whether I was frying anything.)

The general effect is that the sound is crisper - less noisy and cleaner on strong signals, and it seems less prone to whistling. It sounds like I put in a better speaker or something. It's like the short wave fairy granted me a wish. About the actual surgical procedure, it was kinda rough for me to get the old filter off the main board. The instructions talked about pulling the two ribbon cable connectors, but there were a few other wires that seemed to hold the main board to the radio chassis. The directions mentioned that it might be possible to get at the old filter without pulling the ribbons, which is what I did. Problem was that I kinda sat there on the floor with the thing in my lap and poked at the pin side of the board with my iron. My solder sucker's mouth seemed a bit too big, but again, I'm no hardware hacker. I kinda poked and sucked away at the pins until the filter got loose, and then I yanked at the filter with one hand while I poked with the iron with the other. The old filter came out in one piece, legs and all, so don't you laugh. I'm sorta glad no one was there to watch, then again, having an able two-handed assistant would have made the task easier.

I have no doubt that a normally adept electronic hobbyist could do this mod in his sleep, on the other hand, plenty of swl'ers are hardwarily challenged like I am, so I figured I'd share this experience while it's fresh. The instructions were quite reasonable. Reseating the board was also a bit tricky - you have to line up the volume, rf gain, and hi/lo/news sliders - the vol and rf sliders seemed easier when you set them sort of in the middle, next to a board alignment notch - not impossible. At least there were none of those little string dealies like you have in a radio with an analog dial sliding pointer. Yecch.

In all, the scariest part was wondering whether the iron was frying any of the filter's friendly neighbors on the board, since I'm not wise to how much heat the various little guys can take.

Anyway, Kiwa was prompt. My order arrived there on 1-Feb. I got a polite apologetic letter a couple of days later saying that they had gotten a glut of orders lately and they were expecting a new lot of filters on 7-Feb, which is when he actually sent me mine via 1st class mail.

Their address is:
Kiwa Electronics
612 South 14th Ave
Yakima, WA 98902

509 453 KIWA (509 453 5492)

They take personal checks but do not take credit cards at this time. I have NO connection with these guys except as a happy customer with a 2010 that sounds lots better than new.
(Andrew Tannenbaum/USENET/14-Feb-92/KirkBaxter/SW ECHO)

My story is a little different. I first replaced the wide filter with the Kiwa filter, then listened carefully. I was disappointed in two things: (1) the Kiwa does not seem to be centered on 455 kHz and (2) there is significant loss of high frequencies, especially in medium wave broadcasts where you can really hear it.

Let me state that the 5 kHz whistle that drives me to distraction after about 10 minutes of listening is well and truly gone. You won't hear it ever in any situation on any frequency (this after extensive cataloging of various amounts in various situations - times, frequencies, locations, etc.). I can't get the radio to whistle at all any more.

Unfortunately, the lower side band (using the synchronous detector) has an easily noticeable loss of highs (though I might be hypersensitive to highs - my two housemates could not hear the difference at all - one actually thought that the new filter had better highs) while the upper side band has a pronounced upper mid-range projection usually (but not always) accompanied by noise/distortion. (Hope this doesn't sound to much like rec.audio :-)) This makes the voices on BBC World Service much easier to understand and the music much duller.

After one night of listening, I found myself yearning for the factory filter which I re-installed the next night in place of the old narrow filter. Now I can A-B the two. After another night of listening, I decided that there are situations where the Kiwa sounds great, situations where the factory wide sounds better and situations where they both sound lousy, but in a very different way. Suffice it to say, the flatness of the frequency response changes radically when changing from one filter to another. It also changes radically when changing from lower sideband to upper in synch mode. (In fairness, the factory wide filter has the opposite problem - that is, the lower sideband always has more high frequencies than the upper - thought not nearly as much difference as the Kiwa.) Of course the SSB is pretty bad right now, but I don't listen to SSB much. I'd like to have all three filters,

****RECEIVERS (cont.)****

but then I'd have to buy another 2010.

Actually, what I'd really like is a shortwave radio that is as good as current technology permits and still portable (yes, I consider the 2010 portable - I'm taking mine to China this summer). SW-777?

I plan to keep my radio the way it is now for a while to see if my impressions change. In summary, the Kiwa sounds different than the factory wide - more upper midrange punch that makes voices more recognizable, but less high frequencies which, for me, destroy much of the subtlety of music. When listening to local broadcasts of stations with the same program on AM and FM, I have noticed that the AM, with factory wide and synch, sounds better than the FM, which sounds sort of thin. I can't make the same statement when the comparison is with the Kiwa.

I am looking forward to compact disc quality in international broadcasting, but I doubt I'll live to see it. I still love radio more than tv "because the pictures are better". (Andy Mai/USENET/14-Feb-92/Kirk Baxter/SW ECHO)

UK SURPLUS RECEIVERS

The most likely source in the UK (England) is:

M & B RADIO (LEEDS)
86 Bishopgate Street,
Leeds, LS1 4BB,
Yorkshire,
England

.... Tel: 0532-435649 Fax: 0532-426881

They have all sorts of lovely radio receivers come up regularly, including:

- AR88
- RACAL RA17 (series) - ex Military & probably the best valve SW receiver ever made.
- Eddystone - (including the 880's) - real class!!
- Plessey }
- Redifon } - Nice if you know what your looking for (re:model type)
- Marconi }

They can get most of the above quickly if they haven't one in stock; if you really want these sorts of quality receivers (some of which weigh 20-40 kilos [40 - 90 pounds], they'll arrange shipping.

My personal choice is a toss up between the RACAL RA17.L series and the EDDYSTONE "EC958" ..I've used both, & (being slightly controversial), both are streets ahead of any "el Jappo-crap", including NRD 525/535 etc. The "958" is a rare one, but if your a connoisseur of this quality, then snap up the 958 if your ever lucky enough to come across one. They were used mostly by embassies in London & all points south of the Arctic circle.

There are several other UK sources you might like to contact:

RALFE ELECTRONICS
36 Eastcote Lane
South Harrow, Middlesex, UK HA2 8DB
(Tel:081-422-3593, Fax:081-423-4009)

STEWART of READING
110 Wykeham Road
Reading, Berkshire, UK RG6 1PL
(Tel:0734-268041, Fax:0734-351696)

JOHNS RADIO
84 Whitehall Road East
Birkenshaw, Bradford
Yorkshire, UK, BD11 2ER
(Tel:0274-684007, Fax:0274-651160)

Hope this helps, you might also browse through the English magazines: SHORT WAVE and ELECTRONICS & WIRELESS WORLD. (51-Jan-92/Tony Pater - Australia/SW ECHO)

****DREAM ON****

KEN MCKENZIE: If one was to be so lucky as to win huge lottery, let's say \$25 million, what would you rate as the DREAM receiver!!!!? What do the military/Industrial complex use as money no object gear? Do you have any idea what the NSA uses to monitor? I read somewhere about a guy who had two tweaked R390's and two LONG beverage antennas in a diversity mode. The writer said that guy could hear anything he wanted to hear! One of our club board members has a 7-30mhz Log yagi. This thing is massive, I still look at the pictures he sent me and dream.

AL QUAGLIERI: Were money no object, here's what would be on my Christmas list:

The Watkins-Johnson WJ-8700 Dual VLF/HF receiver (price unknown): covers 5 kHz - 32 MHz, two complete receivers on one chassis which measures 8.5" W x 3.5" H x 20" deep, microprocessor controlled with 8-line by 40-character display for menu-driven operation, AM/FM/CW/LSB/USB/ISB, five IF bandwidths, 100 channel scan, suboctave preselector, RS-232 remote interface, stereo headphone jack (the two separate receivers can each be assigned to one headphone). Choice accessory: SWJ-9548 Digital FDM Demultiplexer.

The Rohde & Schwarz EK 085 (over \$30K): covers 10 kHz - 30 MHz. Gold-plated everything. AM/USB/LSB/CW/FAX + 3 FSK shifts, 100-ch. memory, channel scanning w/adjustable dwell time (20ms - 99s), frequency sweeping with stop function for occupied frequencies,

****DREAM RECEIVERS (cont.)****

digital clock timer, RS-232-C interface, digitally tuned filters, variable bandwidth filter, 130-db dynamic range, tolerates signal inputs up to 100V, continuous tuning via spin knob in 10/100/1000 Hz steps, etc. etc. For extra fun, I'd also equip it with the GV 046 Antenna Diversity Unit and the GA 082 FSK Signal Analyzer.

...and for you scanner buffs...

The EM Systems R4000 Receiver System (price: don't ask!): covers 20 MHz - 40 GHz. Microprocessor controlled, realtime DSP, graphic data display, automatic or manual operation, stores received data on disk and tape. Supports up to 16 operators, each having access to a variety of tuners: phase locked, rapid scan, narrow band, or up to 2 GHz instantaneous bandwidth. Equipped with analysis demodulators for all modes, IF panoramic displays, RF spectrum displays, time base displays, and parameter displays. Fully loaded, about the size of a small refrigerator..but lots more fun.

So save up those nickels and dimes....

KEN MCKENZIE: That's exactly the type of reply I was wanted to see Al! I dumped your message to the printer and I'm going to pin it on the wall. Hey, we all have to dream to keep our sanity in this day and age! Now we're going to use a 4-30mhz Log Periodic or maybe two 5000' Beverage running N-S and E-W in this little fantasy, right!? On the EM Sys R4000 are we talking 6 figures for the price? So Al, would you chose the Watkins or the Rohde?

AL QUAGLIERI: Definitely the Watkins-Johnson. I got to play with a WJ-8718A a few years ago when I visited marine station WCC in Chatham, MA. The 8718A is a full-size (19" W x 19.4" D x 5.25" H) rig covering 5 kHz to 30 MHz. Tuning display goes to one Hertz. Standard bandwidths 16/6/3.2/1/1.3 kHz. WCC has a farm of rhombics available at all operating positions. Tuning slowly through a crowded pack of CW signals with narrow bandwidth, signals just popped in and out, one after the other, no swooshing or other skirt distortion. It was an absolutely transcendent experience, I can tell you. I will probably go to my grave lusting after one of these, unless I hit the LOTTO.

By the way, another reply to your original query suggested that all this high-end gear is segmented, clunky, and difficult to use. Not true. The WJ-8700 I previously described is self-contained and would fit comfortably in a briefcase. The WJ-8718A is a self-contained desktop unit.

KEN MCKENZIE: Al, you didn't have a price on the Watkins. What's the ballpark? That scanner you mentioned sounded like science fiction!!! The full wave discones someone mentioned must be something to see!

JOHN ROSS: Can we get a discount for group quantity purchase?

AL QUAGLIERI: Ha! Perhaps if we all pooled our resources, we could buy ONE and then time-share it for the next ten years!

HANK TURNER: What catalog did you get the info from these units... do ya have any info for ordering?

AL QUAGLIERI: This info came from manufacturers' literature. Because their equipment is designed (and priced) for professional monitoring, surveillance, and governmental work, you won't find them listed in any catalog. I get the distinct impression that all of these companies keep an intentionally low profile - not for any kind of security reasons, but because they'd rather not spend their time mailing out pinups to unlikely customers (i.e. we mere mortals). Watkins-Johnson, Rohde & Schwarz, Racal, and Rockwell have all been big names in pro receivers for some decades now. It's always been puzzling to me why almost none of this equipment (except for some Racals) ever hits the DOD surplus lists. Incidentally, you can feast your eyes on some truly mind-boggling radio equipment if you can get your hands on the 12th Edition (1991-92) of "JANE'S MILITARY COMMUNICATIONS." It has descriptions and photos of over 1000 unclassified receivers, transmitters, modems, terminals, encryption devices, signal analyzers, and antennas..most of which cost more than your house. It's 800 pages thick and costs \$210, but might be available at a local university or state library.

LARRY NEBRON: I wonder in this class of receiver(s), can you do multiple automatic timed recordings? The only receivers I have found with this feature are the Sony 2010, ICF-55, and ICF-77 and ICR-9000. I might include the R71 with the optional remote control here also, if someone buys an after-market programmable remote control timer such as the Radio Shack 15-1903. Has anyone tried this? I find it kind of sad that modern top of the line consumer communication receivers such as the R8 and NRD-535 do not allow multiple program timing. I know Sundstrom sells a program for the Kenwood and the NRD-525-535 that will do this, but you have to leave your computer on for it to operate. My seven year old VCR allows eight separate on-off cycles, you would think Drake and Japan Radio could design this in their new receivers? I wonder if they realize that a lot of us use old VCR's to record shortwave programs?

****OLD TUBES****

Several have expressed a desire to know places where they can get vacuum tubes for their old radios. Here's one found with quite a supply at the Charlotte, NC Hamfest just today:

E.S.R.C.
P.O.Box 1192
Delray Beach, FL 33447-1192

Their card says, "We buy, sell, and swap all kinds of electron tubes. Try us for those hard to find obsolete tube types."

Judging from the huge supply they carried to North Carolina, including power tubes and assorted old CRT's, I'd say their claim is a fair one; worth noting for a place to check when you're ready to buy. (07-Mar-92/Don Kimberlin/SW ECHO)

****WWV****

JONATHAN MARKS: Several weeks back we announced something new from the people who provide the world with the shortwave timepieces, WWV in Colorado and WWVH in Hawaii. These two stations broadcast continuous time signals on 2.5, 5, 10, and 15 MHz. We also mentioned their free revised publication that explains all the propagation data you hear on the stations. After we announced it, WWV's Colorado headquarters was deluged by — according to their accounts — thousands of requests. But there are other changes in the works — changes that might just make any recent off-air recordings of these two stations real collectors' items very soon. Dave Rosenthal(?) has been following the events since they suddenly switched their human-voiced time announcements to computer automated ones back in August. But as callers to our AnswerLine have spotted, recently the computer controlled female voice, announcing the time at WWVH, has suddenly disappeared. Dave Rosenthal filed this update.

DAVE ROSENTHAL: WWV and WWVH have had some problems with the new micro-processor based controllers they put online back in August. The new systems are set-up to construct each minute's time announcement from computer memory. The processor pulls each word and number out of memory locations and then strings them together. It goes something like this: [WWV recording] "At the tone — four — hours — thirty — one — minutes — Coordinated Universal Time — beep." Now the computer automated female voice on WWVH in Hawaii has been switched back to the original natural voice we've been hearing since the 1960's. Matter of fact, the 60's vintage drum recorders replaced by the computer control-led audio system are also back online. An electronic glitch has developed in the new equipment, and it turns out the old hardware is more dependable right now. But this isn't the first difficulty with the new system. Earlier, the computer assembled male voice at WWV was causing problems. Here, low frequencies in the voice interfered with automated systems using the 100 Hz subcarrier on the WWV signal. Electronic filtering solved this one, but the folks at WWV have decided to change things once more. Since people have complained that the computer assembled voice announcements sound unnatural, WWV plans to redo the voice recordings and try to improve things. The plan is to record all new time announcements. This time, each hour and minute will have its own announcement. Instead of hearing something like "twenty — three — hours — fifty — two — minutes", it'll be "23 hours 52 minutes". This consumes more system memory, but the folks at WWV hope it will sound better. Your comments would be appreciated. Another change will be in the voices themselves. The original WWVH time announcer, Jane Barbie, will make the new WWVH recordings, and John Doyle(?), a longtime understudy of WWV's original superstar, Don Elliot, will record for that station. Once these new recordings are digitized and installed in system memory, they'll make your off-air recordings of the current announcements real collectors' items! They'll be right up there with the original unedited version of Michael Jackson's new "Black or White" video, or even stock certificates for RADIO EARTH! But, getting back to more available things, don't forget the new "Special Publication 432". It's just been revised and contains lots of interesting and useful information about a whole spectrum of services right at your finger tips. OK, here's the address to request it...: National Institute of Standards and Technology (or NIST), Mail Station 847, 325 Broadway, Boulder, Colorado 80303.

Tell 'em you heard about it here on Media Network, and look for the new improved time announcements coming to WWV and WWVH. Officials say the changeover should come shortly after the new year. Will they be better, easier to understand? Listeners around the world will be the judge, and nobody wants your input more than the folks at WWV. For Media Network, I'm Dave Rosenthal. (12-26-91/RN MEDIA NETWORK/12-28-91/Bill Kelsey/SW ECHO)

****SWLing in SINGAPORE****

-=> Quoting Jonathan Marks to Weng Loh <==

JM > Nice to know you listened in Singapore. Did you know Hugh Waters by any chance. He was trying to get a SWL club together when I met him in Singapore back in 1985. Thanks for the kind words about the programme.

Nice to know you have been to Singapore, Jonathan. New York is a great place, but I kind of miss the exotic food and the squeakily clean and crime free streets in Singapore. Unfortunately, I was not aware of any SWL club, nor do I know Hugh Waters. I'm surprised that someone actually thought of starting an SWL club, because sadly, short wave listening is not terribly popular in Singapore for a number of reasons:

Most Singaporeans live in high rise apartments—"flats" and condos, which do make long-wire antennas somewhat impractical. These apartments are almost invariably lit by fluorescent lighting, making indoor reception downright impossible.

****SINGAPORE LISTENING (cont.)****

There is no media coverage of Short-Wave broadcasting, no magazines on the subject and the World Radio TV Handbook is available late at only 1 book store at an atrocious price. The Sony and Panasonic portables are about the most advanced Shortwave radios you can get, so a real SW enthusiast will have to import a good HF receiver at his/her own expense and risk. Singapore's 'FCC', Telecoms, can give you a lot of grief if you try importing anything that even vaguely resembles a transceiver or a VHF scanner.

