

NASA

The
Journal
of the
North
American
Shortwave
Association

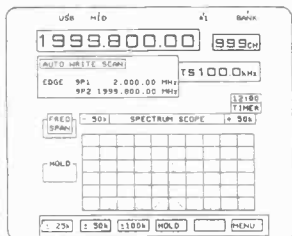
Volume XXX, Number 9
September, 1990

UNIVERSAL RADIO

ICOM R-9000



CRT DISPLAY



The Icom R-9000 is a revolutionary all-mode, super wide-band receiver that continuously covers a frequency range of 100 KHz to 1999.8 MHz. The most visible of the radio's many advanced features is the built-in multi-function CRT display. Receive frequencies, modes and additional useful data are displayed for your operating convenience. The CRT functions as a spectrum scope to show you, at a glance, the relative signal strengths of nearby receive frequencies. The span of the spectrum scope can be selected for $\pm 25, \pm 50$ or ± 100 KHz according to your needs. The screen can also display the contents of 10 memories at once, and can be scrolled to display other memories. The CRT can also be used as a display device to monitor RTTY or packet via an ASCII RS-232 input port (external data converter required). A total of 1000 memories (ten banks of 100) store frequencies, mode, filter width and tuning step increments. You can use different memory banks according to station type, frequency ranges or whatever your preference. By using the memory list screen, many more convenient functions are provided: up to eight character notes for your reference; and the advanced super convenient memory editor function easily moves, copies and deletes the memory contents. Tuning steps: 10 Hz, 100 Hz, 1 KHz, 5 KHz, 9 KHz, 10 KHz, 12.5 KHz, 20 KHz, 25 KHz and 100 KHz. The R-9000 has seven different scan functions with adjust scan speed up to 13 channels/sec. *Program Scan* scans between pre-programmed scan edges. *Memory Scan* scans memory channels. *Selected Number Memory Scan* scans memory channels with the same programmed mode. *Priority Scan* monitors specified memory channels. *DF Scan* scans around the receiving frequency. *Auto Memory Write Scan* programs receive frequencies into memory channels (900-999) during programmed scan. The R-9000 provides versatile scan resume functions when a signal is received: the scan cancels, pauses until a signal disappears, pauses for an adjustable time, or pauses for the mixed conditions of signal activity and time. Also a new *Voice Scan Control* system allows you to skip inconvenient signals such as signals with no modulation, hets or noise. Superior interference rejection is achieved with both IF shift and notch filters. Control features include dual clocks with two kinds of sleep timers and five independent daily timers. Noise reduction is accomplished with a threshold selectable wide-narrow noise blander. The squelch can operate by meter or noise level. A keypad is provided for rapid frequency entry. The output of the CRT can be routed to an external monitor, and the CRT can act as a monitor for an external or internal video source. See TV or your RTTY decoder on the CRT! Mounting handles for standard 19 inch racks are included. Rear jacks include: DC Out, Ext. Spkr., Record Remote, Speech Out, Line Out, IF (10.7 MHz) Out, Video In & Out, Data In, Acc., plus 4 antenna jacks (see specifications). The R-9000 is on display at Universal now.

SPECIFICATIONS

Dimensions 16.7" W x 5.9" H x 14.4" D
 Frequency Range 1 - 1999.8 MHz
 Antenna Impedance 50 ohm (400-500 ohm)
 Selectivity (-6dB) AM 6 KHz
 SSB 2.4 KHz
 CW5 KHz
 FM-W 6/15/30 KHz
 FM-W 150 KHz
 Sensitivity 16 μ V 1.6-30 MHz
 32 μ V 30-999 MHz
 Antenna Jacks 1-30 MHz SO-239
 1-30 MHz RCA
 30-1000 MHz N
 1000-1999 MHz N
 1IF Antenna Two

R-9000 List Price \$5459.00
 R-9000 Discount Price
 Order #0419 \$4795.00

**CALL FOR SPECIAL
 R-9000 SALE PRICE!**

PASSPORT TO WORLD BAND RADIO 1991 Edition

By Larry Magne. A must have book for every SWBC listener. Provides complete visual data on all SWBC stations from 2.3 to 26 MHz. See at a glance, station name, location, frequency, time, language and power. Also includes candid hard-hitting reviews on SW radios. Indispensable! ©1990 IBS, approx 390 p.
 Order #1000 \$16.66
 Pre-Publ. Special \$14.90 (+\$1)

THE DXER'S DIRECTORY

By Fred Osterman. The most complete list of radio listeners ever! A real *Who Is Who* for the listening community. Over 1,800 listeners are included. Find listeners in your area! The second part of the book features full information on over 125 radio clubs worldwide. 1990-91 Edition. ©1990 Universal Radio Research.
 Order #1695 \$4.95
 Pre-Publ. Special \$3.90 (+\$1)

LATIN AMERICA BY RADIO

By Henrik Klemetz. This book covers the finer points of Latin American DXing. Topics include: how to identify stations, catchwords, slogans, regional speech patterns, addresses, music formats, brand names, sign-on/off announcements, time checks, anthems, PSAs plus numerous tips and tricks on QSLing. ©1989 167 p.
 Order #1010 \$23.95 (+\$1)

- Visa, MC, Discover
- Prices are subject to change.
- Full catalog \$1 postpaid

STORE HOURS

Monday - Friday 10:00-5:30
 Except Thursday 10:00-8:00
 Saturday 10:00-3:00
 Sunday -CLOSED-

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1280 Aida Drive Dept. FREN
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NASWA Notes



Bob Brown
238 Cricklewood Circle
Lansdale, PA 19446
CompuServe 74756,1557

I'm typing this months' column while listening to the reactivated British Forces Broadcasting Service on 13745 at 0200 UTC. I can't help but feel moved by this broadcast to the troops in the Mideast during this time of crisis. It's no secret to us shortwave enthusiasts that the bands have been loaded with commentary from almost every area of the world during the past couple of weeks. Unfortunately, the way we listen to history unfolding from our headphones is a secret to most of the population, especially the youth. We have become a visual society with TV news being fed to us in large doses. I don't have to tell you the value of listening to shortwave radio for differing world opinion. Why not try to share your secret with a least one person this month? Expose them to the excitement and education that is available to shortwave enthusiasts. For all you know, they might be glad you did.

And The Winner Is

I received a letter dated August 1 from long time NASWA member **Henry J. Michalenka**, 11 Elizabeth Ann Drive, Johnston, RI 02919. On that morning at 7:15, Hank received a telephone call from the Voice of Turkey informing him that he was a winner in the 1990 Voice of Turkey essay contest. The prize is a ten day all expense paid trip to Turkey and if all goes as planned he will be leaving September 26th. He was one of eight winners worldwide and the only from the USA. I spoke with Hank on the phone last evening (8/20) and he told me that he has been in contact with authorities and the trip is still on as planned. Hank said that he would welcome any advice or experience from any members who have DX'd from that area. He promised an attempt at a feature story about his trip with notes about DX conditions in Turkey. **Sheldon Harvey** of the CIDX won this trip 2 years ago and he had a great time. Hank has been a member of NASWA since June, 1967 and

said that the new *Journal* looks great. But, he does miss the contributions from some of his era. Have a great trip Hank!

Congratulations!

I'm pleased to announce that Dx'ers Forum editor **Rowland Archer** has been promoted to Vice President of Software Development with Data General Computer Corporation. Congratulations Rowland!

Convention Time

Both September and October provide convention opportunities for NASWA members to get together. The ANARCON 90 convention will be held in conjunction with the Tidewater Hamfest at the Virginia Beach Pavilion Center in Virginia Beach, Va. on Sept. 14-16, 1990. The Monitoring Times Convention will be held Oct. 5-7, 1990 at the Hyatt Regency Hotel in Knoxville, Tenn. We will have a club booth at both events and I hope to meet many NASWA members. If you are going to attend either or both conventions and you would like to help us out with our booth, please write to me and let me know. Any help at all will be greatly appreciated. Info for ANARCON 90 from Box 9645, Virginia Beach, VA 23505-0545 and for the MT Convention at Box 98, Brasstown, NC 28902. Ads for both appeared in the *July Journal*.

Staff Notes

We have some changes in NASWA staff assignments effective this month. Because of the planned October visit from the stork to the Field household, **Kris Field** has passed the duties of Distribution Editor to **Vern Hyson** of Charlotte, NC. Kris will continue helping me out as Assistant Director. With his family business demanding most of his time, **Chuck Rippel** has stepped down from African Destinations. **Dr. Harold Cones** will jump pages to

African Destinations from Listener's Classroom. Because of this move we now have a staff opening for a Listeners Classroom editor. I would like to thank both Kris and Chuck for their service to NASWA. Join me in welcoming Vern by keeping his mailbox filled with loggings. Welcome aboard Vern! And lastly, I'm looking forward to see what Harold digs up in Africa. You'll find his first column premiering this month.

Phila. Area NASWA Chapter

I'm happy to announce that the date of the first meeting of the Philadelphia Area NASWA Chapter will be Friday evening October 19, 1990 at 7:30 PM. The get together will be held at the Montgomery School on Stump Rd. in Montgomeryville, PA. Montgomeryville is about 30 minutes north of Philadelphia off of Route 309. NASWA member Dan Cashin has coordinated a mailing to local members and he tells me that he has received many positive responses. A map with directions

to the school will be sent to all who have expressed interest. If you have not been contacted and are interested in joining us, you can reach Dan at 1335 Harrington Rd., Havertown, PA. 19083, or (215)446-7831 after 5 PM. Everyone is welcome!

BLANDX In The Nineties

Yes folks, the 5th edition of BLANDX, now called The Journal Of BLANDX, is hot off the press. Editor Don Moore and his editorial slaves have produced another hilarious parody of your favorite shortwave bulletin. BLANDX is \$2.00, postpaid, in the US, Canada, & Mexico, or \$3.00 or 8 IRCs airmail elsewhere. It is available from:

Don Moore
20108 Hayes Road
Big Rapids, MI 49307

All 4 back issues are still available for the above listed price. Those living in North America can buy the complete back issue set for \$7.00.

Welcome to the following new NASWA members -

John Anderson, Mt. Airy, NC
F. William Black, New Orleans, LA
Ed Boe, Oaklawn, IL
Dale S. Bowman, Boulder Creek, CA
David H. Chisman, Arlington, VA
Dr. Reginald W. Clemens, Albuquerque, NM
Mark Cohen, Skaneateles, NY
Rafael A. Cortes, Carolina, PR
Michael Docy, Lakewood, OH
Mr. Warren J. Dunn, Belleville, MI
Mrs. Lois Eckelman, Stockton, CA
David R. Erali, Wyomissing Hills, PA
Sue A. Fremgen, Westmont, IL
James Garrison, Gatlinburg, TN
Michael Green, Lexington, KY
Wilfrido L. Irizarri, Los Piedras, PR
Kevin W. Johnson, West Allis, WI
Tom Kelly, San Francisco, CA
Steven L. Kirkner, Southfield, MI
Bill Kurrasch, Ontario, NY
George Kwitka, Holland, OH
Michael Laytart, Woodside, NY
Stanley Louie, Brunswick, OH
Kenneth A. Mangione, Kenmore, NY
T. Mann, Crofton, MD
Delbert D. Marcum, Huber Heights, OH
Michael S. McIntyre, Grand Island, NE
David Mercer, Carrollton, TX
Robert L. Moore, Bassett, VA
John O'Neill, Syosset, NY
George Parkinson, Clarendon Hills, IL
Richard Pinter, Highlands, NJ
Jon Pollack, University Park, PA
John T. Reed, Ponca City, OK
Bobby Sharma, Eagan, MN
David Edmund Sliger, Lafayette, CO
Daniel M. Smith, Hornell, NY
Brian J. Smith, Ft. Meyers, FL
Gary Smoot, San Francisco, CA
Ronald J. Snook, Isanti, MN
Ms. Dane Tant, Angleton, TX
David W. Tyree, Valdosta, GA
Paul I. Weiss, Houston, TX
Charles E. Woods, San Antonio, TX
Krishnan Yegnashankaran, Palo Alto, CA

DXer's Forum

Rowland Archer
5524 Hawthorne Park
Raleigh, NC 27613
Compuserve 70075.117



September at last! The official Fall DX Season begins, and summer static crashes begin to subside as winter approaches. Here on the East Coast I look forward to improvements in afternoon tropical band DX to Africa. Check for the West African stations in the 60 meter band around 2200. When these get strong and clear I feel like the new DX season has officially arrived.

Radio Nederland has updated their excellent "Receiver Shopping List". Edition 12, dated July 1990, is available for the asking from English Section, Radio Netherlands, Box 222, 1200 JG Hilversum, The Netherlands. This 56 page booklet includes sections titled: Regional Price Variations, Choosing a Receiver, Current Receiver Survey, Recently Discontinued Receivers, SW Equipment Sources, Military Surplus Receivers, Vintage Wireless Societies, Selected Reference Books, Service Sheet Sources, and Receiver Information Sources. Highly recommended and the price is right!

This month's Mike Stone contribution is from the August 2, 1990 Washington Post, an article titled "FCC Studying Petitions to Start Digital Radio." This technology would bring the quality of compact disks to AM and FM broadcasts. Three companies have petitioned the FCC seeking to establish satellite-based digital audio broadcasting services. The biggest problem is finding space in the frequency spectrum. The House approved a bill Monday recommending within two years moving at least 175 MHz of the total federal spectrum to civilian use. This would help ease the overcrowding. The Senate has *not* passed similar legislation. The second major problem with digital broadcasting is the eventual obsolescence of billions of existing receivers and radio station transmitting equipment. The National Association of Broadcasters warned of "possible dire consequences" to its members.

Clearly a change like this would not happen overnight, but the long-term potential and impact of such a switch is enormous. Thanks for alerting us to this, Mike.

You can be a Forum contributor too. The idea of the DXer's Forum is to share your experiences with other NASWA club members. Imagine a **monthly club meeting**, with one or two **presentations by other club members** on their special interests and "how-to" ideas. Imagine the informal swapping of DX "**war stories**" after the formal meeting. The DXer's Forum is NASWA's version of this! Don't worry about your formal writing ability, just get the essence down on paper and I'll work with you to get it shaped up for publication. **Anything from half-page submissions to "1 hour presentations" goes!** Get with it and share your knowledge with your fellow NASWAns! Thanks.

The Organized DXer, Part II

DX Record Keeping Systems

by Rowland Archer

Last month's installment in this series explained how I keep track of shortwave DX targets (stations I'm trying

to log for the first time), and loggings (notes from the reception when I succeed in hearing it). This month I'll continue

with a look at how I store the information from these loggings and generate reports for hobby bulletins such as Fine Tuning and the Journal.

Bulletin Reporting

Let's face it, everyone likes to get strokes for their accomplishments. When I finally heard my first regional Indonesian station after trying for years, I got a wonderful feeling of accomplishment and wanted to share the news with people who would appreciate my excitement.

Reports in bulletins serve two purposes — on the altruistic side, they help others to hear the same station. On the personal gratification side, they publish your logging for all the world to see. The editor's comment of "nice catch!" can make your day.

So, how do you prepare a report on your loggings for a club bulletin? Many clubs have standard report forms. You can also look at the log reports printed in the bulletin and provide the same information in the same order. Are the listings sorted by frequency, as in the Journal? Or by country, as in Fine Tuning?

If you belong to several clubs and would like to share your loggings with all of them, it can take quite a bit of time to prepare individualized reports, in each club's format, on a weekly or monthly basis. This is another area where computerized reporting shines. I keep all my logs in a computer database file, and print out reports in each bulletin's required format with minimal fuss and bother.

Logging Database

The key to my system is a computerized database of my loggings. A database is nothing more than a collection of structured information. For my purposes I use a database that has a single table. The rows in this table each represent a logging. The columns represent the information I want to keep about that logging. Figure 1 shows the columns in my logging database, with a sample logging for the Voice of Malaysia on 15294.9 kHz.

The column headings are:

Freq: Frequency of the station.

Country: Country name for the station.

Station: station name.

S_On: If I heard the station from sign-on, I use the standard "*" notation in this column. When I print the log report, whatever is in this column (a blank or an asterisk) will be pre-pended to the starting time from the next column.

Start: Starting time of my logging.

End: Ending time of my logging.

S_Off: Same code as "S_On", "*" if the station signed off at End time.

Lang: Standard abbreviation for the language of the broadcast. In the example shown, it was Bahasa Malaysian and Chinese.

Comment: Program details and other comments about the logging such as identification of interfering stations, parallel frequencies carrying the same broadcast, and station identification text.

Listener: For my own loggings, that's me. I also use this database to store information about other DXer's loggings to generate my target list.

Loc: Location of listener.

Freq	Country	Station	S_On	Start	End	S_Off	Lang	Comment	Listener	Loc	Date	SIO	FX	FI
15294.9	Malaysia	V Malaysia		1014	1030		BM/ CH	At t/In, W pop singer, then W arncr in Bahasa Malaysian. Several ments Malaysia, silence 1024-1026, then chime	Archer	NC	06/25/89	444	Y	Y
								1/S to 1030, 1D by M in CH. Unusually clear, decent opening to SEAs this AM.						

Figure 1. Sample Logging Database Entry

Date: UTC date of the logging.

SIO: Reception quality using the standard SIO format (S = Signal strength, rated from 1 (extremely weak) to 5 (excellent); I = Interference from 1 (extreme) to 5 (none); O = Overall quality from 1 (terrible) to 5 (excellent)).

FX: A "Y" in this column says I've sent the report to the Journal (formerly "FRIENDX").

FT: A "Y" in this column says I've sent the report to Fine Tuning.

Preparing the Report

My database software (Ashton Tate's RapidFile) lets me define many different "report formats" to use when generating a report from the logging database. A report format is a template that the computer program can use when printing out the logs. You can build the template to arrange the log information in any order you choose, so I have different templates for my reports to the Journal and Fine

Tuning. The Journal template puts information in the order used in the Journal log reports. Figure 2 shows a Journal report format for the logging shown in Figure 1.

Each logging is printed in the same format, one after the other. For the Journal, the logs are sorted by frequency before they are printed. I instruct RapidFile to only print logs that don't have a "Y" in the "FX" column — which means "logs I have NOT yet reported to the Journal" (FX for "FRIENDX", sorry for the anachronism!). I can also tell it to select only logs newer than a certain date, to avoid sending in stale material. When I finish printing out the report forms, I enter a "Y" in the "FX" column so I won't submit the same logs twice.

Figure 3 shows the same logging as it would be printed out using the Fine Tuning report form template. It is sorted first by country name, since this is the way Fine Tuning bulletins are prepared.

```

                DX LOGS from ROWLAND ARCHER
                *****
                Page 1

15294.9, Malaysia                , V Malaysia                , 1014-1030    in BM/ C.
At t/in, W pop singer, then W arncr in Bahasa Malaysian. Several ments Malaysia, silence 1024-1026, then chime 1/S to 1030, ID
by M in CN. Unusually clear, decent opening to SEAs this AM.

Recep Quality: 444                (Rowland Archer, NC, USA 06/25/89)

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Figure 2. Log Report for the Journal

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                DX LOGS from ROWLAND ARCHER
                *****
                Page 1

Malaysia                , 15294.9, V Malaysia                , 1014-1030    in BM/ C.
At t/in, W pop singer, then W arncr in Bahasa Malaysian. Several ments Malaysia, silence 1024-1026, then chime 1/S to 1030, ID
by M in CN. Unusually clear, decent opening to SEAs this AM.

Recep Quality: 444                (Rowland Archer, NC, USA 06/25/89)

```

Figure 3. Log Report for Fine Tuning

Radio Marabu

German Pirate Radio Profile

by Rich D'Angelo

I received an interesting QSL from the Europirate Radio Marabu which is believed to operate from West Germany. They sent a full data card, station history and information and a picture of their equipment in 36 days for an English report during their June test to North America. The mail drop in the US and Canada is P.O. Box 109, Blue Ridge Summit, PA 17214. The following is reprinted from the information they sent.

Radio Marabu is an independent and non-profit making radio station based in West Germany. The station was founded in the beginning of 1984 and then joined the airwaves in March that year. Radio Marabu normally broadcasts on shortwave on a channel in the 48 meter band. With our shortwave outlet it's possible to reach the whole European continent. The following figures show our audience breakdown by country:

West Germany: 40%

G.D.R.: 23.4%

United Kingdom: 13.3%

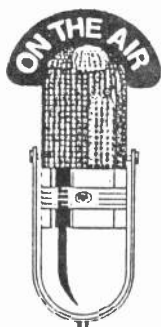
Sweden: 6.9%

We also get letters from listeners in France, Italy, Ireland, Norway, The Netherlands, Austria, Belgium, Switzerland, Czechoslovakia, Spain and Finland.

Because of the international audience Radio Marabu broadcasts in English, German, Dutch and French. In addition to the shortwave transmissions, we also cooperate other European local radio stations in France and Spain on FM.

Our aim is to provide our listeners with alternative and independent music. Therefore we only play music like Punk, Industrial, Hardcore-Dancefloor and others. We want to give our listeners up-to-date information about this kind of music. Your records and information about your organization are very welcome at our mailing address, as shown in the QSL below.

QSL No. 496



RADIO MARABU

Postfach 22 03 42
D-5600 Wuppertal 22
Europas Radiostation für
Alternative Musik
auf Kurzwellen und UKW

TO: RICHARD A. D'ANGELO - USA
DATE: 11 June 1990
TIME: 0045 up to 0059 UTC
FREQ.: 15710 kHz
SINPO: poor reception

You don't need a computer to prepare log reports for bulletins, but it is a handy tool for the job. If you have a computer and haven't tried using it for this, I recommend that you do.

Reception Reports

The next major area of DX record-keeping centers around QSL'ing. There are two sub-topics of interest here: reception reports and QSL record-keeping. First let's look at reception reporting.

A reception report is a letter to a station informing them that you believe you heard their broadcast, and politely requesting them to send you a card or letter confirming this if they agree. That's the essence; the art of writing a good reception report is a topic worthy of a separate article, and in fact if you scan the NASWA reprint catalog you'll find several.

There are several approaches to writing reception reports:

PERSONAL LETTER: You could write each report from scratch, using a typewriter or a computer word processor. Handwritten reports are a distant third in desirability, unless your handwriting is very clear and legible.

REPORT FORM: Many clubs provide reception report forms, which contain blanks that you fill in with the reception information. These are OK for major broadcasters, but too impersonal for the small stations and likely to be ignored.

PERSONALIZED FORM LETTER: This is the option I use. It may sound like the personalized junk mail that's grown in volume over the last ten years — but in practice you can create a personal letter with little more effort than filling out a report form.

Once again, the key is the use of a personal computer with a word processing program. I use WordPerfect on my IBM PC compatible computer. You can use any word processor for the basics. As you learn about your word processor's advanced features, use them to further automate reception reporting.

The first step is to type up a good, basic report. It should contain the following components: introduction, information about you and your locale, reception

details, polite request for a QSL, and thanks to the station for taking the time to read your report.

Save this report on disk or diskette. Load it into your word processor when you need to write a reception report. Edit in the details for that station. Save the report under a different file name so you can use the original letter for the next report.

Make sure you use a file name that will make it easy to find the report in the future. IBM PC filenames are only 8 characters long with a 3 character extension. I use the first 4 characters of the station name appended with the month and year of the report. For example, an August, 1990 report to Deutsche Welle might be saved in the file "DEUT0890.RPT".

I have developed a highly automated system which lets me type in only the parts of the report that change

Another tip is to use some unusual character combination in your form letter to mark those places that need customization in a specific report. One example would be "***". When you prepare your report, you can use the word processor's search feature to find the next occurrence of the "***" characters, positioning you at the right place to type in the next bit of custom information.

Further Automation

I have developed a highly automated system which lets me type in only the parts of the report that change, with WordPerfect automatically advancing the "cursor", which marks where new text gets entered, to each place in the letter that changes from report to report (such as station name, frequency, program details). WordPerfect prompts me to enter the needed information, for example, "Station Name"; I type it in, hit a function key, and it moves on to request the next bit of information needed in the

report. This system lets me generate a report in about 15 minutes. The most time goes into typing up the program details.

I do this with WordPerfect's mail merge function. Most word processors have such a feature. WordPerfect's is especially flexible, and very helpful in building a system such as the one described above. In addition to prompting me for text entry, it also lets me build a menu of choices such as "Return Postage = 1) mint stamps; 2) 1 IRC; 3) 2 IRC's 4) SASE". When this prompt appears, I type the appropriate number 1, 2, 3, or 4, and WordPerfect supplies the full text. I use this for things that have a small number of fixed choices in each report, such as reception quality.

Foreign Language Reports

My automated reporting system really shines when it comes to foreign language reception reports. I prepared basic reports in Spanish, French, Portuguese and Indonesian, using the excellent "Language Lab" series by Gerry Dexter, Tiare Publications.

I use WordPerfect's mail merge feature, described above. The prompts for input are in English, the stored phrases that get inserted in the report are in the appropriate foreign language. I won't go into the details of how it's done, as it is very dependent on the specifics of WordPerfect.

Make sure the word processor you select is capable of letting you enter foreign characters and printing them on your printer.

I use a utility program published by PC Magazine called "Slashbar", which lets me create a file full of sample reception report details in each of the foreign languages I report. I got these sample phrases from the Language Lab books. Slashbar lets you invoke a "Lotus 1-2-3" style menu while in your word processor,

and select the phrase you want from the menu. The menus are in English, the selected phrase is in the foreign language. It gets automatically entered into the report as if I had typed it at the keyboard. For example, when creating a Spanish report, I might select "Details", "Music", and "Folk", from the menus (by typing "D", "M", and "F"); the Spanish phrase for "folk music" gets entered into my report.

Another key aspect of preparing reception reports in foreign languages is having the proper accents and diacriticals over the letters. Going back and doing this by hand is a real chore, so make sure the word processor you select is capable of letting you enter foreign characters AND printing them on YOUR printer. Once again, I find WordPerfect's approach to this to be thorough and easy to use.

Followups

Reception reporting would be a lot simpler if we got a 100% response rate on the first report. Unfortunately, the more desirable the QSL, the harder it seems to be to get. It's not uncommon to have to send out 3 or 4 followup reports, and some DXers have sent 10, 20 or even more for really tough stations.

A good followup report format is to send a copy of your original report, plus a short cover letter stating that your original letter was probably lost in the mail and you are still interested in hearing from the station.

Since I saved the original report on disk in a file name that was easy to associate with the report (such as DEUT0890.RPT), I load that report in my word processor and print out another copy. I then load up my form cover letter, and put in the station's name and address. That's all there is to it.

We're out of space once more, so the final words on keeping track of QSL's will have to wait until next month. Until then, best of DX and 73's.

* * *

Easy Listening

Alex Batman
Route 1, Box 367
Blowing Rock, NC 28605



SUNDAY

- 0010-0030 Encounter (VOA). A look at issues in the news by the two political experts, usually taking opposing sides. Past programs have featured the Nicaraguan election, the Middle East Peace plan (prior to the current Gulf crisis), etc. (5.995)
- 0210-0230 Round About Switzerland (Swiss Radio International). A look at various tourist attractions in Switzerland; including small Swiss villages, the Old Town of Berne, and the Matterhorn. (9.885). Second Sunday of the month.

MONDAY

- 2055-2100 Press Review (Radio Baghdad). The program is divided into three parts. The first is a look at the headlines in Iraqi papers (and other Arab newspapers). The second is a look at editorials and the third is a look at Iraqi home news. It was on this program several weeks ago that Iraq started its first saber-rattling at Kuwait claiming that overproduction of oil in that country and other Gulf states was keeping oil prices artificially low. (13.660).
- 2250-2255 Sports Roundup (Radio Sofia). A look at how Bulgarians are faring in international sports events, including basketball, football (soccer), track & field, weight lifting and gymnastics. (15.330). Reported at 2320 on the same frequency.

TUESDAY

- 2140-2200 Israel Sound (Kol Israel). The pop music scene in Israel program usually concentrating on three or four songs by the same group, performer or composer. Some songs are closer to Folk music and some are popular/rock music. (15640/11.605 Reported at 0010 on the same frequencies.)
- 0045-0100 Science In the News (VOA). A program in special English devoted to issues in science that are making the news. Science here reads ecology, medicine and psychology as well as hard sciences like chemistry and physics. (5.995)

WEDNESDAY

- 1130-1150 Science File (Radio Australia). A program dedicated to issues in science. Some programs devoted to a single issue (like the two part look at tobacco and health) and some looking at several different issues tied together in a theme (like the prospects for sustainable development in India). (9.580).
- 0205-0250 Sounds Around (RBI). A look at the popular/rock music scene in the GDR usually featuring a single group, providing information about the group or performer and playing two songs by them. By the way, does anyone know what happens to RBI/Deutsche Welle when Germany becomes a united state? (11.850/15.240).

THURSDAY

- 0030-0100 New Music U.S.A. (VOA). A rundown of the Top Ten hits in the U.S. as determined each week by Billboard magazine. End of the program also includes a listing of the Top Ten albums. Not all 10 songs are played. The program usually plays 7 or so in their entirety. (5.995).
- 2040-2045 Selected Readings (Radio Damascus). A selection of newspaper and magazine articles from Arab papers almost all of which wind up criticizing Israel in one way or another. Program tends to have more musical interlude time than program (a characteristic of Radio Damascus programs). (12085/15095).

FRIDAY

- 2340-0000 168 Hours (Radio Budapest). A look at the past week's events in Hungary, usually focusing on debates in the newly elected Hungarian Parliament. Listening to this program one understands that the transition from a totalitarian state to a democracy is not easy. (9835/11910).
- 0230-0245 Jade's Kitchen (Voice of Free China). Various Chinese recipes usually tied together by a theme (such as vegetarian dishes). It's not a bad idea to eat well before listening to the program lest you become hungry listening. (5.950).

SATURDAY

- 2315-2400 A Jolly Good Show (BBC). A show with a very good sense of humor which plays rock music requests from week to week, includes a rundown of the Top Ten albums in Britain and an album of the month. Program host is David Lee Travis (for the BBC World Service) a copresenter named "Fred" and the producer, Stu Dio. (5.975/9.915).
- 0050-0120 Over To You (Radio Netherlands). Radio Netherlands listener contact program answering listener questions about the Netherlands. Some letters are quite amusing. I don't know whether my favorite was from the Sri Lankan who was an American millionaire in a previous life and wanted radio Netherlands to help recover his money (tongue-in-cheek) or the one from the man who saw the chess match involving Bobby Fisher in the early '70s as a battle between the forces of good and evil for the soul of the world (apparently serious). (15.560/6.165. Repeated at 0350 on 6.165/9.590).

Latin American Radio World

The second edition of Latin American Radio World is now available. Current as of July 1990, it is an A-4 size double spaced publication. It contains all the LAM Home Service stations in the 2-30Mhz range, including frequencies, station names, transmitter sites, broadcast times, usual slogans and additional remarks. Also included are address, chairman's names, and when known, veri-signers names, and if the station has verified in the last 18 month period. This year they have also included information concerning LAM time signal stations. The price is \$5.00 US(cash only, please!) or 10 IRCs, this includes Airmail worldwide. It is available from:

Latin American Radio World
Casilla 4616,
1000 - Buenos Aires,

African Destinations

Dr. Harold Cones
2 Whits Court
Newport News, VA 23606
Compuserve 71570,411



Africa, called the Dark Continent by the Victorians, is steeped in the mystery that comes from lack of familiarity. The mystery is heightened by the immense diversity of everything—people, weather, vegetation, topography and history—making it difficult to mentally equate Africa with any particular image. Rather than start my stint as Destination Africa editor by highlighting a particular country, I would like instead to increase your familiarity with all Africa by discussing what I view as the major feature of the continent, the climate.