The local authorities have always frowned on broadcasting not flavored for local consumption, as evidenced by the ban on all satellite TV dishes. At one time, distribution of news journals like Time Magazine and the Far Eastern Economic Review have been severely restricted.

I suppose that similar problems (if not worse) plague SWLs in many third world nations, but it saddens me to see it in a developed nation like Singapore. Ironically, the asinine attitude of the Government with regard to Press Freedom and its fervent censorship of the media actually makes Short Wave listening a very attractive to those who seek an alternative opinion.

The BBC is domestically relayed on FM, and as more people realize that similar, quality, unbiased (and biased, of course) programming is available all around the Short Wave dial, we will see definitely see an increase in Short Wave listenership. (12-03-91/Weng Loh/SW Echo)

****AND YOU THOUGHT CELLULAR CONVERSATIONS WERE EMBARRASSING TO LISTEN TO****

I was a Merchantile Marine Radio Officer in 1940/41 and had attained the great age of 18. I went ashore in Scotland one evening and had a "good time" with one of the local girls. Later, when at sea, I discovered that a certain part of my anatomy looked rather unusual and it hurt when I went to the bathroom. The skipper was a bible-punching old so-and-so and I was scared to let him know about this but I told the steward who said I MUST tell the captain or he would. He did...and I had to endure the most embarrassing moment of my life (to that point, anyway) I submitted to a short-arm inspection and, as we were well away from the mandatory silence zone he made me send a message to the US medical officer giving all the gory details and to meet the ship with appropriate medical supplies! Of course, every ship within a thousand miles copied that message and, from then on, I was called "Guns" and other equally embarrassing names whenever I went ashore anywhere in the world, it seemed! (16-Feb-92/Mike Ward/SW ECHO)

****BIG BIRD AND THE BEEB****

DON KIMBERLIN: Heard in SWBC bands, always sounding like a short burst - just a few seconds of what I could best describe as some burbling chirps in the region of 600 - 1200 Hz off the carrier of BBC transmissions, repeated at about 15 minute intervals. I've heard this on particular operations for periods of a week or a month or so. When I say, "burbling chirp," that's meant to describe the sound as something one could easily expect a 400-pound canary with indigestion to belch like - no kidding! I find the sound amusing as well as curious. I have presumed these to be some sort of ionospheric backscatter studies being performed by BBC (and maybe others use such a technique) ... but don't really know. These sounds, when they occur, seem to be obviously associated with the operations of the broadcaster. Can you confirm, correct or amplify on my presumption? Perhaps we have someone on here who's connected with an antenna manufacturer or propagation planner who could explain what I've come to call the "400 - pound canary."

AL QUAGLIERI: I know the sound you mean, although the only place I've heard it is around the 12095 frequency.

DON KIMBERLIN: ...Hmmm. Yes, 12095 is the only freq I can really say I heard it near, so close to BBC I thought it was something related to them.

AL QUAGLIERI: This is nearly out-of-band, most certainly an allocation shared with fixed services. I don't believe it's BBC-related, though, as it doesn't propagate the same as the Beeb's signal...I've heard it clearly when BBC was barely audible there, and vice versa.

DON KIMBERLIN: ...Hadh't really paid enough attention to notice that factor. Interesting. If it is another kind of operation, it must be from a different Radio Region of the world, then --- where 12095 or so isn't a broadcast frequency. Hmmm....

AL QUAGLIERI: Unfortunately, I don't have the equipment necessary for a detailed analysis of this chirper re timing, tone pairs, etc. I believe it's some proprietary packet system, with a separate signalling tone at the beginning of each burst for timing and/or framing.

DON KIMBERLIN: ...Again, I hadn't really listened all that closely, but heard only the burbling sound, and didn't notice any data packet following it.

PATRICK CRUMHORN: I occasionally hear a single burst of what sounds like packet, or at least some sort of data, on BBC's 9640 kHz transmission at 0500. It usually occurs 2-5 minutes into the 0500 newscast. Give it a listen and see if it's the same thing. 12095 hasn't been coming into Texas too well of late, but I don't recall hearing anything similar on that frequency.

AL QUAGLIERI: Considering that the transmission rate is constant, the packet size uniform, and the operation 24 hours, I would hazard a guess that

****BEEB BEEPS (cont.)****

this is some form of telemetry, perhaps weather-related. If you hear this on more than one frequency, try to listen in parallel using two receivers. Is one packet acknowledging the other? Are the parallel transmissions exactly identical? If you really wanted to do some armchair detective work sans a two-acre Wullemberg HF DF array, I would suggest concentrated monitoring of one frequency. 12095 would be a good one. At various times of the day, make note of the signal strength of the chirper. After each notation, make a quick sweep of the 25 meter broadcast band and note which stations from particular areas are strongest. This won't give you a real fix, but will certainly point you in the approximate location.

DON KIMBERLIN: ...Wouldn't that be a great toy to have? But, regrettably, I haven't the time or tools to get serious about it - or, what I'll call "Big Bird," for lack of a better name. ...Short of Andy Sennitt getting a buddy from Caversham to tell what it is, because I'll bet BBC has been interested in it, we may have a proper SHORTWAVE challenge here, for some of the more intrepid SWL's to take on a search to solve The Mystery of Big Bird and The Beeb! ...How about it, Havana and Kristin? This is sure your kind of stuff!

****SUMMERTIME, AND THE CHANGES AIN'T EASY...****

SUMMER TIME: (via Andy Sennitt) In 1991, the former Soviet government decided to bring forward local times across most of the USSR. Moscow Standard Time then became UTC +2. All the times listed in WRTH for local stations in the Russian republic were calculated on that basis. But on January 19, 1992, Yeltsin's Russian government decided to revert to the old times, so Moscow became UTC +3 again; that made the times listed in WRTH one hour too early. Now, on Sunday, March 29, summer time begins, and the clocks go forward one hour, so Moscow time will then be UTC +4. To confuse things further, the Ukraine, for example, never went along with Yeltsin's time change, so they're currently on UTC +2, and on March 29th will become UTC +3. All of which helps explain the rather erratic situation regarding relays of various CIS programs over transmitters in Russia.

The Chinese have announced that this year they will NOT be having summer time, a change from recent years. (19-Mar-92/Andy Sennitt/Jonathan Marks/RN MEDIA NETWORK/Al Quaglieri/SW ECHO)

*****GETCHA REAL OLD FREQUENCY LISTS HEAH!!*****

LEE REYNOLDS: Now available - The LF portion (9kHz to 2.999MHz) of the IRAC federal frequency listing is now available in machine readable flatfile database format. This is the bible for anyone interested in VLF/LF/MF listening with over 10,000 entries covering the armed forces, airports, coastguard, experimental and other services. This is derived from the last unclassified release of this data. Price is reasonable, if interested, please call me (603)878-4077.

AL QUAGLIERI: Please tell everyone online when the data comprising your database was last officially released by a Federal agency.

[LEE REYNOLDS DID NOT RESPOND TO THIS LAST QUERY.]

AL QUAGLIERI (in message to ALL): I thought I'd be the first to toss a bucket of cold water [this database]. The NTIA frequency file was officially classified by Executive Order 12356 on April 2, 1982. I repeat, 1982. That was the last time the government's database was available to John Q. Public. With frequencies subject to frequent change, it's fair to assume that this database is a very inaccurate document indeed. In addition, most of the military has switched over to SINGARS frequency-hopping systems; even marginally-sensitive comms from such agencies as DEA, FBI, IRS, INS, ATF, and Secret Service is now transmitted in encrypted, digital waveforms. In fact, it seems the only time you catch Uncle Sam in the clear is a) when the scrambling system isn't working, or b) when someone's being careless.

I can think of no good reason to pay any amount for a ten-year-old frequency listing, however "computer readable" it might be.

DAVID STARK: I have talked to Lee Reynolds on the telephone to get the scoop on this material. He is aware that much of the material is out of date, but feels that it is of value as a historical cross-reference for services that may appear in higher frequency bands.

AL QUAGLIERI: That's a new twist. This "historical cross-reference" clarification should have been addressed in the original offer. It was not.

DAVID STARK: The information offered is based on the September, 1981 release of the NTIA file. Since the information was released a few months PRIOR to the Executive Order classifying the database, Lee Reynolds believes that this particular listing is still unclassified. I don't presume to interpret whether or not the Order was retroactive. This material may indeed be classified information, but I don't know either way.

AL QUAGLIERI: The law (Executive Order 12356 of April 2, 1982) maintains that "The composite of all UNCLASSIFIED GMF [Government Master File] frequency assignment records is classified at the CONFIDENTIAL level. Although most of the frequency assignment records in the Government Master File are unclassified per se, ... all lists of UNCLASSIFIED frequency assignments to radio stations of the United States that have been extracted from the GMF shall be classified at the CONFIDENTIAL level is the list links assigned frequency(ies) or band assignment(s) with specific

****OUTDATED INFO (cont.)****

location(s)."

DAVID STARK: Lee has done some cleanup work on the raw data, translating cryptic location and agency abbreviations into plain English.

AL QUAGLIERI: So what? We're still talking about a frequency list that is TEN YEARS OLD. Any inferences that monitors could possibly make using this information would be 90% invalid and 100% misleading. Imagine trying to make sense of the shortwave broadcast bands armed with a frequency list from the 1981 World Radio TV Handbook!

DAVID STARK: He is selling the edited database for \$29.95.

AL QUAGLIERI: With all due respect to Lee Reynolds' enterprise and your interest, I maintain that this database is of no practical use at any cost.

DAVID STARK: I tend to agree, but I was interested in presenting the "other side" of the story. I had originally intended to do a SCANNERAMA segment about it, but below 2 MHz is a little out of band for me. :-)

TIM TYLER: Comparing a 1982 IRAC to a 1982 WRTVH in terms of usefulness in 1992 is a major overstatement, as is your notion that up to 90% of the 1982 GMF data would now be invalid. What freqs were your FBI, DEA, & USSS Field Offices using in 1982? Here in Michigan -with few exceptions- they're using the same ones. You don't think 311.0 was in use in 1982, or is still in use now?! I hate to say it, but many military HF freqs that are active now were also used by the same organizations 30 years ago, let alone 10 years ago. The largest change in regards to gov't VHF/UHF networks is that some of them are DES and/or trunked, instead of regular analog voice. That being the case, the 1982 GMF in ASCII form would be nice.

****WILL HCJB'S REAL ADDRESS PLEASE STAND UP?*****

KIRK BAXTER: ..HCJB, P.O. Box 17-17-691, Quito, ECUADOR

ANDY SENNITT: Sorry, Kirk - it's not your fault but that address is NOT correct. The address printed on their own headed notepaper is the one that we have in the WRTH: Box 17-01-00691, Quito.

TOM SUNDSTROM: Andy, DXPL last weekend was giving the new PO Box as 17-17-691 and explaining the number as the first 17 being the 17th postal district in the country and the second 17 as the 17th post office within that district... did HCJB send out different information on the fax?

ANDY SENNITT: Not on a fax. It's printed in rather large type on the back of their November 1991 English Program Schedule, which reads Casilla 17-01-00691. But then again, I - of all people - appreciate that it could easily be a typo!

PAUL KNUPKE JR.: John Beck on Ham Radio Today (3/4) gave the address as Casilla 17-01-691. Not sure why the schedule would be different.

ANDY SENNITT: Well, I guess the printed version is just perpetuating an error, unless BOTH are valid, which is a possibility we haven't considered. Nobody said this job was easy...

ANDY SENNITT (in a later message): The mystery is solved! Moments ago (literally) I received the latest ANDEX Bulletin, in which it is explained that the new PO Box address is at a small office nearer to the radio station. That's PO Box 17-17-691. The one in WRTH, Box 17-01-691, is at the central post office in downtown Quito, and will remain in use until the end of the year, but letters sent there may take a few days longer to arrive. It seems that HCJB's "postman", Antonio Torres, is suffering from traffic congestion! <g> So, as I earlier surmised, both versions of the address are currently valid. Phew!

****THIS IS A TEST TRANSMISSION FOR CIRCUIT ADJUSTMENT PURPOSES...*****

DICK DILLMAN: Heard the following on my ICF-2010 whilst on Long Island for the holidays. Any others hear this one? Is it a commonly heard transmission on the East Coast? 19,070.2 LSB S5 signal "This is a test transmission for circuit adjustment purposes from the Moscow radio telephone station."

AL QUAGLIERI: I've heard this one - irregularly - for at least ten years now.

DON KIMBERLIN: It's a very safe bet that's AT&T's NY-Moscow HF link being maintained as a "backup" in case all other routes fail. They keep such things on the air for a decade or so after there are at least two other routes to other countries. Reception in NY state should be good, because it's beamed to AT&T's receivers at Manahawkin, NJ. ...Highly doubtful you'll ever hear a phone call on it, but if you happen to drop in at a rare opportune moment, you might hear the technical operators talking about getting it lined up. If they do, all you'll hear is the -20 db carrier sitting there, with no traffic on it...but listen to that carrier at the top of the hour and you might notice the "QTT," a

****AT&T LINKS (cont.)****

Morse transmission of the transmitter ID keying the carrier up to 0 db. It's kinda hard to hear unless you know what you are looking for, The AT&T U.S. mate (whatever freq it is on) will ID with "QTT de ATT NY."

****IS YOUR RADIO SPYING ON YOU?****

GEORGE MOSHIER: I was watching one of the talk shows a time back when they were talking about computer hackers, they showed how you could pickup someone else's computer monitor a block away, it wasn't that good of a picture but you could tell what the person was doing on his computer. I just saw someone mention something about if there's something to hear he wants to tune it in so there's one for you to try and see.

BILL CHEEK: I've heard talk to that effect, too, but haven't messed with it, per se. What I have done is monitor and record the carriers generated by local oscillators in neighbors' TV's and radios, and then run the recordings through parametric equalizers in an attempt to filter out noise and still amplify anything in the voice band. Seems that sound waves can produce microphonic effects on local oscillators with FM modulation the result. Yes, it is very weak; exceptionally weak and there's not a chance it can be detected without special processing to remove noise and still amplify any intelligence, BUT....I have evidence to suggest it is possible to hear conversations from the vicinity of a radio or TV just from the L.O. emissions.

That which you speak of is along the same lines and given a period of sheer boredom or nothing else to do, I will definitely take a look into it. As it is, monitoring a nearby computer's emissions and decoding anything intelligent out of it is going to be easier said than done. BUT....you can bet that governments and other well funded operatives are certainly capable of it! Interesting subject and topic for further dissection here on the Echo, George.

****WHY DIDN'T I THINK OF THAT?****

[There was a] CB'er back in the 70s who set up a "ground" in the trunk of his car using a large copper coil inside a bucket of water!! Yes, this is really true. He showed it to a friend of mine who had a business in Mt. Juliet, Tennessee selling both ham gear and Cb equipment back around 1976 or so. We laughed uproariously then too! (19-Jan-92/Brian Carling/SW ECHO)

****THE WONDERFUL WORLD OF PIRATE RADIO****

Boy, the current (1/15/92) W5YI Report sure has a couple of interesting items:

The first is about three pirate broadcasters in Odessa, Texas, who were caught running an unlicensed FM broadcast station. One of them was fined \$750 in a similar case in Oregon back in 1986. This time he got SIX MONTHS IN FEDERAL PRISON!

The other is about Michael Doyel, 31, of Cedar Rapids, IA who got 45 MONTHS IN PRISON because he:

- * Ran phony ads in the Ham Trader Yellow Sheets, cashed the checks worth over \$10,000, and never shipped the gear.
- * Transmitted false "officer injured" and obscene language via the Iowa State Patrol radio system.
- * Transmitted obscene messages through a McDonald's drive-up window to customers trying to order food!
- * Transmitted obscene language via ham two meter repeaters.

Doyel was arrested in Colorado while driving a stolen car, DRESSED AS A WOMAN! (20-Jan-92/Tad Cook/USENET/Kirk Baxter/SW ECHO)

****AMARC? ISN'T THAT A TYPO?***

At the National Federation of Community Broadcasters (NFCB) Conference, which is going on here in Seattle, I picked up a copy of InteRadio, The Newsletter of AMARC, The World Federation of Community Radio Broadcasters. I think this newsletter might be of interest to participants in this echo.

It's a 12-page newsletter which contains articles about Local Radio in Senegal, Pirate Radio in Hungary, clandestine stations in Haiti, Native radio in many parts of the world (including CKON-FM, Mohawk Nation Radio, a station on the Akwesasne Reserve that straddles the US-Canadian Border) and much else.

'This newsletter clearly has a slant, that grass-roots community radio is a good thing that should be encouraged throughout the world. But even if you don't buy their politics, it contains a lot of information that would be difficult to find elsewhere. Subscriptions are \$10 per year (for three issues). It's published in English, French and Spanish in separate editions. To subscribe, or for more information, write to AMARC, 3575 boul. St. Laurent, Suite 602, Montreal, Quebec H2X 2T7, Canada. (14-Mar-92/John Ross/SW ECHO)

****ANOTHER SATISFIED CUSTOMER****

STEVE HAMMER: I sometimes listen to pirates, but I've found that the pirates I've heard might as well have saved their time...I don't mind amateurism, even profanity, or even the illegality (as long as it's someone else that's breaking the law) but the programming...referring specifically to Radio USA and the Voice of Free America [I think] have been a stupendous BORE... I mean, if I want to hear infantile conversations, there are many places besides 7415 kHz where I can hear it...

Last Saturday, the VOFA was broadcasting with all the sophistication of a Gomer Pyle rerun. Why should I put up with this? If there were political broadcasters or even avant-garde music broadcasters doing the pirate thing, then maybe I'd listen. Otherwise, why? I mean RNI is semi-legitimate and

****PIRATE FAN (cont.)****

they're STILL dull as dishwater... Why do so many people in the communications industry have such a hard time communicating??? Rebels without a cause (or clue)?