Climate, especially rainfall, has important effects on the economy and mode of existence of the African people. Many tribes are nomadic, moving with the seasonal rains so that their stock always have feed and water; other tribes are supported by agricultural activities mediated by predictable rainfall. In addition to affecting the quantity and quality of crops that can be grown, the climate also may either encourage or check the spread of insect vectors. By knowing more about a major feature such as climate, we as DXers and SWLs better understand our targets and have more of an appreciation for the culture we are encountering. From a more pragmatic view, the effects of climate directly affect the tax base, which ultimately may affect allocations for national shortwave services.

Africa extends from 37°N to 35°S and is thus bisected by the equator. With some exception, the whole continent is warm or hot, and has too much, too little, or poorly timed precipitation. The climate is generally considered to be tropical and subtropical, however, climatologists divide Africa into seven zones, each basically dictated by amount of annual rainfall. For the most part, the climatic zones occur as concentric belts radiating out from either side of the equator. The vegetation zones of the continent correspond to these natural climate divisions and, of course, dictate wildlife distribution.

The Equatorial Climate Zone

The basin of the Congo River west of Burundi and Rwanda, the Central African Republic, the Ghana coastlands and Cote D'Ivoire are found in the Equatorial Climate Zone. This zone, extending 5 to 8 degrees north and south of the equator, is marked by frequent heavy rainfall (an annual rainfall of as much as 200 inches/year) and a constant temperature (80°F). It is in this climatic zone that some of the best developed tropical rain forests in the world are found. Tropical rain forests exhibit three strata, or layers: the tall canopy, the sub-canopy, and the shorter understory. Because of the total shading by the upper vegetation, little grows on the forest floor and it is relatively open. The soil is poor, all the nutrients being tied up in the vegetation. Roots of tropical rain forest plants grow very close to the soil surface so that they may quickly absorb the nutrients from decomposing leaves. For the people living here, there is an abundance of fruit and natural wildlife meats. In recent years, however, many people have elected to grow cash crops on small farms in the forest. To support the farms, "slash and burn" agriculture is used; the nutrients in the resulting ash provide the necessary materials for two or three years of growth but are soon depleted. After depletion, a new area must be burned if the farming is to continue, and destruction of the tropical rain forest, therefore, continues. For the TV generation, the Equatorial Climate Zone best exhibits the "Tarzan-like" jungle we mentally associate with all of Africa.

The Tropical Climate Zone

The Tropical Climate Zone occupies a zone north and south of the Equatorial Climate Zone, extending 15 to 20 degrees north and south of the equator. This zone is marked by a winter dry season and a summer rainy season, with the area receiving an

average annual rainfall of 60 inches. Daytime highs of 80°F are common and the evenings are typically cool. The climate is conducive to the growth of savanna grasses and it is in this zone that much of Africa's remaining grazing wildlife and their predators are found. Outsiders are very interested in preserving these great herds, however the need for farm land, to support Africa's evergrowing population, places increasing demands on the open range lands needed to support wildlife. Farming can be successful here, and peanuts, cotton and millet are grown as cash crops. Some of the countries of the Tropical Climate Zone are Kenya, Uganda, Chad, Malawi, Nigeria, Sudan and Angola.

Temperate Plateau Climate

The grassland plateau, containing a majority of Africa's farmland, exhibits a steppe or Temperate Plateau Climate. This region is located north and south of the Temperate Climate Zone and extends nearly the full width of the continent. Here there is low rainfall, cloudless skies and large diurnal changes in weather. Summer is warm (84°F) and the bulk of the rain (8-20 inches/year) falls then; winters are cool and dry. Primary natural vegetation is brush. The northern most portion of this region, just below the Sahara, is known as the Sahel, and is a region into which the Sahara Desert is expanding due to a long term decrease in annual rainfall (the process of desert expansion is called desertification). As population growth in the Sahel continues to far outstrip the failing food production caused by land degradation and recurring droughts, this area will remain the focal point for African famine. Sahel countries include all or portions of Mali, Niger, Chad, Sudan Ethiopia and Barkino Faso. South of the southern Savanna is another zone of steppe land and it too suffers from droughts similar to the Sahel. The land here, however, is fertile if irrigated. The countries in this zone include Botswana, Zimbabwe, Zambia, and portions of South Africa and Angola. At higher altitudes (1,000-2,000 feet), the Temperate Plateau Climate modifies with more rainfall (30-40 inches/year) and cooler winters (frosts may occur). This higher region of the Steppe is referred to as the Low Veld.

Desert Climate

The continent also exhibits an extensive Desert Climate in both hemispheres. Rainfall here is often only five inches or less per year and the daytime temperatures may reach 125°F. Nights are usually cool because of poor heat retention by the substrata. Countries with Desert Climate include Namibia, portions of Angola, Mauritania, Morocco, Algeria, Libya, and Egypt.

Mediterranean Climate

Mediterranean Climate is exhibited by coastal Morocco, Algeria, Tunisia, and South Africa's Cape Province. The main characteristic of this climate zone is winter rainfall (up to 30 inches/year) and a long dry summer.

Humid Subtropical Climate

Mozambique and its surroundings exhibit Humid Subtropical Climate, warm and humid with heavy summer rainfalls. Average summer temperatures of 80°F, combined with an average summer humidity of 65%, make this climate zone one of the most uncomfortable in Africa. The winters, however are mild.

Highland Climate

Finally, there is the Highland Climate, which occurs throughout eastern Africa where altitudes exceed 6,000 feet. The mountain slopes of Kenya and the Ethiopian Plateau share this climate, marked by winter rain and cool temperatures. These areas are called the High Veld.

The climate of much of Africa has been changing in recent years. Prolonged drought has forced people to leave their ancestral homes to become refugees in unfamiliar places. The population continues to grow unchecked in the midst of decreasing farming abilities. Much of Africa is being effected by the spread of diseases as climatic zones change to reflect the decreasing rainfall. The thread of commonality is the changing climate; one cannot understand modern African culture without considering the climate.

Thanks for taking the time to read about African climates. I will be back in three months featuring the African countries of the Indian Ocean.

NASWA Portraits

Jerry Klinck
43 Lein Road
West Seneca, NY 14224



One of the words in the NASWA slogan is "friendship". I believe that here is where the "Portraits" column is a key ingredient in the overall character of our club. It is virtually impossible for all of us to visit each other personally, so the next best thing is to use this column as a sort of medium of visitation. By sharing with fellow members what we are all about and where we come from DX-wise, we get to know and understand each other on a more personal basis. (actual visits with other DXers could result as well). I know I really enjoy reading about the experiences of others in the hobby, often relating to some of my own, as well as the equipment they use and their thrills and frustrations. I think by sharing our personal history in the hobby we get to know each other better thereby better understanding the virtues of SWL, NASWA and the fun we commonly share, all under the heading of "friendship".

We've got a very interesting visit coming up next month, with an SWL in our nations' heartland. As a matter of fact, EVERYONES' story is interesting in its' own right so send in yours! And remember, you don't have to be a Steinbeck or a Hemmingway, just give us the facts of your life in SWL/DX, O.K.? Thanks.

Now while my own profile did appear in one of last years columns, I thought I might just re-introduce myself.

I am a 47-year old electrician, happily single, and in the process of rediscovering our great hobby. As to my reference to *deja-vous* in last months column, I wrote columns for the ASWLC and even managed the club bulletin back in the early sixties. And speaking of the early sixties, that is when I first discovered the exciting world of DX, on a home assembled Knight-Kit Span Master SWR from Allied Radio Corp. As a student of Electronics in 1960, I was really only assembling the kit as a project and for the fun of doing it. When I found I could receive R. Moscow, BBC and R. Sofia, well, it was all over but the DXing! My next receiver was a Hallicrafters S-107 followed by a Hammarlund HQ-100. In 1964 I "graduated" to my ultimate receiver which

was an HQ-180A. Since I was without cash or credit, I managed the purchase by forging my dads' signature on a credit application. This hobby can really get in your blood! As previously mentioned, I became very involved in the ASWLC and was fortunate enough to get to know some of the hobby greats of the time, including people like Don Jenson, August Balbi and C.M. Stanbury II.

In 1966 I married, bought a home had children, joined the local volunteer fire company and sort of drifted away from the hobby. But I never really forgot the fun it was and always knew I'd be back.

Then, in early 1989, I decided the time was right to resume a hobby that, in my heart, I never really left. I was able to get in touch with Don Jenson who was my "guiding light" back into SWL. With his assistance I was able to choose some equipment and get the feel of the hobby today.

I am currently adding to my HIC and VIC totals with a Kenwood model R-5000, an MFJ-959B and a Datong audio filter. My "farm" consists of a 210' LW, a "Skywire" dipole and a 60 meter dipole for DXing my favorite area - Africa.

I find mint stamps and IRCs are equally effective in QSLing and of 48 taped reports sent out in the past year and a half, 25 were fruitful.

I was very impressed with the improved quality of club publications over the past 25 years, but was somewhat dismayed by the length of time it takes receiving QSLs as well as the increased cost. (Back in the "good old days" a dollar bought postage both ways and a month was a long wait.) All things considered, though, I'm delighted to be DXing again.

Well, that's me. How about you? We'd all like to hear your story, so how about jotting down some of what you're all about and send it to us here in West Seneca. Let's share our SWL experiences and techniques so that we can get to know each other better, in fraternal friendship. Next month, our Portrait will be of a SWL/DXer in the great state of Iowa! Til then, 73

AND GREAT DX!!

Jerry

Listener's Library

John Bryant, AIA
Route 5, Box 14
Stillwater, OK 74704
CompuServe 74730,2145



Well, summer is over, the thunderstorms are diminishing and the Fall Season is upon us! Before we get started this month, I'd like to thank all of the folks who were kind enough to send "get well" cards and notes to me in response to Bob Brown's July column. They were really appreciated! My rather unexpected surgery in Seattle resulted in a "like new" esophagus, diaphragm and tummy--and an 11" scar! The six week recovery also totally disrupted the latter part of my stay in the Pacific Northwest and caused me to miss seeing fellow **Journal** columnists Wallace Treibel and Bruce MacGibbon, and well as a number of other NASWAns. Sorry fellows!

THE COMPUTER ROOM

Our first item this month is an update on the GEOCLOCK PC compatible software reviewed by Doug Thompson in May's column. Having searched long and hard for DX-oriented geography and clock related software, I am convinced that

GEOCLOCK is the best now available. I started with the shareware version, available at a nominal price from shareware houses or FREE on many BBS's including Tom Sundstrom's Pinelands. The base program is at least as useful as a "DX Edge", and has color world and US maps. With registration (\$30) you get the latest version of the software - fully capable - and about 20 more detailed maps. Each has a fully operational animated sunrise and sunset terminator. The registered program is a deal and a very useful DX tool.

In late June, GEOCLOCK's Joseph Ahlgren and associate Eric Scare, K3NA, released a new add-on "Ham Package" for an additional \$30. This may seem costly but you get a lot for the money. The "Ham Package" consists of a custom drawn azimuthal-equidistant world map centered on your own location with a fully animated terminator and with sunlight/darkness indicated. As you can see, the map is just the beginning!

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VAE: S2
Cont: Asia

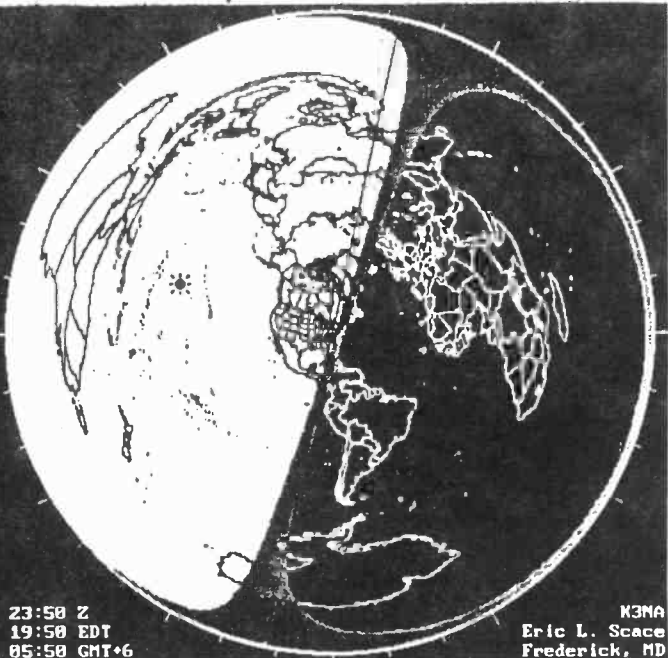
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ITU: 41

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to: 12° 192°
fm: 350° 170°
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kn: 12801 27195

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here: 98 Apr 29 Sun 19:50 EDT
mark: 98 Apr 30 Mon 05:50 GMT+6



K3NA
Eric L. Scare
Frederick, MD

The "Ham Package" also includes a ham data base of about 1500 call signs and geographical coordinants. When you have the azi-equi map on the screen, you simply enter the appropriate prefix (in the illustration, K3NA has entered the S2 prefix) and the software locates the other station on the map, and gives you distances and bearings for both long and short path to the target, as well as showing the Great Circle propagation route to/from the outlying target to your central position. It appears to me that the data base could be modified for SWBC DXing by inputting the first six letters of transmitter sites in place of the ham call sign.

Those of us deeply in shortwave propagation will find both the "Ham Package" and the basic GEOCLOCK program invaluable DX tools. Seen in VGA color, the maps are also quite beautiful! I never thought that I would live to see the day when I would have a real time, full color animated azi-equi of the world map centered on my shack at my elbow while I DXed!!! WOW!!!

There may be some confusion between the GEOCLOCK/Ham Package and Peter Oldfield's "DX Helper" software which was reviewed in July's Listener's Library. "DX Helper" is not in color, nor does the terminator move in real time. However, this \$20 software WILL draw an azi-equi map CENTERED ON ANY SPOT that you care to specify and will draw any terminator for any time/day specified at the keyboard. Mr. Oldfield is working on an animated color version of the program now. The GEOCLOCK/ Ham Package IS in color and animated in real time; however it contains only ONE azi-equi map which is specially drawn to center on your own location. The position of that map cannot be changed by the user. Frankly, I love both programs and even use them on my laptop on DXpeditions!

TO THE STACKS

John Tuchscherer, surely the dean of SWBC DXing (he started in 1922!) checked in to the Library with a whole host of suggestions for those of us interested in the history of broadcast radio. The first is *Man of High Fidelity: Edwin H. Armstrong*, by R.J. Landry. This book is a very well written biography of the radio pioneer who invented the super regenerative receiver circuit, the super heterodyne circuit and frequency modulated radio!

As a general history of radio, John T. strongly recommends a three-book series published by Oxford University Press under the general title *A History of Broadcasting in the Unites States*. Each of the three books have their own titles and were written by Erik Barnouw. They are *A Tower in Babel* (Beginnings until 1933), *The Golden Web* (1933-53) and *The Image Empire* (1953-66). All books suggested by John T. are available on Inter-Library Loan. Thanks, John.

Your Librarian has the just published *Coast Guard Radio* by James T. Pogue, KH2AR. Frankly, I didn't think that I'd find it interesting since I am "SWBC only" just like NASWA. However, the author, an ex-Coast Guard Radioman, has written a fascinating combination history and reference to some really exciting radio listening. The book was obviously put together with loving care and with a great deal of cooperation from the Coast Guard. Beside the history and structure of the Coast Guard's use of radio, there are frequencies, terminology, and addresses of what appears to be every Coast Guard station and every Coast Guard ship larger than a dory! If you live near a Coast, love the sea sea or have a leaning to Utes, this is keeper!

BIBLIOGRAPHY

GEOCLOCK, Available as shareware from Pinelands and other BBS as well as from Public Brand Software (1-800-426-3475) P.O. Box 51315, Indianapolis, IN, 51315, \$5.00+S&H Registered (\$30 to \$60): J. Ahlgren, 2218 N. Tuckahoe St, Arlington, VA, 22205-1946

DX AID, \$20 ppd from P. Oldfield, P.O. Box 152, Piedmont, Quebec, J0R 1K0, Canada

Landry, Robert J. *Man of High Fidelity*. Indianapolis, NY: Bobbs-Merrill, 1946.

Barnouw, Erik. *A History of Broadcasting in the United States: A Tower In Babel* and *The Golden Web* and *The Image Empire*. New York: Oxford University Press, 1966-1970.

Pogue, James T. *Coast Guard Radio*. Lake Geneva: Tiare Publications, 1990, Tiare Publications, P.O. Box 493, Lake Geneva, WI 53147, \$12.95 + \$2.00 S&H

Guest Article

To submit feature articles, contact
Dr. Harold Cones, Editor-In-Chief
2 Whits Court, Newport News, VA 23606

With An Ear To The Future

by: *E. Paul Lukas*
223 Betty Jo Lane
Memphis, TN 38117
Compuserve ID: 72441,2270
GEnie: E.P.Lukas

As with many other baby boomers (I just turned 40), the approach of middle age has brought about a search for new hobbies and those enjoyed as a youngster seem to have a special attraction. That is the case with me at any rate, and an article in U.S. News and World Report last fall about world band radio brought back memories of childhood hours spent crouched in front of Dad's old Zenith console listening for voices and music from exotic places. With all due respect to the budget...it really couldn't stand for another toy...I began the search for a world band radio.

I sent away for catalogs and literature and test reports and visited stores and soon accumulated a pile of information to be used in selecting a radio. After due time spent considering features, brand names, styles, and prices, I narrowed my search to portables, and those from Panasonic and Sony seemed to offer the most for the money. Some toll free phone calls to national suppliers provided more information and I soon found a used Sony ICF-2010 in mint condition with all accessories, paperwork, in the original box for a fair price.

I waited anxiously for UPS to deliver my new toy. I knew it had arrived when I got home from work and was greeted by my wife with the words, "Well, what have you bought this time?" As I tore open the package, I was surprised by the small size of the Sony and intrigued by the rows of small buttons on the front of the receiver. Included with the papers was an invitation to join the North American Short Wave Association,

but that was quickly put aside in my rush to find the instruction manual. In short order, I had the machine loaded with batteries, the antenna wire plugged in, and I was ready to listen to the world! And what a world it was! Radio Australia, the BBC, Spanish National Radio, the Voice of Free China...station after station was duly logged on scraps of paper until my listening post was littered with small scraps of paper.

Several weeks passed and QSL cards and pennants from around the world started to arrive almost daily. My children were impressed with the first one but, having been raised in a world of television and Ted Turner's instant news, they quickly tired of seeing cards from other lands when they could turn on TV and see those lands immediately. My interest, too, began to fade after that initial flush of enthusiasm. Although I continue to listen to my favorite broadcasts several hours a week, I don't lose any sleep any more to short wave listening and I use my headphones to avoid bothering the family. I guess I've matured as a short wave listener, and the hobby is now playing a moderate role in my life.

I love the hobby and I'm glad I did it and the NASWA plays a pivotal role in the enjoyment of it. (Yes, I DID find the card and mail it in.) Short wave listening provides links to the past, to the present, and to the future, and I think I'll stay with it. I believe that I am in the midst of an increase in interest in SWL propelled by a generation of Americans entering their forties and that this interest hasn't peaked yet. 73's

Listener's Classroom

Dr. Harold Cones
2 Whits Court
Newport News, VA 23606
CompuServe 71570,411



Strange things happen sometimes. Several weeks ago I received a letter from Sid Livingston of El Paso, Texas, asking about techniques for taping interval signals. The very next day, a letter showed up in my mailbox from Eric Swedberg of Portland, Oregon, detailing his interval signal taping techniques. In addition to sharing his methods, Eric proposed a club effort to construct a master interval signal tape for a future distribution project (we will discuss Eric's project idea in a future column). Thanks Eric, for sharing your technical knowledge with us.

Eric says, "The first thing to have is a receiver with good audio. I use a Yaesu FRG-7. There are many others as good or better, but stick with solid-state--tube type receivers most often have a hum. I then patch my receiver into a stereo amplifier (quad, actually) with a "Y" adaptor patch cord so that the mono output of the receiver is equally distributed into the stereo channels. The next step is set the volume output of the receiver to be roughly the same as the other components connected to the amplifier (turntable, CD, etc.) to ensure that recording levels won't be too weak or too strong. I use the headphone jack instead of the recording jack as this allows the volume level to be preset and also seems to have less distortion. You may have to disconnect either your antenna ground or stereo system ground as having both may mute your radio's audio output.

Now, between your amplifier and the cassette deck you should have a graphic equalizer. Amplitude modulation is not the highest fidelity sound and needs some "widening" for a quality recording. If, like most equalizers, yours is 10 bands per channel, set your levels at the "0" setting, with your two bottom frequencies pushed halfway up from there, and your two top frequencies pushed all the way to the top. That leaves only one more setting, the third highest frequency--set it at the same level as

the lowest frequencies. Please--always use high-bias tape. There is much less distortion and noise reduction is usually not needed. Optimum sound levels are a must. Let the sound meters occasionally cross the "red line" as long as they don't smack the top. Sound levels set too low will result in much hiss and weak audio that no noise reduction can ever compensate for.

Using this system I have been able to make some remarkable recordings of Interval Signals. Due to the unstable nature of the airwaves, sometimes several recordings of the sign-on or sign-off rituals can be spliced together with the best corresponding fragments into a cohesive, consistent recording. Remember, this is for clear-reception scenarios."

If making your own interval signal tape is not your cup of tea, see if you can locate a copy of the old "HAP tape." The British branch of the now defunct HAP (Handicapped Aid Program) sold an excellent tape some years ago (about 1981) with vocal identification of 137 interval signals, including some of historical interest. You may be able to locate (and copy) this tape through an older SWL--it makes for some pretty interesting listening.

I'm afraid I will soon be leaving Listener's Classroom. Because of an exhaustive work load, Chuck Rippel found it necessary to step down as Destination Africa editor. I have been an active African DXer for some time and was delighted to be able to take over his column. I have enjoyed conducting Listener's Classroom, and will continue my association in the next column or two as I "break-in" the new editor. And speaking of Africa, Proceedings 1990 will soon be out. Among its many articles is a feature on "Shortwave of the African Sahara and Sahel." If you have not seen a Proceedings, you are missing out on a valuable resource. Proceedings is available for \$19.50 plus \$2.00 postage from John Bryant, RRT 5, Box 14, Stillwater, OK 74074.

Technical Topics

Ted Benson, WA6BEJ
426 East Fulvia Drive
Encinitas, CA 92024



SYNCHRONOUS DETECTION Why and How?

Last month I promised to discuss an old, yet new, method of signal reception - synchronous detection. The process has been around for a while, but modern advances in technology have made its implementation much more practical.

In explaining synchronous detection, I had two avenues available: I could give a long, dry treatise, or I could examine a practical, commercially available unit. The decision was made for me by you, the reader. Many of you wrote to ask that I not discuss synchronous detection itself, but instead show how synchronous detection could be used to improve reception quality - as well as where decent add-on synchronous detector accessories could be obtained.

Fortunately, Engineer and NASWA member Guy Atkins stepped forward with a specially condensed version of his *Fine Tuning's Proceedings 1989* article about the Kiwa MAP unit.

While not an endorsement, I feel that the Kiwa unit is an excellent example of synchronous detection, and Guy's review and description will give you a chance to make informed comparisons when deciding to equip yourself with synchronous detection.

THE KIWA ELECTRONICS MULTIBAND AM PICKUP A New Approach to Better Reception

Guy Atkins, 205 SW Clark #C-4, Issaquah, WA 98027

Any traveler knows that a map is a great help in reaching his destination. For the radio enthusiast, last year's introduction of the "MAP" by Kiwa Electronics promises to be a similar advantage for enjoyable listening.

The Multiband AM Pickup (MAP) is an unusual receiver accessory that provides synchronous detection, improved audio fidelity and I.F. selectivity, and other features for AM reception on many receivers. The MAP was designed by Craig Siegenthaler of Kiwa Electronics in Seattle, Washington.

THE AUDIO QUALITY DILEMMA

Signals which struggle through our unpredictable ionosphere are distorted before they reach the antenna. Most shortwave receivers available today do little or nothing to hold this distortion to reasonable levels. The 1985 WRTH reported that the ICOM R71A exhibits up to 30% audio distortion at 80 Hz! Listening over a long period can be very tiring. Not only does the program listener miss out on pleasant reception, but the DXer is left wondering if his receiver is adding to his struggle to hear and identify stations.

The technology to accurately reproduce the audio in a signal has existed for some time. However, manufacturers understandably make compromises: selectivity, stability, image rejection, etc. need to come first. Yet even the best receivers are normally optimized for single sideband reception, not AM.

What could the listener expect if factors

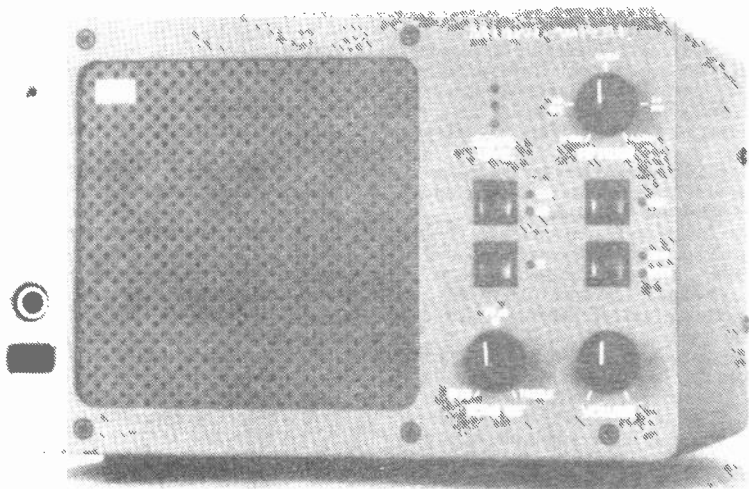
such as signal detection, AGC, tone control, and IF/AF filtering were chosen specifically for the reproduction of AM signals?

DEVELOPMENT HISTORY

Craig Siegenthaler of Kiwa Electronics has an extensive background in broadcast and audio engineering. He has worked for leading AM/FM stations in Seattle and Washington, D.C., as well as the NBC network. Three years ago, while working for PJZ-86 in the Netherland Antilles, he began to look for ways to improve audio quality on his ICOM R71A. His experimentation began with a simple synchronous detector, and gradually expanded into other areas of reception enhancement. Many techniques were tried over a two year period. The result of his work is the Multiband AM Pickup, a new twist in a receiver accessory.

Craig believes there is a need in the marketplace for an "all-in-one" type of audio enhancing unit like the MAP. Synchronous detector add-on boards such as ESKAB's have their place, but they only address one aspect of the problem. Kiwa's MAP accessory bypasses many of the receiver's distortion-inducing stages and processes the signal in a manner specifically designed for AM transmissions. The MAP's signal processing is completely analog, with no digital filtering. The signal exits the radio at the 455 KHz I.F. stage, and does not return.

The MAP is essentially the second half of a communications receiver optimized for listening to AM mode signals. However, particular hook-ups with some receivers will



provide a better signal-to-noise (s/n) ratio when tuning AM signals in ECSS (exalted carrier single sideband - ed.) or while listening to single sideband broadcasts.

My participation in the MAP's development involved the front panel design, graphics layout, and field testing. I'll strive to review the unit objectively, detailing how it can improve both your SWLing and DXing.

This review is a somewhat condensed version of the article I wrote for *Fine Tuning's Proceedings 1989*. My thanks to the Fine Tuning organization for allowing the reprint of this information.

DESCRIPTION AND FEATURES

A self-contained unit (including speaker), the MAP works with any receiver employing the common I.F. frequency of 455 KHz (the MAP will not work with any other I.F.). By use of either a direct or inductive pickup, the 455 KHz signal is intercepted and reconditioned to provide lower noise & distortion, improved selectivity, and a flatter frequency response (passband). The MAP is composed of over 21 integrated circuits and 19 transistors specifically chosen for low noise and distortion. Six quality ceramic filters are also utilized.

The MAP's chassis is sturdily constructed of 20 gauge steel and a .030" aluminum front panel. The entire chassis is produced on a computerized metal forming machine that allows professional touches like rounded corners and a precise fit on all parts. Dimensions are 8.2 x 5.1 x 7.5 inches. This is definitely NOT a homebrew-looking item.

Circuit boards (3) are made of durable glass epoxy, with high quality components well-spaced for serviceability. All switches except the power switch are electronic FET types for long life. The MAP can be powered from 12.5 to 15.5 volts DC.

PICKUPS: A direct connection "pickup" or optional inductive pickup couples the receiver's 455 KHz I.F. signal to the MAP. The MAP is normally supplied with a direct pickup

which easily attaches to the proper point (before or after the I.F. filters, depending on receiver and/or total selectivity desired) by use of a spring-loaded microclip. *No receiver modification or internal rewiring is required*, and the pickup is removable so that the MAP may be used with other 455 KHz I.F. radios.

For tube and portable receivers the indirect (inductive) pickup is recommended. This device "sniffs" out the I.F. signal near I.F. transformers or coils. Both pickups are housed in a small plastic box and use a low-noise preamplifier and a thin coaxial cable that transfers the signal and DC power.

SYNCHRONOUS DETECTOR: The heart of the MAP is its synchronous detection, a mode pioneered in consumer-grade receivers by the Sony ICF-2010/2001D. The synchronous detector in the MAP is a non-PLL type. Employing an enhanced carrier technique, the MAP's detector is able to extract audio even from very weak signals while providing low audio distortion (typically 0.5% THD). The diode (envelope) detectors found in most receivers is threshold-sensitive, meaning detection cannot happen until the signal is higher than the forward voltage drop of the diode. The MAP's detector is not limited in this way, and a more complete and accurate rendition of audio information is the result.

Perhaps the main advantage of the MAP's detector is the ability to tune further off the carrier frequency to favor reception of either sideband with less distortion than diode detectors. It also has an edge over most other synchronous detectors in this respect; the majority of PLL-type synchronous detectors require that the receiver be tuned to the center of the carrier. For example, the Sherwood SE-3 and ESKAB's PLAM board for the R71A employ a PLL synchronous detector that loses signal "lock" if the receiver is tuned more than 35-40 Hz away from the carrier signal. The Kiwa MAP in wideband mode allows tuning as much as 3 KHz either side of carrier before significant distortion arises. This can be a help at time to

avoid adjacent channel interference.

FILTER BANDWIDTH: Using up to six cascaded quality ceramic filters plus AF filtering, the MAP provides excellent selectivity and a very flat audio passband. The narrowband position is 2.9 KHz at -6dB and 4.6 KHz at -60dB; the wideband gives 6.9 KHz at -6dB and 9.2 KHz at -60dB.

Advised shape factors for the narrow and wide bandwidths are conservatively rated at "better than 1:1.8" and "better than 1:1.45" respectively. Actual measured values are given in a custom *Certificate of Performance* supplied with each MAP. My particular unit has shape factors of 1:1.54 and 1:1.32, with total IF/AF ultimate rejection of -111dB (narrowband) and -103dB (wideband).

Depending on your radio, more selectivity combinations may be available by attaching the pickup after the receiver's filters. For example, a stock NRD-525 used with a MAP unit provides five bandwidths when the pickup is placed post-filter; two bandwidths result when the pickup is located before the receiver's filters. The owner's manual gives details on this option for current receivers.

If 2.9 and 6.9 KHz seem rather wide compared to other widths found in good receivers, remember that the MAP's bandwidths have excellent shape factors and ultimate rejection. The non-PLL synchronous detector also allows more latitude in tuning before the point where distortion sets in.

By the use of good quality, cascaded ceramic filters, certain distortion products that may occur with mechanical filters are avoided. Listening sessions confirm that the MAP possesses a combination of IF/AF filtering that works quite well.

AGC: Automatic Gain Control circuitry in the MAP is designed for proper reception of AM signals. When attached to the radio, the MAP's AGC action generally bypasses the receiver's AGC. However, some AGC effect from the receiver has been noted ahead of the MAP when connected to a NRD-525. On signals with rapid flutter, reception can be improved by lowering the receiver's RF gain and turning the AGC off, which permits the MAP's AGC to take over.

MONITOR AMPLIFIER AND

SPEAKER: A low distortion audio amplifier provides over six watts of drive to a polypropylene treated speaker which was chosen for its low "coloration." This particular speaker was chosen after extensive tests by Kiwa, and sound very good. The amplifier and speaker combination can fill a room with volume.

A standard 1/4" phone jack disables the speaker and works with either mono or stereo headphones. A nice touch in keeping with the MAP's approach to clean audio is a front panel "overload" LED that flashes if the amplifier is driven into distortion with excessive levels.

HIGH FREQUENCY FILTER (HFF):

This control is basically an AF notch filter, calibrated and tunable from 1.1 KHz to 4.5 KHz. The *Certificate of Performance* for my MAP indicates a -35dB depth capability at 2.4 KHz. the HFF is primarily used for audio tailoring and noise reduction, rather than as a heterodyne notch filter. The HFF's notch width is wider

than usual for this particular reason.

SIGNAL INPUT LEDs: Yellow, green, and red light-emitting diodes (LEDs) on the front panel give a visual indication of the signal strength provided by the pickup. The LEDs do not function as an S-meter, but instead are a guide to signal level for optimum synchronous detection.

STONE TILT: I know of no other communications receiver or accessory that employs this type of tone control. This device is found in professional audio equipment and allows a wide range of tone adjustment by operating in a "teeter-totter" fashion. As the bass is boosted, the treble is cut (or vice-versa). The tone tilt provides over 16dB of variation throughout its range. The center position will be particularly interesting to mediumwave listeners, as it gives a flat frequency response for MW stations using 75 microseconds pre-emphasis. This is becoming a standard for MW stations in the USA, and the MAP compensates for the boost when the control is centered.

MAP/RECEIVER CONTROL: A quick tap on this button gives an instant "A/B" comparison between the MAP audio and the original receiver audio. The "receiver" position also allows any other audio input such as a tape recorder to take advantage of the MAP's good audio amplifier and speaker (but none of the audio shaping controls have any effect when using an external audio source).

REAR PANEL CONNECTIONS: The following rear panel connections and controls are found on the back of the MAP: 455 KHz INPUT, INPUT LEVEL, 455 KHz OUTPUT, RECORD OUTPUT, RECORD LEVEL, RECEIVER INPUT, GROUND, DC POWER, and BATTERY.

OWNER'S MANUAL: This manual is one of the most useful and comprehensive I have ever seen. Some MAP owners have commented that it is similar in style and thoroughness to the manuals supplied with old Hammarlund and Hallicrafter receivers. Included are descriptive text and graphics, performance charts (including a certification letter from independent testing engineers Hatfield & Dawson, and a detailed *Certificate of Performance* for each serialized MAP), clear hookup instructions with schematics and diagrams for the R1000, R2000, R70, R71A, NRD-515, NRD-525, ICF-2010, and a number of other receivers, general guidelines for hookup to other 455 KHz I.F. radios, specifications, operation tips, alignment information, MAP circuit diagrams, and customer service information.

OPERATION

The MAP is quite simple to use, yet full performance takes some practice to be realized. With the MAP hooked up properly, the receiver's AF gain is adjusted so the volume level with the MAP in RCVR position is equal to the volume heard through the MAP position. This permits a fair comparison of audio quality.

Stations are normally tuned in AM mode. Adjustments to the audio quality are made with a combination of receiver tuning (i.e., tuning off-carrier or with passband tuning control), receiver bandwidth, MAP's bandwidths, Tone Tilt, and High Frequency Filter. The MAP's manual

describes some useful tuning techniques that enhance signal intelligibility in certain situations.

LISTENING IMPRESSIONS

As you would expect from a product offering so much flexibility, sufficient time at the controls is required to learn how to use the MAP to its best advantage. It took me a few days to really master the fine points and to understand how to use the controls in various signal and QRM situations on the SWBC bands. Also, I wasn't accustomed to scrutinizing the audio quality of signals. As a typical DXer I had become accustomed to ignoring noise, fading, distortions, and other distractions. The Kiwa Multiband AM Pickup made me expect more in audio quality.

The differences the MAP can make in the fidelity and intelligibility of signals range from subtle to surprising. Clearer speech reproduction is the norm, due in part to the improved reproduction of consonants such as Cs, Ks, and Ts, which contribute to speech clarity. Voices often seem to lift up out of the "mud" a bit, and I have found the MAP an aid in deciphering station IDs.

John Bryant, NASWA Editorial Board member and experienced Indo chaser from Stillwater, Oklahoma, was one of the first DXers to put Kiwa's MAP to the test. He says that *"the first morning I used my MAP, I heard a full ID on 'Radio Pemerintah Daerah Tingkat Uda Sunhawa' for the first time in my life. In fact, it was the first time I have clearly heard the 5 or 6 words on an RPD identification all at the same time on any RPD reception from the Central USA. The MAP's additional clarity, especially on muffled languages, is startling."*

Derick W. Ovenall, N3EGR, of Wilmington, Delaware, comments *"I am delighted with the improvement in sound quality provided by the MAP over the stock R70, and even after only two evenings of listening, I cannot imagine that I would want to use the R70 on AM without the MAP. The sound is much crisper, and on switching back to the R70 it becomes muffled and fuzzy in comparison. It is amazing that you have achieved such good sound quality with such good selectivity. In short, I am pleased and impressed."*

I particularly enjoy the improvement to music reproduction that the MAP offers. Local MW stations sound excellent in wideband (post-I.F. filter hookup on an NRD-525, AUX filter position). Music from stations with marginal reception through the NRD-525 alone often becomes very listenable when the MAP's controls are "tweaked" properly.

I have heard the MAP in operation with an ICOM R70 and R71A, Kenwood R1000, JRC NRD-525 and NRD-515 and other receivers. Particularly impressive to me is the MAP's ability to reduce receiver-generated "hiss." The NRD-525 has this problem, which is reportedly not phase (synthesizer) noise, but is caused by the interaction of stages or components on the I.F. board. When the MAP is switched in, this particular hiss totally disappears. This solves a major complaint I had about the NRD-525.

The MAP provides sufficient controls for the radio enthusiast to adjust the sound to his or her liking. When interference and other problems cannot be reduced sufficiently, the

overall fidelity and intelligibility is usually enhanced enough to warrant using the MAP.

Noise and static occasionally seem louder or stronger through the MAP because the MAP reproduces all signals better, there seems to be a greater high frequency (treble) component to noise that isn't audible in similar filter bandwidths with a diode detector.

There are two reasons for this: first, the MAP's IF/AF filter combination provides a flatter passband than many filters that experience a roll-off in treble response. Second, the MAP's synchronous detector reproduces high frequency information not normally heard through a threshold-sensitive diode detector.

I definitely would not say that the MAP is useful in every signal situation on the SWBC bands. In some instances, problems in reception are masked by the receiver's own detector to a degree that listening to the radio alone is preferred. Also, there are times when I much prefer DXing with the receiver alone in ECSS mode. The slightly tinny, artificial quality the ECSS sometimes gives can accentuate voice frequencies to a degree that intelligibility is better than with the MAP. The MAP simply offers the radio enthusiast another weapon in his arsenal to combat difficult DX.

THE BOTTOM LINE

As SWLers and DXers become more aware of the importance of clean audio, I hope we'll see manufacturers respond with better sounding receivers. Until these new rigs arrive, the Kiwa Multiband AM Pickup can give a useful boost to fidelity and intelligibility.

Sales of the MAP unit in the past year have been surprisingly brisk, considering the limited advertising of the product. Many sales have been via word-of-mouth recommendation. I have found the MAP to be a solidly built piece of gear, helpful on most AM signals. Also, it has greatly increased my enjoyment of music broadcast over many shortwave station.

Another plus is that this unit works with more than one receiver, and requires no receiver modification.

PRICE AND ORDERING INFORMATION

The MAP costs \$340.00 (US) and comes with a 30-day trial period during which time the unit may be returned for a full refund. The MAP is also covered by a one-year warranty. The MAP is shipped with an owner's manual, a direct pickup, an AC adapter, and various connectors and cables for hookup.

The optional indirect (inductive) pickup and additional direct pickups cost \$40.00 each. Purchasing the indirect pickup is strongly recommended for use with a tube-type receiver.

The MAP and accessories may be ordered directly from Kiwa Electronics. For complete ordering and shipping information, or for more details on the MAP, contact: Kiwa Electronics, 9815 61st South, Seattle, WA 98118 USA. Phone: (206) 722-KIWA.

Equipment Review

Rich Arland
25 Amherst Avenue
Wilkes-Barre, PA 18702
Compuserve 71271,1651

Passive audio filters have been around for a long time. Eclipsed by the IC op-amp active audio filters in recent years, the passive filters have become somewhat of a rarity in the radio hobby. The folks at Dymek have resurrected the passive LC filter and named their version, the FOG CUTTER or FC, for short. The FC is designed to provide a low cost method of improving SW receiver audio. It can be used to tailor the audio response to your individual tastes.

I received the original prototype of the Dymek FOG CUTTER about a month ago. It consists of a black box 1 3/4 X 5 1/4 X 4 inches with input and output connectors and a 6 position switch on the top. Since the FC is a passive device, there is no need for power. As with all passive audio filters there is some insertion loss, but this can't be more than 3 or 4 dB. Ample receiver audio gain is available to offset any insertion loss. Connection is made from the input port of the FC to the external speaker jack on the receiver. A speaker is then plugged into the FC output port and you're in business. Simple, huh??

Since receiver audio is an extremely subjective parameter, turn the 6 position switch on the top of the box until you get the kind of audio you desire. Its that simple. Nothing special, just five combinations of inductance and capacitance and a BYPASS position allow you to tailor your receive audio however you like. The FOG CUTTER functions much like an external tone control, accentuating or attenuating bass & treble audio frequencies. If you have ever tried to get an ID from an elusive Indo regional station you will appreciate the FC. Since most Indos and a lot of the S. American stations are plagued by poor transmitted audio, the ability to drop off the lows and boost the highs in the audio range can make the difference in logging an ID or putting "tentative" next to the log entry.

The FC sits atop my external speaker and since I have started using it, I find that it is an indispensable accessory. The FC is a low cost alternative to improving receiver audio performance. While it is not well suited to RTTY or AMTOR signals, it does, however, clean up SSB, AM and CW signals quite well. The unit is small and simple to operate without becoming intimidating. In short, the FC is a very cost effective approach toward better audio from your SW receiver.

Dymek will be offering the FOG CUTTER II for about \$79.95 + \$5.00 for shipping. The unit will be available from Inline Components, 4521 Campus Drive, #113, Irvine, CA 92715.



Company Store

Richard A. D'Angelo
2216 Burkey Drive
Wyomissing, PA 19610



Plenty of news and other happenings around the Company Store this month. Read on.

T SHIRTS WITH UNIVERSAL APPEAL

Recently, the Company Store had the good fortune of travelling to Ohio. While there we made a side trip to visit our good friends at Universal Radio. Showing universally good taste in clothing are Barb and Fred Osterman. If you are anywhere near Columbus, Ohio stop in for a visit. Let Fred show you some of the neatest shortwave gear around. Wear your NASWA T shirt or sweatshirt for instant recognition!



Incidentally, Universal Radio isn't the only place that carries interesting items in a jam packed catalogue. Your Company Store still has plenty of copies of the first edition of the Reprint Service Catalogue available for only US\$1.00. Keep Dave Turnick off the streets by placing an order from the catalogue today.

NEW LOW PRICE FOR NASWA POPLIN GOLF HAT

A few members recently remarked - "D'Angelo, you crazy??? 14 bucks for a golf hat! For that kind of money it better take a dozen strokes off my score!". Perhaps we went a little too "deluxe" on the hat. Since the NASWA golf hat can't take a dozen strokes off your score, I thought it might be time to look into a slightly less expensive ornament for the head. This month we are introducing our new poplin golf hat which looks remarkably like our old one except it's cheaper (it's amazing how people pay attention when that word is used). Our new NASWA golf hat costs only US\$8.00. It comes in NASWA Royal Blue with the club's logo on the hat. It's a terrific buy. I have my new hat and the quality is outstanding. The leather strap in the back of the hat adjusts to fit all sizes. A truly remarkable value. Hopefully, no more "D'Angelo, you crazy..." remarks will be heard from my family.

NEW ITEM: THE NASWA COFFEE MUG

You asked for it and now we have it. The first NASWA Coffee Mug is now available. This stunning 10 ounce coffee mug comes in NASWA Royal Blue (some people think the color is "cobalt"). NASWA logo designer, Guy Atkins, has combined the clubs logo with a projection of a world map to create an outstanding effect for our first coffee mug design. Destined to be a collectors item, the Company Store will be taking orders immediately!

The NASWA Coffee Mug is priced at only US\$7.00 for shipment within the United States and US\$8.00 to Canada. Overseas shipping costs are expensive, however, if there is an interest the price is US\$12.00 to Europe and US\$18.00 to Australia and New Zealand. To ease some of the administrative burdens of processing orders, we will have an "ordering period" from now until October 31, 1990. I will place an order on November 1 for all orders received. Hopefully, by December 8th, Dave Turnick and I will be able to get all orders in the mail. Imagine your favorite holiday brew in a NASWA Coffee Mug.

73 - RAD

Make checks payable to either Richard D'Angelo or The NASWA Company Store

Listener's Notebook

Bruce MacGibbon
2295 Juniper Avenue
Gresham, OR 97030



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NEW SHORTWAVE PROGRAM - Audrey English of the 'International Radio Network' announced on 8/15 that she would be starting a shortwave program next week that would include 'Ian McFarland' as a guest. Shortwave Radio Listening tips will be given. The IARN Sked is: Daily - 45 minute broadcast on 3975, 14275, 28475 at 0745, 11, 13, 17, 21, 0000 & Sunday at 22 on 3980 & at 23 on 7290. (bmm)

AFGHANISTAN - Radio Afghanistan external sked: Some frequencies are relayed from transmitters in the USSR. - 0130-0430 Baluchi/Pashto As 15255, 11820, 9635, 4940; 0730-0930 Pashto/Dari (Voice of the Homeland) As 21600, 17655, 9635, 4940; 0930-1030 EE As 21600, 17655, 9635, 4940; 1230-1330 Urdu(unconfirmed) As 11985, 4940; 1330-1430 Baluchi/Pashto As 11985, 9635, 4940; 1435-1530 Baluchi/Pashto Asia, Domestic 7200, 4975, 4740, 1107, 945, 648; 1430-17 Pashto/Dari (Voice of the Homeland) As 21600, 117895, 15350, 9635, 4940; 1630-17 AA ME 17580, 15520; 17-18 Pashto/Dari (Breeze of the Hindu Kush) Europe 17745, 15510, 9635; 18-1830 GG Europe 17745, 15510, 9635; 1830-1930 EE Europe, Am 17745, 15510, 9635; 1930-20 FF Europe, ME 17745, 15510, 9635. (WBI 8/10)

ALGERIA - Radio Algiers is currently providing reliable signals for its Spanish service from 22-23 on 15215 & 9640. The stations identifies as "La Voz de Sahara Libre" ("Voice of the Free Sahara") during this segment. (Radio Australia's 'Japanese DX Time' 8/11,12 edited by Craig Seager of the 'Australian Radio DX Club')

AUSTRALIA - From 8/13 RA on to ME 13-15 on 21775, 17630 as announced on Radio Australia on 8/13. (John Carson on vacation in New Mexico) & thanks for phone call! (bmm)

BELGIUM - Future of RTBF external service under review - Radio Netherlands, Hilversum, in English 1150 gmt 26 Jul 90. Excerpts from "Media Network" interview with Andre Moens, director of RTBF Radio 4 International.

(Moens in French, fading to English translation) As you may know, RTBF (Radio-Television Belge da la Communaute Francaise), like almost all other public broadcasting organisations, is facing financial difficulties. To resolve these, the administrative body of Belgium's French-speaking community is studying a number of options. It is asking, for example, whether Radio 4 International should remain on the air. The administrative council is supposed to decide by November whether or not the RTBF should continue to operate an international service.

(Reporter) ... Under current legislation, funding for both the domestic and international services of the RTBF and the BRT (Belgische Radio en Televisie, the broadcasting organisation of the Dutch-speaking community) come from the listener and viewer fees. But the RTBF says it isn't receiving enough to continue operating both its domestic and international services in their present form. So, what does it plan to do?

(Moens) Obviously we would need the proper funding to operate the international service. In case we don't receive that funding we are studying a number of other possibilities, for example co-operating with Radio France Internationale.

(Reporter) ...Wouldn't it be more logical for the two communities (French and Dutch-speaking) to work together?

(Moens) Well, as you may know, it would be rather difficult. Belgium began the process of federalisation several years ago. Radio and

television organisations were among the first to be totally separated. It would be quite difficult to reverse those changes. But I must say that this possibility has not been ruled out. As I said, we are studying all the options to keep Radio 4 International on the air. (WBI 8/3)

BOLIVIA - 4808, 1046, Radiodifusoras Libertad, Santa Fe, Folklorica music to sign-on with full IDs at 1100. Sometimes they ID simply as 'Radio Libertad'. (Paul Edwards, Wellington, New Zealand via "OZ DX" #56, 8/90) 6094.3, 0912, R. Cosmos, Thanks to David Foster tip! Fair/poor w/Bolivian huaynos, many UTC -5 Time checks. No ID, but who else?? on 7/11 (Geoff Cosier, Melbourne via "OZ DX" #58, 8/90), and Peter Bunn says he hears a carrier quite regularly on this spot, but no audio so far. They may be having transmitter/modulation troubles.

BOTSWANA - Radio Botswana domestic sked: 0300-22 Multilingual Dom 7255, 4830, 3356, 972, 648, 621, VHF/FM including 0410-0430 Mon-Fri "Parliament Proceedings" (Setswana, irreg); 0430-0435 News headlines (Setswana and EE); 0430-0455 Mon-Fri "Parliament Proceedings" (Setswana, irreg); 05-0510 News (Setswana); 0510-0520 Mon-Sat News (EE); 0730 freq change 7255, 5955, 4830, 972, 648, 621, VHF/FM; 11-1110 Mon-Fri News (Setswana); 1110-1120 Mon-Fri News (EE); 1115-1125 Sat & Sun News (Setswana); 1120-1130 Mon "University of Botswana" (EE); 1125-1135 Sat & Sun News (EE); 1125-1140 Tue "The UN and South Africa" (Setswana); 1500 Freq change 7255, 4830, 3356, 972, 648, 621, VHF/FM; 16-1610 News (Setswana); 1610-1620 Mon-Fri News (EE); 1645-17 Mon-Fri "Around the World Today" (EE); 1700 Freq change 7255, 4830, 3356, 972, 648, VHF/FM; 1800 Freq change 4830, 3356, 972, 648, VHF/FM; 19-1910 News (Setswana); 1910-1920 News (EE); 1920-2055 Mon-Fri "Parliament Proceedings" (Setswana, irreg). (WBI 8/10)

BRAZIL - Radio Cabocla de Tabatinga is once again heard in the Pacific area on 4815. Reception has been at 1030, when Christian religious programming was featured. Broadcasting from the town of Benjamin Constant, near the borders with Colombia and Peru, this station was previously known as Radio Nacional de Tabatinga. (Radio Australia's 'Japanese DX Time' 28/29 Jul 90 edited by Craig Seager of the "Australian Radio DX Club")

CANADA - Due to situation in the Persian Gulf, on 8/14, RCI to start broadcasts in AR for first time, at 0330 & 0430 on 15275, 11730.

CHILE - Radio Santa Maria (tentative) on 6029.7 at 1141 to fade out 1150. Noted with fair signal just before fading out, several jingles, "Patagonia" mentioned but no ID on 7/28. (Ron Howard, Carmel, CA)

CHINA - CPBS Minority Broadcast at 2035 on 9775 in KK & at 2100 Mongolian on 8/16 (bmm) 9775, 2151, CPBS-2, EE Language Lesson. At 2200 'Sing of our Motherland' into listed 'News and Press review' on 8/15 (bmm)

COLOMBIA - 11972USB, NF, Radio Difusora Nacional de Colombia, National Anthem to 2313 then programming continued on, whereas the //17863USB was 2314* on 8/14 (bmm)

CUBA - Radio Havana has been noted using another frequency not listed in its official schedule. Reception on 9620 has been at 2350, with a SS program for listeners in North America. (Craig Seager via Radio Australia's 'Japanese DX Time' 8/11,12 edited by Craig Seager of the 'Australian Radio DX Club'.)

ECUADOR - HCJB test transmissions on SSB; claims audio quality better for some listeners. Radio Netherlands, Hilversum in EE 1150 gmt 19 Jul 90. Excerpts from "Media Network".

Religious station HCJB in Quito, Ecuador, has begun testing on single sideband (SSB). John (?Beck), who works at the station faxed us to say they actually started with erratic tests last month on 25950, 21470, 17790 and 15155 kHz. Listening tests in Quito resulted in the decision to use 20% carrier, for the time being, for regular transmissions. The testing is being done on an antenna directed to Europe and the South Pacific, but soon other areas will be targetted. The antennas in use are an undetermined rhombic for 11 through 19 metres (25-15 MHz bands) and a folded dipole for 11 metres, so for now when two transmitters are in use,

one will be on 11 metres (presumably on 25950 kHz).

The transmitters were obtained at a very low cost through the courtesy of the Swiss PTT. These transmitters were used from about 1970 onwards to communicate with aircraft in flight, but since some of that communication is now done by satellite, four of their seven SSB transmitters weren't being used, and were made available to HCJB.

The power in each case is 30kW. HCJB says that the radios with a phase-lock loop tuning capability...should be able to get even better audio fidelity with these SSB transmissions than if you were listening to regular shortwave signals, especially when fading is present. (WBI 7/27)6581, 0834, R. Catacocha, Weak w/fading and ham QRM on 6/24. Long folklorica music program to 0934 tune-out. Listed as LV de Juventud; could be a network with local announcers carrying on late for Saturday night local time. Heard mention of 'Radio Catacocha' at 0926. (Paul Edwards, Wellington, New Zealand via "OZ DX" #58, 8/90)

HCJB in Quito is now using the new freq of 21480 for services to Europe until 2230*. This replaces 21470 and is heard in parallel w/15270 and 17790. EE broadcasts go to air from 19-20 and 2130-22. HCJB continues to make use of the 11 metre band, and the freq 25950 is heard w/EE programming at 2230. (Craig Seager via Radio Australia's 'Japanese DX Time' 8/11,12, edited by Craig Seager of the 'Australian Radio DX Club'.)

EGYPT - Egyptian Radio and Television tentative program schedule, ? 1990-
0030-0330 AA 9900 ECNA; 0045-02 SP 9475 NA; 0045-02 SP 9740 SAM; 0045-02
11715 SP SAM; 01-21 Holy Qur'an 9755 NAfr, S.Eur & ME; 01-05 General
Program 12050 Eur,NA; 02-0330 EG 9475, 9675 NA; 02-05 Voice of Arabs 9770
NA,S.Eur & Arab Gulf; 02-05 Voice of Arabs 1105 Arab Gulf; 0250-06 General
Program 9455, 9620 N.Afr, S.Eur, & 9805 Arab Gulf; 0250-17 General
Program 11665 ME; 0330-0430 AR 6195 WNA; 0430-05 Albanian 9900 Albania; 0500-10
11980 Voice of the Arabs NAfr, S.Eur & Arab Gulf; 05-17 Voice of the Arabs
15225 Arab Gulf; 06-10 General Program 15115 WAfr; 06-14 General Program
11785 N.Afr & S.Eur; 06-14 General Program 15175 Arab Gulf; 06-1430
General Program 12050 Eur, NAM & E.Afr; 10-13 Voice of the Arabs 11980
N.Afr, S.Eur; 10-2250 General Program 9850 N.Afr & S.Eur; 11-1130 AR 17800
C&S Afr; 1115-1215 AR 17745 ME & Afghanistan; 1115-1215 Thai 17770 SE
Asia; 12-18 General Program 17670 N.Afr & S.Eur; 1215-1330 EG 17595
S.Asia; 1215-1345 Malay 17770 SE Asia; 1330-1430 Bengali 17595 S.Asia;
1320-1450 Indo 17770 SE Asia; 1430-2250 General Program 12050 Arab Gulf,
NAM & Eur; 1430-1545 AR 15220 W.Afr; 15-16 Hindi 17690 S.Asia; 15-16
Pashto 15175 Afghanistan; 1530-1630 Afr 15155 E&C.Afr; 1530-1730 Swahili
11975 C.&E.Afr; 16-1730 Urdu 17690 S.Asia; 16-1645 Zulu 11875 C&S.Afr;
1615-1745 TK 6230 Turkey; 1630-1730 Somali 15155 E&C.Afr; 1630-1830 EG
15255 C&S.Afr; 1645-1730 Shona 11875 C&S.Afr; 17-2330 Voice of the Arabs
11785 Arab Gulf; 17-2250 General Program 9670 Eur; 17-2330 Voice of the
Arabs 9700 N.Afr & S.Eur; 1730-18 Albanian 9950 Albania; 1730-1815
Indebele 11875 C&S.Afr; 1730-19 Amharic 15155 E&C.Afr; 1745-1945 Persian
11560 Iran; 18-19 IT 9900 Eur; 18-2330 Voice of the Arabs 11665 C.&E. Afr;
1830-1915 Lingala 15255 C.&S.Afr; 1830-1930 15375 Wolof W.Afr; 19-20 GM
9900 Eur; 19-21 Hausa 15210 W.Afr; 1930-2030 Fulani 15335 W.Afr; 1930-2030
Bambara 15375 W.Afr; 20-2115 FR 9900 Eur; 20-21 AR 9940 Australia; 2030-22
EG 15375 W.Afr; 2030-2230 FR 15335 W.Afr; 21-22 Yoruba 15210 W.Afr; 2115-
2245 EG 9900 Eur; 2215-2330 PT 15420 SAM; 2345-0045 AR 15220 CAM; 2345-
0045 AR 17770 SAM. (Gordon Darling, Papua New Guinea)

GERMAN DEMOCRATIC REPUBLIC - DW spokesman on plans for external broadcasting
after unification. Radio Netherlands, Hilversum, in English 1150 gmt 26
Jul 90. Excerpts from "Media Network" interview with Wolfgang Pleines,
head of Deutsche Welle transcription services.

(Pleines) ...There are five radio and TV stations in Germany (FRG and GDR) broadcasting for external audiences. You know Deutsche Welle (DW)... Deutschlandfunk (DLF)-which is also based in Cologne, operating under the same law but with a slightly different task. It broadcasts for audiences in Germany and Europe, as the definition goes, and Germany is defined here as both East and West Germany. And then there comes RIAS, the Radio in the American Sector, which was founded by the Americans after World War II to inform audiences in Greater Berlin and East Germany. Today, however, the bulk of RIAS's budget comes from West German coffers, the Americans contributing only 3%. And then, finally, we have East Germany, where there are two stations broadcasting for outside audiences - first Radio

Berlin International (RBI), and then the Deutschlandsender, which in basic (terms) has about the same function as DLF...

Now in the view of the imminent unification of both parts of Germany, it almost goes without saying that there is no reason at all left for the existence of five external services. But how the landscape of German external radio should be shaped in the future is still being vividly debated by all political parties.

Let's start with the ruling Christian Democratic Party, the CDU. It suggests a merger of DLF with the second TV channel ZDF, which currently is transmitting only on television. In this way ZDF would have its own channel for audio purposes as well. As far as the foreign language services of DLF are concerned, ten in all, they should be merged with DW and, in addition, DW should intensify co-operation with RBI, which in fact insinuates a merger..(the)taking over of RBI by DW.

The FDP, the coalition partner in the CDU cabinet, also suggests that DLF's foreign language services should be incorporated in DW, and the German service of DLF should be made part of the ARD, the co-operation (umbrella organisation) of West Germany's radio and TV services.

And finally the Social Democrats, the SPD. They in their view are not too different from that of the CDU as far as DW is concerned. This party also advocates the transition of DLF's foreign language services in DW and the German service becoming part of the ARD...

(Interviewer) But what will happen to the transmitters and studios of RBI? After all, DW is already co-ordinating frequencies at international conferences.

(Pleines)...There are talks going on, on the level of the directors general. The political sides have made no decision at all yet. Of course DW would be interested in getting the ten transmitters of RBI which would increase our (DW's) transmitter power from 32 at the moment to 42...The decision will probably be made before 31st December...because the colleagues of RBI have only a guarantee for further employment until the end of the year. So if the year runs out and our colleagues at RBI don't get any salaries any more, then I think this would be the end of RBI.. (WBI 8/3)

GUATEMALA - Radio Buenas Nuevas, Huehuetenango, 4800 kHz, has extended its broadcasting hours to: 11-14 and 22-0330. Languages used have also increased according to an information sheet from the station. There are now 5 languages used, although programming is still mostly in Mam. (David Foster, Mansfield & Peter Bunn, Melbourne via "02 DX" #56, 8/90)

IRAQ - Via Radio Nederland's 'Media Network' on 8/9 & thanks to Mike Fern, CA for this: Radio Baghdad is adding new frequencies since the start of the war. Russian was noted yesterday at 1500 on 13600NF. (Note: My "Monitor" Valery Ostoverkh in Karaqanda, Kazakh, SSR, has heard RR on this freq since 6/10 - (bmm)

Iraq is using bubble jammers to jam AA broadcasts from the VOA and BBC, plus selected channels from Turkey and Egypt.

Voice of Egypt of Arabism programme - Since 8/11, Radio Baghdad's domestic General Service has been observed carrying a programme called the "Voice of Egypt of Arabism" (Arabic: "Sawt Misr al-Urubah") at approximately 1830. On 8/11, the programme was broadcast at 1848-2112, although it has started as early as 1825 and has ended around 2000. An announcement stated that it is carried at 2130-23 Cairo time (1830-2000 gmt).