KIRK BAXTER: Some pirate stations are not well prepared to broadcast either technically or with their programming, while other stations have gotten the technical aspect of broadcasting down well, but don't have too much to say. Free form radio isn't all together bad, but many djs can't be spontaneously witty and lively.

STEVE COLETTI: I was listening to a new pirate I know, (from another area of communications), and was appalled at the screw-ups. He has access to studio equipment so I told him to pre record the broadcast and stop fumbling with cassettes. He can't take calls yet so why should he go on live? Once he learns radio, he should be able to do it live (sans oopsies).

****RUSH MAKES MORTON DOWNEY JR. LOOK SEXY****

The current issue of the NRC's DX News includes a clipping from the New York Daily News on *RUSH LIMBAUGH*.

It even includes a photo.

God! Is he ever ugly! (and *FAT*)

(Kinda like a cross between Baby Huey and Benito Mussolini) (22-Jan-92/J.J. Hit/SW ECHO)

****MOSCOW MAILBAG HIJACKED****

Here's a UPI story about the Radio Moscow mail problem:

MOSCOW (JAN. 16) UPI - Radio Moscow canceled its mailbag program Thursday, reporting that it had no mail and blaming thieves for stealing sacks of Christmas mail to different parts of Russia from abroad.

A Human Rights group reported last week that one of its members discovered the mail scattered along a road south of Moscow and that the mail had been opened and discarded in an apparent search for hard currency.

Foreign money, such as U.S. dollars, can be used in so-called hard currency stores, the only well-stocked shops in Moscow.

The Radio Moscow announcers apologized for not having mail to read on their program, speculated that the thieves were looking for hard currency sent from abroad, and said they expected the culprits to be punished, though there were no arrests reported in the case.

A report by a correspondent for Crime-Press, an offshoot of the news agency Tass, said the brightly-colored holiday greeting cards and letters were opened and were strewn along a highway.

The reports said most of the mail, to different parts of Russia from abroad, was later destroyed by a bulldozer but that one sack of letters was salvaged.

Some organizations avoid security problems with the Russian, formerly Soviet, mail service by not using it. The U.S. Embassy trucks its Moscow mail to and from Finland. And some resident foreigners, such as journalists, can arrange to get mail at their embassies. Others use private companies, such as American Express.

The first Russian stamps were issued this week, replacing Soviet stamps, Tass reported. The three stamps were devoted to Russian Olympic athletes. (23-Jan-92/Mark Huff/SW ECHO)

****DANCES WITH WAVES****

Native Radio: Thoughts On Empowerment

This article is intended to stimulate community stations into thinking about ways of using radio to empower local community structures that govern or represent the interests of their communities.

There are 20 Indian-run radio stations on the air in the United States. Only one of these is Indian-owned and regulated: CKON-FM, Mohawk Nation Radio, on the Akwesasne reserve.

Akwesasne straddles the U.S. Canadian border in upstate New York, and in the Canadian provinces of Ontario and Quebec. Neither the FCC or the CRTC (the regulatory bodies that issue licenses to broadcast in the USA and Canada respectively) license this station. CKON-FM, also known as SEKON, is one of three Mohawk Nation stations, the only one with a Mohawk Nation Broadcast License. Its operating license is issued through an application process every five years, by the traditional and historic Mohawk government known as the Traditional Mohawk Council of Chiefs.

SEKON's facilities, like the rest of the reserve, are situated half in the U.S., and half in Canada: the broadcast booth is in Canada, and the antennae and tower are in the U.S.; half the transmitter is in Canada, the other half in the U.S. While the CRTC recognizes SEKON and the Mohawk Nation's right to regulate its own operation, the FCC does not. Until 1982 the Mohawks at Akwesasne depended on local, non-Native radio, which did little to focus on this community of 10 000. The effort to build a Mohawk station at Akwesasne began in the fall of 1981, with the establishment of a 20 watt FM facility called Akwesasne Freedom Radio (AFR). AFR was on-air for a year and a half as an internal social experiment that led to the building of SEKON, three years after AFR first began broadcasting. AFR was not a pirate radio operation, though the station did not hold a license to broadcast. It worked toward establishing an attitude among a disenfranchised community that would result in the creation and enforcement of its own laws and codes of conduct.

****NATIVE RADIO (cont.)****

Like its predecessor, SEKON is an example of a community creating and controlling its own radio broadcast media, having rejected "foreign" ownership and control of its airwaves. In this context, Native-regulated radio is a last ditch effort to keep political and cultural identity and power safe against the onslaught of a dominant culture. To be attuned to the people, to the community, is most important, as they are the power-base and our reason for existence, as Native radio stations. It's all been for nothing if we continue to let the outside forces set policy for Native "controlled" endeavors. Community self-empowerment, take the cure, take control! (L. X. Jacobs & Ray Cook/PEACENET/22-Jan-92/Patrick Crumhorn/SW ECHO)

****SYNCH OR SWIM****

ANDREAS ZILKER: This is a summary to my question "AM sync. demodulators — How?" posted one month ago. Many thanks for the input.

GLENN E. THOBE: Simplistically speaking, a synchronous detector consists of a PLL to track the carrier and a coherent demodulator. The latter mixes a synthetic carrier with the IF signal and passes the result through a low pass filter to get AM. My Grundig Satellit 500 uses a CX857 IC chip.

JIM HAYNES: Well, you could go to the library... In particular, there's an interesting article in Proceedings of the I.R.E. circa 1960 by John Costas titled "Poisson, Shannon, and the Radio Amateur" (approximately). [...]

ANDREAS ZILKER: Well, to make things a bit more precise:

J.P. Costas
Synchronous Communication
Proc. I.R.E. 12 (1956)

J.P. Costas
Poisson, Shannon, and the Radio Amateur
Proc. I.R.E. 12 (1959)

THOMAS L. CARNEY: [...]
Dave Herzhberger, W9GR
Build a Synchronous Detector for AM Radio
Popular Electronics April, 1982
pp 61,66-71

ANDREAS ZILKER: Add-on to SW receiver, comparable to article above but more exotic components (gain control with LED-LDR pair).

PETER ORBAN: The Signetics NE 561 chip contains all the necessary components, the VCO, the phase comparator, and an extra double balanced mixer to do the AM demodulation. The '78 Signetics linear catalog has applications for the circuit. This chip is out of production though, so you have to make up the circuit from different components, e.g. from an NE 564 PLL circuit and an MC 1496 mixer. An excellent book on PLLs is by R.E. Best: PLLs, Theory, Design and Applications. It has a sample coherent AM receiver with Exar integrated circuits (XR 2206, XR 2208).

MIKE GRUBER: I have done quite a bit of research on Sync Detectors in the last few months. I hope to have an article published in QEX on this subject sometime this year. Hopefully, this will answer all or most of your questions in greater detail than I can now, but:

- 1) A simple sync detector can be made from a phase locked loop chip. AM stereo chips can be used as sync detectors if properly configured.
- 2) This type of detector can be of a single chip design. However, much of sync detector's advantage over an envelope detector is not utilized in this case.
- 3) A sync detector can, in many cases, be put to better use by employing phasing techniques to reject either one of the two AM sidebands at will. Interference can be rejected and selective fading can be further reduced. The Sony ICF-2010 has this feature. The Drake R8 does not - I am not sure about any of the others.
- 4) The QEX article will hopefully include a schematic to homebrew a sync detector using a Sony AM Stereo IC Chip. It will also have a fairly extensive bibliography of other articles and construction articles.

Well, hope I have answered most of your questions for now. The sync detector is great for short wave broadcast listening and really worth the effort to build one. I have had an ICF-2010 for almost two years and still marvel at the improvement a sync detector can make.

DAVE TURNER: I have been told that Electronics and Wireless World had a paper on:
AM Synchronous Demodulator
Trevor Brook
E&WW
September 1989, Vol 95, Number 1643

****SYNCH RESOURCES (cont.)****

ANDREAS ZILKER: This seems to be the most versatile and up-to-date article for a homebrew project. It consists of an add-on board with analog filters and a discrete PLL connectable to the 455kHz output of a SW receiver.

Plessey makes (or at least made) a Multimode Detector chip that can be used as a synchronous detector. Their part no. is SL624C, but I've only read about them in their application handbooks.

Also:

Synchrodyne AM Receiver
Electronics & Wireless World Jan - March 86

Complete design of a AM direct conversion (synchrodyne) receiver for LW & MW, discrete PLL and MC 1496 dual balanced mixer.

Pat Hawker, G3VA
Synchronous Detection in Radio Reception
Wireless World Sept 72, Nov 72

Historical development of sync. detection (many references), some simple experiments with TTL chips

****STUBBLEFIELD LIVES ON****

Troy Cory, the grandson of Nathan Stubblefield is in the news again. But, this time in a different light. The following is from the Associated Press.

Murray, Ky. (AP) — A pop singer who claims his grandfather is the true inventor of radio was arrested yesterday (01/03/91) in California on a fugitive warrant alleging he stole services from workers at his Kentucky broadcast stations.

Troy Cory, who bought radio station WNBS-AM and low-power television station WNBS-TV in this western Kentucky town ten years ago, was arrested around 1 a.m. at his home in Pasadena, a Los Angeles County deputy sheriff said.

Cory, also known as Keith Stubblefield and Keith Whitenack, was held in the Los Angeles County Jail on a Calloway County, Ky., warrant charging him with 20 felony theft of services counts at the two stations, Deputy Todd Deeds said.

A Dec. 13 indictment handed up by a Calloway County grand jury accuses Cory of refusing to pay at least 14 employees of the station who refused to sign personal services and information non-disclosure contracts.

Cory's publicist said he intended to surrender to authorities in Murray on Jan. 6, then begin resolving problems which caused employees of both stations to walk off their jobs on Dec. 6.

"He knew he would be arrested and just wanted them to tell him what the bail would be so he could pay it when he went back Monday. They had him arrested at home to intimidate him," Cory spokesman Chris Harris said.

Harris said Los Angeles lawyer Kevin McLean was preparing to file a lawsuit next week in federal court in California over disputes arising from the broadcast stations.

Harris said Cory surrendered after police arrived at the gate of his estate overlooking Pasadena's Rose Bowl. He said Cory accused Kentucky officials of arousing Pasadena officers exaggerating the seriousness of the charges. Harris said he videotaped the arrest.

Deeds in Calloway County show Cory paid \$1.15 million for the two stations on Oct. 18, 1981. He stands to lose his licenses for the stations unless they are back on the air when the last of two Federal Communications Commission extensions expires on Feb. 3.

Cory told the FCC he must replace a staff depleted by walkouts and firings and a large amount of electronic equipment he claims a former employee stole from the stations. (01-05-92/Brian Johnson/SW ECHO)

****1992 WRTH: THE CRITICS SPEAK****

BOB PADULA (Australian Radio DX Club): The 1992 WRTH was mailed to members on 9 January following direct airfreight delivery from the USA into Melbourne. Some 140 copies were sent out. It now has 592 pages (576 last year), and maintains a high level of accuracy and topicality. The WRTVH people are getting their act together now, in providing up-to-date information demonstrated by the inclusion of the VOA-Botswana schedule, which came into effect in December! It's amazing what a little competition can do...Some minor irritations are the non-publication of schedules for the "PB" stations in Australia, the continued omission of the "Top End Aboriginal Bush Broadcasting Association", the listing of some inactive broadcasters without such indication (eg: KCB1), the inclusion of apparent harmonic radiations without clarification (eg: Radio Malaysia "11930" - 2x5965), the omission of the FEBC's African Service (KFBS) on 9475 (on the air for nearly 12 months!) and the inclusion of apparent utility data (eg: Radio Kiribati's feeder service on 14917.7).

Other small points include: the out-of-date schedule for the Qatar Broadcasting Service, the inclusion of the Radio North Solomons (PNG) schedule without any indication of its usage of Radio East New Britain's facilities at Rabaul, and some annoying exclusions of the HF Broadcasts of the BCC-Taiwan, such as 15320 CBS, 15125 BCC (omitted in the alpha listing but given in the frequency list).

****EVERYBODY'S A CRITIC (cont.)****

Despite the above problems, the WRTH is well worth the money, even though the Australian user won't find the Satellite Transmission section of great application. I would also suggest that future coverage on complex technological subjects, such as "Solar Activity 1992" be commissioned from professional engineers or scientists, who are trained, expert, and qualified to offer informed and meaningful analysis on such topics. The "World Broadcast Reception Conditions" article, by George Jacobs, himself a professional engineer, represents an excellent account of this subject.

The WRTH would be improved by the inclusion of a "Spectrum Chart" showing authorized Frequency Allocations for commercial broadcasting services. This could be based on the ITU's "Radio Regulations, highlighting spectrum usage for the three ITU Regions. I would also suggest that FAX and electronic mail addresses should be expanded.

In conclusion, I note the continued exclusion of the ARDXC from the "Collaborators and monitors" listing. This is in contrast to other Australian groups who are indeed listed as such. What does the ARDXC need to do to secure such an entry, or any other DX group for that matter? ARDXC has been marketing and selling the WRTH, and forwarding to the WRTH people complimentary airmailed copies of the ADXN for nearly 30 years, and if that doesn't justify "collaborator" status, I don't know what would! Even a courtesy of the WRTH might have been a small indication of the support we're providing. OK, the small profit from the WRTH sales goes into the Club's treasury, but the effort and energies expended in marketing and selling WRTHs is purely voluntary, with absolutely no financial reward for the members involved. In fact, one Australian based group is listed as a collaborator, yet doesn't rate a mention in the "Clubs for DXers pages! I think that it would be a good idea if the WRTHVH people explained their position on this, so that everyone's aware of the rules.

DANIEL ROSENZWEIG: While looking through the WRTH I noticed a mistake in the Radio Jordan FM section. Radio Jordan no longer broadcasts in English on 99 MHz. 99 MHz is now in Arabic. 90.9 MHz, on the other hand, IS still running in English. They announced that 90.9 is 'now broadcasting in FULL FM Stereo'. 99 was also in stereo - but I compared the two while they 99 still existed. 90.9 was much LOUDER - so I think that 90.9 now uses 'compression' technology (for the better or for worse). One other MINOR detail is that in the Israel Radio (domestic) schedule it says that 88.2 MHz is program E... In the 'program' listing program 'E' is omitted. - 88.2 is a relay of Kol Israel's EXTERNAL service on domestic FM (while 1458 and 576 are DOMESTIC foreign lang. + Hebrew prgr.'A') broadcasts. BTW the ONLY domestic English broadcast that is NOT relayed on SW is the 5 PM (1500 UTC) 2 min. news bulletin. Also, in the Reahet Bet (relay of the domestic "B" service) the frequencies from 2300-0400 were not listed, since they were released about three or four weeks after the initial schedule. The frequencies from 2300-0400 are: 7465 9435 11585 11605 .

BRUCE MACGIBBON: Apparently there was a lack of effort when it came to China's Domestic Radio Frequencies. A lot of the information is wrong and was corrected by me in September of 1991 when I did a survey of what I could hear on CPBS-1 & 2. Also a frequency of CPBS1 was left out which has been around for over a year. As China is my expertise when it comes to CPBS-1 & CPBS-2, I am wondering if "The Asian Broadcasting Institute" even collaborated on this material. (Note: Asian Broadcasting Institute is listed as a collaborator for the WRTH. They are also the experts when it comes to broadcasts from China). Hopefully between now and the 3rd Sunday of February when I am on Radio Japan DX Corner, I can make the corrections again. In the meanwhile if you are a list logger be careful when it comes to CPBS-1 and CPBS-2. WRTH blew it again! Take Care, Bruce in Gresham, Oregon, who notes there was nothing in the WRTH that referred to any type of update. Maybe the competition is not that tough referring to Bob Padula's remarks in ARDXC about how the WRTH was better due to competition!

ANDY SENNITT: I have noted your criticism of the Chinese domestic radio listings in WRTH92. These were compiled by Olle Alm in Sweden, who is also acknowledged to be something of an expert in these matters. Therefore I have sent him a copy of your message and will await his response before replying in detail to it. I must say, however, that the tone of your message was not at all friendly, and I shall do you the courtesy of assuming you just had another of your bad days when writing it!

sent a copy of your message to section editor Olle Alm, who responds as follows :

"For the 1992 edition no info was received from the ABI. The China Domestic Services script had to be closed at a rather early date due to the higher priority given to the vast changes in the former USSR. Updating the China CPBS SW section is very tricky since no advance or other official info is made available and times and frequencies vary widely over the year. The latest available info at the script deadline usually is the summer schedule (incomplete info), which differs greatly from the winter one in use when the book is out. If we use last year's winter schedule we will still be outdated as several frequencies normally are changed from one year to another. Compiling a reasonably good schedule for the book thus would include much guesswork.

"I would welcome cooperation to make this list closer to reality, and would recommend Bruce M. the following procedure: Give advance notice in July that you are going to supply updating info and mention by which way it will be sent (letter, fax or computer net); then around 15th September send a list of suggested changes to the information

****WRTH POT SHOTS (cont.)****

published in the current WRTH, so that the list can be expected to be reasonably correct in times and frequencies (including the low frequencies that are used during the winter only) when the book is out in January."