The "Voice of Egypt of Arabism" has been observed on 17720, 15170, 15150 and 12025, although not all these frequencies have been heard every day. The programme is also carried on the MF channels of Radio Baghdad's domestic General Service.

The "Voice of Egypt of Arabism" carries talks urging Egyptians to hit "imperialists" and Zionist interests on Egyptian soil, appeals to Egyptians asking them to save Holy lands from enemies, and talks assailing "the agent Husni Mubarak" for passing resolutions at the Cairo summit without allowing some Arab leaders to address the meeting, all interspersed with patriotic Egyptian songs.

Radio Baghdad previously carried a programme of the same name following President Anwar al-Sadat's visit to Jerusalem in November 1977. It continued until 9th July 1982, when it was replaced by a similar programme called "Corner of Arab Egypt". This programme was later discontinued. (WBI

INDIA - All India Radio Sked - This sked is presented in two parts: The AIR General Overseas Services in EE (1) and AIR's other language services (2) - AIR GOS(1) Sked: 0000-0115 EE As 15110, 11745, 11715, 9910, 9535 including 0015-0020 Press review, 01-0110 News and commentary, 01-0115 Programme preview. 10-11 EE As Au 21735, 17865, 17387, 15335, 15050 including 10-1015 News and commentary, 1015-1020 Programme preview, 1040-1050(Mon) "DXers Corner" (alternate weeks), 1050-1055 Press review, 1055-1057 News summary, 1057-11 Programme preview. 1330-15 EE As 15335, 11760, 9565 including 1330-1345 News and commentary, 1345-1350 Programme preview, 1346-14 (Sat) News from United Nations Radio, 1420-1425 Press review, 1435-1445(Mon) "DXers Corner" (alternate weeks), 1453-1455 Programme preview, 1455-15 News; 18-1845 EE Af 11935 including 18-1815 News and commentary, 1815-1820 Programme preview; 1845-1945 EE Eu,ME,Af 11935, 11860, 11620, 9910, 9665, 7412 including 1845-1855 Programme preview, 19-1910 News and commentary, 1925-1935(Mon) "DXers Corner" (alternate weeks); 1945-2000 EE Af 11935 including 1945-1959 Press review, 1959-20 Programme preview; 2045-2230 EE Eu,Au 15265, 11715, 11620, 9910, 9665, 7412 including 2045-2050 Press review, 21-2110 News and commentary, 2110-2115 Program preview, 2130-2140(Mon) "DXers Corner" (alternate weeks), 22-2215 News and commentary; 2315-24 EE As 15110, 11745, 11715, 9910, 9535 including 2315-2330 News and commentary, 2330-2335 Programme preview.

AIR (2) Sked: 0000-0045 Tamil As 11880, 9705, 4990, 1134 including 0005-0015 News; 0015-0430 Urdu As Dom 1071, 702 including News, 0130 Freq change 9675, 6155, 1071, 702, 04-0402 News summary; 0045-0115 Burmese As 15165, 11880, 9705, 7265, 1134 including News 0045-0055; 0130-0230 Nepalese As 9550, 7210, 6110, 3905, 594 including 0218-0228 News; 0215-0230 Tibetan As 11870, 594 including 0215-0230 News; 0215-03 Pashto As 9630, 7225, 6045 including 0220-0230 News; 0250-0430 Bengali As 594MW including 0335-0340 News summary; 03-0345 Dari As 9630, 7225, 6045 including 0305-0315 News; 0315-0415 Hindi Af 17805, 15165, 11855 including 0320-0330 News; 04-0430 Persian ME 17785, 15360 including 0405-0415 News; 0415-0430 Gujarati Af (News) 15165, 11855; 0430-0530 AA ME 17785, 15365 including 0450-05 News & 0525-0529 News summary; 0430-0530 Swahili Af 15280, 11855, 11830; 07-08 Nepalese As 11735, 9610, 7110 including News at 0701-0710; 07-0930 Tamil As 7205; 0720-0830 Sindhi As 7140, 6170, 1071 including news at 0820-0830; 08-0830 Punjabi As 702; 08-11 Bengali As 594; 0830-1130 Urdu As, Dom 9675, 1071, 702 w/news summary 0832-0837 & news 1120-1130; 0845-0945 Indo As 17860, 15175 including news 0926-0925; 1115-1215 Burmese As 17785, 15165; 1115-12 Thai As 17830, 15365 including news at 1134-1144; 1130-1230 Tamil As 17850, 17387, 15335; 12-13 Sindhi As 7140, 6170 including News at 1205-1215; 1215-1315 CC-Std As 15365, 11785 including news 1216-1226; 1230-1315 Tibetan As 9575, 7412 including news at 1245-1255; 1230-1430 Punjabi As 702 including news summary 1333-1335; 13-1330 Baluchi As 11960, 7140, 6170 including news summary 1301-1306; 13-15 Sinhala As 15020, 11620, (Note: See info in DXS 126-131 dtd 7/3 & also monitoring observation below) 9700 including News 1310-1320 & news summary 1440-1445; 1315-1335 Tibetan including news at 1315-1326; 1330-1430 Dari As 11960 including news at 1331-1340; 1345-1445 Nepalese As 7412, 6140, 1134 including news 1435-1444; 1445-1515 Bengali As 1134; 1430-1545 Pashto As 11960 including news 1435-1445 & news summary 1540-1542; 1430-1615 Urdu As, Dom 3205, 702; 1515-1615 Swahili Af 15280, 11830 including news 1530-1540; 1545-1615 Sindhi As 11935; 16-1735 Bengali As 1134 including news 1635-1645 & News from the United Nations Radio 1650-1701 on Saturday; 1615-17 Hindi Af 15280, 11830 including news 1620-1630; 1615-1715 RR Eu 11935, 9620 including news 1630-1640; 1615-1730 Persian ME 11810, 9910, 7265; 1615-1930 Urdu As Dom 3205, 1702 including 1630-1645 News and commentary & 1730-1735 news summary; 17-1745 Gujarati Af 15280, 11830 including news 1705-1715; 1730-1945 AA ME 15185, 9910 including 1750-18 News & 1940-1944 News summary; 1745-1830 Hindi ME 11620, 9550, 7412 including news 1815-1825; 20-2045 FF Af 11860, 9950 including news 2005-2015; 1945-2045 Hindi Eu 11620, 9910, 9665, 7412 including news and commentary 20-2015; 2145-2245 CC-Std As 11745, 9950, 7265, 1134 including news 2146-2152; 2245-2315 Tellugu As 15110, 11745, 11715, 9910, 9535; 23-24 Hindi As 15165, 11830, 7265, 1134 including 2305-2315 news. (WBI 8/3)

Radio Kashmir news programmes now reportedly originate in Delhi - Radio Netherlands, Hilversum, in English 1150 gmt 2 Aug 90. Excerpts from "Media Network" report.

The media situation in the state of Jammu and Kashmir is worsening... Around 10 kms outside of Srinagar is a small village called (?Namal)... The transmitter site of All India Radio Srinagar is built on top of a hill, but surrounded by a large fortified complex, several kilometres across. Around 3:30 am local time last Thursday 26th July, rebels launched a rocket attack on the transmitter building - four rockets in all - blowing the roof off, but evidently not causing any damage to the transmitters, which remain on the air...

Several listeners in India have noted what appears to be news broadcasts from Radio Kashmir at Srinagar on shortwave frequencies not listed for the station. What's more, the programmes are frequently and off the air without warning. Investigations in Kashmir and New Delhi reveal that because of several death threats to news announcers on Radio Kashmir Srinagar, all the news and current affairs for the state is now produced and presented from Broadcasting House in New Delhi.

Special shortwave transmitters from a transmitter site just outside the Indian capital... beam the programmes to Jammu and Kashmir, where they're simply relayed with no further announcement. You can look for these relays between 0350-044 UTC on 6045 and 630 kHz, 0655-0705 UTC on 11850 or 9565, between 13-1630 on 11620, and finally 14-1425 on 6140 or 4860 kHz. (WBI 8/10) 11620, 1635-1729*, AIR, possibly an extension of the program mentioned above. Indian music then W talk, then M & W & music on 8/20. (bmm)

INDONESIA - 3935, 1440, RRI Semarang. Back after ages and ages on 7/15. (David Foster, Mansfield, Victoria, Australia via "OZ DX" #58, 8/90) 3447, 1444, RRI Pontianak, Lagu hiburan on 7/15, and for some reason this outlet was accidentally deleted from WRTH '90. (David Foster, ibid) 4867, 1450, RRI Wamena. Drifting/moving from 4871v again, with US country songs back-to-back on 7/27, and on rather late. (Peter Bunn, Melbourne in his publication "OZ DX" #58, 8/90)

ISRAEL - Kol Israel Sked from 8/26-11/4: 0000, 01, 02 (1/2 hour program w/news and features) NA 12077, 11605, 9435; 05 (15 minute news bulletin) NA & W.Eur on 15640, 11605, 9435 & Australasia on 17575. Alternate freq: 11655; 11 (1/2 hour program of news and features) W.Eur & NA on 21790, 17575, 11585 & Australasia on 15650. Alt. Freq: 17590. 18 (15 minute news bulletin) Eur 11655, 11585; 20 (1/2 hour program of news and features) WEur, NA 15640, 12077, 11605 & Africa on 17630. 2230 (1/2 hour news and features) NA & W.Eur on 12077, 11605, 9435 & LAM 17575. Alt. Freq: 11655. (as announced on "Kol Israel's" "DX Corner" on 8/19)

Starting August 26th, a beginners course in Modern-Spoken Hebrew. The languages of instruction are English, French, and Spanish on different nights of the week. English speakers can listen to the Hebrew by radio lessons on Sundays, repeats on Wednesdays and Friday at 2300 UTC on 17575, 12077, 11605, 9435. (as announced on 'Kol Israel' 8/19)

ITALY - The Adventist World Radio station at Forli was heard on the new freq of 7230, with an EE program at 0530. This channel is thought to replace the former 7125. (Radio Australia's 'Japanese DX Time' 21/22 July 90 edited by Craig Seager of the Australian Radio DX Club.)

JAPAN - NHK - Osaka on 3377.5 at 1028-1130 w/JP program. At 1035 into EG program (This Saturday program was once called the "English Hour" but did not catch program ID now.) till 1100, time clicks, JP program of various examples of religious music and songs, weak/QRN on 7/28 (Ron Howard, Carmel, CA) NHK - Tokyo on 3607.5 at 1028-11 w/JP program of traditional JP music. Good on 8/4. (Ron Howard, Carmel, CA)

KUWAIT - 15505, 1031, Radio Kuwait w/music program w/buble jammer underneath. Short announcement at 1045 which was an appeal to the Arab World for help. Kuwait Radio is usually a very polished, professional operation. Today (8/2) there were huge gaps of dead air. Only Radio Kuwait frequency that I heard at this time. BBC news mentioned that Kuwaiti Radio was still operating. Still on at 1205 when I left for work.

13620//11990 (Jammed), 13610, 15495, 15505 (Jammed) 2100, Radio Kuwait on 8/2 with patriotic tunes with short pronouncements between every song. Interestingly, Iraq was referred to often, but was never mentioned by name. Nor was Saddam Hussein. BBC reported at 2200 that Kuwaiti Radio

was still operating from a mystery location. I am convinced that it was still operating from Kabd transmitter site. The station was still broadcasting when I went to bed at 0330. The next day (8/3) it was not heard in my local morning and has not been since. Why Kabd you say? One, the number of transmitters (five) would be alot to loan anyone for a clandestine operation, especially on such short notice. The modulation and signal strengths were consistent with what I usually hear from Kuwait. It it was a clandestine operation from a mystery location, why has it not been heard from in the last couple of days. The real mystery is why it took the Iraqi Army so long to capture this transmitter site. Perhaps the Kuwaiti army fought better than most news reports would have us to believe. (Hans Johnson, Maryland)

More on Kuwait - Shortwave transmissions remain on air for some 36 hours after Iraqi invasion. Monitoring research 2-3 Aug 90.

Radio Kuwait broadcast a statement from the Kuwaiti Defense Ministry on the start of the Iraqi invasion of Kuwait at 0300 gmt on 2nd August. Radio Kuwait's shortwave frequencies continued on the air (with a few breaks in transmission) broadcasting music, patriotic songs, slogans and appeals for help on behalf of the Kuwaiti government until 1111 gmt on 3rd August when all frequencies went off the air. Until that time, shortwave transmissions from the transmitting site at Kabd (an area southwest of Kuwaiti city) had been observed on up to six of the following frequencies simultaneously: 21675, 17895, 15505, 15245, 13620, 13610, 11990 and 055 kHz - all frequencies used by Radio Kuwait before the invasion.

The radio on the shortwave frequencies had been announcing itself as "This is Kuwait" (Arabic: Huna al-Kuwait) - the usual identification for Radio Kuwait.

At 1830 gmt on 2nd August, the radio said: "Dear listeners everywhere. Do not be fooled by extraneous radio stations. The news and bulletins are totally false. They are broadcasting venom through their propaganda which should not be believed. Do not pay attention to what these radio stations are broadcasting. This is our radio station. It is the sole and official radio station that is broadcasting its programmes from Kuwait and in the name of Kuwait. This is Kuwait."

This was followed at 2057 gmt by the following announcement: "This is Kuwait. We draw the attention of the viewers and listeners of Kuwait TV and Radio that the broadcasts will continue on the currently operational wavelengths for the radio. As for the TV, our transmission for Thursday will end at midnight (local time) after the last news bulletin. We hope to return and meet again, God willing, tomorrow Friday morning, on the road to victory. Kuwait radio will continue its broadcasts around the clock. We are with you with our souls as a sacrifice for Kuwait."

Music and appeals for help on the shortwave frequencies continued, as stated above, until 1111 gmt on 3rd August. (WBI 8/10)

Via Radio Japan's "DX Corner" 8/5 & thanks to Mike Fern, CA for this: Since Iraq invaded Kuwait, broadcasts in AA from the area have picked up in Japan. The station identifies itself as Radio Kuwait. Now here are its frequencies: You can hear the broadcasts on 21.675 MHz, 17895, 15.495, 13.620, 13610, 11.990 MHz and 6055 kHz. These are parallel freqs and are on the air from 19 hours UTC.

Now, Tetsuya Kondo of the Asian Broadcasting Institute says that severe interference is reported on these stations' transmissions at 15.505 MHz and 6055 Khz.

Now, Yuki Sakagami of Radio Japan's Arabic section has monitored this broadcasting, and he told me (Rika Kobayashi, producer and presenter of Radio Japan's 'DX Corner')s that the broadcasts from undisclosed location say the Emir of Kuwait, and other Kuwaiti government leaders are well, and the radio vowed to deter the invaders, purify what it called the ... country from treachery, and send the invaders fleeing back.

Via Radio Nederland's 'Media Network' 8/9 by Jonathan Marks - and thanks to Mike Fern, CA for this:

Several hours after Iraqi forces seized the main studios of Radio Kuwait on 8/2, technicians managed to get the station back on the air with an announcement on several Radio Kuwait frequencies. The message repeated several times, was a plea for help to the rest of the Arab world and the Gulf Cooperation Council. The broadcasts appear to have come from a makeshift studio at the transmitter site well outside Kuwait City. Transmissions were heard on 21675, 17895, 15505, 15495, 15245, and 13610 kHz throughout Thursday and early Friday morning, Aug 3. Most of the

lower frequencies suffered from deliberate interference by Iraqi bubble jammers. At 1111 UTC last Friday, Radio Kuwait's voice vanished from the airwaves.

Since that time a news agency story has said that Saudi Arabia has provided the exiled Kuwait royal family with transmission facilities, for Radio Kuwait-in-exile broadcasts. However, extensive monitoring, here in Hilversum and also at BBC Monitoring at Caversham Park, fails to provide any evidence to support that story, at least so far.

The fate of the Kuwaiti MW transmitters is unknown. A new station has been heard on 990 kHz calling itself the Radio of the Provisional Free Kuwaiti Government. Kuwait has never used 990 kHz. Specialists believe it probably originates in a border area from Iraqi territory.

LAOS - 6130.0, 1152-1216, program of SE Asian music. At 1200 large bell rung slowly 7 times (I always find this bell makes the most distinctive sounds I have ever heard on SW), SE Asian music in language w/several mentions of Vientiane by M&W announcers on 7/28,29. (Ron Howard, Carmel, CA)

LESOTHO - Radio Lesotho, Maseru Sked: 0255-22 overall in multilingual languages including 04-0405 News (Sesotho), 05-0505 News (English), 07-0705 News (Sesotho), 09-0905 News (Sesotho), 11-1110 News (Sesotho), 1130-1140 News (English), 14-1405 News (Sesotho), 16-1610 News (English), 17-1710 News (Sesotho), and 19-1905 News (Sesotho). (WBI 7/13)

MONGOLIA - Radio Ulan Bator has been heard by Craig Seager with its Mongolian service from 1055-1155 on 11852 and 12015. The 31 metre band channel of 9615 is listed for this program, but does not appear to be in use. (Radio Australia's 'Japanese DX Time' 28/29 Jul 90 edited by Craig Seager of the Australian Radio DX Club)
4995, 1337-1345, RUB Choibalsan, Mongolian, song, M msg, song, W&M talk//4827v, 4850 on 7/17 (Valery Ostroverkh, Karaganda, Kazakh SSR)

NETHERLANDS - Via RN's 'Media Network' 8/9 and thanks to Mike Fern, CA for this: Because there are quite a number of Dutch people living and working in the Gulf area, Radio Netherlands has added extra frequencies to serve that area. At 1330 UTC, 21675 kHz has been added, and a second transmitter put on 21480 kHz for the Middle East. (Freq changes since Saturday 21530 & 17605 ex 21675, 21480 - via RN's 'Media Network' 8/16) At 2230 UTC, 9860 kHz is on the air to the Middle East and the programs are all in Dutch.

NEW ZEALAND - New Zealand is to have a permanent Daylight Time from the first Sunday in October to the third Sunday in March. This year it will be October 7 through to Sunday March 17, 1991. (Arthur Cushen's DX World via 'DX'ers Calling' the monthly magazine of DX Australia dtd 8/90)

Radio New Zealand Int'l Sked. RNZI broadcasts from a 100 kW transmitter locate at Tangitaki, near Taupo in the centre of North Island. During Summer time in New Zealand - from October - all programmes will be heard one hour earlier than shown. Unless otherwise shown, all programmes are broadcast in English.

0000-0400 English (relay of RNZ National Radio) Mon-Sat 17675 including 0000-0012 Sat News, 0000-0030 Mon-Fri News and Midday Report, 0030-0040 Mon-Fri News, 0040-01 Mon-Fri "Rural Report", 01-0105 Mon-Sat News, 02-0205 Mon-Fri News, 03-0305 Mon-Fri News; 04-0716 EE 17675 including 04-0410 Mon-Fri News, 0430-0455 Mon "Mailbox" (for DXers) (1st and 3rd Mon), 0430-05 Tue "Insight" - current affairs, 0430-05 Thu "Tagata Atu Motu" - for Pacific People, 05-0505 Mon-Fri News, 0505-0510 Mon-Sat News about New Zealand, 0510-0530 Tue "Drumbeat" - news from University of the Pacific, 0510-06 Mon "Calling Tonga", 0510-06 Wed "Calling Samoa", 0510-06 Thu "Calling Niue and Tokelau", 0510-06 Fri "Calling Fiji", 06-0605 Mon & Fri "Mana News" - news about Maori and Polynesian affairs, 07-0705 Mon-Fri News, 0705-0710 Mon-Fri News about New Zealand; 04-0643 (Sat & Sun) EE (Relay of RNZ National Radio) 17675, 0530-06 Sat "Tagata Atu Motu" - for Pacific people, 06-0617 Sat News; 0643-08 Sun 17675 (Relay of RNZ National Radio) - no significant programmes; 0645-11 Sat 9855 (Relay of RNZ National Radio) - no significant programmes. 0716-0830 Mon-Fri EE 9855 including 0717-08 Mon "Calling the Cook Islands" (relayed by Radio Cook Islands), 0717-08 Tue "Calling the Solomons/Vanuatu/Kiribati/Papua New Guinea" (each country every 4th week), 0717-08 Thu "Calling

Australia/French Pacific" (alternate weeks), 08-0810 Mon-Fri News, 0815-0830 Mon "Focus on Politics", 0815-0830 Wed "Rural Report", 0815-0830 Thu Pacific Press review. 1750-1845 Mon-Fri 15485 including 18-1805 News (EE), 1805-1810 Mon-Fri News about New Zealand (EE), 1815-1819 Mon,Wed,Fri News (Maori), 1815-1819 Tue, Thu News (FF), 1820-1824 Mon-Fri News (Cook Island Maori), 1835-1839 News (Samoa), 1840-1844 Mon-Fri News (Niuean); 1845-1935 Sun-Fri 15485 including 1855-1859 Sun-Thu News (Tonga), 1855-1859 Fri News (Tokelau), 19-1905 Sun-Fri News (EE), 1905-1930 Fri "Mailbox" (for Dxers) (1st and 3rd Fridays), 1905-1930 Sun-Thu "Morning Report"; 1935-2205 Sun-Thu 15485 including 1945-1949 Mon, Thu News (Fijian), 1945-1949 Tue News (I-Kiribati), 1945-1949 Sun, Wed News (Hindi), 1950-1954 Mon, Wed News (Solomons Pijin), 1950-1954 Sun News (Tok Pisin and Motu) (for Papua New Guinea), 20-2010 Sun-Thu News (EE), 2015-2019 Sun,Mon,Wed News (Maori), 2015-2019 Tue,Thu News (FF), 2045-21 Sun-Thu New Zealand and Australian press review and financial news, 21-2105 Sun-Thu News (EE), 2105-2110 Sun-Thu News about New Zealand (EE), 2110-2130 Sun "Focus on Politics", 2110-2130 Tue "Rural Report", 2110-2130 Wed Pacific press review, 22-2205 Sun-Thu News (EE); 1935-2205 Fri (Relay of RNZ National Radio) 15485 including 20-2005, 21-2105, 22-2205 News; 2205-24 Sun-Fri (Relay of RNZ National Radio) 17675 including 23-2305 News. (WBI 8/3)

PAKISTAN - Radio Pakistan in Urdu to S. & SE Asia is now on 17640 & 21730 from 0045-0230 replacing 17660 & 21490. News in EE at dictation speed follows at 0230 on same freqs, in addition to 9545, 15115 & 17725. (Craig Seager via Radio Australia's 'Japanese DX Time' 8/11,12 edited by Craig Seager of the 'Australian Radio DX Club'.)

PAPUA NEW GUINEA - A new SW transmitter was installed back in March for PK24 on 4890 kHz which carries the Karai service. They are using 5KW of power. Radio Eastern Highlands have reported they have installed a new 10kW transmitter which will be commissioned around September this year. Existing transmitter site is 'Pimito' in Goroko. (Ian Baxter, Meadowbank, NSW via 'DX'ers Calling, the monthly magazine of DX Australia dtd 8/90)

PERU - Radio La Cronica reactivated - Monitoring research 19-20 Jul 90. Radio La Cronica was observed on 19th July on 9520 kHz from 1330 gmt until fade-out at 1630 gmt. On 20th July, the station was heard on the same frequency between 1110-1130 gmt. (WBI 7/27)

Radio Huanta 2000 is currently heard on 4747, drifting from its nominal freq of 4755. The station is heard from s/on at 1010 with the Peruvian NA, and an ID announcement. Reception is fair on most nights.

Many of the local broadcasters in Peru transmit on freqs outside of the recognised shortwave bands. Some of those audible in recent weeks include Radio Inca, Banos del Inca on 4238, La Voz de Cutervo on 5661 and Radio Sensacion, Huancabamba on 6895. All are heard with fair reception at 1130. (Radio Australia's 'Japanese DX Time' 21/22 Jul 90 edited by Craig Seager of the Australian Radio DX Club.) Note: In Peter Bunn's "OZ DX" #56, 8/90, Paul Edwards, Wellington, New Zealand heard them on 4747 at *0959 w/anthem and s/on, strong and clear, w/SS echo announcements and folklorica program & Peter Bunn, Melbourne says Radio Huanta 2000 on 4752 as heard at 1016 after using 4747 for some time. Enjoyable guitar tunes 1010, Time check/ID 1017. This may be a little idiosyncrasy of the transmitter, rather than any deliberate frequency move.

Radio Cora on 4914.5 at *0930-1130. Very good signal for this new SW Lima station, on with ID, into music program, many time checks by W announcer on 8/4. At 1110, acknowledgement of many reception reports. NOTed on 8/2-4. (Ron Howard, Carmel, CA) Craig Seager via Radio Australia's 'Japanese DX Time' 8/11,12 provides Radio Cora's, Lima address: Paseo de la Republica 144, Of. 5, Lima 1, Peru.

POLAND - Appeal for Polish-language radio stations to tone down comment on Gulf situation. Polish Radio, Warsaw, in Polish 2100 gmt 10 Aug 90.

Text of report - According to a report carried by PAP (the Polish news agency), Polish diplomatic sources have reported that the situation in the Polish colony in Iraq and Kuwait is very tense. The heads of enterprises ask that a request be passed on for the Polish-language programmes of the Voice of America, the BBC and Radio Free Europe to be more carefully thought out; for them to contain the facts without extraneous comment and for them not to fan unrest among the workforces employed in Iraq, where

there is indeed calm. (WBI 8/17)

SOUTH AFRICA - Radio RSA announces new English-language programme and transmission schedule. Monitoring research 13 Aug 90. At 1535 gmt on 13th August, Radio RSA announced that as from 2nd September, the following schedule for its English-language broadcasts would apply:

04-05 gmt on 11900 and 7270 kHz ("Good Morning Africa"); 11-12 on 17835, 11900, 11805 and 9555 kHz.; 15-18 on 17790 (from 1700), 15270 and 7230 kHz.

Radio RSA also announced that their actuality programme, "Africa South", would be broadcast after the news from Mondays to Fridays at 1100 and 1700 gmt. The request programme, "Yours and Mine" would be on the air every day except Saturday at 1600 gmt. (WBI 8/17)

SUDAN - Sudanese Radio starts test transmission on reactivated high-power MF channel. Sudanese Radio, Omdurman, in Arabic 2145 gmt 12 Aug 90 - Text of announcement:

Dear listeners, we would like to draw your attention to the fact that (our transmitter on) 231 metres or 1296 kHz mediumwave has resumed broadcasting for a trial period. It will operate in the morning from 05-07 (03-05 gmt) and in the evening from 1900 to closedown at midnight (17-20 gmt).

It is expected that the transmissions on this wavelength will cover all of Sudan, the southern parts of the Arabian peninsula and Yemen. To the west they will cover the central parts of the Central African Republic, Chad and southern Libya. To the north they are expected to be heard clearly up to the Mediterranean and to the south in Kenya, Uganda and Zaire.

We hope that our dear listeners in these areas will inform us of the quality of reception and whether there is any interference with other stations, etc. We also hope they will inform us of the type of radio they use. Kindly send the reports to this address: Sudanese Radio, department of (word indistinct) affairs, Box 572, Omdurman.

Monitoring research 13 Aug 90 - Sudanese Radio is at present observed on 11632 and 9535 at various times of day, on 9550 at 1330-14 gmt (when the anti-Sudanese government station Radio SPLA broadcasts on that frequency), as well as on 1296 kHz. (Editorial note: the 1296 kHz transmitter is listed as being of 1500 kW in power. (WBI 8/17)

SYRIA - Radio Damascus Sked - Freqs used for the Voice of Iraq broadcasts are changed frequently in order to avoid interference. Some transmissions may be heard one hour later during winter time in Syria.

0000-0015 PP Am 15095, 12085; 03-04 Arabic (Voice of Iraq), ME 12085, 1125, 828; 04-0530 Hebrew includes bulletins in AA, Bulgarian, FF, GC, RR & SS on different days, ME 783; 13-14 Turkish Eu 15095, 12085; 13-14 Hebrew ME 783; 17-18 Arabic (Voice of Iraq) ME 12085, 1125, 828; 17-18 RR Eu 15095; 1805-1905 GG, 1905, 2005 FF, Fu, Am 15095, 12085; 2005-2105 EE Eu 15095, 12085; 2110-2210 EE Au, Am 15095, 12085; 2215-2315 AA, 2315-24 SS Am 15095, 12085 (WBI 7/20)

THAILAND - Shortwave radio programme for Thai workers in the Gulf area. 'Matichon', Bangkok, in Thai 6 Aug 90. Excerpts from report.

Somphong Faichampa, director general of the Foreign Ministry's Information Department, told reporters that the Foreign Ministry and the Public Relations Department have co-operated in order to transmit a shortwave programme to the Middle East under the title: "The Programme for Thai Workers in the Middle East". The programme will be broadcast on the frequency of 9655 MHz to Saudi Arabia, Kuwait and the United Arab Emirates from 22-2230 (15-1530 gmt)...on every Tuesday, Thursday and Saturday.

Somphong said that the programmes will contain news about Thailand, a programme for health, an entertainment programme and a programme answering listeners' letters. The first broadcast will begin on 12th August, which marks Her Majesty the Queen's birthday.

The plan to broadcast this shortwave programme was conceived after the visit to the Middle East early this year by Deputy Foreign Minister Second Lieutenant Praphat Limpaphan. Praphat thought that there should be a radio programme for the 200,000 Thai workers in the Middle East so that they know the news about Thailand and that they will not feel so far away from home. (WBI 8/10)

UNITED ARAB EMIRATES - 11965, 2313, Abu Dhabi, AA. W w/vocal & at 2314 ID then W & M talk//13605. Apparently to 0200* on 8/17 as nothing heard after that. Didn't hear usual listed //s of 11985 or 9600 at 2313 nor did I hear any English. So apparently EE has been dropped. (bmm)

UNITED KINGDOM - Via RN's 'Media Network' 8/9 interviewing Gordon Howell, General Manager for Engineering, BBC World Service and thanks to Mike Fern, CA for this. Note: Not Verbatim.

Our services going out in AA to the ME have been seriously affected by jamming. Since the end of last week more and more frequencies have been jammed until we reached the stage yesterday where virtually all of our public statements were affected. We have no confirmed reports of interference to our medium wave transmissions. There is no interference to the BBC World Service in English. We are introducing additional frequencies for our Arabic services in the Middle East as of the morning of Aug. 9. Marks: The extra frequencies are 12040, 13745, and 17695 kHz. So far there has been no report of Radio Franc International's Arabic service being jammed despite the medium-wave relay from Cyprus. Howell: We recommend that people listen for frequency announcements, look for scheduled programs to run on, and look for additional frequencies which will be pre-announced. Marks: (Later) BBC has extended its Arabic transmission by 90 minutes.

British Forces Broadcasting Service broadcasting to Saudia Arabia and the Persian Gulf to the British Forces on 'Operation Grande'. Started Monday via facilities of the BBC. Sked: (1/2 hour broadcast) At 0200 check 7125, 9640, or 13745 (Making it across the Atlantic, Jonathan Marks understands); 0930 listen on 15205, 17695 or 21735 (in Hilversum 21735 is completely blocked by the UAE) & 1330 listen on 15195, 17695, or 21735. (via Radio Nederland's 'Media Network' on 8/16) Note: I (bmm) checked for this at 1330 on 8/19 and found nothing.

UNITED STATES - Via RN's 'Media Network' 8/9 interviewing Bill Whittaker, Chief, Frequency Management and Monitoring Divison, VOA, Washington - and thanks to Mike Fern, CA for this. Note: Not Verbatim.

We first heard (about the jamming) on Friday evening(8/3) from BBC Monitoring, as well as our own monitors in Vienna. Two of the five freqs beamed to the Middle East were affected. Since Friday, it has become increasingly worse, and more frequencies have been jammed. The MW channel at Rhodes on 1260 kHz has been jammed since, probably, Saturday morning. This is the first time it's been jammed since 1967 during the Egyptian-Israeli war. It has forced VOA to play 'musical frequencies'. We have switched sites and we have changed to different frequencies in some instances. The Iraqis have been very adept at following us and have generally caught up to us within an hour or so. We have monitoring going on from Helsinki to Islamabad, and in all those locations the jamming comes in quite well. We can only assume that it is as strong or better in and around Baghdad, Kuwait and the peninsula of Saudi Arabia.

(Later) As soon as the jamming started we began an hour's extension of our morning Arabic program, which is now on from 0330-0630 UTC, and we increased the time we are on in the evening from 16-22 UTC. On 8/8 VOA expanded its afternoon program. We are beginning on-the-hour 15-minute broadcasts at 11, 12, 13, 14 and 15. Three or four different frequencies 17810, 15225, 15105, and 11705 are used for all the programs.

We have this going out on two Intelsat satellites, both Intelsat V satellites. The Atlantic satellite is at 332.5 degrees east, and it's on transponder 21, on the +7.02 MHz subcarrier channel from 0330-0630 and from 16-22 UTC, as well as the programs started on 8/8. We are also on the Indian Ocean satellite, an Intelsat V satellite, which is at 180 degrees east, on transponder 14, and it too is on the +7.02 MHz subcarrier channel. Eric Beauchemin of Radio Nederland: The only people who can put up satellite dishes in the UAE and Saudi Arabia are the ruling sheikhs.

Radio Free Europe, Radio Liberty Broadcast Sked effective 9/30:

Languages - AR - Armenian; AZ - Azerbaijani, BR - Belorussian; BU - Bulgarian; CS - Czechoslovakian; DA - Dari; ES - Estonian; GE - Georgian; HU - Hungarian; KA - Kazak; KI - Kirghiz; LA - Latvian; LI - Lithuanian; PA - Pashto; PO - Polish; RO - Romanian; RR - Russian; TA - Tajik; TB - Tatar-Bashkir; TU - Turkmen; UK - Ukrainian; UZ - Uzbek.

Transmitter Sites - Bilis - Germany B1-B9 100kW; Gloria - Portugal G1-

G19 250kW, G20 & G21 50 kW; Holzkirchen - Germany HA-HD 250 kW; Lampertheim - Germany L1-L7 100 kW, L9 20 kW; Pals - Spain P1-P6 250 kW. Note: Some transmitters at Pals can be operated on a combined mode resulting in twice the power output. Transmitters in the combined mode are shown for example as P1+P2, etc.

Note: Transmitter sites are in parenthesis & Sun = Sunday.

3960(B3) RR, 0000-03, 19-0000 (L9) RR; 3960(L6) RR, 02-05, 05-07(B2) HU, 06-07(B2) HU(Sun); 3970(B2) CS 0000-01, 03-04(B9) RO, 06-07(B9) CS(Sun), 22-24(B2) CS; 3970(B9) 04-07; 3985(B3) 03-0330; 3990(B3) 04-06, 19-20(B3) BR, 20-24(P1) PO.

5955(L2) 0000-01 RR, 03-0330 ES, 0330-04 LA (G9), 18-23(B1) RO, 23-0000(L2) RR; 5955(HA) 01-03 RR, 04-0430 RR, 0430-05 LI, 05-0530 ES (HC); 5970(B4) 0000-03 RR, 03-0330 BR, 04-06(G9) PO, 19-24(G16) PO; 5970(B4) 06-19 PO; 5985(G16) 03-05 RR, 06-07(G16) HU, 21-24(G15) HU; 5985(G16) 03-06 RR(Sun), 07-21(B8,H1) HU; 5985(G16) 05-07 HU.

6015(HC) 0530-06 LA, 06-0630 LI; 6040(B9) 22-23 PO; 6050(G16) 0000-02 RR, 23-24(B8) RR; 6070(B1) 03-06 RR(Sun); 6070(B1) 03-06 RO; 6105(HC) 0000-04 RR, 04-0530(L2), 19-23(L2) RR, 23-24(HC) RR; 6105(L9) 0530-19 RR; 6115(G8) 0000-01 CS, 04-06(G8) RR(Sun), 07-09(B9) CS, 17-19(B3) CS; 6115(L2) 01-02 TB, 04-07(G8) CS, 19-24(G8) CS; 6115(L2) 02-04, 06-07(G8) CS(Sun); 6130(B4,P1) 05-06 BR; 6135(B1) 0000-01, 18-19(HC) ES, 23-24(B1) RR; 6135(B1) 01-02 UZ, 02-03 TU, 19-20(HC) BR; 6135(HC) 20-21, 21-22 LI, 22-23 ES; 6170(L7) 0000-03 KA, 03-07(L7) UK, 07-1430(L3) RR, 1430-16(HC) RR, 18-24(L7) UK; 6170(HC) 16-17 LA, 17-18 LI.

7115(G17) 05-06(Sun) RR, 19-20(G17) HU, 22-23(G7) RO; 7115(G17) 05-07 HU, 20-22(G7) BU; 7115(G17) 06-07(Sun) HU; 7115(B2) 07-19 HU; 7130(HB) 02-04 TB; 7145(HB) 0000-02, 03-04(G18) 03-0330 ES, 0330-04 LA, 0630-08(HD) RR, 20-24(G18) PO; 7145(L9) 02-03 KA, 05-0530(HD) ES, 0530-06 LA, 06-0630 LI; 7145(G13) 04-0430 RR, 0430-05 LI; 7155(P6) 0000-0030, 03-0330(P6) ES, 0330-04 LA, 04-0430 RR, 0430-05 LI, 05-0530 ES, 0530-06 LA, 19-20(HB) BR, 23-24(P6) RR; 7155(P6) 0030-02 KI, 02-03 RR, 20-21(P6) LA, 21-22 LI, 22-23 ES; 7165(L9) 0000-0030 TA, 0030-0130 RR, 0130-02 TA, 03-06(G19) (Sun), 05-08(B1) RO, 15-20(B9) RO, 20-23(G19) RO, 23-24 RR; 7165(G19) 03-06 RO; 7180(L4) 0000-01 RR, 01-02 AZ, 02-03 AR, 03-04 GE, 04-05(HA) RR, 05-0630 BR, 0630-08 RR; 7190(B9, P1) 0000-02 RR, 04-07(G18) PO, 07-18(B5,P1) PO, 18-20(G18) PO; 7190(G18) 06-07(Sun) PO, 20-24(G17) HU; 7200(G14) 0000-01 CS, 15-16(HB) BR, 19-24(G14) CS; 7200(G14) 02-03 RR, 03-0330 BR, 0330-04 RR, 16-17(HB) LA, 17-18 LI, 18-19 ES; 7220(P3) 0000-0530 RR, 0530-07(L2) RR, 18-21(HA) RR, 21-24(P3) RR; 7220(L2) 07-18 RU; 7245(L5) 0000-01 UZ, 01-02 TB, 04-06(G14) RR(Sun), 18-24(L5) RR; 7245(L5) 02-04 TB, 06-08(G14) CS(Sun); 7245(G14) 04-08 CS; 7255(B7) 0000-02 UZ, 02-0230 RR, 0230-03 PA, 03-07 UK, 07-11 RR, 11-17(L7) RR, 17-18 TB, 18-19(L4) AZ, 19-20 GE, 20-21 AR, 21-22(B9) BU; 7255(HA) 22-24 RR; 7275(G18) 0000-03 KA; 7295(HA) 0000-01 RR, 03-0330(B2) DA, 0330-04 RR, 06-08(L5) RR, 16-24(B7) UK; 7295(B2) 01-02 UZ, 02-03 TU.

9505(G3) 0000-03 RR, 03-0330 ES, 0330-04 LA, 15-16(B6) BR, 18-19(P4) ES, 19-20 BR, 20-21 LA, 21-22 LI, 22-23 ES, 23-24 RR; 9505(G3) 04-0430 RR, 0430-05 LI, 05-0530 ES, 0530-06 LA, 06-0630 LI, 16-17(HD) LA, 17-18 LI; 9520(P1) 0000-0630 RR, 0630-17(L1) RR, 17-24(P1) RR; 9540(L3) 0000-0030 TA, 0030-02 KI, 02-0230 RR, 0230-03 PA, 03-0330 DA, 0330-04 RR, 22-24(L3) RR; 9555(G11) 0000-0030 TA, 0030-0130 RR, 0130-02 TA, 02-0230 RR, 03-0330(B8) DA, 0330-04 RR, 07-11(HA) RR, 17-22(G18) BU; 9555(G11) 0230-03 PA, 22-23(G18) RR; 9555(G13) 05-0630 BR, 23-24(G11) RR; 9565(B8) 0000-01 RR, 16-19(B6) UK, 19-24(P5) UK; 9575(L3) 17-18 TB; 9595(G13) 0000-01 CS, 03-08(G11) RO, 08-15(B6) CS, 15-24(G13) CS; 9595(G11) 03-06 RR(Sun), 06-08 RO(Sun); 9625(L1) 0000-01 RR, 01-02 AZ, 02-03 AR, 03-04 GE, 04-05 AR, 05-06 AZ, 14-17(B3) BU, 17-18(L1) GE, 18-19 AZ, 19-20 GE, 20-21 AR, 21-24 RR; 9645(B6) 0000-0030 TA, 0030-0130 RR, 0130-02 TA; 9660(HD) 0000-03 KA, 03-05(P5) UK, 18-19(HD) RR; 9660(P5) 05-07 UK, 19-20(HD) RR; 9660 20-23(HD) RR; 9680(G10) 0000-01 RR, 04-05(L5) AR, 05-06 AZ, 20-23(B6) RR, 23-24(G18) RR; 9680(G10) 01-02 AZ, 02-03 AR, 03-04 GE; 9695(G5) 05-08 HU, 08-14(B1) HU, 14-24(G5) HU; 9695(G5) 05-06(Sun) RR, 06-08(Sun) HU; 9705(G6) 04-09 PO, 09-15(B9) PO, 15-24(G6) PO; 9705(G6) 04-06 (Sun) RR, 06-09(Sun) PO; 9715(B8) 01-02 UZ, 02-03 TU; 9715(G13) 03-0330 BR, 0330-04 RR; 9725(L6) 0000-01 UZ, 02-02 TB, 04-08(G10) CS, 08-13(B3) RR(Sun), 13-14(B3) RO(Sun), 18-23(G11) RO; 9725(G6) 02-04 TB, 06-08(G10) CS(Sun), 14-18(B1) RO(Sun), 23-24(L6) RR; 9725(B3) 08-14 RR, 15-18(B1) RO; 9725(B3) 08-14(Sun) RO; 9750(P5) 0030-02 KI, 21-24(L4) RR.

11725(G15) 01-02 TB, 02-06 RR, 06-21(G12) PO, 21-22(L3) RR; 11750(G19)

0000-03 RR; 11770(G1) 0000-0030 TA, 05-0630(G1) BR; 14-22(G1) BU; 11770(G1) 0030-01 RR, 0130-02 TA, 02-0230 RR, 0230-03 PA, 03-0330 DA, 0330-05 RR, 0630-14(G1) RR, 22-24(G1) RR; 11780(HA) 17-18 TA; 11815(G4) 04-08 RO, 08-13(G4) RU, 13-15(G4) UK; 11815(G4) 06-23(Sun) RO; 11815(G4) 08-13(Sun) RR, 13-23(G4) RO(Sun); 11815(G4) RO; 11825(B5) 04-07 RR, 07-20(G7) CS, 20-22(G20) CS; 11855(G4) 01-02 UZ, 02-03 TU, 03-04 RR, 04-05(L4) AR, 05-06 AZ, 18-19(G3) AZ, 19-20 GE, 20-21 AR, 21-23(L6) RR; 11875(G17) 01-02 AZ, 02-03 AR, 03-04 GE, 04-05 AR, 17-18(L6) GE, 18-19 AZ, 19-20 GE, 20-21 AR; 11885(G5) 0000-04, 04-12(HB) RR; 12-17(P3) RR; 17-19(P5) RR; 21-24(G12) RR; 11885(L3) 19-21 RR; 11895(G7) 0000-07 RR, 07-21(G2) HU; 21-24(G21) HU; 11915(G12) RR 0000-06, 20-24(HB) RR; 11925(B5) 18-21 RR; 11935 0000-07 KA, 17-21(P3) UK, 21-24(G2) UK; 11970(G9) 0000-0030 RR, 0030-02 KI, 02-03 RR, 03-06(G21) RR, 06-0630(P3+P4) LI, 0630-12 RR, 12-15(HB) KA, 15-16(P6) BR, 16-17 LA, 17-18 LI, 18-19 ES, 19-20(P6) RR; 23-24(G9) RR; 11970(G9) 20-21 LA, 21-22 LI, 22-23 ES.

15115(G15) 14-21 BU; 15130(G13) 0630-12 RR, 12-15(P4) KA, 15-16(P4) BR; 15130(P4) 16-17 UZ, 17-18 RR; 15145(B8) 05-07 RR; 15145(G8) 07-19 PO; 15170(G15) 06-14 RR, 15-19(G21) RR; 15215(G9) 06-08 RO, 13-20(G9) RO(Sun); 15215(G9) 06-20(Sun) RO; 15215(G9) 08-13 RR, 13-15(G9) UK; 15215(G9) 15-20 RO; 15255(G16) 07-19 CS; 15290(P1,P2) 07-17 RR, 17-20(G20) BU; 15340(L3) 05-06 AZ, 06-07 RR, 08-12(L5) RR, 12-13 AZ, 13-15 AR, 15-16 AZ, 16-17 RR, 17-18 GE; 15355(G17) 07-19 HU; 15370(HC) 07-12 RR, 12-1330(HC) RR, 1330-1430 TB, 17-18(G18) TB; 15370(L3) 1430-15 KI, 15-1530 TA, 1530-16 TU, 16-17 UZ; 15380(P6) 06-15 RR, 15-16 RR, 16-19 UK; 15445(L7) 07-11 RR, 11-14(G5) RR.

17725(G19) 06-14 RR, 14-20(G19) BU; 17735(G14) 08-12 PO, 12-15(G14) KA; 17750(B6) 05-08 RR, 08-11(HD) RR; 11-1130 TA, 1130-12 KI, 12-1230 TU, 1230-1330 UZ, 1330-1430 TB, 16-17(G18); 17750(HD) 1430-15 KI, 15-1530 TA, 1530-16 TU; 17760(L4) 06-12 RR, 12-13 AZ, 13-15 AR, 15-16 AZ, 16-17 RR, 17-18 GE; 17770(P5) 07-1330 RR, 1330-1430 TB, 1430-17 RR; 17805(G11) 08-13 RR, 13-15 UK; 17805(G11) 08-18(Sun) RO; 17805(G11) 13-18(Sun) RO; 17805(G11) 15-18 RO; 17835(G10) 08-16 CS, 16-17 UK; 17865(G20) 14-17 RR; 17895(G5) 08-11 RR, 11-1130(B7) TA, 1130-12 KI, 1430-15(B7) KI, 15-1530 TA; 17895(B7) 12-1230 TU, 1230-1330 UZ, 1330-14 PA, 14-1430 DA, 1530-16 TU.

21455(G18) 08-12 RR, 12-13 AZ, 13-15 AR, 15-16 AZ; 21510(HA) 11-1130 TA, 1130-12 KI, 12-1230 TU, 1230-13 UZ, 1330-14 PA, 14-1430 DA, 1430-15 KI, 15-1530 TA, 1530-16 TU; 21530(G6) 11-1130 TA, 1130-12 KI, 12-1230 TU, 1230-1330 UZ, 1330-14 PA, 14-1430 DA; 21665(G21) 12-15 KA; 21720(G13) 12-1330 RR, 1330-1430 TB. (via Tetsuya Kondō, Yokohama, Japan)

U.S.S.R. - Radio Moscow reduces output to Scandinavia - Monitoring research
1 Aug 90. A survey of Radio Moscow services beamed to Scandinavia shows that since 1 August transmissions on 11950, 1675, 9800, and 494 kHz have been as follows: 1530-17 Finnish; 17-18 Norwegian; 18-19 Swedish; 19-20 Danish. The new schedule reflects a weekly reduction in output of 3 hours 30 minutes for broadcasts in Finnish, Norwegian and Swedish. Output in Danish is unchanged. (WBI 8/10)

Radio Moscow drops 30-minute Japanese programme - Monitoring research 1 Aug 90. Radio Moscow's service in Japanese at 22-2230 gmt was unheard on all known frequencies - 17710, 15470, 11905, 9885, 7315 and 20 khz - when checked on 1st August. (WBI 8/10)

CLANDESTINE BROADCASTS - Holy Mecca Radio - originating in Iraq on 9730 24 hours a day and question remains as to whose jamming it. Is it Iran, Saudi Arabia or maybe Iraq itself as maybe a 'black' clandestine station. (via RN's 'Media Network' on 8/16) WBI 8/17 says this station was first observed on 4/10 at 1055. The station identifies itself as "Holy Mecca Radio" (Arabic: Idha'at Meccat al-Mukarramah. Although the station has been heard at various times between 04 & 2200, poor reception prevents a definite time span being established - it is possible that Holy Mecca Radio broadcasts for 24 hours a day. 9730, 1503, Holy Mecca Radio (presumed), M AA over jammer. At 1505 M w/ID Huna ...? then music. At 1520 M talk brief then music at 1522 and another ID in AA on 8/17 & on 8/19 at 1531 on 9720 M w/same ID as heard on 9730 & music, but not as good as co-channel presumed Sri Lanka BC & now jammed heavily on 9720. (bmm)

Iran's Flag of Freedom Radio to close temporarily for upgrade of equipment. Monitoring research 27 Jul 90. An announcement in Persian at 1630 gmt on 27th July on Iran's Flag and Freedom Radio stated that due to

transmitter repair and replacement of equipment, the station would go off the air from 28th July until 4th August. Normal transmission would resume on 5th August at the same times and wavelengths. (WBI 8/3)

Kurdish Radios - Kurdish clandestine radios reportedly broadcast joint programmes. 'Milliyet', Istanbul, in Turkish 23 Jul 90. Excerpts from report: The clandestine Kurdish radio station known as "Karker Soresh" operated by the Kurdish organisation known as "Karker Komel", which is headed by Hoseyn Hoseyni and is waging anti-government struggle in eastern Iran, has begun broadcasting programmes jointly with the station known as "Gelli Kurdistan", which is operated by the Kurdish Workers Party...

According to the 'Milliyet' news service, the two radio stations broadcast joint programmes under the name "Denge Soresh" from 17-18 (presumably 14-15 gmt). They continue to broadcast on separate channels from 18-1830. Anti-Iranian propaganda is aired in the Kurdish dialect used in Iran on one of these channels. The other channel airs anti-Turkish propaganda in the Kurdish dialect used in eastern Anatolia. The two clandestines are believed to be broadcasting from a location in the Alabotan forest in southern Iran, close to the Iraqi border. (WBI 8/3)

Radio Patria Libre - New transmission and frequency. - Monitoring research 1-6 Aug 90. Radio Patria Libre, a station hostile to the government of Colombia, was heard signing off in Spanish at 1220 gmt on 1st and 2nd August on 6315 kHz. Announcement state that Radio Patria Libre broadcasts at 1130 and 0030 gmt.

On 6th August, the existing 0030 gmt transmission was also confirmed to be on 6315 kHz. (WBI 8/10)

Voice of the Broad Masses of Eritrea - Address in Sudan given for letters on Eritrean Revolutionary anniversary programme - Voice of the Broad Masses of Eritrea in Amharic 1630 gmt 5 Aug 90.

Excerpts from announcement:

On the occasion of the anniversary of the Eritrean Revolution on 1st September...the EPLF Secretary General will answer questions from you, the listeners to the Voice of the Broad Masses of Eritrea. You can send your questions in any language. We will broadcast your questions and responses of the EPLF Secretary General before 1st September 1990...in a special programme.

Your questions, which should reach us by 15th August 1990...should be sent to the following address: Voice of the Broad Masses of Eritrea, PO Box 891, Port Sudan, Sudan. (WBI 8/10)

Voice of the Struggling Chadian People - A radio station identifying itself as the Voice of the Struggling Chadian People was observed on 20th and 22nd July on 11850 kHz. Programmes in FF are broadcast from 1603 followed at approximately 1645 by programmes in AR and at about 1720 in Chadian vernacular languages. The station closed down at 1820 on 7/22.

The station was unheard at the above times on 21st July.

The style of programming is similar to that of Radio Bardai, which was observed intermittently between 1983 and 1988 and the Voice of the Chadian Popular Revolution, which was heard in 1989. Both of these stations, however, operated on 6009 kHz, from a transmitter believed to be in Libya. (WBI 7/27) 11848, 1609 with African music t/1611 then M in FF. Kept playing the same music over and over. At 1622 on 11847. Open Carrier at 1628 & 1630* on 8/20 (bmm)

Voice of the Libyan People - 9475, 0501 in AA w/freq info & at 0502 Quaran on 8/17. First heard on 8/16 at 0507. On 8/19 found them on 9480 over jammer. (bmm)

Voice of the Resistance of the Black Cockerel - Radio heard on 7100 kHz. Monitoring research 2 Aug 90.

Voice of the Resistance of the Black Cockerel, which broadcasts on behalf of Jonas Savimbi's UNITA movement in Angola was observed with programmes in Portuguese on 7100 kHz from 18-1845 gmt on 2nd August. At approximately 1845 gmt reception was lost under interference from other stations. Voice of the Resistance of the Black Cockerel had been unheard for several days prior to 2nd August. (WBI 8/10)

Radio SPLA heard on 11710 w/an EE program from *13. The station identifies itself as "The Voice of the Sudan peoples' revolutionary struggle", and provides good reception in the Pacific area. Following the English program, an AA segment commenced at 1330. (Craig Seager via Radio Australia's 'Japanese DX Time' 8/11,12 edited by Craig Seager 'ARDXC')

Final Comment: If you are going to the 'ANARC' Convention, hope you have a good time. Rika Kobayashi, Radio Japan DX Corner will be there. 73's, Bruce

QSL Reports

Sam Barto
47 Prospect Place
Bristol, CT 06010



Avec les compliments de
RADIO - DAHOMEY
via Gordon Darling

The illustrations in this months QSL Column were supplied by **Mr. Gordon Darling** in Papua New Guinea. Since he took the time to send in some very good black and white contrast QSL, I felt I should print them. If anyone else would like to send in some older or unusual QSLs from their collection, they will appear in the bulletin.

ABU DHABI: Voice of the United Arab Emirates 9600 f/d ltr. w/ station and national information in 33 ds. v/s Ahmed A. Shouly. (Cox-OR). 11985 f/d cd. w/ same info. in 40 ds. (Paustian).

ARMENIAN SSR: Radio Moscow 21740 via **Yerevan** f/d "Kosmos Hotel" cd. in 49 ds. (Butcher-MA). **Radio Station Peace and Progress** 9480 via **Yerevan** (ILG) p/d cd. in RS in 2 mo. w/ station schedule in RS. (Barto-CT).

ASIATIC RUSSIA: Radio Moscow 15545 via **Krasnoyarsk** f/d "Peoples Friendship Fountain" cd. in 2 1/2 mo. (Barto). 15570 via **Vladivostok** same cd. in 2 1/2 mo. (Barto). 21690 f/d cd. in 96 ds. (Darling-PNG). 17570 via **Komsomolsk-na-Amur** f/d cd. in 96 ds. (Darling). 9450 via **Novosibirsk** f/d cd. in RS in 2 1/2 mo. w/ RS schedule. (Barto). 17870 via **Chita** f/d cd. in RS in 2 1/2 mo. (Barto). 15130 f/d cd. in 96 ds. (Darling). 17655 via **Nikolaevsk-na-Amur** f/d cd. in 96 ds. (Darling). 21790 via **Irkutsk** f/d cd. in 96 ds.

AUSTRALIA: Radio Australia (Darling).

9580 via **Shepparton** n/d "Wilderness Society" cd. w/ f/d ltr. and program schedule in 18 ds. (Nagengast-MN).

AZERBAIJAN SSR: Radio Moscow 4785 via **Baku** p/d ltr. in 62 ds. Also rcvd. 3 RS/EG pocket calendars, large wall calendar, several booklets, recipe books, etc... Quite a haul! I'm sure you mean **Radio Baku** Bill. Anyway a great QSL. (Taylor-PA)..

BONAIRE: Trans World Radio 11930 f/d "Willemstoren Lighthouse" cd. in 20 ds. w/ personal note and poster for 1 IRC. v/s Sally Rork. (MacHarg-CR). Chuck Roswell informs me that TWR does not accept tapes of their programs. It just takes way too much time away from their limited staff. However, the station does want your comments and suggestions... Sam.

BRASIL: Radio Bras 11745 f/d "Cathedral in Brasilia" cd. w/ schedule and sticker in 86 ds. v/s Claudia Carneiro (Carson-OK). **Radio Cancao Nova ZYE971** 9675 f/d cd. in EG in 7 mo. for a PT rpt. and \$1.00. Rcvd. decal for "Pope John Paul II Foundation." (Flynn-CA).

VOICE OF THE REVOLUTION
NATIONAL
BROADCASTING SERVICE
P.O. Box 817 - Conakry
Republic of Guinea

VERIFICATION OF
RECEPTION REPORT
of **M. G. M. DARTING**
10, Osterby Drive, Ca-
verham Park Lea,
dingle, R.G. 4, UK
Great Britain

30-1-81

Dear Listener,

We received your reception-report with a great pleasure. Here is its verification:

Date of reception: *10th February 1981*. Time: from *02.11.0235* - G.M.T. *09:00hrs - 6m*

Our program confirms that it was our station you heard. Your report is very interesting; we appreciated it very much.

For every further correspondence, please enclose a like international reply coupon

Many thanks

We give you below our complete broadcasting program.

KHz - m	G.M.T.																									
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1403-211																										
4910-48																										
7125-41																										
9200-31																										
13210-19																										
6:15-47																										

We hope that you will write us and receive our friendly greetings.

The Director

RADIO FREE CITY QSL

From: GORDON DARLING
 Date: 27th APRIL 1960
 Time: 0832 to 0848 WTTU
 Freq: 7315 kHz
 Power: 20 WATTS



CAPITAL SOUNDS FROM EDINBURGH
Voice of Kenya 4934 Waveru Mvea, Electronics Inspector for the Chief Engineer. AIR Bombay 15280 S. Sundram. RRI Tanjung Karang 3395 Djarot Nursingghi, Technical Dept. Radio Huancavelica 4885 Mr. Yeshier Riveros Castillo. Radio Quillabamba 5025 Ana Esther Hualde, Secretaria. Radio Continental 6055 Elizabeth Mardini de Noboa, Sub Gerente Regional. Radio Vilnius 17665 Edvinas Butkus, Deputy Chief Editor...via PLAY DX.

VERIFICATION SIGNERS: AIR Port Blair 4760

F. Venugopal, Station Engineer. Radio Santa Cruz 6135 Alvaro Fuente C., Director. Radio Nacional de Huaruni 5965 Pafael Lineo Morales, Director General. Radio Brasil Tropical 5015 Klerius Antonio dos Santos. Radio Nacional de Espana - Tenerife 17715 Maria Carmen Baez, Secretaria. Radio Nacional de Colombia 17865 Alvaro Mattos Ricaurte. Ondas del Ortoquaza 4765 Norberto Plaza Vargas. Radio Rebelde 5025 Noemi Cairo Marin, Public Relations Department. Radio Rio Amazonas 4870 Mirlam Marino, Secretaria.

BULGARIA: Radio Sofia 7115 and 11660 f/d cds. of "Parliament Building" and "Holocaust Memorial" in 1 mo. for 2 IRCs. Also rcvd. station diploma * and schedule. (Carson-OK). Home Service - Stolnik 7670 f/d cd. w/ site in 113 ds. after several years of trying. Great! (D'Angelo-PA).

BYELORUSSIAN SSR: Radio Moscow 15540 via Minsk f/d cd. in 7 wks. (Klinck). 15320 via Orsha f/d "Arbat Square" cd. in 49 ds. (Butcher-MA).

CAMEROON: CRTV - Bafoussan 4000 f/d prepared cd. w/ ltr. in 31 ds. for \$2.00 donation to CATHCA. v/s James Achanyi-Fontem. (D'Angelo-PA).

CANADA: Radio Austria International 6015 via Sackville f/d "Salzburg Costume" cd. w/ sticker and schedule in 15 ds. (Nagengast-MN). Radio Canada International 13720 f/d "DIY" cd. in 44 ds. (MacHarg-CR).

CENTRAL AFRICAN REPUBLIC: Radio Centrafrique 5035 p/d "Map of Africa" cd. in 2141 ds. after several f/up rpts. w/ ms. v/s Jacques Mbilo, Directeur des Services Techniques. (Woloch-PQ).

CHAD: Radio Nationale Tchadienne 4904.5 f/d ltr. w/ sticker in 88 ds. for a FR rpt. and 2 IRCs. (Wallace-CT). ltr. in 50 ds. for a FR rpt. and \$1.00.

CHILE: CBV Time Signal Station 8677 f/d "World Map" cd. in (Swedberg). 6 wks. for a SP rpt. and \$1.00. v/s German Valdivia Ibarra, Commander of Station. Very friendly operation! (Taylor-PA).

CHINA, PEOPLES REPUBLIC OF: Radio Beijing 15440 via Kunming f/d "Cotton Flannel Ornaments" cd. in 21 ds. w/ 6 paper cuts, station pennant and a 40th anniversary commemorative envelope. (Butcher-MA). 15440 and 9920 cds. in 44 ds. (Darling-PNG). 15100 and 11660 cds., schedule and magazines in * 44 ds. (Darling). 17855 via Shijazhang cd. w/ site in 6 wks. after my original report was answered w/ another cd. (Forth). Swiss Radio International 11695 via Kunming f/d "Old Town - Bern" cd. in 14 ds. for 1 IRC. (Butcher-MA). Chinese Peoples Broadcasting Station 3360 p/d cd. in 3 mo. in EG/CH for an 85 reception. (Barto-CT).

COLOMBIA: HJPV La Voz de Yopal 5050 p/d ltr. in 3 mo. for a SP rpt. Sticker rcvd. v/s Marlen Arenas R. (Barto-CT).