****VENEZUELAN COUP****

Score another one for shortwave. I listened to WTOP for 45 minutes this morning and not a word about the attempted coup in Venezuela. Then I turned by chance to a Colombian station and there was the president of Venezuela making a Yeltsin-like appeal. Since this was the first news I had it caught me by surprise. As you can imagine Caracol (the Colombian station) covered things in such detail as to talk to an insurgent who was holding the state governor prisoner. For those of you who speak Spanish, Voz del Cid (I think 9940 or 9960) has been carrying quite a bit of detail as to the repression in Cuba, with a large network of human rights activists risking their lives to send the information out. Particularly gripping is the upcoming trial of the folks who killed policemen trying to escape the island, for the death penalty is being asked for. (04-Feb-92/Pedro Saavedra/SW ECHO)

****HAD THIS BEEN AN ACTUAL EMERGENCY, YOUR RADIO WOULD'VE BEEN CONFISCATED...***

Touched base with the EBS guru, and lo and behold, there IS a specific rule on this:

Emergency Broadcast System operation during a National level emergency

--- Broadcast stations in the International Broadcast Service will cease broadcasting immediately upon receipt of an Emergency Action Notification and will maintain radio silence. However, under certain conditions, they may be issued appropriate emergency authorization by the FCC with concurrence of the Director, Office of Science and Technology Policy, in which event they will transmit only Federal government broadcasts or communications. The station's carrier must be removed from the air during periods of no broadcasts or communications transmissions.

47 C.F.R. s. 73.933(a)(9)

There is no comparable requirement for State and Local level emergencies. And yes, Section 73.932 DOES require EBS monitor receivers at the IBC control point. The stuff we learn on BBSs!!! (7-Jan-92/Pioni Almoni/SW ECHO)

****M.C. HAMMERED****

It happened in Oceanside, California. A man broke into a police car early Monday morning (01/07/92) and used the radio to sing rap music. Dispatchers frantically tried to find out where the source of the man's transmission was. They finally found out that the guy was in their own back yard. An Oceanside Police Department spokesman, Bob George, told a local newspaper... "at 5:30 this morning, some idiot jumped our 8-foot fence, got in one of our marked police units, put the mike to his mouth and started singing rap to us." An officer who was on duty inside Oceanside Police Headquarters went out to the parking lot behind the department building and found the culprit in his car. The parking lot area is enclosed by an eight foot high chain link fence. Another officer who heard about the incident commented like this... "Great Security" and "That's Hilarious." It was later revealed in a brief police log item... "The suspect jumps the fence, gets on a police radio and begins a rap tune about the things he likes to do, most of them obscene and punctuated with profanity." No other details about the incident were included in the logged item. Police later identified the suspect as 20 year old Basil Wilmington whom they suspect a transient. He was issued a citation for suspicion of being under the influence of narcotics. George said... "It's just not a very good idea if you're going to be under the influence of narcotics to come and sing us a song. Especially on one of our own radios." The rapper used the police department's primary dispatch frequency. However, dispatchers made a switch to the department's secondary dispatch channel and contacted all patrol units in the field. The singer was found through the process of elimination. (8-Jan-92/Brian Johnson/SW ECHO)

****INTERNATIONAL BROADCAST TASK FORCE****

From RADIO WORLD February 2, 1992:

INTERNATIONAL BROADCAST STUDY LOOKS AT NEW TECHNOLOGIES
by JOHN GATSKI

WASHINGTON - Although new technologies for international broadcasting, such as direct broadcasting satellite (DBS), are not likely to be implemented for another five years, the U.S. should begin its planning now, according to a Presidential Task Force Report on International Broadcasting.

Eventually, the report said, international broadcasting will be impacted by the new technologies such as DBS and single sideband (SSB) radio. "The U.S. should plan for the advent of widespread direct broadcast by satellite by participating positively in the frequency allocation process in the International Telecommunications Union ...

Once implemented, the new technologies would likely be used in Eastern Europe, the Middle East and Asia, the report explained. Although tensions have decreased in Eastern Europe, the Task Force has recommended a continued presence there as well as stepped up presence in Asia and the Middle East.

Much of the U.S.'s international broadcasting investment should remain committed to shortwave because it will remain the "most efficient method" of broadcasting until beyond the end of the century, the report noted. The Voice of America (VOA), for example, relies heavily on shortwave.

Other suggestions to take advantage of existing technology include leasing satellite space from private companies or leasing private transmitters.

****TASK FORCE (cont.)****

As far as international digital broadcasting in the tradition of VOA or Radio Free Europe, the report said the limitations of transmitting equipment (shortwave) and the necessity for special digital receiving equipment does not make it desirable at this time. Also, production and duplication of compact disc and digital tapes for international broadcast purposes is considered more expensive and cumbersome than the widely used analog tapes.

Other areas discussed by the task force include Radio Marti and TV Marti, the audio and video services that beam news and information to communist Cuba. Radio Marti, an AM broadcast service, has been transmitted to the island since 1983. In 1990, TV Marti was launched in a limited hour (3 a.m. - 6 a.m.) broadcast using a blimp-mounted transmitter tethered in south Florida.

The Cuban government retaliated by transmitting a TV jamming signal and promised intentional interference to U.S. radio stations. The controversial service has been criticized as ineffective by the NAB and some members of Congress.

The task force did not urge outright elimination of the TV service, but recommended it be turned off if better hours are not found. It also suggested taking Radio Marti and TV Marti from the United States Information Agency (USIA) and placing them under the Board for International Broadcasting, as are the other "surrogate" broadcast services, Radio Free Europe (RFE) and Radio Liberty.

On the U.S.'s international broadcasting structure, the report noted that Voice of America (VOA), Radio Liberty, Radio Free Europe and TV Marti should maintain their different missions for several more years, by the 21st century the separate services should be streamlined into one service.

"Radio Free Europe and Radio Liberty ... have a continuing, albeit somewhat modified mission, which will continue to be very important for some years," the report noted. "We believe the new role of alternatives, as opposed to surrogate broadcasting, is to assist newly democratic nations in establishing and developing democratic institutions, particularly a free and unfettered media.

On the China issue, which continues to defy the European anti-communism trend, the task force recommended increasing VOA broadcasts. Task force discussions also noted a "desirability of establishing a Radio Free Asia" to China, Vietnam, North Korea, Laos, and possibly Cambodia.

If established, this service could share VOA facilities, the report added.

Detractors of a Radio Free Asia point to increased costs and the potential to create instability, especially in China, leading to chaos and violence.

Opponents also point to the difficulty and expense in finding transmitter sites, estimating as much as \$80 million to construct and expand broadcasts into China. Operations would run about \$24 million per year, according to one estimate.

Alternative, less costly proposals would include utilization of current VOA facilities for expanded China broadcasts. (09-Feb-92/AJ Quaglieri/SW ECHO)

****UFO'S FINALLY EXPLAINED***

JONATHAN COBB: I was scanning all over the SW and HF bands last night and I picked up what I think to be a conversation between a base in Nevada and an aircraft. I never heard the name of the people talking, I just heard some talk of the craft being flown. Call me crazy, which this may be, but they were talking about the UFO they were flying! Weird? Eh? Just wanted to know if anybody heard the same thing?

MICHAEL SHIRLEY: I have in the past. What you were hearing was unencrypted chatter from one of the secret aircraft that is run from the old CIA facility at Groom Dry Lake, about 50 miles east of Tonopah. The F-117A Stealth used to be based there and for about the last 40 years, a succession of special reconnaissance aircraft have operated from that facility. They are kept there because their external configurations would give foreign governments an idea of what to look for and what they are capable of. There are a lot of really weird aircraft there and some of em would easily be confused with the UFOs that saucer buffs all claim to see. These are all of Terrestrial origin and come out of our good old Military Industrial Complex.

****BLACK LIBERATION RADIO****

PATRICK CRUMHORN: The following article appeared on PEACENET...

Assassination Attempt Didn't Kill Radical Station

Minutes after a powerful slug from a .357 Magnum shattered his window, narrowly missing his head, Mbanna Kantako, the driving force behind Black Liberation Radio, was back on the air broadcasting a tape of the attack.

Black Liberation Radio (BLR, formerly WTRA) is a radical one-watt African-American station broadcasting from the Kantako home in the housing projects of Springfield, Illinois. Its tenants are mostly black, and comprise the poorest population in east Springfield. They suffer racial prejudice and a high incidence of police brutality.

The Federal Communications Commission (FCC) has repeatedly tried to close down this unlicensed station, for failing to meet its regulations (it's illegal to operate a station with less than ten watts, a measure adopted to discourage stations like BLR from broadcasting) BLR gained popularity and support in the projects by recruiting young volunteers to the station and by broadcasting local residents' complaints about police brutality.

Incredibly, the Springfield police (who monitor and tape BLR daily) failed to investigate the attack, and the local media suppressed the story. Kantako was broadcasting a live interview on white supremacy at the time of the attack on his life. It is unknown who the assailants were, however, it may have been

****BLACK LIBERATION RADIO (cont.)****

an attempt to silence BLR once and for all.

Kantako's response to the attack has been to turn up the heat; BLR now broadcasts 24 hours a day, seven days a week.

Black Liberation Radio Newsletter
333 N. 12th Street
Springfield, IL
62702, USA
(217) 527-1298

GARY HUFF: To keep things in perspective, I used to live in Springfield and am very familiar with that station. He broadcasts from a public housing project called Hay Homes, located on the near Northeast side of Springfield.

That housing project is swarming with drug dealers, burglars, prostitutes, armed robbers, addicts, fences, and is a cancer on Springfield. It is so violent that when I worked in the hospital in Springfield, we used to call that area the "Springfield Knife and Gun Club."

Mr. Kantako broadcasts programs generally consisting of very crude language, tons of profanity, and in general is nothing more than a non-stop diatribe for revolution and "hate Whitey."

I am also personally familiar with many, if not all of the police who patrol that area, and don't be misled by that "police brutality" nonsense. Mr. Kantako's definition of "police brutality" is the vigorous enforcement of drug laws, gun laws, murder and assault laws, etc. He believes that the police are violating the "rights" of the drug dealers and the pimps and the hookers by arresting them. He tries to make a racial issue out of it, as though it is White police harassing Blacks. He fails to mention that most of the police in that project are Black, and their supervisors are Black.

He is difficult to shut down because he is sitting in the middle of a very, very violent area that would take nothing short of a SWAT team to go in and confiscate his radio equipment. The FCC is aware of his broadcasts, and has tried to be extremely tolerant of his shenanigans, in the interests of not stirring up unnecessary trouble (spelled R-I-O-T-S). If he were anyone other than who he is, located anywhere other than where he is, he would have been shut down long ago.

Don't shed any tears for his operation. He's getting away with murder right now. And DON'T send any money!!! If you feel sorry for his listeners, send your donation to the Salvation Army in Springfield, located 1 block south of Mr. Kantako, or St. John's Breadline, located just to the West a couple of blocks. They are doing MUCH more good than the obscenity-laced broadcasts of Mr. Kantako.

KEVIN JOHNSON: Uhhh...hate coming in on the end of a discussion. But do you have any evidence (real evidence not just because Somebody said so) that the allegation is true? Seems to me that this is a knee-jerk reaction to the gentlemen's (I know the term may not apply to him) race. Seems to me there's too much of: "[pick your subject] did/did not occur because he/she/it is/isn't black/white/oriental/etc, ad nauseam" going on that is generally unsupported by facts. This is the type of thing that causes so much dissension and tension. Just my two cents, no flame intended.

GARY HUFF: Kevin, I don't mean to try to come on like a "David Duke," or wearing a white sheet. In fact, I was in an inter-racial marriage for over 20 years, and my kids are half-and-half. But I don't allow myself to be branded as "racist" in comments such as above when, in fact, they are fact and truth. I lived about 5 miles from the man in question for most of my life, and in fact drove right by his apartment in the housing project he lives in on my route to work. I used to tune into his station as I drove by (he had a range of about 2 miles), and I would listen on almost a daily basis to some of the vitriolic diatribe he was putting out. It was, in general, exceptionally racist in content, blaming "Whitey" for all the evils in the world, blaming all the local politicians in Springfield as racist, blaming the police force as being anti-black (which was a real trick, since the majority of the police in that project were themselves black), and in general just covering all the bases in flaming racist passions against Whites. Now, if I were to start a pirate radio station and start railing day and night against Blacks, or Japanese, or Jews, or Hispanics, tell me truthfully: how long do you suppose I would be allowed to operate that station? (You may give your answer in fractions of a second, if you wish). The Illinois State Journal-Register, the newspaper for Springfield, ran many news articles and editorials on the subject, so it was a well published news story, that the FCC had been notified by hundreds of citizens of Springfield, both Black and White, complaining about the foul language (his broadcasts were heavily laced with profanity, including obscenities for sexual intercourse, bodily functions of excretion, and other delightful language). Most people want freedom of speech, but this guy went way, way beyond the boundaries of tastefulness, or of putting out anything you would want your kids to tune into on their FM dials. Additionally, his non-stop calls for revolution, overthrow of the White government, "kill Whitey," etc. were outrageously inflammatory. As I say, how long do you think I'd be allowed to put out a broadcast advocating "Kill Niggers," or "Kill Spicks" or "Overthrow the Kikes?" Such conduct on my part would be justifiably condemned and stopped in 2 seconds! That the FCC allowed it to continue at all shows me (and I was most certainly not the only person to make this interpretation... the vast majority of letters to the editor supported this viewpoint) that they

****BLACK LIBERATION RADIO (cont.)****

were reluctant to shut the man down for fear of being accused of "racial insensitivity," or because the housing project the broadcasts were emanating from were seething hotbeds of violence, drug dealers, prostitutes, murderers, revolutionaries, and assorted reactionaries. It would literally require a heavily armed SWAT team to go in and shut the guy down. Other interpretations were made as well, but few locals involved could find any that were sensible or within the bounds of reason. Thus, the man was allowed to operate his station for hate and inspiration for mass murder for many years without FCC intervention. Now, you can call that anything you like. Myself, when I see a candy bar in the store with the word "Hershey's" written on it, I call it chocolate. When I see "Wrigley's," I call it chewing gum. When I see the FCC allow obscene hate-filled pirate broadcasting to continue, I call it "weak," "inexcusable," "afraid to take action," and several other labels. It was quite apparent to me that the man was being allowed to continue his very plainly illegal pirate radio operations for no reason other than that he was Black and thus exercising a "freedom of speech" that would be denied any other race. Over many years the letters to the editor in the State Journal Register told me that I was not the only person to think that way. As I say, double standard at work. Not many other explanations fit.

JAY MARVIN: Now tell us where you got your information? In fact, have you ever heard any of his broadcasts? It seems to me there's some racism at work here. State your sources. Do you have any? Or is this what you think?

GARY HUFF: Cool your jets, Jay. My source is from my own personal observations...I used to live about 5 miles from the guy, and I've heard his broadcasts in person many, many times. Interesting that you accuse me of racism... I'll have to mention this to my wife, with whom I am in an inter-racial marriage, or to my children, which are of mixed races. They would be interested to know that I am prejudiced against them. Any other questions, smart guy?

RICHARD DALE: Thanks for the on-the-spot report. Too many people fall for the "gossip" they hear, believing it to be true with absolutely no backing facts.

Of course, we all remember the stories on SW of Hussein's troops disconnecting the babies' incubators, or the reported atrocities in Yugoslavia — both of which turned out to be false.

I used to get the biggest kick out of Radio Moscow's mailbag show. They'd read a letter from a "John Smith of Chicago" (how *original*) praising the USSR and saying how wonderful it was (WAS is the key word). Obviously it was designed to pull your chain.

STEPHEN WAKEFIELD: I have heard of this before — unlicensed radio stations operating out of someone's house — do you know where I would get the information on doing this legally? I have a friend that would enjoy something like this, and her birthday is coming up. Just wondering....

KIRK BAXTER: Black Liberation Radio, like any other pirate station, is illegal. It just depends on how vigorous the FCC is going to pursue a particular case. Some, like BLR, seem to be ignored, while another FM pirate in Texas recently got 6 months of jail time for broadcasting. Wouldn't that be a nice birthday present??

PLONI ALMONI: "The Sources" tell that the FCC has long ago referred the case for prosecution and the U S Attorney is too scared (or confused) to send in the Marshals and to take it into court. Rest assured, however, that the vast majority of U S Attorneys nationwide are a good deal more aggressive than that....

PLONI ALMONI (in a later message): The word that I get is that the U S Marshal and the FCC are ready to go in any time the National Guard will provide a Bradley Fighting Vehicle, and nothing less will do.

DON KIMBERLIN: From what we've seen about Black Liberation Radio, it's so safely located in the middle of a ghetto war zone that the FCC would need to rent a battalion of Marines to get to it. That's a pretty good reason for their failure to shut it down as I see it.

ALLAN MARAIN: I do not find the failure of the Springfield Police to investigate the matter incredible.

MICHAEL SHIRLEY: I wonder if they would try to close down a station that sings the praises of Mr. Bush?

RICHARD DALE: Yes. Republican/conservative/religious stations have been shut down.

MICHAEL SHIRLEY: Can you give some details on the programming of these.

RICHARD DALE: There were three or four fundamentalist religious organizations which ran pirate stations. This has been probably 6 or 8 years ago, as best I can remember. One claimed 10 watts, but it was closer to 100 I think. Of course, there's always the Voice of Tomorrow (?), which claims to be from near Baltimore. It's apparently run by the Aryan Nations or similar group. Rumor places it in the northwest, and it's never on often enough or regular enough to track.

****BLACK LIBERATION RADIO (cont.)****

MICHAEL SHIRLEY (continues): It is possible to be conservative and not be a fan of Mr. New World Order. For example, out here, there are lots of Constitutionalists who go by the letter of the Bill of Rights and little else. These people refuse to pay taxes, buy guns with the intention of revolting when the feds get too terribly obnoxious and in some places, Boise Idaho for example, refuse even to get drivers licenses. (My kind of people come to think of it, even if I don't agree with some of their agenda.) Now, these people may well be conservative, but they are almost as hostile to Mr. Bush as I am. The Republican mainstream, the feds and Statist types in general would tend to think of these people as subversive. <REMEMBER: A MURDERER ONLY THREATENS INDIVIDUALS, BUT A TAX PROTESTER THREATENS THE EXISTENCE OF THE STATE!> It therefore wouldn't surprise me if the FCC moved against a Constitutionalist, Bible thumping Christian.