COSTA RICA: Radio for Peace International 21566 f/d cd. in 122 ds. for 1 IRC. v/s James Latham. (Burns-MA). 7375 f/d "Dove" cd. w/ T-Shirt info. in 32 ds. (Paustian). same w/ schedule in 67 ds. and a second QSL 10 days later w/ an invitation to participate on a local committee. (Cox-OR). 13660 f/d cd. w/ schedule in 75 ds. for 1 IRC. (Wallace-CT).

RADIO VILA Station YJ84, YJB7 of the New Hebrides Broadcasting Service

To: G. N. DARLING
 Of: REALING
Great Britain

I am pleased to be able to confirm your reception of this station at G.M.T. 0900 on 27.1.1979

TRANSMITTER: AWA BTH-2

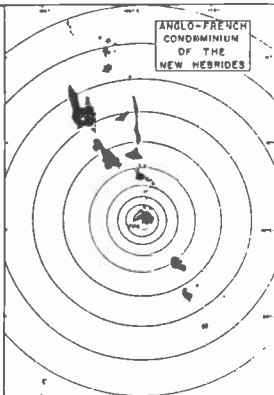
FREQUENCY: 3945 kHz

NOMINAL OUTPUT POWER: 2KW

ANTENNA SYSTEM: 3945 KHz - Vertical Incidence TRO/4/0.3 array of four phased dipoles in rectangular arrangements, with radiation peaks directed north and south. 7280 KHz - colinear array 0.32 above ground.

for Radio Vila

J. S. IRVING.



RADIO VALLERI QSL CARD

This card confirms that Mr. C.M. Darlwin of 34 Slankly Rd. South Meenan, Ennisleard heard Radio Valleri - a free radio station broadcasting with a power output of 40 watts from Dublin, Ireland - on a frequency of 6317 kHz from 19:30 to 19:35 hours GMT on 23 DECEMBER 1983.

Many thanks for your report which we found most helpful.

For: Radio Valleri

David Jones (DJ)

NOTES: James Smallwood....Please send me your address. It was on your envelope but not in the letter. I discarded the envelope...Sam. Mark Burns has terminated his employment at WCAV and now works part time at WCTK-FM, a 50 kw outlet in New Bedford, MA. He broke his arm a few weeks ago but that hasn't prevented him from turning the dials with his fingers. Hi!...Great going!
Jerry Klinck reports that he was especially thrilled with his recent QSL from Radio Pyongyang using the label and other techniques that were suggested in the Journal a few months ago. Qite a DX organization...Jerry.

COSTA RICA: Radio For Peace International 7375 and 7375 (USB)

2 f/d cds. in 8 mo. for 3 IRCs. Rcvd. info. on World Peace University and out-of-date program schedules. (Carson-OK).

CUBA: Radio Habana Cuba 11760 f/d "El Morro Castle in Habana" cd. in 9 mo. for 1 IRC. Also rcvd. personal ltr. explaining the delay. (Carson-OK).

CZECHOSLOVAKIA: Radio Praha International 7345 f/d "Wallachian Open Air * Museum - Gelders Cottage" cd. in 45 ds. for 1 IRC. QSL was for their first day of broadcasting as **RPI!** (Carson). f/d "Wallenstein Garden" cd. in 31 ds. (Paustian). f/d "Gate of Strahov Monastery" cd. in 38 ds. for 1 IRC. (Carson-OK).

DOMINICAN REPUBLIC: Radio Amanecer 6025 n/d form ltr. in 10 mo. after 2 f/up rpts. in EG for \$1.00. v/s Ing. Socrates Dominguez. Postcard was rcvd. (Kremer-IN).

ECUADOR: HCJB 15155 f/d "Cotopaxi Volcano" cd. in 45 ds. w/ schedule for ms. (Carson-OK). same cd. in 26 ds. w/ schedule and report form. v/s Glen Volkhardt. (MacHarg-CR). f/d "Ilinizas Mountain" cd. for various freqs. in 6 wks. (MacHarg).

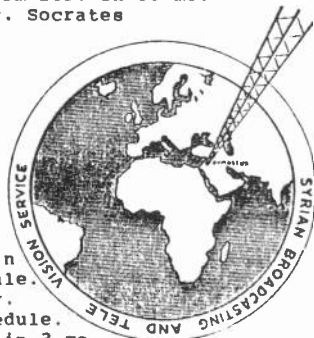
ENGLAND: VOA Wofferton 6140 f/d "VOA Control Console" cd. in 51 ds. (Kusalik).

EUROPEAN RUSSIA: Radio Moscow 11950 via Tula f/d "Moscow River" cd. w/ schedule in 83 ds. (Nagergast-MN).....In the last bulletin I referred to Mr. Colin Nagergast as a female. I guess I mixed up Colin and Colene...Sorry. 21785 via Arnavir f/d cd. in 49 ds. w/ schedule. (Butcher-MA). 17765 f/d "Kalinin Ave." cd. in 3 mo. (Barto). 15185 via Zhigulevsk f/d cd. w/ schedule and pennant in 3 mo. (Barto). 15450 f/d "Council of Ministers Building" cd. in 49 ds. (Butcher-MA). 12035 via Moscow f/d cd. in 3½ mo. (Barto). 15460 via Kingisepp f/d cd. in 49 ds. (Butcher-MA).

EURO PIRATES: Radio Confusion (England) 6308 f/d fact sheet w/ personal ltr. in 67 ds. for ms. (Druzak-BEL). **Passion Radio** (Germany) 6230 p/d * "Listener Cartoon" cd. in 150 ds. (Druzak-BEL). **Radio Pamela** (England) 6222.4 f/d "Ship" cd. in 10 ds. for ms. (Druzak-BEL). **Pirate Preaks Broadcasting Service** 15050 f/d cd. w/ ltr. in 54 ds. for \$1.00. Station history and stickers rcvd. (D'Angelo-PA).

GABON: La Voix de la Renovation 4777 via Libreville f/d cd. in 55 ds. for a FR rpt. and 1 IRC. (Wallace-CT).

GERMAN DEMOCRATIC REP: Radio Berlin International 11890 f/d cd. w/ sticker and pennant in 44 ds. for 1 IRC. (Wallace-CT). 15125 f/d "Peoples Radio Receiver" cd. in 1 mo. for 1 IRC. (Carson-OK). 11785 same type cd. in 1 mo. for 1 IRC. (Carson). f/d "Five Scenes" cd. in 3 mo. w/ apology about the delay due to "changes in personnel." (Cox-OR). f/d "Ernst Thamann" cd. in 68 ds. w/ new schedules for 1 IRC. (Carson-OK).



ADVENTIST WORLD RADIO

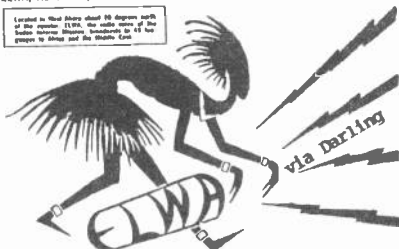
IN ASIA
Box 15, Poona 411001, India
via Darling
Frequency 11825 kHz
Power 20 kW
Location Pune
Date 6 March 1983
Time 0455 GMT



Dear Gordon H. Darlwin,
Thank you for your reception report which has been checked against our programme logs and is hereby verified as correct.

David Jones
For Director

Located in West Africa about 30 degrees north of the equator, ELWA, the radio voice of the African people, broadcasts to all time zones to help and help the World Cup



for 2 IRCs. My report was mailed from Chicago. Don't know what I did right? (Forth).

KOREA, REPUBLIC OF: Radio Canada International 6150 via **Kimje** cd. in 66 ds.(Darling-PNG).

LIBYA: Radio Jamahiriya 15235 f/d cd. w/ schedule in 14 wks. for 3 IRCs to the Malta address.(Klinck)

LITHUANIAN SSR: Radio Vilnius 7400 f/d cd. w/ ltr., stamps and a DX Club Diploma in 129 ds.(Carson).

MALAGASY REPUBLIC: Radio Nederland

1755 p/d "Bonaire Anniversary" cd. in 20 ds. for \$1.00.(Taylor-PA).
MALI: Radio Beijing 11715 f/d "Gray Horse" cd. in 32 ds. w/ paper cuts, schedule, stickers and book markers.(Carson). 17705 same cd. w/ booklets and schedule in 12 ds.(Nagengast-MN).

MAURITANIA: Radio Mauritanie 4845 f/d "Map" cd. in 99 ds. for a FR rpt. and ms. This was after 5 f/up rpts.(D'Angelo-PA).

MEXICO: Radio Educacion 6185 form ltr. w/ station photo via registered mail in 2 mo. for a SP rpt. and ms. v/s Ing. Gustavo Carreno L.

NEW CALEDONIA: RFO 7170 n/d "World Map" cd. in 7 wks. for a (Forth). FR rpt. and \$1.00.(Taylor-PA).

NIGER: La Voix du Sahel 3260 f/d cd. w/ schedule in 4 mo. for a FR rpt.

NIGERIA: FRCN Kaduna 4770 f/d form ltr. in 5 mo. for 2 IRCs. v/s Yusuf Garba.(Cox-OR). f/d ltr. in 2 mo.(Lare-MI).

PAPUA NEW GUINEA: Radio Western 3305 cd. in 3 1/2 yrs. w/ no f/up rpt!
 (Darling). **Radio Southern Highlands** 3275 p/d ltr. in 1 mo. after a f/up rpt. w/ ms. v/s Andrew Meles, Station Manager (Lare-MI).

PARAGUAY: Radio Nacional del Paraguay 9735 n/d ltr. in 11 mo. for a SP rpt. and \$1.00. v/s Lic. Augusto Ocampos Caballero, Director General.(Kremer).

PHILIPPINES: VOA Poro/Tinang 21545, 6110, 17735 cds. in 166 ds.(Darling-PNG).

ROMANIA: Radio Romania International 21665 rcvd. old "Radio Bucharest" cd. w/ new schedule in 88 ds.(Darling). 15335 f/d "Manuc's Inn" cd. in 179 ds. for 2 IRCs.(Carson-OK).

SAIPAN: KHBI 17780 f/d prepared cd. in 140 ds. after a f/up rpt. to WCSN headquarters.(Darling). new style f/d cd. in 18 ds. for ms.(Taylor). 15405 and 15435 f/d "DIY" cds. in 28 ds.(Darling). 15055 same type cd. in 21 ds. for ms.(Butcher-MA). 9530 same in 38 ds.(Darling-PNG).

SAUDI ARABIA: Broadcasting Service of the Kingdom of Saudi Arabia 9720 and 9705 f/d cd. w/ f/d ltr. in 86 ds. after 4 different f/up rpts. Schedule rcvd.(D'Angelo-PA). 9720 f/d cd. w/ ltr. and other goodies via registered mail in 32 ds. v/s Suliman A. Al Samnan, Director of Frequency Management.(Field-PA)...Bet you will get good replies now!

SCOTLAND: Radio Stella 6320 f/d "Flag and Music" cd. in 30 ds. w/ personal note for ms. v/s Jock Wilson, Station Manager.(Druzak-BEL)...Ireland.

SIERRA LEONE: SLBS 5980 f/d prepared cd. in 36 ds. after a f/up rpt. for SASE. v/s Emmanuel Ehrim. This was after trying for nearly 7 years. Thanks to D'Angelo and Allen for v/s.(Paszkiwicz).

SINGAPORE: Radio One 5050 f/d "Skyline" cd. in 146 ds. w/ schedule and bookmarker.(Mac-Harg-CR).

SOLOMON ISLANDS: SIBC 9545 f/d white "Emblem" cd. in 52 ds. for \$1.00.(Taylor-PA).

SOUTH AFRICA: Radio RSA 9615 f/d "Interior of the Karoo" cd. in 55 ds.(O'Keefe).

HTC
СВОБОДНАЯ РОССИЯ
FREE RUSSIA

NTS

Mr. G.M. Darling,
74, Stanley Road,
South Harrow,
To Radio Middlesex, England. This confirms our QSL

Date 12 Nov. 1971 4344.5 kHz MC

Time 15.34 - 15.47 GMT Vy 73 es rc'd

RADIO ANDORRE
Emissiones Internationales
Boule Papeale N.° 1
ANDORRE LA VIEILLE

L'eur Auditeur,
Nous vous remercions d'accepter de
votre aimable lettre nous demandant un
compte-rendu de nos émissions diffusées
sur les: 6230 m 48,15
Vos renseignements nous sont très
utiles et vous en remercions.
Espérant vous lire à nouveau, veuillez
agréer l'assurance de nos sentiments
très distingués.

RADIO ANDORRE

Mr. Gordon Darling
10 osterley drive
Caversham Park
RG4 0XP - ENGLAND

SOUTH AFRICA: Radio RSA 9615 f/d
 "Johannesburg at Night" cd. in 46 ds. for 1 IRC.(Carson-OK). 9615 and 9580 f/d "Durban North Beach" cd. in 49 ds. for 1 IRC.(Carson). 21590 f/d "White Rhino" cd. in 46 ds. for 1 IRC.(Carson) 21535 f/d "Garden Snails" cd. in 49 ds. for 1 IRC.(Carson). 11935 f/d "Gemsbok and Springbok in Kalahari National Park" cd. in 46 ds. for 1 IRC.(Carson-OK).

SUMATRA: RRI Jambi 4927 f/d prepared cd. in 1 mo. after a f/up rpt. in IN for SASE. v/s Drs. Haji Ali Amran. This is the same v/s who did my Ambon QSL back in 1987. (Lare-MI).

SWEDEN: Radio Sweden International 21500 cd. in 18 ds.(Backlund-NY). 11705 f/d "Stockholm and View from Kaknastornet" cd. in 17 ds. for 1 IRC. v/s William Von Arnold. Schedule was rcvd.(Carson-OK).

TAIWAN: Voice of Free China 9680 f/d "Ch'ing Dynasty Porcelain" cd. w/ schedule in 29 ds.(Paustian). 5950 and 5985 same cd. in 68 ds. w/ sticker and newspapers for 1 IRC.(Carson). 6200 and 11745 via Pan-chiau and 7130 via Minhsiung f/d "Ducks by a Brook" cd. w/ sticker and schedule in 2 1/2 mo.(Barto-CT).

TANZANIA: Radio Tanzania 9685 cd. in 432 ds. after 2 f/up rpts. for \$1.00. (Darling-PNG).

PLUTO QSL




We are pleased to confirm that DOROTHY DARLING heard our transmission on 6240kHz at 0830-0840GMT on 12th April 1987. This broadcast came to you from TALES.
 73s & 80s,
 Karen Dawson

WESTSIDE RADIO
 #49 METRES **DUBLIN** #SHORT WAVE#

To GORDON DARLING
 DATE 11th JUNE 1978
 TIME 1205 - 1224 GMT
 FREQUENCY 6280 kHz
 OUTPUT POWER 60 WATTS
 ANTENNA DIPLOLE

THANK YOU FOR YOUR RECEPTION REPORT! #BEST 735#




Building" cd. in 7 wks. (Butcher). 12060 via Vinnitsa f/d "Friendship Fountain" cd. w/ schedule in 7 wks.(Butcher-MA).

USA: WSHB 13760 f/d "DIY" cd. in 28 ds. for ms. v/s Judy P. Cooke.(Carson-OK). 13760 and 17555 dame cd. in 30 ds.(Darling-PNG). 9465 f/d cd. in 38 ds. Report was sent to CSM Headquarters.(MacHarg-CR). 9455 p/d cd. in 18 ds. for ms.(Taylor-PA). 9455 and 13760 same type cd. in 1 mo.(D'Angelo-PA). **WCSN 15300 f/d "DIY"** cd. in 32 ds. v/s E.H. Coker.(MacHarg-CR). 9850 f/d "Antenna" cd. in 28 ds. for ms.(O'Keefe). same f/d cd. in 30 ds.(D'Angelo). 15300 f/d cd. in 32 ds.(Darling). **WYFR 13695 f/d "Logo"** cd. w/ schedule in 11 ds. (Nagengast-MN). **KUSW 15590 f/d cd.** in 11 ds.(Backlund). **Voice of the Organization of American States 9565 cd.** w/ schedule and OAS booklet in 5 wks. for ms.(Forth). **WWCR 7520 f/d "Ham Style"** cd. in 18 ds. for ms. Sticker rcvd. Note that sometimes station can be rcvd. on 15040khz (2x7520).(Taylor) f/d cd. in 11 ds.(Backlund). f/d cd. in 10 ds. after a f/up rpt. w/ ms. v/s George McClintock.(Weber-OH). rcvd. a blank cd. w/o sending a reception report!(Darling) **VOA Delano 5985 f/d cd.** in 166 ds.(Darling-PNG). **VOA Europe 21585 via Bet-hany** cd. rcvd. for "Special EDXC Transmission" in 16 ds. for a faxed rpt.(Darling). **WYFR 17612.5 f/d cd.** in 8 ds.(Backlund).

USA (Pirate): WLIS 7409 f/d "Ian McFarland Head" cd. in 35 ds. for ms.(O'Keefe). **KFAT 7400 f/d multi-colored logo folder** in 59 ds. for a rpt. to Wellsville addr.(Zeller-OH). **Voice of Intoxication 7411 f/d cd.** in 40 ds.(Zeller-OH).

THE
 FALKLAND ISLANDS BROADCASTING
 STATION



3370 kHz
 QSL Gordon Darling Ai de Heath
 MA 152 BROADCAST SECRETARY

USA (Pirate): One Voice Radio 7415 f/d cd. in 33 ds. for SASE. Personal ltr. rcvd. Card was for a "Special Edition Memorial Day 1990". (Burns-MA). f/d cd. w/ ltr. in 19 ds. for ms. (O'Keefe). p/d green cd. w/ personal ltr. in 18 ds. for ms. (Taylor-PA). "Globe/Embryo" cd. w/ personal ltr. in 60 ds. for ms. (Paustian). **Radio Comedy Club International** 7417 "Clown" cd. w/ ltr. and a personal note in 35 ds. for ms. (Paustian), **Radio Ganymede** 7415 "Voice of the Ganymedian Empire Blue Tourist" cd. in 61 ds. for a taped rpt. and ms. (Paustian). **Radio EXP** 7415 f/d cd. in 20 ds. for ms. (Paustian). **Tube Radio** 7415 2 cds. w/ personal ltr. in 38 ds. for ms. (Paustian). **Voice of Stench** 7355 f/d ltr. in 49 ds. for ms. (Paustian).

USSR: Radio Moscow 17585 f/d "Peoples Friendship House" cd. in 58 ds. w/ schedule. (Paustian).

VATICAN: Radio Vatican 6190, 9645, 6248 and 7250 f/d cds. in 3 mo. (Bar-to-CT). 6015, 9615 and 11830 f/d cd. in 3 mo. (Barto).

VIETNAM: Voice of Vietnam 7416 and 9731.5 p/d cd. w/ schedule and station pennant in 4 mo. (Barto-CT).

YEMEN - NORTH: Radio Sana'a 5950 ltr. w/ postcards in 201 ds. after a f/up rpt. for \$1.00. (Darling-PNG).

YUGOSLAVIA: Radio Titograd 9620 via **Belgrade** cd. in 456 ds. after a f/up * rpt. for ms. (Darling-PNG). **Radio Yugoslavia** 9660 and 9660, one cd. of "Orebic" and another of "Lovran" in 5 mo. for \$1.00. Also rcvd. station pennant and schedule. (Taylor-PA).

ZANZIBAR: Radio Television Zanzibar 11735 f/d ltr. in 30 ds. after a f/up rpt. for \$1.00. v/s N.M. Suleiman who would like tapes of local US stations. (Swedberg).

Note: I guess this about wraps up yet another Journal QSL Column. After about 15 or more years of editing this particular column, I am starting to get the hang of it. When I have a great many items for the Column, I utilize the small print on my typewriter; however, if the contributions are down slightly, I will go to the larger style print - as I have done with this months QSL Column. Hope you like it. At times, the smaller print can be very hard to read.

The current crisis in the Middle East makes me wonder just what effect there will be on shortwave transmissions. I've been tuning the MENA news services without much luck. The KUNA service seems to gone completely. Radio Kuwait transmissions can be heard over Radio Cairo - at least the news services are reporting this transmission. I can only presume that next months Journal will have some current and up-to-date info on this situation.

syncom forty-one

via Darling
free radio for north america

broadcasting with forty-one watts
on forty-one meters



VERIFICATION CARD

QSL



Location Burma
Wavelength 5040
Date 9.11.78
Time 15:05 to 21:50 (GMT)

Your reception report has been examined and found correct!
incorrect

Information and Reporting Department,
Rangoon, Burma
18.9

Till next time best of DX and QSLing....

Sam

NASWA Scoreboard

Jerry Lineback
6361 Shore Drive
Douglasville, GA 30135



JERRY A. LINEBACK, Editor
6361 Shore Dr.
Douglasville, Georgia 30135

September 1990

Welcome to Scoreboard for September. We again welcome several newcomers this month. We thank all DXers who take their time to share their totals with us through Scoreboard. The Spotlight this month is on Asia. C/H=countries heard and C/V=countries verified. Country counts should be in accordance with the NASWA Radio Countries List. You must update, or at least write and say that there is no change, once a year to remain on the Scoreboard. If you write only once a year, please update all totals. Thanks again to the contributors for this Scoreboard. The next deadline will be on November 15 for the December issue and the Spotlight will be on Europe.

Name, State	Total		Asia		Best Asian QSL
	C/H	C/V	C/H	C/V	
James Young, CA	238	225			
John Tuchscherer, WI	236		66		Qatar
Gordon Darling, PNG	235	229	68	65	Turkiye Polis
Sam Barto, CT	234	229			
Edward Kusalik, Alb.	228	225	65	64	VTVN Saigon
Marlin Field, MI	225	222	62	61	RRI Serui
Gerry Bishop, FL	224	210	66	63	Bhutan
William Flynn, CA	224	208	63	55	BCS Kure, Japan
Roland Schulze, FRG	224	206	66	59	RPD Ende
Harold Cones, VA	223	214	58	49	
Nobuaki Takahashi, Japan	221	189			
Tom Gavaras, MN	219	216	64	63	VTVN Saigon
Terry Palmersheim, WA	219	201	61	54	RTV Hong Kong
Mitch Sams, KS	218	171	63	43	Kashmir 3277
Al Miller, OH	217	209	62	58	Nepal
Steven Lare, MI	215	174	57	47	Hong Kong 3940
C. Vernon Hyson, NC	214	203	56	51	Sarawak
John Sgrulletta, NY	213	213	56	56	V. O. Peace
Rick Krzemien, CA	209	194	61	59	Bhutan
Ron Howard, CA	209	190	58	51	NHK Kumamoto
Paul Buer, FL	208	197	55	52	VoPeace
Richard Davis, NM	208	197	62	59	RRI Dili
Kirk Allen, OK	206	197	49	37	Azad Kashmir
Del Fye, FL	206	191	54	49	Ambon
Kevin Atkins, AL	206	182			RKIP Surabaya
Donald Hosmer, MI	206	160			
Sheryl Paszkiewicz, WI	205	193	59	52	Sri Lanka BC
Jerry Lineback, GA	205	108	55	15	Ujung Pandang
David Swaringen, NC	202	182	54	47	Nepal
Charlie Hoffman, PA	201	150	58	37	Brunei 7215
Christos Rigas, IL	200	178	53	47	Aden
John Bryant, OK	199	176	52	40	R Nepal
Frank Orcutt, NY	199	157	51	39	RTV Brunei
Rowland Archer, NC	198	181	56	48	R. Nepal
Mike Harvester, Okinawa	197	183	54	49	AFNT Taiwan
Robert Ross, Ont.	197	171	53	44	Kampuchea 4910
John Huniwell, NJ	194	189	48	47	Laos
Harold Sellers, Ont.	191	155	47	35	Cambodia
Kent Willis, KY	191	143	48	27	Laos 6130
Tom Daly, NY	191	44	50	4	Turk Meteor Svc

Name, State	Total		Asia		Best Asian QSL
	C/H	C/V	C/H	C/V	
Henry Michalenka, RI	184	148	47	33	Thai Meteorol.
Fred Kohlbrenner, PA	180	144	45	39	R. Pyongyang
Tom Laskowski, IN	176	139	36	27	Mongolia
Norman Bobb, MN	175		44		
Rev. John Eckert, PA	170	153	44	41	R. Baku
Jerry Klinck, NY	169	147	41	38	R. Pyongyang
Ichiro Maruo, Japan	169	101	61	36	AIR Guwahati
Andy Rugg, Que.	164	150	41	38	BBC, Singapore
Kevin Klein, WI	164	73	43	16	R. Pakistan
Greg Hart, FL	161	107	39	26	RRI Surakarta
Jim Renfrew, NY	160	121	37	28	Ulan Bator
Jim Streitmatter, IN	160		42		Sarawak
Kurt C. Cox, OR	153	117	36	20	RTM Sarawak
Carl Mann, NB	151	127	36	30	Burma 4825
Carl Radtke, WA	147	147	39	39	Nepal
Bill Taylor, PA	146	101	33	22	BSF
Peter Dillon, Greece	146	91	39	18	R. San'a
Thomas Ross, IL	145	125	36	28	RTV Hong Kong
Jim Smallwood, AL	140	112	35	31	King of Hope
David Morby, NY	139	36	32	4	R. Jordan
Robert Landau, NJ	135	112	30	24	VoMeterology Tu
Dale Park, HI	131	37	38	8	AWR via SLBC
Harold Levison, PA	125	92			
Joe Kremer, IN	123	78	24	17	R. Jordan
Adrienne Barhydt, OR	117	72	32	15	R. Tashkent
Joe Zobro, MI	113	83	17	10	R. Baghdad
Mark Humenyk, Ont.	111	65	34	14	NHK Japan
Larry Royston, HI	109	37			
Robert Carlsen, OH	103	85	24	16	Burma BBS
David Turnick, PA	92	80			
David Galletly, NY	86	59	22	10	VoVietnam
Richard Wallace, CT	79	40	15	8	
Dennis Kelly, MI	73	60			
William Blight, MD	70	51	11	8	JJY Japan
Rev. William Peake, IA	49	35			

Thanks to all who have shared their totals with us this quarter. We encourage all NASWA Members to share their totals with us through the Scoreboard. Remember the next deadline is 15 November for the December issue and the Spotlight will be on Europe. Gud DX and 73s y'all.

IT'S BACK! IT'S BETTER! IT'S BLANDX!

Yes, BLANDX, the annual DX bulletin parody is back with an all-new fifth edition! But, it's not a kinder, gentler BLANDX! No, it's "BLANDX in the Nineties" with a brand new name - THE JOURNAL OF BLANDX! Favorite old columns such as Sven Gonzalez's "Listeners' Trashbag" and Ray Framus's "QSLs and Other Goodies" are joined by new ones like "DXers' Kindergarten", "BLANDX Mugshots", "From the Maximum Leader", and "The BLANDX Boutique". It also includes details on that new volume of DX wisdom, "Mistreatings 1990". BLANDX is now 100% desktop published, and any similarities to another DX bulletin may be more than just a coincidence! BLANDX is 36 pages long and doesn't have a boring cover! Available for just \$2.00 postage-paid in the US, Canada, & Mexico, \$3.00 airmail elsewhere, from Don Moore, N-20108 Hayes Road, Big Rapids, MI, 49307. Checks/Money Orders payable to Don Moore.

Contributors' Page

Kris Field
431 Babylon Road
Ambler, PA 19002-2302



LOGGINGS CONTRIBUTORS - SEPTEMBER 1990 - DEADLINE 10th of MONTH

The following members contributed loggings:

Brian ALEXANDER, Mechanicsburg, PA	NRD 525, MAP, 60M Delta Loop
Guy ATKINS, Issaquah, WA	Allied SX 190
Kurt COX, Leaburg, OR	NRD 525, random wire
Patrick CRUMHORN, Austin, TX	R70, Alpha Delta DX Sloper
Richard D'ANGELO, Wyomissing, PA	
Peter DILLON, Greece	
Elliot FEINBERG, Brooklyn, NY	R70, Sony 2010
Mike HARDESTER, Okinawa	DX 302, Zenith Transoceanic
Rufus JORDAN, Pittsburgh, PA	
W. KARCHESKI, Holden, MA	
Jerry KLINCK, W. Seneca, NY	R 5000
Paul KLING, Amarillo, TX	
Mike LAIRD, Cameron, MD	DX 302, R 2000, 70' LW
Tim NOONAN, Madison, WI	Drake SW-4A, Random Wire
Dale PARK, Honolulu, HI	R5000, ATS803
John PRATH, Ft. Lauderdale, FL	NRD 520, R71A
Jim RENFREW, Rochester, NY	Sony 2010, LW
Mike WOLFSON, Ashland, OH	Sony 2010

Thanks to one and all for their loggings this month! The summer static should be soon giving way to the September DX conditions and we'll all be spending more time at our radios! (Don't we hope.)

Due to the the expanding Field Family (number three child due this fall) and a wish to concentrate on helping Bob Brown a little more with some of the headquarters chores, I'll be giving up the Distributing Editors position and handing things off to Vern Hyson in North Carolina.

Please start sending your loggings directly to:

Vern Hyson
9835 Lone Eagle Road
Charlotte, NC 28215

I don't have enough space to say thanks to everyone as thoroughly as I'd like, but thank you for the support you've all given to me and this column. I'll also miss the regular correspondence I've enjoyed from you. I'm sure you'll give Vern a big welcome next month. I've met Vern and he'll do a great job. During the transition period in the next couple of months, I'll forward all the loggings that arrive here along to Vern.

So, thanks again, I've had fun. I'll see you around the clubhouse!!