MICHAEL SHIRLEY (later): What regulation says that you can't operate a station of less than 10 watts? Also, what are the regs for a station of more than 100 milliwatts but less than 10 watts?

PATRICK CRUMHORN: Not sure of the exact regulation number, but any transmission over 100 mw requires a license. Black Liberation Radio, according to the ACE newsletter, uses 400 mw. The FCC used to license 10 watt FM stations, but upped the minimum allowable power to either 100 or 1000 watts...the latter, I believe. Some of us political malcontents think that was done to make low-power community FM stations obsolete.

JIM GRUBS: It was done to eliminate the frivolous, "Mr. Microphone" type radio stations.

MICHAEL STANLEY: Speaking as one of the more malevolent political malcontents, the only reason that I can see for any desire to make low power community radio obsolete, would be a morbid desire on the part of the bureaucrats to restrict the access of individuals to interactive media. The attempts to regulate talk radio by reenacting the Fairness Doctrine and the efforts at regulating free BBSs out of business tends to support this view. Example: Remember when the established national talk radio hosts got people to send their congresscritters a teabag as a protest against the congressional pay raise? As soon as that one passed, guys like Jessie Helms and others began a series of continuing efforts to get the old Fairness Doctrine reinstated. That would make call in type talk radio impossible because the station managers couldn't keep track of how many minutes one side or another got. When you get people like me who are politically non-elucidians into the debate, the problem becomes compounded. The professional hair splitters from Disneyland on the Potomac know this and figured that the licensees would eliminate political discussion and go back to playing Mantovani or some other version of MUZAK! This comes down to Noam Chomsky's point that instead of free and open debate, we have the Engineering of Consent. Instead of debate you get tactical disagreements between people who share common premises. Nobody ever begs the question. Those of us who are outside of those premises begin to feel a little cognitive dissonance because what we think seems to be outside of what is presented as mainstream thinking. What interactive media has done is to permit people like me to set the agenda. Instead of finding myself among the politically insane, it turns out that by transcending the political isolation that centrally controlled media creates, it becomes possible to find that I'm actually part of a consensus and that what is presented by establishment media as the mainstream is actually a lot of self serving drivel. Regulations restricting the access to media to those who have either lots of political power or lots of money is basically an effort to restrict debate to the parameters which are friendly to those in power. Maybe I ought to corner my Sr. Senator who is up for reelection and ask him to support a bill to establish low power community access channels at one end of the AM and FM spectrum. I don't give it much hope of winning but if enough support is shown for the proposal, then maybe at least FCC might decide to liberalize things before somebody in congress accidentally does it for them..... <EVIL GRIN>

RICHARD DALE: Not wanting to enter into a debate on the merits of current programming, it's possible, too, that content could play something to do with it. If 10-watt stations were readily available, I fear it would turn out like CB, with "channel wars" and jamming, etc. I'm surprised there aren't more FM pirates around. It's not that hard a technology! However, with an FCC monitoring station just 7 miles away, I'm not ready for that just yet. I'm gathering the schematics and plans and commencing the building, but the air date will be the day the militia is called out to collect the guns/scanners/etc of the citizens. Hmhmhmhm. May not be too far off, either.

MICHAEL SHIRLEY: I'd be really hard put to disagree with that. It seems that the older that I get, the more I find to fear from government. On the other side of the coin, last time that I read the Federalist Papers, I thought that we were supposed to be the militia and were supposed to stand in opposition to a standing army and select militia. (I.E. National Guard, State Militia, police agencies etc...)

Concerning low power broadcasting, I'm interested in the legalities because an election is coming and low power broadcasting would seem to be a useful way to reach certain constituencies within the city that I live in. I'm trying to get both legal information and information on the availability of those low power broadcast units that real estate agents use to advertise houses to passers by. They are essentially a machine that plays a cassette tape and then rewinds. If I could tweak a few of these to the 100mw limit and install the largest legal antenna possible, then with a little intelligent programming, I could target neighborhoods with swing constituencies. Given that the

****BLACK LIBERATION RADIO (cont.)****

neighborhood that I live in is largely hispanic, programming slanted toward them, combined with say, a voter registration drive, might accomplish something.

****MT CONVENTION****

I am pleased to announce that Monitoring Times will be having it's third annual radio convention in 1992. Preliminary details have been released to the staff and more will be forth coming very soon in MT. Don't make your plans for Knoxville we will be moving in 1992 to:

Atlanta, Georgia
at the Omni
October 23 - 25, 1992

I talked to Kelly Davis the other day and the whole staff (including your's truly) is very excited. This should be the best yet. One preliminary note, a tour of the CNN facilities located there in the convention hotel will be scheduled and Kelly says the room rates for the convention hotel will be cheaper than at Knoxville. Also airline connects into Atlanta are cheaper and better so now none of you have any excuse to join Gayle, me and the rest of the staff at Atlanta. You won't regret it I am sure. In fact if any of the Radio Clubs are represented, you ought to contact Brasstown now about possibly having your yearly convention at the MT convention. We will have exhibitors and SWBC folks at Atlanta and the banquet guest speaker (if things work out) is a definite coup. More later as the information is released. Remember, you heard it first here on Fidonet. (01-Jan-92/Larry Van Horn N5FPW/SW ECHO)

****WHY SO MANY FREQUENCY CHANGES?***

GARY GREENBERG: I have to admit that the instability of S/W stations is frustrating. I'd like to have a couple of memory buttons for the countries I find entertaining or useful and PUSH them when I sit down. (Almost never the same time twice in a week). Instead, I search among the available frequencies and bump into stuff (or nothing of use). What is the premise of the ever-changing frequencies and schedules? Am I mis-perceiving a recurring pattern to be (what seems to me) total chaos? If American domestic radio/TV played these games, the public'd revolt! Imagine wondering when and where you'd find the Simpsons each week (Yuk!)

BILL OXNER: Shortwave broadcasters don't really have any choice. Propagation conditions change with the seasons and with the sun spot cycle. A frequency that puts a great signal into North America during the winter may be totally useless during the summer. Another problem is the somewhat chaotic nature of international frequency assignments. A broadcaster may have a good frequency but suddenly a new broadcaster chooses to begin broadcasting on the same or an adjacent frequency. The first broadcaster then may have to move to avoid the interference. Even with all these problems there ARE some frequencies that have remained very stable for several years and which you can safely program into your memory presets:

- BBC morning and daytime in the US: 12095, 15260, 15070 there are others but these have remained the same for at least the last few years
- BBC evening and night in the US: 5975
- HCJB day and night: 9745
- R. Netherlands night: 6165 6020 9590 for at least the past three years
- R. Japan night: 5960 for at least the past three years
- R. Australia night: 17795 21740 for at least the past three years
- R. New Zealand night: 17770

There are other stable freq's but this should get you started.

DAN FERGUSON: Yeah, I wouldn't like not knowing what channel to avoid. :-) What stations are you listening to? BBC, for example, has used 5975 to North America in the evening for a very long time. International broadcasters will normally try very hard to keep the same frequencies. There are, however, some things beyond their control. One of those uncontrollables is the progression of the seasons, with the resulting changes in HF propagation. At one time major broadcasters made major overhauls of their schedules four times a year, on the first Sunday of March, May, September and November. (The M, J, S and D broadcasting seasons of the IFRB -- International Frequency Registration Board.) In recent years most major broadcasters have switched to two schedules a year, beginning on the last Sunday of March and September (The Z (zommer) and W (winter) schedules), coinciding with the time change in Europe. Over a period of several years you'll also see changes as general propagation conditions vary with the sunspot cycle. And any time a transmissions isn't getting through in the target area it will very likely be changed. Most broadcasters would see little point in continuing to transmit a program that, because of changing propagation or interference patterns, could not be heard by the intended audience.

RICHARD URENA: There are some patterns based on propagation conditions, but that does not preclude chaos, either. For the major broadcasters, once you hit on a good frequency (or frequency) they SHOULD remain fairly stable. On a particular day, the signal may be degraded or even inaudible due to solar or geomagnetic storms. The topic is pretty wide, so I think that this will be the first of a series of messages in which we should discuss propagation, and how it affects reception. By "we" I mean everyone on the echo, there are lots of

****FREQUENCY CHANGES (cont.)****

people here who know a lot about the subject, and I think it would benefit everyone to discuss this topic.

Firstly, propagation is affected seasonally. The presence or absence of daylight between you (the receiver) and the transmitter affects propagation of the different bands. Roughly speaking, higher frequencies (13, 16 and 19 meters) propagate best on daylight; lower frequencies (49,90 and 120 meters) propagate poorly or not at all during the daytime. The 21, 25 and 31 meter bands are kind of middle of the road, and you will find stations there at all times of the day.

Since the amount of daylight varies with the season, this causes broadcasters to make seasonal changes to their frequencies. For the most part, these changes occur around the time of the fall and spring equinoxes, which is to say, around November and March. In November, there is a general trend to move from higher to lower frequencies, and vice-versa in March. Since we just went through the fall equinox a month or so ago, there have been many frequency changes made by the broadcasters. Although the intention is to keep the new frequencies in operation until March or thereabouts, some further adjustments are done because of interference, etc. This process is going on right now (and in addition, political and economic changes in different countries affect their shortwave operations as well. It's anybody's guess what will happen to Radio Moscow now).

****HEY, THEY'RE TALKING 'BOUT MY RADIO!***

(Replying to a query from John Grove:) From a message on Echo I gather you are looking for a source of technical help with ICOM radios. If you will tune 14.317 on Sundays around noon Eastern Time, the ICOM users net is on for several hours, and takes technical info requests and tries to solve any problems you might have with ICOM equipment. Several of the participants are ICOM repair reps. Net is centered on Amateur or Ham equipment, but you may be able to get tech help on other Icom gear. If you are not a ham, perhaps you could find someone locally who is who could patch you in to the net. It is a directed net. Also, on the same frequency, Icom net is followed by Yaesu Net (sometimes, as they have not had net control recently). Later in the afternoon on same frequency is the Kenwood Users Net. I have found these nets to be excellent sources of product-specific information, and the technical reps have access to all factory service bulletins. (12-10-91/Jim Overstreet/SW Echo)

****HRO RECEIVERS****

FRANK GILMORE: Reference your message of 11/21/91 concerning the various receivers, the comments on the HRO really hit home! I have had considerable experience with the National series as a user, dealer, and warranty repair depot. ...I probably lost more sleep over the HRO-60 than any two things they made...except for the first NCL-2000 amplifiers which were prone to very interesting self destruction. ...When a customer paid the kind of money the 60 was bringing back then they expected a wondrous receiver...which the 60 was not. In point of fact, the HRO-50T1 (not the HRO-50 or HRO-50T) was the best of the whole series and the engineers at National knew this and tried feverishly to come up with a fix. The 50T1 was more sensitive on high freqs, more stable, and had a superior crystal filter. The '60 was prettier in a cosmetic way and actually had a higher grade of components, but it just didn't perform as well. ...One trick that HRO users learned quickly was to keep the unused coil drawers sitting on something hot...the transmitter, radiator, whatever... so when they were plugged into the receiver the drift would stabilize much faster. ...As to the alignment...the only HRO series receiver that I found had severe alignment problems was the HRO-7. By later versions it was very primitive. The HRO-5 was a joy to work on because of simplicity...and was really a very good receiver. The HRO Senior and Junior receivers were not that great by more modern standards, although for their day they were at the top of the heap. Many variations of these receivers were made for the military. I just disposed of one that was built under contract to the FAA that had some very unusual features. ...As to freq readout...there were two methods. The most accurate was to have either a mil surplus BC-221 series frequency meter sitting beside the receiver....or to the spend tedious hours make up logging charts that corresponded with the 0-500 windows on the center dial and it's out ring calibration marks. I did this for 20 and 15 once and it was worked fine, but was a hassle. I gave serious thought to producing these charts for a sideline business, but realized there were not that many people using the receivers that would buy them. ...Something not know by most "modern" SWLs is that frequency readout for 99% of hams and SWLs of the 50s and 60s era was something that would be nice but not all that necessary. Band edge marker generators were very popular so you didn't accidentally slide out of the low end of 20 during a DX contest. It was not uncommon for DX stations to drop as much as 15 khz below 14.000 to escape the QRM.....for in those days their nations radio governing bodies could care less where they were operating. ...I don't want to take up too much space...but did want to comment on the HRO series. Audio was good...and they sure were pretty glowing in the darkened room!!

DON KIMBERLIN: You sure know plenty about the fabled HRO's. Can you confirm or correct the legend that National coined the term "HRO" based on the first development being for the Navy and a "Helluva Rush Order?" I heard that one years ago...

ANDY WALLACE: No problem at all about the long HRO post, Frank. I'd like to hear more! I have the HRO-50T1 that got me some great DX during my shortwave "school years." I learned a lot about tricky tuning and listening for IDs and frequencies. My brother made me a digital display for the thing (actually a combination RF generator and counter) and that was a blessing. The HRO-50 was a pretty set in grey... It was also built like a

****HRO RECEIVERS (cont.)****

tank and the rounded corners were beautiful. Only problem I had with mine was the power transformer cooked one sunny Fall day andhmm, what's that awful smell? We found a transformer that was close but had to rig up a separate one for the 12V. Even the S-meter was pretty!

FRANK GILMORE: Yes, I remember those power transformer problems now that you mention it Andy. I think I changed out two of them under warranty. And yes, the S Meter was pretty! I have built digital counters for other radios, but not one for the HRO series. I have one commercial unit on a Drake receiver, and built a homebrew one for each of my Collins Receivers...even though their calibration is great. I have become used to the R-5000 and R-71A dials....plus with bifocals it helps!! ...Sometime I will post some information on the legendary HRO-5000 and 6000 series. I had one of theoops I see I put one too many 0s in there.....make that 500 and 600 series. I had a 500, one of the first ten off the assembly line and it was a learning experience....actually I was a beta tester! I pulled a lot of hair out. At the same time approximately I was selling Squires Sanders SS1-R receivers, which is another story. I loved them as long as the servo motors didn't burn out! The display for them was wonderful...but prone to losing the CRT. Going to write a book some day, but keep adding chapters with all the new stuff coming out!

ANDY WALLACE: I'd love to hear more about the HROs, Frank. I remember seeing ads for the HRO-500 in my dad's old QSTs and thinking about what a great radio it must have been -- heck, it was #500, right? I remember others on the echo saying they were a BEAR and I can believe it. Anyhow, post more if you like; this humble Fido-er enjoys reading nostalgia.

****JOIN GLENN AND/OR BRUCE AS HE/THEY VISIT/VISITS BEIJING/PEKING****

Glenn Hauser and/or Bruce MacGibbon will escort the first ever shortwave radio listeners tour to China on September 17 to September 30.

This is a 14 day tour via San Francisco or JFK via Air China's Boeing 747 SP non stop to Shanghai

- Day 2 - Arrive Shanghai early evening
- Day 3 - Shanghai Morning sightseeing then late afternoon first class train to Hangzhou.
- Day 4 - Sightseeing in Hangzhou
- Day 5 - Sightseeing in Hangzhou
- Day 6 - Motorcoach tour to Suzhou. Afternoon sightseeing in Suzhou.
- Day 7 - Cruise the Grand Canal to Wuxi. Sightseeing in Wuxi. Evening train to Nanjing.
- Day 8 - Sightseeing in Nanjing.
- Day 9 - Morning train to Shanghai. Afternoon sightseeing in Shanghai.
- Day 10 - Afternoon non stop flight to Beijing, China's Capital city. Transfer to your hotel.
- Day 11 - Visit Tian An Men Square, the Forbidden City and downtown Beijing.
- Day 12 - Morning drive to the Great Wall, afternoon tour of the Ming Tombs.
- Day 13 - Visit the Summer Palace, Temple of Heaven.
- Day 14 - Depart Beijing this morning for San Francisco and JFK. Arrive early morning in San Francisco and JFK early evening after crossing the International Dateline.

Included in your tour to China:

Round trip airfare via Air China from San Francisco or JFK to Shanghai. American Breakfast(all you can eat), Chinese Luncheon and Dinner Daily. (10-15 courses). First class train service or motorcoach transportation between cities. Sightseeing admissions in each city visited. Fully escorted by a China International Travel Service national and a local guide in each city. Not included are tips and departure taxes from China.

Price is \$1,966.00 from San Francisco. Add \$200.00 from JFK.

1992 is the designated travel year to China in Asia. September is also Radio Beijing's 45th Anniversary and one of the days in Beijing, we will visit Radio Beijing.

Tour Deposit has to be made in early July to hold those dates. If you would like to further information, please contact me:

Bruce MacGibbon
2295 NE Juniper Ave
Gresham, Oregon 97030

From my experience in Beijing from July 29-Aug 5 of 1991, this will be a most memorable trip for all. Also, in 1993 the rates are expected to go up, so see China at a discount during the designated travel year. (02-Mar-92/Bruce MacGibbon/SW ECHO)

****GEORGE JACOBS - THE MAN, THE MYTH****

George Jacobs was truly born into the age of shortwave. His birth in 1924 coincided to the day with the discovery of the ionosphere, upon which shortwave depends. The year 1992 marks George's 51st professional year in international broadcasting, and he is still going strong!