73, Kris

Tropical Band Loggings

Sheryl Paszkiewicz
1015 Green Street
Manitowoc, WI 54220



Welcome to another issue. Some more great loggings this time and, hopefully, we're headed for another great fall DX season. We've got a special column this month so read on:

- 1660 USA, KA2XXB, Beltsville, MD, 23/6, 0730-0745, "Experimental skywave suppression station operated by the National Association of Broadcasters," See 1/90 Monitoring Times for further info on this station. (Alexander-PA)
- 2410 NEW GUINEA, R. Enga, 15/7, 1220 clear & strong S6 level. Old pops, PD anmts, ID, TC 1225 (Atkins-OWA) OWA will indicate Orcas Island, WA, & IWA, Issaquah, WA--sp.
- 2420 BRAZIL, R. Sao Carlos, 29/7, 0107 w/50s pops, brief anmt, dead air, full ID & FC, fair. (Johnson-MD)
- 2490t BRAZIL, R. Oito de Setembro, 29/7, 0038 w/Dire Straits mx, tlk on hr, sudden s/off, no anthem or ID. Could someone give me QTH of town of Descalvado? (Johnson-MD)
- 2755t CHINA, Vo Strait, 7/7, 1458-1530 w/EG lessons to 1500 time sig, tent. ID. Tlk abt Taiwan, instl "Love is Blue" bridges //6170, SIO=454. (Hardester-OKINAWA)
- 2904.8 LESSER SUNDAS, RKPDT2 Ngada, 15/7, 1135 w/ment Indo cities, fair-good w/lagu pops, ads, soft mx, 1159 ID, Jak relay. (Atkins-OWA)
- 3214.8 SULAWESI, RRI Manado, 14/7, 1157-1231 w/M&W anners, vcls, instls, ID 1200, nx, ment Manado, SIO=353. (Hardester-OKINAWA)
- 3215 SOUTH AFRICA, R. Oranje, 31/7, 0310 in AK w/Amer. pops, accordion mx, ads, one in EG. Strong till 0400 & bad QRN. SIO=342. (Kurrasch-NY) Tnx a lot for your loggings--sp.
- 3260 CHINA, Guizhou PBS, 21/7, 1445-1502* w/tlk, EZL mx, time sig, poss. ID, carrier only past 1505. (Hardester-OKINAWA)
- 3280t CHINA, Vo Pujiang, 7/7, 1233-1302 w/instls, ment. Taiwan, no TP on hr, //3990, SIO=454. (Hardester-OKINAWA)
- 3300 GUATEMALA, R. Cultural, 4/8, 0320 w/"Back to the Bible," then another rel pgm, SIO=343. (Kurrasch-NY)
- 3320 SOUTH AFRICA, R. Orion, 1/8, 0035 in EG w/"Banana Boat Song" ID, heavy QRN & CW. (Kurrasch-NY)
- 3365 BRAZIL, R. Cult. Araquara, 31/7, 0405 w/Latin pops, good sig, SIO=344. (Kurrasch-NY)
- 3365 CUBA, R. Rebelde, 4/8, 0655-0730 w/all mx pgm, spot anmts, ID, poss. bx coverage anmt. (Jordan-PA)
- 3377.5 JAPAN, NHK Osaka in SSB, 4/7, 1050-1105 in JP w/time sig, ment. NHK, more tlk, SIO=353. (Hardester-OKINAWA)
- 3394.8 ECUADOR, R. Zaracay, 2/8, 0224 w/drunken-sounding ballad, vcls w/chorus. Severe fading. (Peck-NY)
- 3654.2t SULAWESI, RKPDT2 Luwu, 15/7, 1145 weak-fair w/lots of tlk, fade before 1200. (Atkins-OWA)
- 3970 JAPAN, NHK Sapporo in SSB, 14/7, 1145-1205 in JP w/time sig, NHK ID, SIO=333 w/het 3972. (Hardester-OKINAWA)
- 3995 WEST GERMANY, Deutsche Welle, 25/7, 0200. (Kurrasch-NY)
- 4607.4p IRIAN JAYA, RRI Serui, 15/7, 1355-1400 w/romantic mx, RRI ID 1400, march mx, long echo anmt, fair. (Atkins-OWA)
- 4789.7 IRIAN JAYA, RRI Fak Fak, 4/7, 1333-1357* w/vcls, s/off anmts, IDs, ment Irian & Fak Fak, instl anthem. (Hardester)
- 4800 LESOTHO, R. Lesotho, 4/7, 0505 in EG w/lcl nx, ID, weak but readable. (Klinck-NY)
- 4810 SOUTH AFRICA, SABC, 8/8, 0435-0450 in AK w/tlk abt Mexico, TC, nx, poss. RSA ID 0445, fair. (Cox-OR)
- 4820 HONDURAS, HRVC, 3/8, 0140 in SP w/rel pgm. (Kurrasch-NY)
- 4825 BRAZIL, R. Educ. Braganca, 8/7, 0856 very weak w/YL w/ID. (Renfrew-NY)
- 4835 SARAWAK, RTM Kuching, Y net in Malay?, 8/7, 1050 w/Qur'an, echo tlk, a capella singing //7145. Poor. (Park-HI)

- 4859.9 VENEZUELA, R. Maracaibo, 2/8, 0115-0150 w/pop mx, anmts, TC, ID, big band mx, ballads. (Paszkievicz-WI)
- 4860 PERU, R. La Hora, 15/7, 0120-0145 w/anmts, IDs btwn folk mx, accordion/brass pops, QRN & fading. (Jordan-PA)
- 4904.6 CHAD, RN Tchadienne, 4/7, 0430 in FR w/s/on, lcl mx, noisy but strong. (Klinck-NY) 5/8, 0500 in FR w/guitar mx, fair-good. Tentative. (Kurrasch-NY)
- 4910.4 CAMBODIA, VOPC, 7/7, 1135-1210 w/trlk by W, some by M, vccls, instls, 1156 ment of Kampuchea, poss. nx, strong RTTY QRM. Sounded a lot like Vo Natl Army of Dem Kampuchea noted on 4/7. (Hardester-OKINAWA)
- 4914.6 PERU, R. Cora, 23/7, 0225-0236 w/ballads, ID, anmts, ment. Lima. (Paszkievicz-WI) 7/7, 0320-0402 w/IDs, lots of tlk, ads/jingles, fair. Tnx Kevin Atkins tip. (Atkins-IWA) 2/8, 0935 w/TCs btwn each tune, ID, ads, one for Rancho Mercado, faded by 1020 w/mx. (Renfrew-NY)
- 4915 GHANA, GBC-1, 4/8, 0603 in EG w/nx, SIO=333. (Kurrasch-NY)
- 4920 ECUADOR, R. Quito, 25/7, 0230 w/sev. ads, ID. (Kurrasch-NY)
- 4930 TURKMEN SSR, Ashkhabad, 15/7, 0040-0110 in RS w/EZL mx, Mayak IS 0059, tlk, fade 0105 which correlates to Ashkhabad's sunrise. (Alexander-PA)
- 4934 KENYA, KBC, 29/7, 0200 flute IS, "This is KBC, the Kenya Broadcasting Corporation, Nairobi." (Johnson-MD) 12/7, 0240 in EG w/Western mx, ID, nx 0300. (Klinck-NY)
- 4950 SARAWAK, RTM Kuching, 7/7, 1128-1135 w/exc sig in EG, "This news is coming to you from the studios of RTM, Sarawak." (Atkins-IWA)
- 4965 BRAZIL, R. Alvorada, 28/7, 0932 w/vccls, anmts, FC, ID, ment. Parintins. (Paszkievicz-WI)
- 4970 ECUADOR, R. Tarqui, 15/7, 0620-0740 w/tlks btwn lcl instls, poss. bx coverage anmt, QTH refs, guitar mx. (Jordan-PA)
- 4978 VENEZUELA, Ecos del Torbes, 25/7, 0240 w/many ads, mx, SIO=444. (Kurrasch-NY)
- 4990 NIGERIA, R. Nigeria, Lagos, 22/7, 2301-2307* in EG w/nx, ID, pledge, choral NA, SIO=353. (D'Angelo-PA)
- 4990.9 SULAWESI, RRI Gorontalo, 15/7, 1305 w/LOUD sig! YL w/constant tlk of Sofia (Bulgaria?) & Jakarta. Are these 2 sister cities? US pops 1314, lcl ID 1329, 1330. (Atkins-OWA)
- 5010 MADAGASCAR, R. Madagasikara, 12/7, 0310 in FR w/trlk, lcl mx. (Klinck-NY)
- 5015t CLANDESTINE, R. Truth, 23/6, *0430 in EG w/IS, anthem, nx, very poor. (Karcheski-MA)
- 5020 NIGER, LV du Sahel, 8/8, 0504-0540 in FR w/Islamic mx, ID 0508, beatiful mx/trlk each 5 min. interval. (Cox-OR)
- 5020t SOLOMON ISLANDS, SIBC, 29/7, 0620 in PD? w/pops, tlk by M, severe flutter, poor, don't believe this was Niger. (Peck)
- 5030 ECUADOR, R. Catolica Nac., 1/8, 0150 w/rosary, ID, FC, march mx, off 0201, fair-good. (Kurrasch-NY) 4/7, 0240-0302* w/HC mx, rel, tlk, anmts, NA. (Alexander-PA)
- 5040t CHINA, Fujian PBS, 4/8, 1103 in CH w/nx. (Paszkievicz-WI)
- 5040 VENEZUELA, R. Maturin, 14/7, 0331-0350 w/nx, chimes btwn items, ID, ads 0336, more nx 0338. (D'Angelo-PA) 15/7, 0540-0610 w/anmts, IDs, lively LA mx. (Alexander-PA)
- 5045 BRAZIL, R. Cultura do Para, 26/7, 0040. (Kurrasch-NY)
- 5063.9 UNID, 8/7, 0338 w/LA mx, anmts, Mexican NA at s/off. (Renfrew-NY)
- 5075 COLOMBIA, Caracol Bogota, 1/8, 0210 w/nx, mx, lots of Coca-Cola ads, good. (Kurrasch-NY) Also 30/7, 0600 w/ID, tropical mx, SIO=343. (Kurrasch-NY)
- 5407.8t CLANDESTINE, Vo Natl Army Dem Kampuchea, 4/7, 1223-1304 many ment Kampuchea, variety mx, pauses btwn sentences in tlks, lang not smooth, pres. Cambodian. (Hardester-OKINAWA)
- 5532.9 PERU, R. Frecuencia Modular, 8/7, 0346-0406* very poor w/mx to s/off. (Renfrew-NY)
- 5660.5 PERU, LV de Cutervo, 15/7, 0040-0200* w/campo vccls, anmts, abruptly off 0200, no NA. (Alexander-PA)

Hopefully, we are heading into a fruitful DX season, producing lots of new DX catches at your location. Whether you are a DXer or prefer listening to programs, maybe you tend to, as I did a few years ago, avoid the tropical bands because you are uncomfortable trying to identify stations broadcasting in foreign languages, as many stations operating in the tropical bands do. However, did you know that there are at least 41 countries you can log in the frequency range 2000-5900 kHz which broadcast in English?

Following is a list of stations you might like to try for. Many of them will give you a closer look into the region's current events and culture as well as additions to your country totals. If you collect NASWA awards, it's also a help in adding to your totals for the Tropical Bands Awards. Remember these awards are for QSLs from 50 (and 75) countries operating below 6000 kHz and which are physically located between the Tropics of Cancer and Capricorn. If you are lucky enough to get those 50 or 75 countries verified, send your award application to Rich D'Angelo.

ENGLISH BROADCASTS IN THE TROPICAL BANDS

AFRICA

1. Benin:
4870 kHz ORTB, Cotonou, 2015 UTC, best fall & winter and on the East Coast
2. Botswana:
3356 kHz R. Botswana, Gaborone, 0510 UTC
4830 kHz R. Botswana, Gaborone, 0510 UTC
3. Cameroon:
4000 kHz R. Bafoussam, Bafoussam, 0700, 2200 UTC
4795 kHz R. Douala, Douala, 0600-0645 UTC Sunday
4. Ghana:
3366 kHz GBC-2, Accra, 0525, 2000-2305 UTC
4915 kHz GBC-1, Accra, 0600, 2100, 2245 UTC
5. Kenya:
4934 kHz KBC, Nairobi, 0200-0400, 2010-2110 UTC weekends
6. Lesotho:
4800 kHz R. Lesotho, Maseru, 0450, 0500 UTC
3255 kHz BBC Relay, Maseru, 0300-0400 UTC
7. Liberia:
3255 kHz ELBC, Monrovia, 0600-0730, 2100-2300 UTC
3990 kHz VOA Relay, Monrovia, 0500-0700 UTC
4760 kHz ELWA, Monrovia, 0600-0800, 2000-2230 UTC
8. Malawi:
3380 kHz MBC, Blantyre, 0500, 0600 Sunday, 0700 UTC
9. Namibia:
3270 kHz NBC, Windhoek, check local North Amer. evenings
3290 kHz NBC, Windhoek, 2000-2200 UTC & check evenings
10. Nigeria:
3326 kHz R. Nigeria, Lagos, 0430-0700, 2100-2230 UTC
4770 kHz R. Nigeria, Kaduna, 0430-0700, 2100-2300 UTC
4990 kHz R. Nigeria, Lagos, 0430-0700, 2100-2300 UTC
11. Sierra Leone:
3316 kHz SLBC, Freetown, 0700, 2100, 2200, 2300 UTC

12. South Africa:
 3320 kHz R. Orion, Johannesburg, check local evenings & late afternoons
 4810 kHz R. Orion, Johannesburg, check local evenings & late afternoons
 4880 kHz Radio 5, Johannesburg, 0300-0600, 2100-2200 UTC
13. Swaziland:
 3200 kHz TWR, Manzini, 0530 UTC
 3240 kHz TWR, Manzini, 2000-2130 UTC, best for East Coast listeners
 5055 kHz TWR, Manzini, 0430-0700 UTC
14. Tanzania:
 4785 kHz R. Tanzania, Dar es Salaam, 0530 UTC
15. Uganda:
 4975 kHz R. Uganda, Kampala, 0400, 0700 UTC
 5027 kHz R. Uganda, Kampala, 0400, 0700 UTC
16. Zambia:
 4910 kHz ZNBC, Lusaka, 0500, 0600 UTC
17. Zimbabwe:
 4828 kHz ZBC-2, Harare, 0400, 0500, 0600 UTC
- ASIA
18. Andaman Islands:
 4760 kHz All India Radio, Port Blair, 1200-1500 UTC or thereabouts. This one is very difficult & requires great care with the ID since there is another AIR station on this frequency.
19. Bangladesh:
 4880 kHz R. Bangladesh, Dhaka, 1255, 1530 UTC
20. Hong Kong:
 3940 kHz RTV Hong Kong, 1100 UTC, only on every 2 years for South China Sea Yacht Races. Next scheduled bx should be during a 1-2 week period in March or April, 1992. However, this did not show up on the air this year.
21. India:
 3205 kHz All India Radio, Lucknow, 0035-0040 UTC
 1530-1545 UTC best on West Coast
 4800 kHz All India Radio, Hyderabad, 1230-1235, 1530-1545 UTC
 4840 kHz All India Radio, Bombay, 0035-0040, 1430-1435 UTC
 4860 kHz All India Radio, Delhi, 0035-0040, 1430-1435 UTC
 These stations are best heard in December-January in North America
22. Java:
 5046 kHz RRI Yogyakarta, 1130-1145 UTC
23. Nepal:
 3230 kHz R. Nepal, Kathmandu, 1415 UTC best on West Coast
 5005 kHz R. Nepal, Kathmandu, 1415 UTC best on West Coast
24. Sarawak:
 4950 kHz RTM Kuching, 1130, 1400 UTC
25. Singapore:
 5010 kHz SBC, 0800-1500 UTC
 5052 kHz SBC, 0800-1500 UTC

26. Sri Lanka:
4940 kHz SLBC, Ekala, 0000-0300, 1100-1700 UTC

EUROPE

27. England:
3955 kHz BBC via Daventry, 0300-0600 UTC

28. France:
3965 kHz RFI via Allouls, 0315-0345 UTC

29. Switzerland:
3985 kHz SRI, Berne, 0730 UTC
3985 kHz R. Beijing Relay, 2200 UTC

30. USSR:
There are occasionally English broadcasts from Radio Moscow in the 60 meter band. When you hear one, why not send them a report and be sure to ask them to indicate the transmitter site on the QSL card.

NORTH AMERICA

31. Canada:
3330 kHz CHU, Ottawa, all times, best North American evenings

32. Costa Rica:
5055 kHz Faro del Caribe, San Jose, 0300-0400 UTC

33. Guatemala:
3300 kHz R. Cultural, Guatemala City, 0300-0400 UTC

34. Honduras:
4820 kHz HRVC, Tegucigalpa, 0400-0500 UTC
4910 kHz LV de la Mosquitia, Puerto Lempira, check 0000-0300 UTC

35. USA:
2500 kHz WWV, Fort Collins, CO, anytime
5000 kHz WWV, Fort Collins, CO, anytime (no pun intended)

OCEANIA

36. Australia:
2310 kHz VL8A, Alice Springs, 1200-1500 UTC
2325 kHz VL8T, Tennant Creek, 1200-1500 UTC
2485 kHz VL8K, Katherine, 1200-1500 UTC
4920 kHz VIM4, Brisbane, 0900-1500 UTC
5000 kHz VNG, Llandilo, 0900-1500 UTC

37. Hawaii:
2500 kHz WWVH, Kekaha, Kauai, North American mornings
5000 kHz WWVH, Kekaha, Kauai, North American mornings

38. New Guinea:
2410 kHz Radio Enga, Wabag, 0900-1300 UTC, some English
3290 kHz R. Central, Boroko, 0900-1330 UTC
3305 kHz R. Western, Daru, 0900-1400 UTC
3345 kHz R. Northern, Popondetta, 0900-1400 UTC
3365 kHz R. Milne Bay, Alotau, 0900-1400 UTC
4890 kHz NBC, Port Moresby, 0900-1400 UTC
These stations are best heard in Spring and Fall in North America

39. Solomon Islands:
5020 kHz SIBC, Honiara, 0900-1130 UTC

40. Tonga:
5030 kHz TBC, Nuku'alofa, 0900 UTC
41. Vanuatu:
3945 kHz R. Vanuatu, Port Vila, 0900 UTC

Please note that this list is not all-inclusive and doesn't include every English broadcast in the tropical bands, just those in the range 2000-5900 kHz. Some broadcasts were omitted for obvious reasons such as reception being impossible at the scheduled times. One such omission was Tristan da Cunha.

Thank you to everyone who contributed this month. Special welcome to Bill Kurrasch, who sent in some nice loggings. Your format was just fine. Guy Atkins' loggings from Orcas Island, Washington, were done on DXpedition with John Bryant, using some very long beverage antennas.

Log contributor Mike Hardester will be returning to the States soon from Okinawa. I've really appreciated your support the past few months.

Also at this time I would like to welcome Rich D'Angelo as our new awards chairman. I know Rich will do a good job for us because he's already processed an application of mine. I'd also like to say a special thank you to John "Kap" Kapinos for the great job he's done as awards chairman for the past six years. Now you can get some time back at the dials. I'd also like to thank Kris Field for doing a good job sorting all these logs in his capacity as distributing editor. It's been a pleasure working with you. We'll be welcoming Vern Hyson as new distributing editor shortly, but now that I've made the announcement, PLEASE read Bob Brown's NASWA notes for further details. The transition may not be immediate since I know the folks at HQ want to make it as smooth as possible. That's enough rambling from me, don't you think? You don't have to answer that. Have fun and CUN30.

FOR SALE: Kenwood R5000 with YK-88A1 6 kHz filter, Alpha Delta Sloper DX Antenna, 110' RG213/U underground coax, Transi-Trap LT, MFJ-16010 antenna tuner, ISOBAR AC line filter, Yaesu YH-77 headphones, 1990 ARRL Antenna Handbook, 1990 WRTH, 1990 PWBR, other books, 1990 Monitoring Times, All purchased 2/90, used 50 hours. In perfect condition. Best Offer, Mitchell Hull, 190 Eisenhower, Battle Creek, MI 49017. Phone (616) 965-8541.

FOR SALE: Universal M-900 decoder and Seikosha SP-1200AI NLQ printer. Used six hours. Both for \$500.00. GE Superadio II with wide/narrow (8 and 3 kHz) on MW. In box, \$40.00. I pay postage. Terry Palmersheim, 12703 86th Avenue E., Puyallup, WA 98373. Phone (206) 841-8978 after 0000 UTC, or leave message.

FOR SALE: Kenwood R-1000 receiver in excellent condition. Has 4 kHz wide and 2.9 and 1.9 narrow Collins filters. With original carton and manual. Price \$400.00 including UPS shipping. Richard Speir, 1221 Chalet Drive, Sandusky, OH 44870. Phone (419) 626-3330.

FOR TRADE: I have several hard-bound books in very good condition that I would like to trade for the following pre-1965 catalogs: Allied, Burnstein-Appleby, Walter Ashe and Lafayette. Also pre-1965 WRTH. Kiver (1947) FM Simplified (D. Van Nostrand); Jordan & Nelson (1942) Fundamentals of Radio (Prentice Hall); National Bureau of Standards Ionospheric Radio Propagation (US Dept. of Commerce. Excellent condition); Send your list to Ed Cichorek, P.O. Box 215, New Brunswick, NJ 08903.

FOR SALE: Info-tech M-200F CW/RTTY converter. Like new condition. Price \$175.00. Two Maxon 49S voice-operated 49 MHz communicator headsets. Good up to ¼ mile. \$25.00 for the pair. Kirk Baxter, 12310 Aberdeen, Leawood, KS 66209. Phone (913) 345-1380 after 6 pm CDT.

International Band Loggings

Wallace C. Treibel
357 N.E. 149th Street
Seattle, WA 98155



- 6045 INDIA AIR Delhi in EG 1535, natl & reg nx, //6140, f (Park HI)
 6130nf? JAPAN RJ in Lang/EG 1047, tlk in lang, ID, nx in EG on the hr (Klinck NY 8/5)
 63236 PERU R Estacion "C" in SP 0045, mx, tlk, ID 0059 (Alexander PA 7/15)
 6560 NO. KOREA R Pyongyang in JP 1040, tlks on reunification, f (Park HI 7/24)
 66909 PERU R Cutervo in SP 0005, ID's, annmnts, LA pops, OA mx (Alexander PA 7/15)
 67547nf? PERU R La Merced in SP 0020-0205*, OA mx, lcl folk mx, ID's, NA (Alexander 7/15)
 7189 EQUATORIAL GUINEA R Africa in EG 2258*, relig pgm, ID, NA, f (D'Angelo PA 7/22)
 7190 YEMEN PDR Yemen BCS in AR 0318; AR mx, M talking w/ID 0331 (Klinck NY 7/13)
 72029 ZAIRE LV du Zaire in FR 0450, hi-life mx, tlk re Zaire (Renfrew NY)
 7205 ALBANIA R Tirana in FR 0400, female talking, ID's in FR (Klinck NY 7/13)
 7255 NIGERIA V of Nigeria in EG 0507-0600, nx, ID's, "African Safari", pgm recap, mailbag pgm (Klinck NY 7/29, Laird MD 7/14, Carson OK 8/3)
 7265 WEST GERMANY Sudwestfunk in GM 0315, pop mx, tlk, ID 0400, f (Peck NY 7/21)
 7375usb COSTA RICA R for Peace Intl in EG 0211, tlks on ecology & Apartheid (Wolfson OH) in EG 0628 w/UN Radio relay of "Caribbean Magazine", g (Carson OK 7/30)
 7540 ITALY V of Europe in EG 0352, rock vocals, ID, address, f (D'Angelo PA 7/14)
 9345 NO. KOREA R Pyongyang in FR 1600, IS, ID's, nx, mx, tlks, p (Dillon GREECE 7/1)
 9420 GREECE VOG in GK 0103, GK mx w/male chorus, annmnts, vg (Kling TX 8/8) in EG 0133 w/ tlk re extradition of judge to Greece from US, //9395 (Wolfson OH 7/28)
 9425 GREECE VOG in GK/SP *2300-2350*, IS, brief mx, ID's, nx, tlks in SP, GK mx, "Never on Sunday", tlks re various Latin American countries, p (Jordan PA 7/12)
 9475 EGYPT R Cairo in EG 0200, nx, mx, "Press Review", ID (Wolfson OH, Klinck NY)
 9495 USA LV Alpha 66 via WHRI in SP 2335-2359*, anti-Castro tlks (D'Angelo PA 8/2)
 9520 HUNGARY R Budapest in EG 0035, budget nx, vg (Kurrasch NY 7/21)
 9555 PHILIPPINES R Veritas Asia in EG/VT 1101, ezl mx, ID in EG, g (Park HI 7/25)
 9560 ETHIOPIA V of Ethiopia in EG 1535, nx, mx, sked, mailbag, ID (Hardester OKINAWA)
 9580 GABON Africa #1 in FR 2245, pop mx, vg (Kurrasch NY 7/24)
 9660 ETHIOPIA V of Ethiopia in EG 1800, ID, Afro nx, "Ethiopia Today" (Dillon GREECE)
 9660 AUSTRALIA ABC Brisbane in EG 0810, local polit cmtry, f (Klinck NY 7/30)
 9680 PORTUGAL RP in EG 0240, "Portugal Past & Present", mx (Laird MD, Kling TX)
 9690 SPAIN R Beijing relay in EG 0326, cooking show, f (Carson OK 7/21)
 9690 ARGENTINA RAE in PT 0100, ID's, nx? & tlks, nice mx, p (Jordan PA 7/6)
 9730 EAST GERMANY R Berlin in EG 2150, rpt on GM reunification, ID (Prath FL 7/28)
 9735 PARAGUAY R Nacional in SP 0135, tlks, spot ID's, orch mx, sked, p (Jordan PA) in SP 0802, clear ID's, pop mx, nx 0820, vg (Cox OR 7/26)
 9750 SO. KOREA RK in EG 1234, intnatnl choral festival, lang lessorf (Carson OK 7/30)
 9765 WEST GERMANY D Welle in EG 0434, ID, "Africa Report", f (Park HI 7/20)
 9765 MALTA V of the Mediterranean in EG 0625, mx, ID, "Malta Your Host" (Carson 8/8)
 9770 AUSTRALIA RA in EG/VT 1325, IS, open in EG, into VT nx, g (Carson OK 7/30)
 97793 YEMEN R. Sanaa in AR 0305, AR mx, tlk, ID (Klinck NY 7/12)
 9840 VIETNAM Vov in EG 1024, interlude, into IN 1030, //150096, p (Park HI)
 9850 EGYPT R Cairo HS in AR 1720, Qur'an recitation, ID, TC, nx, mx (Dillon GREECE)
 9855nf? NEW ZEALAND RNZ in EG 0800, NZ sports & politics, exc (Cox OR 7/30)
 9855nf? CHINA R Beijing in JP 1035, tlks, sked, ID, xylophone mx, f (Park HI 8/8)
 9900 EGYPT R Cairo in FR/AR/EG 2107, tlks, bells & ID, lcl dance mx (Peck NY 7/28)
 9910 INDIA AIR in Farsi 1630, local mx, tlks re Pakistan, Iranian mx (Dillon GREECE)
 9977 NO. KOREA R Pyongyang in EG 1700, ID, propaganda (Dillon GREECE)
 10330 INDIA AIR HS Delhi in EG 1711, mailbag pgm, dedication mx, p (Park HI 7/23)
 11084nf? IRAN IRIB in SP 0157, nx, scmbor mx, faint "whooper" jarring, f (Frodge MI)
 11575 CHINA R Beijing in EG 1750, "Idioms & Their Stories", IS, f (Park HI 7/25)
 11588 ISRAEL Kol Israel in HB 0245, tlks, Yiddish pop mx, f-g, //11605 (Peck NY 8/2)
 11620 INDIA AIR in EG 2158, folk mx, nx re German reunification, f (Peck NY 7/15)
 11660 BULGARIA R Sofia in EG 2135, nx, ID, mx, mailbag, //15330 (Prath FL 7/15) in EG 0126, Bulgarian instrumental folk mx, tlk, p (Peck NY 7/26)
 11660 BELGIUM RTBF in FR 0440, tlks, soul mx, sports rpt?, f (Park HI 7/19)
 11705nf? NO. MARIANAS KHLBI Saipan in EG 0828, Far Eastern mx, ID, nx (Klinck NY 7/30)
 117114 PAKISTAN RP in EG 1603, relig & natl mx, polit cmtry, nx, p (Park HI 7/23)
 11715 MALI R. Beijing relay in EG 2010, nx, features, g (Kurrasch NY 7/30)

11735 YUGOSLAVIA RY in EG 0005-0043*, nx, features (Carson OK 7/23, Laird MO 7/26)
11760nf? INDONESIA VoI in IN 1240-1412, into EG 1345, ID, nx, g (Hardester OKINAWA 7/14)
11790 USSR R Vilnius in EG 2202, Lithuanian nx, "The Way We Live", g (Carson OK 7/15)
11800 ALASKA KNLS in EG 1500, IS, ID, sked, "The Swinging Years" (Noonan WI 7/12)
11805 GUAM KTWR in EG 0838-0945, relig pgming (Klinck NY 7/30, Laird MO 7/29)
11821v COLOMBIA Rdf Colombia in SP 2155, ezl mx, TC, ID's, promos, p (Jordan PA 7/15)
11825 ALBANIA R Tirana in EG 0242, mailbag, local mx, QRM RHC, p (Carson OK 8/8)
11835 SRI LANKA SLBC in EG 1054, tlk on econ, ID, ezl local mx, f (D'Angelo PA 7/16)
11845 PHILIPPINES FEBC in EG 1055, "Back to the Bible", ex 11850, p (Park HI 7/31)
11845 WEST GERMANY D Welle in EG 0510, "European Journal", econ nx, g (Carson OK 7/12)
11865 JAPAN RJ in EG 1415, nx, ID, f (Klinck) in EG 1920, lang lesson, g (Park 7/15)
11870 PHILIPPINES VOA relay in EG 2002, spec anncmt by Pres Bush, nx, f (Park HI 7/24)
11880 SPAIN REE in EG 0000, national nx, "Panorama" (Laird MO 7/14)
11890 EAST GERMANY R Berlin 0150, nx of Iraqi invasion, cmntry (Feinberg NY 8/3)
11910 HUNGARY R Budapest in HG 0143, IS, intro, nx, ID (Wolfson OH 7/28)
11930 NETHERLANDS ANTILLES TWR Bonaire in EG 0330, DX pgms, exc (Carson OK 7/21)
11935 INDIA ATR Delhi in EG 1805, world & relig nx, econ cmntry, p (Park HI 7/19)
11940 ROMANIA RRI in EG 0200, new IS, Dem party nx, QRM from RCI (Peck NY 7/16)
11985 UNITED ARAB EMIRATES Abu Dhabi in EG 2215, ID, sked, drama (Noonan WI 7/11)
11990 CZECHOSLOVAKIA RPI in FR 1627, new 8-note IS, multi-lang ID's, p (Park HI 8/1)
12015 CHINA R Beijing in Cantonese 1100, IS, IS, pgm preview, nx, g (Park HI 7/29)
12025 ALASKA KNLS in CH 1601, IS, ID, into CH after s/on, f-g (Noonan WI 7/12)
120245 IRAQ? R Baghdad(t) in AR 0456, Mideast mx, ID?, p (Park HI 8/9)
12085 SYRIA R Damascus in AR 2230, AR mx, ID, nx, //15095 (Prath FL 7/14)
13610 EAST GERMANY R Berlin in SP 0300*, sked, fanfare, nx, f (Frodge MI 7/2) in EG 1945, cmntry on GM reunification, problems in Liberia, ID, IS, p (Jordan PA 8/6)
13610 KUWAIT RK in EG 1806-2000, rock mx, comedy, pops, Qu'ran readings, nx, ID, wx (Kurrasch NY 7/30, Park HI 7/27, Wolfson OH 7/28) in AR 1800, brief tlks, AR mx, listed EG 1800, hrd AR instead, presumed Iraqi invasion effects (Jordan PA 8/5)
13635 SWITZERLAND SRI in EG/SP 2127, "Sunday Supplement", mx, ID (Karcheski MA 7/8)
13675nf? UNITED ARAB EMIRATES R Dubai in EG 0330, nx, feature, //15435 (Crumhorn TX 7/24)
13700 NETHERLANDS RN in DT 1628, ripply-sounding IS, TC, nx, p (Park HI 7/31)
13720 GUAM KSDA/AWR in EG 1038, special on 55th AWR world session (Hardester OKINAWA)
13790 WEST GERMANY D Welle in EG 1900, ID, world nx, contest, Afro nx (Dillon GREECE)
15000 TAIWAN BSF Time Station in CH 1729, CW & voice ID's, pips, p (Park HI 8/1)
15010 VIETNAM VoV in EG 2050*, YL reading listeners' comments, f (Kurrasch NY 8/5)
15060 SAUDI ARABIA BSKSA in AR 0438, nx, AR mx, ID (Klinck NY 8/3)
15100 MALI R Beijing relay in EG 0300, world nx, current affairs (Laird MO 7/13)
15110 PHILIPPINES R Veritas Asia in RS 1055, tlks, ID, address, IS, f (Park HI 7/25)
15135 FRANCE RFI in EG 0325, nx, ID, exc (Kurrasch NY 7/23)
15150 MADAGASCAR R Nederlands relay in EG 1450, "MadNet", tlks, f (Park HI 7/19)
15165 CHINA R Beijing in EG 1544, "Idioms & Their Meanings", IS, G (Park HI 7/16)
151708 SOCIETY IS. RFO Tahiti in FR 0530, beautiful Polynesian mx, vg (Klinck NY 7/29) in TT 0322, TT folk mx, ukes, tlks in nasal-sounding TT (Peck NY 7/17)
15180 USSR R Vilnius in EG 2214, Lithuanian literature, choral mx, p (Carson OK 7/14)
15185 FINLAND RF in EG 2303, rpt re Soviet hijackers seeking asylum in FN (Prath FL)
15240 EAST GERMANY R Berlin in EG 0147, nx, cmntry on Potsdam Agreement (Carson 8/3)
15245 ITALY RAI in IT 0200, tlks, jazz, pops & classical mx, ID, f (Jordan PA 8/6)
15290 BULGARIA R Sofia in EG 0300, nx, mailbag, cmntry (Carson OK, Frodge MI 7/17)
15295 SWEDEN RS in EG 0233, Swedish reaction to Iraqi invasion, f (Carson OK 8/3)
15325 FRENCH GUIANA R Japan relay in EG 0300, nx, ID, exc (Klinck NY 7/3)
15345 WEST GERMANY R Liberty in Azeri 0430, tlk, AZ folk mx, ID (Peck NY 7/21)
15360nf? MADAGASCAR R. Nederland relay in EG 1915, "Happy Station" mx pgm (Klinck NY 7/1)
15360 SINGAPORE BBC relay in EG 1040, "Vintage Chart Show", g (Park HI 8/6)
15430 SAUDI ARABIA BSKSA in Somali 0400-0452*, tlks, ID's, mx, NA, f (Jordan PA 7/12)
15435 UNITED ARAB EMIRATES R Dubai in EG 0330, nx, cmntry on internal effects of Iraqi Invasion of Kuwait (Kurrasch NY 7/24, Jordan PA 8/3-7)
15460 USSR R Tashkent in EG *1330, Chang? IS, ID, nx, severe flutter (Peck NY 7/28)
15485 USSR R Kiev in EG 2340, "Sunday With Radio Kiev", vg (Kurrasch NY 7/21)
15485 USSR R Vilnius in EG 2200, nx, tlk w/pro-independence slant (Feinberg NY 7/18)
15507 TUNISIA(t) RIV TUNIS in AR 0640, chatty laff-filled skit, tlks, p (Jordan 8/4)
17440 ICELAND ISBS in IC 2324-2330*, tlk by woman, //13855, 15770 (Alexander PA 7/14)
17575 ISRAEL Kol Israel in RS 1527, IS, ID, nx?, mix w/RN Madagascar, p (Park HI 8/9)
17590 ISRAEL Kol Israel in RS 1958, IS, ID, sked, nx, //15640, p (Park HI 7/24)
17630 ISRAEL Kol Israel in EG 2157, nx review, into Yiddish 2200 (Prath FL 7/14)
17630 GABON Africa #1 in FR 1505, western pop mx pgm, g (Klinck NY)