Combining outstanding engineering talents, diplomacy and a fierce belief in the free flow of information, for thirty-four years he was one of the principal architects of the world-wide broadcasting system of the Voice of

****JACOBS BIO (cont.)****

America, and of the modernized technical facilities of Radio Free Europe and Radio Liberty.

Retiring from the government's "Senior Executive Service" in 1980, he continues to develop privately-owned international broadcasting systems, including a world-wide network for the Christian Science Monitor and for Adventist World Radio. George has recently completed the design for what will be the world's largest privately-owned shortwave broadcasting station. It is now under construction near Birmingham, Alabama. He is also actively involved in developing privately-owned broadcasting stations in Eastern Europe and the Soviet Union. Jacobs has a Masters Degree in Electrical Engineering, and he is a Registered Professional Engineer. He has been awarded the grade of Fellow in the "Institute of Electrical and Electronics Engineers" (IEEE), and in the "Radio Club of America." Recognized world-wide for his achievements, he is the recipient of numerous awards for his government service and from his peers. These include the Air Medal for combat service in Europe with the US 8th Air Force, a Superior Honor Award from USIA, an Outstanding Performance Award from the Board for International Broadcasting, and the Marconi Gold Medal for excellence in Engineering. George's biographical sketch appears in "Who's Who in America", and "Who's Who in Technology Today."

In 1982, George was appointed by President Reagan to the "Presidential Commission on Broadcasting to Cuba", where he actively participated in the conceptional design and frequency assignment for Radio Marti. He also was a Consultant to the team selected to do the electronic design for a USA-Israel joint radio broadcast relay station to be located in Israel, and for a VOA station to be located in Israel, and for a VOA station to be located in Thailand. Jacobs has represented the USA at almost every major broadcasting conference convened by the International Telecommunication Union since 1949, and he is recognized world-wide as an expert in the field of frequency allocations.

Jacobs has authored hundreds of technical articles, and in 1991 he celebrated his 40th year as Radio Propagation Editor for "CQ Magazine." He is also co-author of a popular textbook dealing with shortwave radio propagation. George is actively engaged in communications as a hobby as well as professionally, and his call sign "W3ASK" is heard and known throughout the world." (George Jacobs & Associates/04-Mar-92/Bruce MacGibbon/SW ECHO)

****BBCM: IT'S NOT FOR EVERYBODY****

(in a reply to Mark Meece)

ANDY SENNITT: Mark, you asked about qualifications for working at BBC Monitoring (it is no longer called the Monitoring Service). I worked there for four years prior to joining WRTH, so maybe I can help.

First of all, you don't say what sort of job you had in mind. I presume from your background that you are interested in one which can utilize the DXing knowledge you already have. In that case, you probably mean something like the job I did, which in those days (1974-78) was called Operational Assistant. These people act as the link between the receiving station at Crowley Park, which supplied most of the signals down the line according to a predetermined schedule, and the monitors who actually listen to the broadcasts. There are no formal qualifications for this job, but you would have to take an aptitude test. Personality is just as important as knowledge, because at times of crisis and/or poor reception, the job can become very stressful as everyone demands priority attention at the same time ! The job may sound "glamorous", but remember that for most of the time you are doing the exact opposite of DXing - instead of looking for rare, weak signals you would be primarily interested in what can be heard - and MONITORED ! - on a regular basis. Occasionally a coup in some small country results in the need to monitor something more exotic, but for 99% of the time the job is much more mundane than that.

It does have its moments of excitement - for me it was being the first person outside Nigeria to learn of a coup, and being on duty the night of the raid on Entebbe, where we monitored unscheduled broadcasts of Israel Radio. I left after four years because there is not much of a career structure based on that particular job - it doesn't qualify you for much else, apart possibly from the job I'm doing now !

****TAKE A FLYING LEAP...****

(from the BROADCAST Echo)

SCOTT CASON: Folks, they are still at it! A "BASE" jumper will climb to the top of your tower and then jump off, just for the thrill of it. Meanwhile, damaging your expensive transmitting equipment. They parachute to the bottom after climbing over your antenna and waveguide. There was a report of base jumpers at WCTV's 2000 foot tower in Tallahassee last nite. These folks can cost your station money in equipment cost and off-air time. I would recommend checking your intrusion alarm if your transmitter is remote controlled and alerting studio personnel for suspicious activity around the station if your transmitter is with you. Just thought you might like to know.

RICHARD DALE: What do they do about RF burns?

TIM MULLIN: We used to have that problem here at KTUL. A few folks just could not resist our 1900+ stick. I'm not aware of them ever doing any damage. It surprises me that no one ever got RF burns or tangled up in the guy wires. Fortunately, they don't do it anymore. The jump doesn't scare them, but the guard dog sure does!

RON LUTTRELL: I guess it's safe to assume these guys have fathered all the children they intend to, or they're looking for a cheap, painless alternative to a vasectomy...

RADIO JAPAN AND BBC TO SHARE TOYS

RADIO JAPAN's announced it will use BBC transmitter facilities later this year to improve its SW signal into Europe. I asked DENNIS THOMPSON, who heads the BBC WORLD SERVICE Broadcast Coverage Department, in London, whether the BBC would therefore get time on transmitters in Japan in return.

DT: The idea, hopefully, is to arrange a swap in due course. But initially we are hiring transmitters to RADIO JAPAN so they can improve their coverage of both Europe and the USSR. Ultimately, when they have more capacity on their transmitting station at Yamata, then it's hoped that BBC will be able to get reciprocal relays through that facility to improve our coverage of east Asia.

JM: Now, the contract's just been signed with RADIO JAPAN. What does that mean in terms of the languages that are coming out of BBC facilities?

DT: Well, starting on the 1st of July this year, 1992, RADIO JAPAN will have some 10 hours of programming — 17.5 hours of transmitter time, because sometimes they'll be using two transmitters simultaneously — and they'll be carrying Japanese, English, Russian, German, and French.

JM: Will it only be SW? 'Cause, I mean, you — you say "English" there. On the other hand, I — I guess that all your antennas in the UK are beamed out of the UK rather than for domestic coverage.

DT: Yes, their — their intention is not to cover the UK, because it will be HF only, and they'll be beaming primarily eastward into the USSR and more-or-less southward into west and central Europe.

JM: So, why does the BBC need facilities in Japan after you've got Hong Kong?

DT: Well, we have only two transmitters at Hong Kong, and one program feed. So this means we can do either Mandarin or English; we can't do both simultaneously. So, whilst we're very happy with the coverage from Hong Kong, we can't do both of our major languages simultaneously into China, so the idea is, when we're doing Mandarin out of Hong Kong, we can complement that with the coverage in English out of Yamata.

JM: RADIO JAPAN will be using the BBC facilities at Skelton, in Cambria. You may recall the RADIO NETHERLANDS was forced to abandon plans for a joint project with the BBC to build a relay station in Thailand. The Dutch government decided not to approve the necessary funds. But what about the BBC's plans? Are they still going ahead?

DT: One of the things we need to do, in terms of improving our audibility, is to obtain better signals into the subcontinent. We are redeveloping our station at Masirah by installing new antennas, and we would like to complement that development by the Thailand relay, which will give us the ability to cover the subcontinent very advantageously from both the east as well as the west.

JM: And how many transmitters will go in?

DT: Two transmitters. As you know, the original concept was two for RADIO NETHERLANDS and two for WORLD SERVICE, and we will press on with our two, and hopefully get those installed as soon as possible. Clearly, the — the most important thing is to sign an agreement with the — the Thai government, which will enable us to proceed. But once that is achieved, then we would think the building time scale would be of the order of three years. (20-Feb-92/Jonathan marks/RN MEDIA NETWORK/Bill Kelsey/SW ECHO)

GOOD MORNING, MOSCOW...I'M HOWARD STERNSKI A Profile of the Moscow Radio Scene by Vasily Strelnikov

So what IS happening on the Moscow FM scene? The best way to find out: switch on the wireless. In my case, a Sony ICF-2010. No problem, you might think. Well, actually, that's where we encountered the biggest problems. See, Japanese and western-made radios cover the FM band mostly from 76-108 MHz; while in the former Soviet Union and most of Eastern Europe, FM means 65-74 MHz, supposedly because the other frequencies are for special communications and television audio.

So what do you do with a radio like the Sony 2010 or any kind of ghetto blaster if you're stuck in Moscow? You go in your local electronics shop and buy a widely-advertised and scarcely-available FM Adaptor, the size of a box of matches, with one AA size battery which is never available. The cost of the adaptor, 100 rubles (about \$1 US). Snap it onto your telescopic and — presto! Mediocre FM mono. So you might say, "Why go to all this trouble here when you can go to the store and buy a Russian-made radio with a local FM band? Well, that's the hitch, see; you can't FIND these radios anywhere! Anyway, let's see what we can dig up.

First stop: M Radio, on 71.3 MHz [mx: Van Halen "Jump," Russian dj], a 24-hour nonstop Top 40 Europop station operated in part by Skyrock of France. And I must say that this is a big favorite with late night taxi drivers and people involved in nighttime jobs.

Okay, let's move on to 69.8 MHz, where we find Europa Plus, the first and by far the most successful pop music station in terms of advertising, broadcasting from 6 am - 1 am on FM, with a simulcast from 4 pm - 4 am on 1116 kHz mediumwave [mx: "Thriller," M ID in Russian]. Their music format: the best of the past 30 years. Europa Plus also broadcasts weather

MOSCOW FM (cont.)

and traffic reports several times an hour. [announcer talks in Russian] That's the voice of local superstar dj Stenya (?) saying, "We folks in the arts have a tendency to lose our heads sometimes and go bonkers. That's what happened to me today right before the show. I had a fight with my boyfriend. I'm sorry, dear; here's a song to make up: Dave Stewart and "Crown of Madness" You're listening to Europe Plus, a joint Russian-French radio venture.

Apart from these two independent stations, there are a couple of State-run operations like the all-classical music Radio Orpheus, or Yeltsin's favorite Radio Russia and Radio One and Two.

Well, a short while back I would have ended my story right there. But let's see what happens when I unclip the FM Adaptor from the telescopic antenna of my Sony 2010 and scan the 76 - 108 MHz FM band [mx, dj: Radio Maximum?...FM] My God, it's alive! In true stereo, that's Radio Maximum on 103.7 FM, a Russian-American joint venture between the Moscow News newspaper and Harris Electronics, Westwood One, and StoryFirst Distribution. Radio Maximum was the first station to broadcast in the 88 - 108 MHz FM range in Moscow, because according to their estimates, there are more than two and a half million Western and Japanese-made radios in the nation's capital alone. Radio Maximum believes that, regardless of the absence of specialized surveys, it is possible to draw a picture of the owners of such sets. These are people in the 18-to-40-year age bracket, with a good, steady income - business people. Radio Maximum also plans to capture another important part of the listening public: foreigners staying in Moscow, of whom there are approximately 350,000. Two hour programs in English and other languages are planned in the near future. Their format is rock and pop, news, weather, and sports. Radio Maximum is on the air from 5 pm 'til midnight. Up 'til now there's been no advertising.

Well, let's go down now to 103 FM where, via satellite from Oslo, Norway, it's the Russian station in exile, Radio Rocks [mx, W "It's 4 o'clock in Moscow and St. Petersburg. You're tuned to Radio Rocks. Good afternoon and welcome to the English portion of our broadcast. My name's Julia Jannikova (?). You can hear us in Moscow at 103, St. Petersburg 102, and Riga 102.7," wx forecast] Now there's a familiar voice. Radio Rocks has been on the air for nine months now in St. Petersburg, Riga, and only recently in Moscow. The station broadcasts 15 hours a day in Russian and two hours in English. The staff is made up of former Radio Moscow air personalities. There is news on the hour and news in brief on the half hour - sounds like the World Service, um,...old habits, perhaps - plenty of music, and advertising. The news is compiled at the Rocks office in Moscow and then it's faxed to Oslo. Radio Rocks is run by a Russian-Finnish joint venture, InterRocks, which in part transports metals across what used to be the USSR. This brings in a lot of hard currency, part of which is invested in Radio Rocks. Radio Rocks managers and PDs claim that theirs is destined to become the world's biggest FM station, partly thanks to their great air personalities. The truth is, however, the dj's sometimes sound bored and uninterested in what they are doing, at times playing 10 records back to back without any announcements. One reason might be the poor living conditions and extremely small salaries for an expensive city like Oslo. It's also worth mentioning that picking up Radio Rocks in Moscow tends to be somewhat of a problem, as you might have noticed, due to the fact that the transmitter at the downlink facility is located well outside of Moscow city limits.

And finally, there's this newest addition to the Moscow FM scene: [jingle, mx, chimes, promo, W anc in Russian] A take-off there on a Red Square parade welcoming in the appearance of Radio 101, which incidentally broadcasts from the Radio Moscow building. I asked Yuri Kosten, who is Program Director at 101, to tell me about his station. "We broadcast on the so-called Western band, FM frequency 101.2 here in Moscow. We have a 10 kw transmitter here, and we cover the Moscow region almost totally. We wanted to set up a typical commercial radio station, not just a radio disco (?), with music and information programs. We orient our activity basically on the 25-to-50 years old [sic]. Speaking about our music format, music formats of such stations and we respect them - as Europe Plus or M Radio or other stations, they are dictated from abroad. I mean, if we take Europe Plus, there is a playlist prepared in Paris or somewhere, and have to speak to this. We are much more flexible. We don't have foreign capital so far at this station. This is the first Russian commercial radio station. We decided to be independent, both from political structures and from foreign countries; but independence, like any coin, has two sides. So we are independent, but so far we are very poor. For people work this commercial radio station, my wife always asks me at night) when I come home (I come home very late at night), she asks me all the time "You're working at the commercial radio station that's very funny, I don't have bread tonight." And speaking about the people even during the wartime, the World War II, very tough time, people listened to the radio." Yuri Kosten of Radio 101 FM.

On a lighter side, even though the three stations are rivals, they sometimes sound like sister stations. Well, you might say it's because of the lack of experience, give them time, after all they are trailblazers here. That's true, of course. But I happen to know for a fact why at times they sound identical. It's thanks to an enterprising young man who, when Radio Rocks was in the planning stage, projected himself as the greatest radio artistic director on this side of the barricade. He was hired by Radio Rocks to do their jingles, music sweeps, and production music. Now, for reasons known only to him and Radio Rocks, he shortly left the station and moved on to Radio Maximum, where he used the same jingles, music sweeps, and production music. Yes, he was soon fired by Radio Maximum, only to land at - you guessed it - Radio 101 FM, where up to this day he is producing the same jingles, music sweeps, and the like.

****MOSCOW FM (cont.)****

That's radio - Russian style - for you. For Radio Nederlands Media Network, this is Vasily Strelnikov in Moscow. (05 Mar 92/Vasily Strelnikov/RM MEDIA NETWORK/AI Quaglieri/SW ECHO)

****THE YOUNG AND THE GOATLESS****

The following appeared in the magazine "The Economist" of February 29th 1992, page 40.

ABDUL KARIM'S CASEBOOK

Dr. Finlay he is not, but Abdul Karim, the health-worker hero of Afghanistan's most popular radio programme, is doing his bit.

Deprived of television, and usually illiterate, Afghans rely on the radio. Their favorite station is the British Broadcasting Corporation, whose broadcasts in Pashto, the main Afghan language, they prefer to the more strident Radio Pakistan, Voice of America and the mujahideen's Radio Free Afghanistan.

In 1988 the BBC decided to use its hour-long daily Pashto transmission to tell Afghans how to deal with the landmines that litter their mountains. The message was passed in the form of a "soap opera", using characters with whom the audience could identify. The success of the first soap led to others, on agriculture, drugs and health: enter Abdul Karim, Sayyed Hassan, the grumpy village elder suspicious of Abdul Karim's new-fangled ways, and Akhtar Bibi, Sayyed Hassan's broadminded wife, who usually gets her husband to follow the health worker's good advice.

Writing to the BBC, which is now broadcasting the soaps in the country's second language, Dari, a real-life health worker described how the local women refused vaccination. Then the village elders heard Abdul Karim explaining it to Sayyed Hassan. "The next day," the letter said, "the men of the area brought 300 of their women to be vaccinated." (06-Mar-92/Richard Urena/SW ECHO)

****SIGNALS****

Current sked for the SIGNALS program:

Shortwave -		
7435 kHz	0435 UTC	Sunday
7435 kHz	0705 UTC	Monday
12160 kHz	2205 UTC	Monday < == NEW TIME &
FREQUENCY		
15690 kHz	1705 UTC	Sunday (variable, as time is available)

AM - 870 kHz WGTL, Kanapolis, NC 2pm Sunday

FM - 97.3 MHz WRBU, Peoria, IL Times TBD

Cable - Channel 31, Rensselaer CableVision, Rensselaer NY

Satellite - Let's Talk Radio Network S-3, Channel 21, 6.2 MHz wide band audio

Friday, 6:30 pm
Saturday, 6:30 pm
Sunday, 11:00 am

Solar Radio Network via Astra to Europe and the Mediterranean is due to start up any day. Schedule TBD.

SIGNALS is free for the asking to any non-commercial station that wants it, with two caveats: the program must run intact and the station must pick up the distribution charges of \$10/week. This covers a portion of the tape, duplication and shipping costs *ONLY*. The program is also available to commercial stations, interested Program Directors can call 914/923-1862 to discuss the specifics.

Many other outlets are in development - you'll be able to hear *SIGNALS* in the near future in Boston, Greater Chicago, Denver, Norfolk (VA) and other markets, as well. (05-March-92/Havana Moon/SW ECHO)

****REMOTE-CONTROL CENSORSHIP****

(The following item was posted on 28-Feb-92, and written by Bill Thomas, Director of Pacifica Radio Program Service; it was ported to the Shortwave Echo by Joe DeLassus on 05-Mar-92)

PLEASE SEND MESSAGES OF SUPPORT FOR RADIO ENRIQUILLO TO THE DOMINICAN REPUBLIC

THEY HAVE BEEN FORBIDDEN TO CONTINUE THEIR CREOLE LANGUAGE BROADCASTS WHICH HAVE BEEN ONE OF THE ONLY CHANNELS OF INDEPENDENT INFORMATION FOR HAITIANS.

Some of you know me as the Director of the Pacifica Program Service. I am also on the Board of AMARC, the world community radio organization (Association Mondiale des Radiodiffuseurs Communautaires). We happen to have another Board member from Haiti, who has passed along this request.

Radio Enriquillo is a station in the Dominican Republic, owned by the Catholic Church. Radio Enriquillo, until last week, did 2 one hour news programs daily, in Creole, aimed at the population of Haiti. Pedro Ruquoy (a priest originally from Belgium) is the Director of Radio Enriquillo, and stayed in contact with President Aristide during his exile in Venezuela. This station allowed Pres. Aristide to relay messages to the Haitian population.

****RADIO ENRIQUILLO (cont.)****

The coup leaders in Haiti are intent on stopping these broadcasts. They have jammed the signal (though it is still audible in most of the country), and in November, they arrested a Dominican priest who came to Haiti, thinking mistakenly that he was the station's Director.

Now, the Dominican government has forbidden Radio Enriquillo to broadcast in Creole. Joseph George, the AMARC Board member from Haiti, has asked for us to send messages to the Dominican government, encouraging them respectfully to change this decision.

You can fax the Palacio Nacional in Santo Domingo at 1-809-686-6625 and the Congreso Nacional at 1-809-535-0744.

Below is the text of a letter from Pedro Ruquoy, followed by my quick and dirty translation.

Chers Amis,

Avec une profonde douleur, je vous informe que le directeur de telecommunication de Republique Dominicaine, monsieur Leopoldo Nunez Santos, vient de nous donner l'ordre de suspendre nos transmissions en creole sous menace d'agir si nous n'obeissons pas. Cette action du gouvernement dominicain represente un coup violent contre le peuple haitien qui se voit priver de pratiquement sa seule source d'information libre. Cette mesure represente aussi une violation contre Radio Enriquillo qui, au nom de la liberte et de la justice, voulait accompagner le peuple haitien dans son martyre et sa resistance pacifique contre les forces de la mort.

Nous esperons que vous puissiez intervenir immediatement aupres des autorites Dominicaines pour exiger de nous laisser realiser notre travail d'information au peuple haitien.

Por Radio Enriquillo, Pedro Ruquoy Director

Dear Friends,

With profound regret, I inform you that the Director of Telecommunications of the Dominican Republic, Mr. Leopoldo Nunez Santos, just ordered us to suspend our transmissions in Creole under threat of action if we don't obey. This action of the Dominican government represents a violent coup against the people of Haiti that finds itself deprived of practically its only source of free information. This measure represents also a violation against Radio Enriquillo that, in the name of liberty and justice, wishes to accompany the Haitian people in their martyrdom(?) and the peaceful struggle against the forces of death.

We hope that you will be able to intervene immediately with the Dominican authorities to quickly allow us to realize our work of information for the Haitian people.

Please note that Radio Enriquillo's AM signal normally covers Haiti (the Dominican Republic and Haiti share an island), so this is not a case of radio aggression like, for example, Radio Marti.

I'd like to give you more information on the situation, but this is all I know for now. If you feel that it's enough for you, please write. Remember that the purpose is not to censure the Dominican government, but to, with all due respect, encourage them to change their decision.

Thanks.

DON KIMBERLIN (to RICHARD URENA): Richard, the [above] post is from one of Fido's leading Leftists, Joe Delassus in St. Louia. From what I have seen of his posts, most anything he promotes is for the cause of world socialism. Do you perhaps have any information that in fact, the Radio Enriquillo he's promoting might be a political problem for the Dominicans? Appreciate your comments, Richard. For info, R. Enriquillo appears to be HTS, 1020 kHz, 10 kw. located at Apartado 99, Tamayo, DR, with one Gerardo Rodman for a Director. No indication that the Church owns it from what I can see.

BILL KELSEY: And thanks again for your efforts! I may add that my earlier response to the first repost might have been a little hasty. I based my suppositions on the phrase "this is a coup by the Dominican government to the Haitian people." On further reflection, the word "coup" (as in coup d'etat) means literally "blow." So the original in French might have said "this is a blow against the Haitian people" instead of "this is a coup." Not at all the same thing! So the problem might have been with the translator's bias.

As far as the possibility of war, well... On a purely military level it does not make sense. But with the current situation the junta in Haiti could decide to circle the wagons and prepare for such a thing. This is a very remote possibility. But the essential point, as I mentioned in an earlier reply, is that it's not wise for the Dominicans to unilaterally take sides and go beyond what the OAS decides. Even though we all wish the Haitians well, Aristide might never return to Haiti as president and the Dominican government must be prepared to live with the dictatorship next door (that, BTW, would be nothing new). "Appeasement" is not the right word for it.

RICHARD URENA: It is true that the Dominican government has forbidden Radio Enriquillo to do the Creole broadcasts.

****DOMINICAN RADIO GAG (cont.)****

Interestingly, from what I hear (second-hand info on this), the pretext the government gave involved some legalese about not allowing broadcasts of speeches in foreign languages. It appears that the R. Enriquillo folks found a loophole and are now singing their messages in Creole, rather than saying them. But as I say, my info on this is secondhand right now. If I get some actual verification on this, I'll post it here.

I do not know exactly why the Dominican government has taken this course of action but I can tell you that what the quoted post implies—that the government is allied with the Haitian military coup—is completely false. Dominican governments have never tried to play geopolitical games, much less with our next-door neighbor with whom we share the same island. This is not necessarily for altruistic reasons, but rather because any attempt to influence the political situation in Haiti is bound to backfire and/or to generate even more instability, neither of which is desirable from the Dominican point of view. Dominicans have no business butting into what is already a very complicated political culture, much of which we don't understand fully.

I can speculate that the reasons in this case are twofold: a) there was a row between the Dominican government and Aristide while he was still president, over denunciations of mistreatment of Haitian residents in the DR; b) historical mistrust—sad but true—between our two countries.

DON KIMBERLIN: And thanks again for your efforts! I may add that my earlier response to the first repost might have been a little hasty. I based my suppositions on the phrase "this is a coup by the Dominican government to the Haitian people." On further reflection, the word "coup" (as in coup d'etat) means literally "blow" So the original in French might have said "this is a blow against the Haitian people" instead of "this is a coup." Not at all the same thing! So the problem might have been with the translator's bias.

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STEVEN TODD: This station's purpose is quite noble (I wish the coup leaders in Haiti all the luck in the world — bad luck, that is), but there's one little item that I would like to point out: the government of the D.R. is apparently fearing some sort of military action by Haiti against the Republic. The arrest of that priest is an obvious act of hostility on the coup leaders' part, one that has obviously not gone unnoticed in Santo Domingo... I don't know what sort of military prowess the Dominicans possess, but their government is apparently trying to appease the Haitian coup government.

Don't you think that averting a war is more important than allowing this station's freedom to broadcast, even if that station is intending to bolster the spirit of the Haitian people?

Are there any alternative stations (outside the DR) that could broadcast the same information to Haiti without fear of retribution?

****CALLING ALL CANADIANS, EH?***

Here's an interesting offer that was passed on to all readers of Canadian BBS systems by Bob Ing in Toronto, Canada...

SHORTWAVE LISTENERS NEEDED

The Databank in an ongoing study of shortwave listening in Canada, invites SWLs from across Canada to participate in a Canada-Wide listener survey. The number of surveys conducted in each province/territory are relative to population, so only a limited number of listeners will be selected. Those chosen, who complete a survey will receive \$35.00 for their valuable input and time. Surveys will be conducted by mail or telephone at a time convenient to the participant.

To participate, simply send your name and address on a postcard, or your business card to the address below before 30 March 1992. The Databank thanks all respondents interested in this study, however only those selected will be contacted.

Send your postcard/business card to:

The Databank
Project S-153
P.O. Box 769, Station "P"
Toronto, Ontario
M5S 2Z1
(14-Dec-91/James Dixon/SW ECHO)

****LURKING AROUND KPH****

DICK DILLMAN:...years ago who had gotten some of the transmitters declared surplus by KPH when they abandoned their trans-Pacific HF telephone circuits.

ROGER STARK: Curious: Where exactly was KPH located? Do you know what actual property and what it's used for now?

PLONI ALMONI: KPH still is in Point Reyes (next to ATT) receivers, Bolinas transmitters. The locations are on the AAA Marin County map. And they are still in service.

ROGER STARK: Oh, I thought that was KSF. I thought KPH was Portland. Maybe I'm all twisted, but I thought it was the Point Reyes facility which was dismantled several years ago.

PLONI ALMONI: Nah - KPH/Point Reyes/Bolinas keeps pouring it out day after day. KSF was the FAA HF station in Tracy that was dismantled many many years ago (a friend of mine worked there until it closed). KFS is the former ITT station - receivers in Half Moon Bay, and transmitters in Palo Alto (right alongside the Bayshore). Also still pouring it out day after day.

DICK DILLMAN: KPH is still quite active providing CW and SITOR services to ships in the Pacific and around the world. The station started in the early part of this century in the Palace Hotel in San Francisco with the appropriate call of PH. When the international prefixes were introduced the station became KPH. The station moved to Marin County, north of San Francisco, as part of the Marconi wireless system in the teens. At that time, all traffic was on long wave, both ship to shore and point to point across the Pacific and beyond. The transmitting was (and still is) located at Bolinas. The receiving station was located at Marshall (or Marshalls or Fishomens - the town went by several names) north of Bolinas. When the short waves were discovered, the receiving station moved to the plateau at Point Reyes (where it is today). The new location was selected by Dr. H.H. Beverage who invented the famous wave antenna which bears his name. I spent an afternoon with Dr. Beverage in his study some years ago and he filled in some of these details for me. The long wave Alexanderson alternators remained in standby service at Bolinas for many years. The building in which they were housed still stands and is the present home for transmitter BL1 (Bolinas 1), now on 500kHz. In the heyday of shortwave, KPH provided trans-Pacific telephone service. These were still in service during one of my visits to the station in the 70s. Each receiver took up three 6ft. racks and each had a placard showing what circuit it was receiving. Seeing "Hong Kong" and "Singapore" above these receivers was thrilling. I even listened to the audio through the single technician's earphone attached to each set. I have pictures of the installation. During the first world war, all Marconi stations in the U.S. were taken over by the government. KPH was sold to RCA which operated it until recently when they sold it to MCI which runs it (and WCC, preciously CC on Cape Cod) today.

DICK DILLMAN (to Roger Stark): I don't have very much information about (K)PH's time at the Palace Hotel. But in general I do know that it was common then for radio stations to be situated in hotels upon the theory that they added to the stature of the establishment. Up to about 15 years ago there was a classic flat top four wire antenna still atop a car dealership on Van Ness Avenue in San Francisco.

ROGER STARK: Yeah. I remember that. I think it was atop Ellis Brooks. What was that antenna for anyhow? That wasn't the Don Lee/Mutual building, and I don't remember reading about Brooks owning a station. What gives?

DICK DILLMAN (later reply): Sorry, I never knew what station was associated with that antenna. Another user has suggested KSFO.

PLONI ALMONI: Tell the truth, Dickie — it was there but hadn't been used for 30 years before that either (KFRC??)

DICK DILLMAN (continuing): There was also little distinction between broadcast and marine stations in the early days.

ROGER STARK: Yeah. I noticed in an old FCC proceedings book that KGO used to be a ship-shore station when it began.

DICK DILLMAN (later reply): Really? You mean like KPH and KFS etc.? That's a new one on me. Do you have a reference?

ROGER STARK (later reply): I was looking through FCC/FRC/Dept of Commerce proceedings at the Cal Berkeley library and saw either a frequency list or an application for change of license or something. I think I may have looked it up in the index in the book for 1922, but it was a long time ago. I distinctly remember the call KGO and the notation that the station was engaged in maritime communications. I'm assuming that the call letters weren't recycled, but as KGO went on in 1922, I assume they didn't change the call since that time.

DICK DILLMAN (continuing): Early pictures in my files show a "receiving operator", complete with typewriter, on duty at the

****KPH (cont.)****

control position of broadcast stations, ready to receive distress calls.

DON KIMBERLIN: Your remark sent me diving into the old books. I found one as late as 1928, describing RCA/NBC's station WRC in Washington (on 640 kHz). It says:

"Three first-class commercial-licensed operators are employed at the main station of WRC." (This following a long description of the studios, so the author apparently regarded the transmitter as being the 'main station,' a somewhat different connotation than later years, eh?) "An efficient receiving set is provided. This is equipped with a loudspeaker and any SOS calls would be immediately noticed by the operator on watch. The work of the operator is generally confined to watching to see that everything is going all right, listening for distress calls, and handling the switches and plugs which throw the power on or off and connect the modulation current to the transmitting apparatus." ...So, it looks like maintaining a distress call watch in broadcasting stations continued for some time at least close to 1930. In fact, when I happened onto the scene in the 1950's, working at "the transmitter" was what I thought was a "great job." However, it faded fast about 1960, like so many "good jobs." Ah, those halcyon days!

DICK DILLMAN (continuing): As an aside, many of the CW operators at present day KPH are quite aware of the history of the station and also of radio history in general. On my last visit, one filled me in on the history of the Globe Wireless building on a ridge in San Mateo which is now the transmitting site for ARINC (Aeronautical Radio, Inc.) on the west coast.

PLONI ALMONI: Transmitters there, receivers at Mori's Point, north end of Daly City.

DICK DILLMAN (continuing): The call was KTK and they were in direct competition with KPH and KFS in the early days.

ROGER STARK: Hey...I remember hearing that in code when I was trying out a homebrew receiver. What ridge in San Mateo?

DICK DILLMAN (later reply): The site for Globe Wireless (and the current ARINC transmitting station) was north of the junction of routes 92 and 35, behind the big cemetery there.

DICK DILLMAN (continuing): He told the story of a ship's operator calling KTK endlessly but not being able to break the station, while KPH was ready to accept his traffic. When queried, the operator said that the reason was that KTK was so much easier to send than KPH (!). I guess I believe that. I in return filled him in on the old 500kHz transmitter at KFS. It used A2 (modulated CW) but the modulation didn't come up until about a minute after the operator started keying the transmitter. I guessed the reason was a slow heating filament in the modulator. Not so. When I visited the transmitter site the operator told me that the old (and gone) transmitter was modulated by a motor-generator set which took that long to come up to speed. The mounting studs were still sticking up out of the floor.

PLONI ALMONI: Did you get to see the open-cage water-cooled 500 kHz transmitter at KFS (it was there as late as 1975 that I personally know of). I do remember the m/g modulated rig from hearing it in the late 60s and early 70s for traffic lists. It may be one and the same.

ROGER STARK: I seem to remember when I was in grade school hearing something on our car radio while driving up on the way to Santa Rosa. Fascinating! This is great stuff! Thanks.

DICK DILLMAN (later reply): The KFS transmitting site is located near Palo Alto so I don't think it was them you heard near Santa Rosa. Can't think of what CW transmitting site would have been near there. But I too remember hearing 500kHz CW on the car radio on Long Island. Couldn't copy code then so I don't know what station it was. I agree, it's great stuff... and even greater to be in contact with people who share the passion.

ROGER STARK (later reply): Yeah, I've driven past the Palo Alto site many times...it looks abandoned, except that once in a while someone leaves the lights on. The Santa Rosa signal seemed to be near an airport—it might have even been near Hamilton Air Force base, now that I think of it. (Everything north of SF is "Santa Rosa" to me.)

DICK DILLMAN (later reply to above): User Almoni is correct: the flat-top antenna on Van Ness Ave. had been out of service for some time before my arrival in 1967 for the Summer of Love. I didn't mean to imply that it was still on the air, just that the artifact of an earlier time was still there.

ROGER STARK (later reply): I guess I'd missed something here. What was the antenna on Van Ness used for? I'd thought I'd accounted for every AM antenna in the Bay Area. I must have seen the open cage 500kHz job as I think I was there about 1975 or so. But I don't have a clear memory of it. I do remember sniffing around Building 1 at the

****KPH (cont.)****

KPH transmitting station with my girlfriend however. She opened a door which appeared much like any other, except that it was the entrance to BL-1, the 500kHz transmitter there. Needless to say all sorts of buzzers and bells went off and we skedaddled. Didn't seem to really upset anyone, though.

TIM TYLER: Is the large HF facility visible from the highway (can't recall if it is Hwy 101 or just 1) on the right hand side (going North) a few miles past NASA Ames/NASA Moffett the "Palos Altos" site you mentioned? I saw it while I was out at Onizuka AFS, & tried to snoop around it a little but couldn't figure out who operated it. The building & antennas didn't look to be in the best condition, but certainly operational.

DICK DILLMAN: The HF Facility on the east side of highway 101 is the transmitting station for KFS. Yes, it is a bit dilapidated looking and not as big as KPH nor is it located on the coast. But they consistently put in a good signal to ships at sea.

TIM TYLER: Thanks for letting me know about the KFS tx site, Dick! The least they could do is put a sign up identifying who uses the station, so Curious-Georges like me don't have to snoop around & trespass in vain effort to figure out what the place is!

PLONI ALMONI: They specifically took the sign down, and I have it on good authority (the station manager) that if they find someone "snooping around and trespassing" they will have him/her arrested and press charges of criminal trespass. A word to the wise - that's life in the late Twentieth Century.