17675 NEW ZEALAND RNZ in EG 0245-0600, mx, nx, features, wx rpt, ID (Feinberg NY 7/18, Cuff PA 7/13, Carson OK 7/31, Cox OR 8/2, Peck NY 7/16)

17730 BRAZIL Swiss Radio relay in EG 0200, nx, "Dateline", to SP 0230 (Laird MO 7/12)

17730 VATICAN STATE VR in EG 0525, cmtry on unrest in Nigeria, g (Carson OK 7/12)

17740 USSR R Tashkent in EG 1200, world & lcl nx, cmtry, feature, f (Jordan PA 8/1)

17750 TAIWAN VOFC in EG 2200, nx, wx, tlk, sked, ID (Noonan WI 7/27, Feinberg NY 7/25)

17755 NORWAY R Denmark relay in DN 1755*, tlks, ID, nx, g (Jordan PA 7/30)

17780 NO. MARIANAS KHBI Saipan in EG 0558, IS, "News Focus", g (Carson OK 7/12)

17790 ECUADOR HCJB in EG 1920, "DX Party Line" (Welfson OH 7/28)

17810 JAPAN RJ in JP 0840, Nagoya Grand Sumo Tourney play-by-play, g (Park HI 7/18)

17835nf BULGARIA R Sofia in EG 0335, polit & econ tlks, into FR 0400, f (Jordan PA 7/14)

17845 SPAIN REE in SP 2240, polit tlks re Latin America, ID, //15110 (Prath FL 7/14)

17875 ECUADOR HCJB in EG 0100, "DXPL" w/R Pyongyang profile, //15155, f (Park HI 7/29)

17895 WEST GERMANY R Liberty in RS 1715, polit tlks, ID "R Svoboda" (Prath FL 7/28)

21470usb ECUADOR HCJB in EG 0316, "Happiness Is", "Studio 9", nx, f (Park HI 7/18)

21490 AUSTRIA RAI in EG 1430*, nx, econ rpt, sports recap, Austrian press reaction to invasion of Kuwait, g (Carson OK 8/7) in EG 1630, nx, feature, g (Dillon GREECE)

21525 AUSTRALIA RA in EG 0405-0520+, soccer match, other sports nx, f (Jordan PA 7/14)

21540 EAST GERMANY R Berlin Int in EG/RS 0500, IS, cmtry, 13 min segment in RS, then back to EG, orch mx (Jordan 8/8) in GM 1058, weak IS, ID?, nx, vp (Park HI 8/3)

21545 CANADA RCI in EG/GM 1621, cmtry on native Indian conflict in Canada (Carson OK)

21550 FINLAND RF in EG 1410, Finnish editorials re Kuwait invasion, p (Carson OK 8/7)

21605 UNITED ARAB EMIRATES R Dubai in EG 1330, ID, nx, AR mx, vg (Klinck NY 8/3), in EG 1641*, nx, wx, ID (Prath FL 7/15) in EG 1605, nx, feature (Kling TX 8/8)

21610 JAPAN RJ in EG 0315, nx, mx, f-g (Kurrasch NY 7/26)

21700 GABON R Japan relay in EG 1510, nx, JP lang lesson, f (Kurrasch, Dillon GREECE)

21700 UNITED ARAB EMIRATES R Dubai in EG 0554*, tlk of Islamic civilization, orch mx, ID's, closing annmcs of EG service, NA, f (Jordan PA 7/14)

21705 NORWAY RNI in EG 1600, "Norway Today", nx, mx, interview, exc (Cuff PA 7/15)

21725 UNITED ARAB EMIRATES Abu Dhabi in AR 0228, Qur'an recitation, f (Carson OK 7/30)

21740 AUSTRALIA RA in EG 0224, interview w/Father Collins, g (Carson OK 8/6)

21780 ISRAEL Kol Israel in RS *0435-0520, IS, mx, ID, nx, vp (Jordan PA 7/8)

21825 AUSTRALIA RA in EG 1040, "DX Time", tips on KVOH & Pakistan, p (Park HI 7/22)

25680 CHINA Swiss Radio relay in EG 1355, EG s/off 1400, then FR, f (Hardester OKIN)

25950usb ECUADOR HCJB in EG 0033, nx, relig pgm (Carson OK) in multi-lang 2130, Andean mx TC, relig tlk (Jordan PA) in SP 2335, cmtry, ID, //21740 (Crumhorn TX) in EG 2130, pgm from W. Yorkshire, England (Kurrasch NY)

CLANDESTINES AND PIRATES

63194 EUROPIRATE R Stella Int in EG 0028-0210, rock mx, ID, mentioned besting from Edinburgh, Scotland. Some multi-lingual tlk, f-g (Alexander PA 7/15)

73998 PIRATE Hope R Int in EG 0224, IS, ID, comedy rx (Alexander 7/15)

74148 PIRATE Action R in EG 0156*, rock, Wellsville, NY address, vg (Alexander 7/15)

7415 PIRATE WKZP in EG 0230, rock, Blue Ridge Summit address (Renfrew NY 6/10)

7415 PIRATE Radio USA in EG *0306, ID, mentioned "broadcasting from a leaky bathtub off the coast of NA", rock mx, comedy ads, f-g (D'Angelo PA 7/28)

7419 PIRATE CPBN "Fly-By-Night-Radio" in EG 0159-0218*, ID's, Wellesville, NY address Canadian mx, funny ads, s/off w/segments of Canadian NA, exc (Alexander PA 7/15)

74902 PIRATE RFM in EG 0343, ID's, Blue Ridge Summit address, movie reviews, steel drum mx, g (Alexander PA 7/4)

62802 CLANDESTINE? V of Hope(t) in lang 1625, flute mx bridge, tlks, violin mx, two clear mentions of Box 2575 address (Hardester OKINAWA 7/4)

75375 CLANDESTINE? V of Europe in EG 0222, Euro pop mx, ID, f (Karcheski MA 7/5)

15685 CLANDESTINE V of Unity (Egypt) in Pashto/Dari 1202-1258*, prayers, tlk, mx, discussion re Palestine, g (Hardester OKINAWA 7/21)

17540 CLANDESTINE V of Unity (Egypt) in Farsi 0138, tlk mentioning Mujaheddin, tlk re Tajikistan at 0143, Tajik instrum folk mx, f (Peck NY 7/26)

Welcome to first-time contributors Bill Kurrasch (NY) and Richard Cuff (PA). Also, I still receive some loggings not cut into individual slips. With the volume I receive each month, you can imagine how much a time-saver it is to avoid cutting these apart myself.

English Schedules

Tom Sundstrom

P.O. Box 2275
Vincentown, NJ 08088-2275
MCI Mail 244-6376
Fax 609-859-3226
Pinelands RBBS 609-859-1910



Prepared 08/24/90 at 6:57 PM.

Thanks to **John Carson (OK)**, **Kris Field (PA)**, **Gordon Darling (Papua New Guinea)**, **David Alpert (NY)** and **Joe Hanlon (NJ)** for their contributions this month.

Iraq & Kuwait

The August 2nd invasion of Kuwait by Iraq resulted in a lot of radio-related activity. Thanks to **Andy Sennitt**, **Lou Josephs**, **David Alpert** and others who continuously posted information on the Pinelands SWL conference.

Aside from some English-language programming during the initial fighting -- calling for assistance from other countries -- **Radio Kuwait** was apparently only broadcasting in Arabic and adhering to most of its Arabic schedule. On the 2nd and 3rd, all I heard on 13610 circa 20 UT was **Radio Berlin International**. **Josephs** first reported hearing Arabic and the Iraqi bubble jammer on 15505 around 1130-1230 on the 2nd. According to subsequent reports the Kuwait transmitters only stayed on the air for a short time, using a makeshift studio at the transmitter, after the main studios were taken. The Kuwait transmitters were silenced on the 3rd.

The **Kuwait News Agency** press radio teletype service appear to be silent. On the 4th (the first day I could check) I heard nothing on any of the two dozen or so **KUNA** frequencies that should propagate to here around 11 and 12 UT. Normally 14831 is an active frequency carrying English news. The Iraqi- and Cairo-based press teletype continued as usual and offered an interesting alternative to the international

broadcasting. Probably the easiest RTTY press service to view from the Middle East is **Maghreb Arab Press (MAP)**, Rabat, Morocco, from 12 to 14 UT at 50 baud, 425 Hz shift. This English language broadcast is beamed to NA on 15752.7 kHz. The **Iraqi News Agency (INA)** may be found on 13524, 14699, and 14373, all at 50 baud, 425 Hz shift, at various times between 12 and 15 UT in French and English. Unlike **MAP**, **INA** does not transmit continuously during its scheduled times.

Interestingly, **Radio Baghdad** had very little to say on the 2nd and the days immediately following. Aside from a three or four minute newscast at the opening and closing of the 20-22 UT release on 13660 kHz you would hardly know a war had begun. During the week following the invasion, **Radio Baghdad** expanded its news broadcasts to as long as 15 or 20 minutes both opening at 20 and prior to its usual close at 2158 or so. Additional news and comments, defensive in nature, are now interspersed throughout the two-hour transmission. And on a Friday (August 10) I heard a mailbag show ending at 2130 UT. I don't know its start time or periodicity.

As one would expect, the **BBC** news coverage was excellent. The **Swiss Broadcasting Corporation**, **Radio Moscow** and **Radio Havana Cuba** also had extensive coverage on the activity. While **Radio Cairo's** NA release on 9475 has picked up in signal strength recently, the audio quality is still quite poor and the news reports are difficult to understand. If you want Egypt's perspective on the Arab news, tune into **MENA (Middle East News Agency)** press teletype on 15935 (50 baud/300

Hz shift) from 12 to 15 UT. News items in French and English are interspersed.

If you don't listen to **Radio Nederland's Media Network**, you are missing an excellent electronic media show. The August 9th show contained a complete review of the Middle East broadcasting scene and aired some very interesting tapes made during the takeover. And **BRT Belgium's Radio World** has been giving detailed schedule coverage of the Middle East broadcast stations.

Within three weeks of the invasion many broadcasters added frequencies and hours in Arabic and their native languages targeted to their nationals in the Middle East. **Australia, Canada, Denmark, Holland, Japan, Sweden and Thailand** were among those doing so.

On the 16th the **VOA** broadcast the first of its daily *Department of State* advisories to citizens in Kuwait, warning those persons to stay put in their homes and not to try unauthorized border crossings. **Dave Alpert** of *ABC News* called me to listen to the live announcement via my receivers and telephone, and subsequently sent me a number of faxes of material that moved over the radio press wire services.

An August 16th a **UPI** news story reported an estimated 4,700 Britons and 2,500 Americans were stuck in Iraq and Kuwait. The **BBC** and **VOA** are the prime sources of news to those held captive, according to those persons who managed to escape to freedom. The **VOA** expanded its Arabic broadcasts from 7.5 to 9.75 hours per day, English to 22 hours a day. The **BBC** expanded its *World Service* to 24 hours and increased the Arabic service from 9 to 10.5 hours per day. **Hanlon** says the English frequencies are 9410, 12095 and 15070 kHz. Another **UPI** story, dated the 19th, alludes to a *Armed Services Network* transmitter, now under construction, to be set up in Saudi

Arabia. On the 22nd, another **UPI** story gave more details. Two mobile radio/TV stations are being overhauled and flown to Saudi Arabia as soon as permission is received from the Saudi government. The work is being performed at the **Sacramento (CA) Army Depot**, a storage and repair facility for high-tech electronics.

Media Network on August 16 and the August 21st *Sweden Calling DXers #2108* reported the start-up of the **British Forces Broadcasting Service**. **BFBS** is on the air three times a day at 02, 0930 and 1330 UT broadcasting programs for the British military and citizens in the Middle East. The signal at 1330 is easy to hear. The station was last active during the 1983 Falklands war.

Sweden Calling DXers #2108 August 21 and *Media Network* August 23 both reported that **Radio Baghdad** was broadcasting 20-22 UT on 11860 an English-language program to the troops in the Middle East. (In a August 17th newspaper clipping faxed by **Alpert**, it implies that the start date was August 15 or 16.) It is different programming than on 13660 at the same time to Europe. On the 23rd **Bob Brown** and I listened to the last 45 minutes or so. (A **Radio Moscow WS** program in an unknown language dominates 11860 at 20 UT.) Additional times are 10-12 and 16-18 UT, according to the sign-off announcement, on 11860 kHz.

The August 21st *Sweden Calling DXers #2108* contained additional information not seen elsewhere. "Radio Baghdad has reintroduced its *Voice of Egypt of Arabism*, which is critical of Egypt, at around 1830-2000 on 12025, 15150, 15170 and 17720 kHz. And a new station calling itself **Holy Mecca Radio** has appeared in Arabic on 9730. Heard at various times between 0400 and 2200, the station supports Iraq and appeals to Arabs to rescue Mecca from foreign occupation. **Egypt** has answered the Iraqis by allocating a

shortwave frequency in the name of **Radio Kuwait**, scheduled to broadcast two hours a day. Iraqi Armed Forces have banned amateur radio activities in Kuwait..." but I see excerpts from ham radio communications via **Pete Kemp**, KZ1Z, who posts same on the BBS and in the FidoNet SW echo.

Schedules Recap

Egypt:	0200-0330	9675	9475	NA
	2115-2245	9900		Eu
Iran:	1930-2030	9022	6035	ME/Eu/NA
	0130-0330	11830		NA
Iraq:	1000-1200	11860		ME
	1600-1800	11860		ME
	2000-2200	13660		Eu
	2000-2200	11860		ME
	0000-0030	12077	11605	NA
Israel:	0100-0130	12077	11605	NA
	0200-0230	12077	11605	NA
Jordan:	1100-1315	13655		Eu/NA
	1320-1630	9560		Eu/NA
Syria:	2005-2105	15095	12085	Eu/NA
	2105-2205	15095	12085	NA/Aus
Turkey:	0300-0350	9445		NA
	2000-2050	9795		Eu
	2200-2250	9445		NA
UAE/Dubai:	0330-0400	15435	15400	NA
	1330-1400	21605	17865	Eu/AF
	1600-1640	21605	15435	Eu/AF
/V of:	2200-2400	11985	9600	WNA

This is a partial listing of Middle East broadcast schedules. For additional details see the full schedule listing in the *May Journal* and the subsequent monthly updates. The BFBS and Israel schedules are in this month's update.

Notes

According to **Lou Josephs**, **Radio Nederland** will have a satellite digital audio feed to Bonaire in place by January. Look for significant improvements in the audio quality. The **Sri Lanka Broadcasting Service** was heard regularly through the month with surprisingly good signals on 15120 kHz until its 20 UT sign-off. **Israel** returned to winter time on August 25. A *SCDX* item put **The Voice of Greece** on 9695 (ex-9395) at 1920 UT, but on the 24th I still hear English news on 11645 and 9395 kHz. **Radio Tirana's** official schedule shows English at 0430 and 15 to Africa; 08, 1030 and 14 to South Asia and Australia. *Media Network* on the 23rd said **Radio Baghdad** changed

to 11755 (ex-11830) to NA at 0130, but neither **Brown** or I could hear anything on either frequency. 11830 continues to be announced for NA. Additionally, on the 24th, **Radio Baghdad** cut short its European release, ending at 21 UT without explanation. We also note that the **Voice of UAE** is missing at 22, but we don't know why.

Radio Norway International, after 40 years, will commence Saturday broadcasts effective September 6. Those who send a reception report for the first-ever Saturday transmission in English may have a chance at one of the 100 special diplomas being offered.

In August **WRNO**, according to **Dan Ferguson**, was operating at 1 kw while waiting for a new transmitter tube. **Glenn Hauser's World of Radio** broadcasts were very difficult to understand due to the weak signal and co-channel interference. Unfortunately the lengthy taped-off-the-air excerpts from Iraq and elsewhere were virtually useless due to poor audio quality from both the originating station and **WRNO**. The signal was back to normal on the 23rd, but an **AMTOR** signal made a mess of 7355 at 0030 UT August 24.

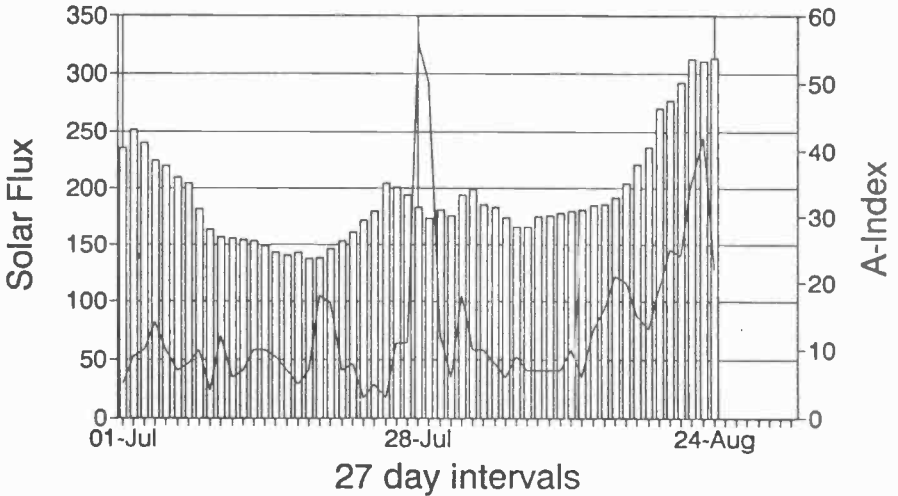
Per **Marks** and **Hauser**, **Radio New York International**, formally of the *M.V. Sara*, will return to the air September 16 at 01-05 UT via **WWCR** on 7520 kHz.

Anna Case of **George Jacobs & Associates** sent *W-90* schedules for their nine clients. As these schedules don't take effect until September 30, we'll hold them until next month.

A upgrade to the spreadsheet package arrived on the 24th, just in time to prepare the graph. There is a significant improvement compared to last month's graph as the software now directly supports the printer. We're experimenting with the graph format and design, so if you haven't seen something you like, wait a month.

Solar Flux & A-Index: Jul-Aug 1990

Recorded from WWV

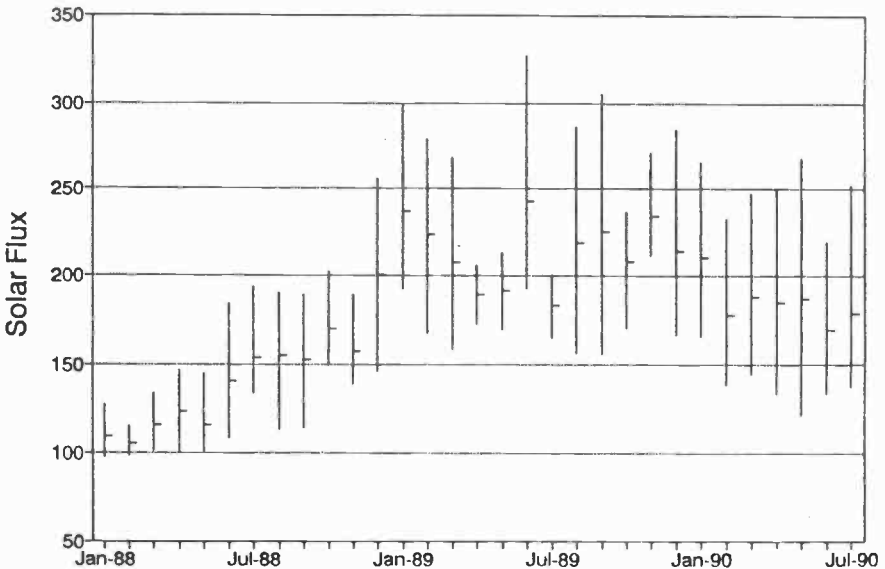


by Sundstrom



Solar Flux: 1988-1990

Monthly High-Low-Average



Changes entered between 07/28/90 and 08/24/90.

ENGLISH LANGUAGE SW BROADCAST SCHEDULES: By Start Time

Compiled by Thomas R. Sundstrom, W2XQ

Start End Time Time (UTC) (UTC)	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Freq #8	Target Area	Notes	Record Last Updated
0000 0030	Israel	Kol Israel	12077	11605	9435						HA		08/23/90
0100 0130	Israel	Kol Israel	12077	11605	9435						HA		08/23/90
0100 0130	Norway	R Norway Int'l	11925	9615							MA/CA	Su & Mo only	08/23/90
0200 0230	England	British Forces BC Serv	13745	9640	7125						ME		08/16/90
0200 0230	Israel	Kol Israel	12077	11606	9435						HA		08/23/90
0200 0230	Norway	R Norway Int'l	11735	9615							MA/CA	Su & Mo only	08/23/90
0300 0505	South Africa	Radio Orange	3215										08/23/90
0430 0500	Albania	R Tirana	11835	9480							AF		08/16/90
0500 0515	Israel	Kol Israel	17575	15640	11655	11605	9435				Aus/As/NA/E Eu/W Eu		08/23/90
0500 0800	Kuwait	R Kuwait	15345								Far E/SSE As/Aus/NZ	not hrd since 8/1/90	08/03/90
0510 1640	South Africa	Radio Orange	7285										08/23/90
0530 0600	Italy	AUR Europe	7230								Eu		08/16/90
0530 0600	United Arab Emirates	R Dubai	21700	17865	17830	15435					SE As/Aus		08/11/90
0630 0700	Belgium	BRT	13675	11695	6035						Eu/Aus		08/16/90
0730 0825	Netherlands	R Nederland	15560	9630							NZ/Aus	#2 v Bonaire	08/02/90
0800 0830	Albania	R Tirana	11835	9500							S As/Aus		08/16/90
0800 0850	North Korea	R Pyongyang	15230	15180							SE As		07/28/90
0828 0855	Netherlands	R Nederland	15190								Aus	M-Sa	08/02/90
0930 1000	England	British Forces BC Serv	21735	17695	15205						ME		08/16/90
1000 1200	Iraq	R Baghdad	11860								ME	targeted at troops	08/23/90
1030 1100	Albania	R Tirana	11855	9480							S As/Aus		08/16/90
1030 1055	United Arab Emirates	R Dubai	21605	17865	15435	15320					Eu/W Af		08/11/90
1100 1130	Israel	Kol Israel	21790	17575	15650	11585					U Eu/E Eu/Aus/As		08/23/90
1100 1200	South Africa	Radio RSA	17835	11900	11805	9555					Afr		08/23/90
1200 1230	Norway	R Norway Int'l	25730	21735							S As/Far East/Aus	Sa & Su only	08/23/90
1200 1225	USSR	R Tashkent	17740	15460	11785	9715	7325				As		08/26/90
1215 1330	Egypt	R Cairo	17595								S As		08/16/90
1300 1330	Norway	R Norway Int'l	9585	9590							Eu	Sa & Su only	08/23/90
1330 1400	England	British Forces BC Serv	21735	17695	15195						ME		08/16/90
1330 1355	USSR	R Tashkent	17740	15460	11785	9715	7325				As		08/26/90
1400 1430	Albania	R Tirana	11855	9500							S As/Aus		08/16/90

Shortwave DX Program	Show Name	Start Time	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Target Area	Notes re DX Show	Record Last Updated
1500 South Africa	Radio RSA	15270	7230									ECCAS Afr		08/23/90
1530 Albania	R Tirana	11835	9480									Af		08/16/90
1600 Iraq	R Baghdad	11860										ME	targeted at troops	08/23/90
1600 Norway	R Norway Int'l	25750	15220									ME/Af	Sa & Su only	08/23/90
1630 Egypt	R Cairo	15255										CAS Afr		08/16/90
1645 South Africa	Radio Orange	3215												06/23/90
1700 Norway	R Norway Int'l	9655										EU	Sa & Su only	06/23/90
1700 South Africa	Radio RSA	17790										W Afr		06/23/90
1800 Israel	Kol Israel	11655	11585									E EU/W EU		06/23/90
1800 Kuwait	R Kuwait	13610										EU/Af/NA/Am/NZ	not hrd since 8/1/90	08/03/90
1800 Norway	R Norway Int'l	17755										NA	Sa & Su only	06/23/90
1900 Ecuador	HCJB	21480	17790	15270								EU		07/28/90
1900 Norway	R Norway Int'l	25720	21705	15235	15220							W Af/SA/EU/Am/NZ	Sa & Su only	06/23/90
1900 Spain	Spanish Foreign Radio	15395	15280	11790								ME/EU		08/05/90
2000 Israel	Kol Israel	17630	15640	12077	11605							Af/W EU/NA		08/23/90
2001 Iraq	R Baghdad	11860										ME	targeted at troops	08/23/90
2030 Egypt	R Cairo	15375										W Afr		08/16/90
2100 Norway	R Norway Int'l	15165										Far East/Am	Sa & Su only	06/23/90
2100 Spain	Spanish Foreign Radio	15375	15280									Af/EU		08/05/90
2115 Egypt	R Cairo	9900										EU		08/16/90
2130 Ecuador	HCJB	21480	17790									EU		07/28/90
2200 Norway	R Norway Int'l	17730	15195									W Af/SA	Sa & Su only	08/23/90
2230 Israel	Kol Israel	17575	12077	11655	11605	9435						Af/LA/NA/W EU		08/23/90

Changes entered between 07/28/90 and 08/24/90.

ENGLISH LANGUAGE DX SHOWS: By Day of Week
Compiled by Thomas R. Sandstrom, W2XG

Shortwave DX Program	Show Name	Start Time	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Target Area	Notes re DX Show	Record Last Updated
** DAY OF THE WEEK: Sunday		2020	2000	Israel	Kol Israel	17630	15640	12077	11605			Af/W EU/NA		08/23/90
DX Corner		2250	2230	Israel	Kol Israel	17575	12077	11655	11605	9435		Af/LA/NA/W EU		08/23/90

** DAY OF THE WEEK: Monday

DX Corner		0020	0000	Israel	Kol Israel	12077	11605	9435				NA		08/23/90
DX Corner		0120	0100	Israel	Kol Israel	12077	11605	9435				NA		08/23/90
DX Corner		0220	0200	Israel	Kol Israel	12077	11606	9435				NA		08/23/90

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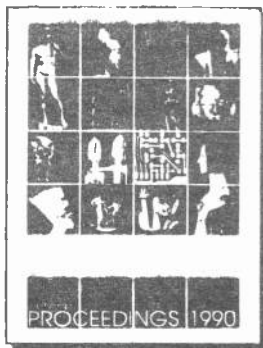
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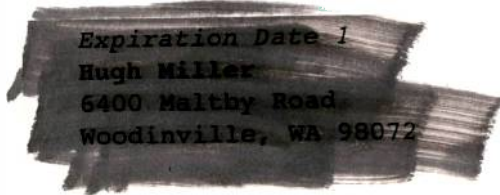
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The Journal of the
North American Shortwave Association

ISSN 0160-1989

Executive Director: Bob Brown, 238 Cricklewood Circle, Lansdale, PA 19446
Assistant Director: Kris Field, 431 Babylon Rd., Ambler, PA 19002-2302
Publisher: Bill Oliver, 45 Wildflower Road, Levittown, PA 19057
Executive Council: Jerry Berg, Bob Brown, Dr. Harold Cones, Gerry Dexter, Kris Field, Glenn Hauser, Don Jensen, Bill Oliver

EDITORIAL STAFF

Editor-in-Chief: Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606
DXer's Forum: Rowland Archer, 5524 Hawthorne Park, Raleigh, NC 27613
Easy Listening: Alex Batman, Route 1, Box 367, Blowing Rock, NC 28605
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Distributing Editor: Kris Field, 431 Babylon Rd., Ambler, PA 19002-2302
Tropical Band Loggings: Sheryl Paszkiewicz, 1015 Green Street, Manitowoc, WI 54220
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