DICK DILLMAN: Yes, they should be proud of their operation and have a sign identifying it. In fact though, they're shy about it all and very reluctant to allow visitors into the transmit site. The only reason I got in last time was that the automatic sliding gate was under construction so I was able to sleaze right by. The receiving site is usually more hospitable.

TIM TYLER: Funny you should mention the sliding fence gate at the KFS transmit site. I drove right up to that gate one day, & even opened up that telephone/intercom box they have there, trying to figure out who ran the place. One of the things I was going to eventually do is call up the company that installed the fence (they had a little advertising plate on the fence with their phone #) & ask them who owned that site! I never got around to doing that, but I think I still have that paper with the name & # of the fence company somewhere. Kinda makes me think that the transmitter site might be used by more than just KFS if they're trying to keep such a low-profile & not allow visitors...

PLONI ALMONI: Nope, it's all KFS and their concerns are security of their installation (i.e. non-trashing) and their liability for injuries to trespassers under California tort law.

DICK DILLMAN: It would be great if they were indeed doing something shady at the site, but I got the full walk-around when I was there last and it was just what you'd expect at a coast station transmitting site. Of course, who KNOWS what they might have installed since then... heh-heh. As to the little phone box at the gate, I last visited the site, or attempted to, on a weekend a few months ago. No answer at the transmitter building - unmanned on weekends. But never one to give up I hacked around with the system a bit and finally got a ring - and an answer - from the receiving station on the coast. The advised me that visitors were not allowed. Feh!

TIM TYLER: Well, I suppose you could have told the receiving site that you were the fire department, & that if they didn't tell you how to get in right away, they might as well shut-down due to the TX site burning down.

PLONI ALMONI: You asked about the KFS licensee - this is what I found: KFS WORLD COMMUNICATIONS - POB 5 - HALF MOON BAY, CA. Your guess is as good as mine.

DON KIMBERLIN: Hmmm.. Well, sounds like WorldComm, the subsidiary of Telecolumbus, the Swiss investors who bought what had been ITT's World Communications from WUTCo after WUTCo bought Worldcomm, stripped off its international Telex and telegraphic stuff, and dumped it. Leaving it with only international private line business and the coast stations.. or so it seems. Of course, the curious part is how they would overcome long-standing FCC proscription of foreign ownership of radio properties. Must be some real shenanigans in there to accomplish that..(Thanks for the look-up!)

PLONI ALMONI: That's what US subsidiary corporations are all about - ITT did it for decades because when I worked for them in the early 60s they were very much of a European-owned conglomerate. And you are welcome.

****KPH (cont.)****

DON KIMBERLIN: Interesting that Western Union, which never had any involvement with HF or maritime radio, wound up with KFS. To my knowledge, all that publicly remains with the Western Union label is money orders (AT&T got their Telex/TWX along with the Easylink E-mail (which had taken over the functions) — and if you saw the press, said AT&T declared the "end of the telegraph business" last week. What was WUTCo has renamed itself to New Valley Corporation, to protect any goodwill value in trade name Western Union. If you have an easy resource, it would be interesting to know if KFS trades as Western Union or New Valley today.

****CONSIDER YOURSELF WARNED****

Within the past couple months, I have been asked repeatedly to come back with my publication "The DX SPREAD" as I have 10-15 hours to devote to shortwave radio. For a while, I helped Mr. H with DX Listening Digest doing around 25-30 pages. If it hadn't been that I had just a letter quality Daisy Wheel Printer, I would still be doing both. My son has an Amiga Computer and in a few months will be purchasing a Hard Drive and a Printer. If things work out right, that is if I get the energy back to do such a thing, I might venture back into the typing world of Shortwave Radio after I have practiced for a few months compiling shortwave information like I used to. (06-Feb-92/Bruce MacGibbon/SW ECHO)

****NOW - REACH OUT AND TOUCH ALICE BRANNIGAN!****

Just saw some messages in the broadcast echo stating that Popular Communications will be available in a Braille edition in the very near future. If you have vision impaired friends or are yourself, this might be a new source of info for you. I have no details, sorry. (06-Feb-92/John Grove/SW ECHO)

POP-COMM in Braille will begin syndication in April. Contact your state library for the blind for a subscription. (Kyle Seitz/GENIE/04-Mar-92/George Conover/SW ECHO)

****BZZZAPP!****

GENE BLAIR: I was struck by lightning last Spring. 40' tower, stick antenna. Broke the antenna off at the mast pipe, rode down my coax, got into my phone lines and the AC, and scampered through my house like a gazelle. I had an inline coax suppressor, several suppressor in AC line with various equipment, some good ones and some cheap ones. Of the equipment in close proximity ("My Corner") it got my FRG7700, KW430, some other receivers, modem, most of my computer (left the RAM intact), one old BC12 scanner, a cordless phone, and some other misc. stuff. Most of my radios were not plugged in, either to coax or AC, but the cords were still close to the outlets. Got a TV way out in the kitchen. It didn't touch (still in my corner, now) my M6000 and monitor, my 2004, and my printers. It left two rooftop scanner antennas, three other TV sets and all the other ge-gaws I play with. But I was days finding light dimmers and the like here and there that were hit. All suppressor were blown.

I called the FD, smelling smoke and thinking it was in the attic or walls, but it was my radios frying that I was smelling! My point is this, I believe that without the suppressor I did have, the damage would have been much greater, and that anything in that line will help a little bit. My other point is that I don't think "anything" will protect against a direct strike. One other thing, there are many trees close by that are taller than my tower, and yet the lightning went for the antenna. It was selective to the point of weirdness, both in its target and in the equipment it ruined. I consider myself a most fortunate and blessed person to still have a roof over my head.

BILL CHEEK: Gene, your reaction here is parallel with how I would feel if a drunk driver killed one of my children. I would lose sight of any reason and objectivity; and would not feel justice to be done unless the slimebag were sent to the gas chamber after 1-year of continuous torture. In other words, when adversity impacts us head on, things take on a different countenance and we react a little differently than if the same thing happened, say to a neighbor.

I, too, have taken a direct lightning hit; quite a few, in fact, and most were at a time before suppressor and good arresters were available. My station equipment has never suffered damage, either. I watched from a window on numerous occasions as bolt after bolt struck my 100-ft tower and the antennas which were installed on it. Never any equipment damage. Scorch marks on the radio table where fireballs or St. Elmo's fire erupted from the equipment; coax shields welded to the tower legs, but never any household appliance or electronic damage. Why not, especially since I wasn't using suppressor or any other artificial protection?? I don't know. But, but I can surmise that it was because of my penchant for an extensive grounding system.

I can venture the educated guess that the reason you suffered so much damage was because the lightning surge couldn't find a ready, direct path to ground, so it did the next best thing and branched out through every conductor it could find to leak itself to the earth. That path was through the household wiring to the service entrance ground and possibly other points hither and yon. If you would have had a straight line, solid conductor from the top area of your tower or antenna supporting structure down to earth ground via several routes from its base, then chances are there would have been no appreciable surge elsewhere in your household system. Nothing that your suppressor couldn't have easily handled anyway. Suppressors, including MOVs and gas tube shunts cannot be expected to protect against, nor are they

****CRISPY FRIED RADIOS (cont.)****

rated for the kind of energy in a lightning bolt. Instead, these devices are to be considered supplementary; to protect against modest induced effects from the direct stroke.... which should be provided with a direct path to ground, you see. MOVs are good for when lightning strikes way down the street and sends a transient up the power lines. Gas tube shunts are good for the antenna lines when a stroke hits a well grounded tower but induces surges in the coax shields and center conductors. You may note that all suppression devices have a ground terminal on them? A suppressor without a nearby reference ground is almost worthless.

I dare submit that the total dissipation ratings of all the suppressor you had in use at the time weren't sufficient to even dent the intensity of that bolt. Like trying to dent an ocean surf with a canoe paddle. But all this doesn't make you feel any better; nor does it lessen the hurt and the expense. I'm just sympathetically saying that you're in no position to make objective determinations of what happened and how it could have been prevented. After all, some would say that the Hand of God reached down and touched you.

For the future, it certainly cannot hurt to run a solid copper #6 conductor down the length of the tower or supporting structure directly to two or three 10-ft, 1" dia copper water pipes driven into the ground. Ensure this #6 is bonded to the structure at 10-ft intervals, and at the very least, the shields of all coax should be bonded to this conductor down near ground level. Run a comparable #6 conductor from behind your station equipment by the most direct route to the ground pipes. Interconnect the metal chassis of every station equipment to this conductor hidden behind. Alligator clip leads will do nicely if you don't feel like making up something heavier and snazzier. Continue with liberal use of MOV suppressor and gas tube shunts as you wish. I see no harm in them, and they might make a difference if a "flood channel" is otherwise provided for direct hits.

In fact, it would do no harm if you were to sit back and contemplate the structure and purpose of a real flood control system, which may be easier to understand at the onset. A lightning control system differs not a lot in diagrammatical concept. In any event, I know where you're coming from and you have my deepest sympathy. I, too, have a perfectly fine Yaesu FRG-7700.

DON KIMBERLIN: People make two very common mistakes. First, they believe that the power version of "ground," which is valid only for low-frequency things like 60 Hz, is adequate - when of course, a small understanding of inductive reactance would show the error (Most confusing to many is that reactance is measured in "ohms" just as DC resistance is. I've even seen "expert" repairmen think they measured reactance with a DC v-o-m - with the low current battery source of the ohmmeter <gack>!). Second, they think the earth has unlimited ability to swallow up a lightning bolt at a pinpoint contact area. The notion that perhaps God didn't make that interface able to do anything is one they have a hard time with.

While I'd debate your penchant for running a #6 all the way up a tower and bonding it along the run, you certainly made sure the tower joints were bonded well by doing that.

Your post was cut off at the end, so I can't tell if you included one all-important point: Adding a separate "earth terminal," as a separate ground rod is often called (the National Electrical Code language is "alternative earthing electrode") opens a new risk of electrical power shock in the event of the power wiring losing its "ground return" connection to its ground rod. Thus, the Code specifies, and any do-it-yourselfer should, run a #6 between their added ground rod and the power ground rod. Since the added ground rod is the primary point for lightning to go, routing of the #6 bonding wire to the power ground rod can be as circuitous as power wiring is - unless one wants the power ground rod to be part of the lightning dissipation field, too.

****HF AERADIO DAYS ARE NUMBERED****

What I wanted to share was an article in the February's issue of FLYING magazine. It seems that Collins Radio and United Airlines have teamed up and achieved the first certification for communications to provide en route transoceanic clearances via the ACARS/SATCOMM data-link network. A United Airlines 747-400 series was equipped with a Collins Satcomm 900 radio and they got approval after trial flights over the Pacific. The system will allow pilots to get routes changes without the use of HF radios. The article states the first the pilot composes his request on his flight management system which then is sent to the ACARS management system. The ACARS system then transmits to the SATCOMM which in turn transmits to the message to the ground. The message then is routed to ARINC and ARINC then contacts the FAA. In turn, the FAA then grants the clearance and it is forwarded back to the aircraft. The HF radios will be used only as a backup through the SATCOMM system if needed. (24 Feb 92/Greg Blanchard/SW ECHO)

****ONLY THEIR PRINTER KNOWS FOR SURE****

BRIAN JOHNSON: Checking through the Monitoring Times "Shortwave Guide" in the March 1992 edition, it is found (on page 76) that Nigeria is listed (0600 UTC) as using 3326 and 4990 kHz. for domestic programming. I just got a post-card from VON in today's mail which gives 7255, 15120, 11770 and 9690 kHz. as their operating frequencies. That was also confirmed at 0600 UTC (10 PM PST-my time) as I heard an interesting

****NIGERIAN MIX-UP (cont.)****

broadcast from Voice of Nigeria tonight. At 0600 there was a commentary on Botswana followed by a music program at 0615. The program was in English.

ANDY SENNITT: Brian, can you clarify this? Are you saying you actually HEARD these frequencies? The reason I ask is that they last used most of these frequencies over 10 years ago, when all their transmitters were working. In recent years they have only used 7255 running at half power, and have had to cannibalize the other transmitters to keep that one going. They keep saying they're going to get them all back on the air, but nothing ever happens. If you really have heard them on 15120, 11770 and 9690, that's major news !!

BRIAN JOHNSON: Andy, the only frequency I've ever heard from VON was 7255 MHz. However, the post card DID have the other two I mentioned in the previous post printed at the bottom along with 7255 MHz. Someone might want to monitor those two just to see what might happen in the future.

ANDY SENNITT: Ah, I thought so! They're still using up supplies of cards that were printed ages ago. Every year without fail, one or two letters arrive here telling me about these frequencies, and every time it turns out to be untrue. That's where years of experience and a (reasonably) good memory really help - and, incidentally, a perfect example of why we can't simply print information supplied by broadcasters without checking it first!

****AMOK TIME****

JURGEN BARTELS: I'm curious why is there a time zone with a half hour difference instead of the usual 1 hour difference. I imagine it must be difficult travelling back and forth into that timezone, everything must be messed with your planning. The same question arises for Newfoundland, though an island makes it a bit easier I guess?

ROD SWIFT: Another example of timezone shifting is one of half an hour in Australia. The state of South Australia (capital: Adelaide) and the Northern Territory (capital: Darwin) are UTC +9.5 hours zone. Western Australia (capital: Perth) is on +8.0 and Victoria (capital: Melbourne), New South Wales (capital: Sydney), Queensland (capital: Brisbane), Tasmania (capital: Hobart), and the Australian Capital Territory (nation's capital: Canberra) are all on UTC +10.0 hours. South Australian and the Northern Territory should be UTC +9.0 hours, but moved 0.5 hours forward to "be closer" to the states on UTC +10.0 hours. This is because of ECONOMIC reasons rather than any other.

Other nations with strange time zones are:- Bhutan, which is UTC +5.5 hours. Canada, which has a UTC -3.5 hours time zone. Cocos/Keeling Islands, which is UTC +6.5 hours. India, which is UTC +5.5 hours. Iran, which is UTC +3.5 hours. Myanmar, which is UTC +6.5 hours. Norfolk Island, which is UTC +11.5 hours. Sri Lanka, which is UTC +5.5 hours. Surinam, which is UTC -3.5 hours.

JEROME VAN DER LINDEN: Geographically, South Australia and the Northern Territory in Australia should probably be UTC +9 hours. However, the major population centers in SA at least are in the eastern half of the state, and the extra half hour suits that situation. In fact there has been pressure from business and TV networks that our time zone should be aligned with that of the eastern states (which include Sydney, Melbourne, Brisbane) so that we would be UTC +10. That however brought a big reaction from the rural lobby who occupy the vast spaces out west and north, so the existing UTC +9.5 stayed. It isn't really a problem for most people: this country being so vast it is not so common that people cross back and forth between SA and for example Victoria. The towns close to the border manage OK. There is one larger city in New South Wales (UTC +10) called Broken Hill, which is very close to the South Australian border, takes our TV and radio, and observes a local UTC +9.5 time zone.

****THE OFFICIAL RULES****

I found this on an old log of mine. The author is Richard Dale:

Richard's Shortwave Rules:

1. All shortwave fades.

The fades may be:

- a. Fast and shallow
- b. Fast and deep
- c. Lengthy and shallow
- d. Lengthy and deep
- e. Sesqui-periodic and shallow.
- f. Sesqui-periodic and deep.

2. Under international law, a station engineer must monitor the signal at the transmitter site. He is required to make phase adjustments to the transmitter/antenna setup at the following instances:

- a. xx:59:58 (right before station ID)
- b. xx:29:58 (right before station ID)
- c. Anytime the announcer says, "This news has come to you from the Voice of xxxxxxxxxx."

3. Stations are required by law to search the band they will be transmitting in to find the busiest frequency. If there are less than five 500 kW

****DA RULES (cont.)****

transmitters on the frequency, the station may not transmit there.

4. As an appendage to rule 3, if the station cannot transmit on the desired frequency, it must move 3.47 kHz away and play music consisting only of brass instruments, preferably trumpets.

5. A station must have a palindromic interval signal. That is, if the engineer opens the cart and reverses the tape (and he must), the IS will sound the same.

6. The rarer a station is in a given reception area, the faster the announcer must read the list of frequencies which it will be appearing on after closing down the current frequency. The frequency must be made during the middle of the reading of the list.

Note: Refer to rule 2. At his option, the engineer may include Rule 6 under the Rule 2 heading. If the announcer reads the frequencies in meters (i.e., "30.215 meter band"), the engineer may elect to waive the phase adjustment.

7. You would pick up Tristan da Cunha if only your antenna was just 6 feet higher or 25 feet longer. (16-Dec-91/Chris Stamper/SW ECHO)

A NOTE CONCERNING USAGE AND ATTRIBUTION:

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must be credited to its initial source and all intermediate

steps, exactly as listed. Editors, DX publications, or

broadcasters who fail to fairly credit material will be

removed from the SOD mailing list.

Well ain't that a kick in the butt! I'm talking about the surprise typeface switcheroo between pages 8 and 9 in this issue, making SOD as typographically schizophrenic as all the other DX bulletins in the hobby. Just one more tale in the never-ending saga of one man's love/hate relationship with his computer.

Offering you explanations of this issue's tardiness would consume more space than the previous 37 pages, so I won't offer any; take my word, though - the reasons were legit.

As always, 'twas a trip meeting up with the more notorious among you at this year's Winter SWL Fest; I do believe a pressing problem should be addressed before another of these GTG's happens - namely, who the hell will deliver a pizza to Kulpsville, PA at 2:30 in the morning?

Hope you enjoyed this issue as much as I enjoyed finally being done with it. Keep those stamps and letters coming.

73.....