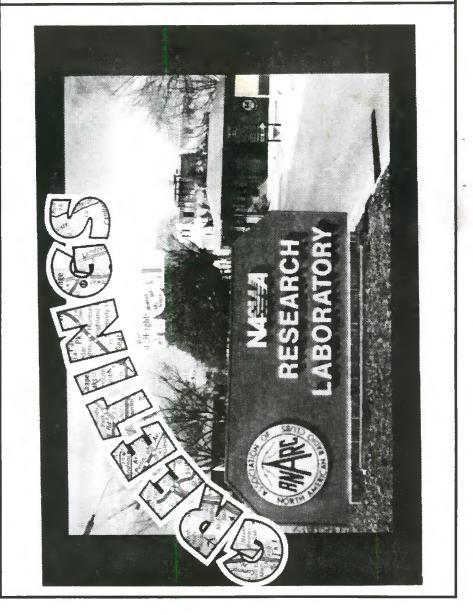
NAME IN THE JOURNAL NORTH AMERICAN SHORTWAVE ASSOCIATION

VOLUME XXXVII NUMBER 4

APRIL 1997



Monitor MORE with advanced equipment from Universal Radio!





Dollar for dollar, the new Drake SW-2 has to be the best value in shortwave radio today. Here is a table top receiver, with a truly impressive array of features and capabilities, at a price that everyone can afford Never before have you been able to get so much radio for so little money. Of course the SW-2 covers all longwave, medium wave (AM) and shortwave frequencies. Single sideband is easily tuned with separate LSB and USB positions. Amplitude modulated signals sound great through the front firing speaker. When a shortwave signal does start to fade you can engage sideband selectable synchronous tuning to stabilize and improve the signal. The capable memory system is nonvolatile and stores 100 channels (storing frequency, mode and detection). Memory recall may be accomplished by either keypad entry or by rotating the main tuning knob while in memory mode. Other refinements include: RF Gain, Tuning Bar Graphs, 100 Hz readout and Dimmer. Dual antenna inputs accept either a PL-259 coaxial or wire feedline A mini earphone and 14" external speaker jack are provided. The optional remote lets you operate this radio from across the room. The oversized digital display is large enough that you can actually see the frequency from across the room. Universal is excited to offer this exceptional radio value. The reliable, American-made Drake SW-2 carries a limited one year warranty. Order #2222 \$489.95 (+57



SPECIFICATIONS

Frequency Range	100 - 30000 kHz
Power	. 12 VDC 1.5A
	120VAC P.S included
Antenna Impedance .	50 ohm
Selectivity (-6dB)	AM 6.0 kHz
	SSB/CW 2.3 kHz
Sensitivity	<.5 µV SSB
	(10 dB S+N/N)
Intermediate Freqs	1st IF = 55.845 MHz
	2nd IF = 455 kHz
Audio Output	. 1 Watts at 8 Ohms
Standard Steps	. 50Hz via Tuning Knob
	5kHz Up/Down Buttons
Circuit Type	Dual Conv. Superhet.
Dimensions	10.875" x 4 4" x 7 62"
	276x111x194 mm
Weight	. 5.8 Lbs. net (2.6 kg)

OPTIONS

+ Drake MS-8 This external speaker includes a 6 foot cord with plug	#2846	548.95 (+54)
Drake Carry-Tilt Handle This plastic handle snaps on in a jiffy.	#1317	4.95 (+53)
Drake MMK-1 Mobile Mounting Bracket Inverted or upright.	#3032	14.95 (+ ⁵ 3)
Drake Infrared Remote Keypad	#1589	48.95 (+*3)
Operate your SW-2 from across the room! This stylish remote does i		
 down, control the volume, enter frequencies, change modes, mute; 	and even dim	the display!

Restoration, Allied, Ameco.

AOR, Bearcat, Bharat

Collins, ComFocus, CPC,

Cubic, Dansk Radio, Davco.

Debeg, Drake, Eddystone,

Hallicrafters Hammarlund

Knight Kit, Lafayette, Lowe, LTV Temco, Mackay.

Harvey-Wells, Heathkit. Icom, J.R.C., Kenwood-Trio,

Marconi, McKay Dymek

Multi-Elmac, National.

Norlin, Panasonic

Midland, Morrow, Mosley,

PhaseTrack, Pierson-Holt.

Racal, R.C.A. Raytheon.

Realistic, Redifon, RF

Communications. RFT

Rosetta Labs Sears

BME. Bohde&Schwarz.

Siemens, Skanti, Sony Squires-Sanders, Standard.

Sunair, Swan, Taivo, Tech

nical Material. Telefunken.

TEN-TEC Thomson-CSE

Plessey, Quality U.S. Tech.

Elta, Eska, Galaxy, General

Electronics, Cardwell

Dynamics Gonset

Chapter Titles Shortwave Receivers Introduction, Buying A Used Past & Present Receiver, Using This Book. More Information, Repair &

Communications Receivers 1945-1996



New 2nd Ed. 80 Chapters 350 Pages 600 Photos Printed Jan.97 · Covers 1945 to 1996. 500 Receivers

• 400 Variants includes 70 U.S. and Intl. manufacturers 19.95 (+*2 ship)

This huge 350 page Second Edition includes over 500 shortwave and amateur communications receivers made from 1945 to 1996. Here is everything you need to know as a radio collector or informed receiver buyer. Entry information includes: receiver type, date sold, photograph, size & weight, features, reviews, specifications, new & used values, variants, value rating and availability. Seventy American and worldwide manufacturers are represented. Become an instant receiver expert!

Transworld, Videoton-Mechlabor, Vigilant. Watkins-Johnson, Yaesu, Briefly Mentioned and \$19.95 (+52 bookrate or +53 UPS) Receivers That Never Were



Quality Equipment Since 1942

Universal Radio, Inc. 6830 Americana Pkwy. Reynoldsburg, Ohio 43068-4113 U.S.A. 800 431-3939 Orders & Prices 614 866-4267 Information 614 866-2339 FAX dx@universal-radio.com www.universal-radio.com Visa, Mastercard or Discover card nces & specifications subject to cl

JRC Japan Radio Co., Ltd. NRD-345



Famous for its top-gun receivers, Japan Radio Company once again pioneers with a brand new model at a surprisingly affordable price. incredibly attractive and compact radio delivers hour-after-hour of listening pleasure with high dynamic range and synchronous AM detection to help tame fading. Dual IF filters (6/2 kHz) are supplied, with a third optional position available. Tuning the radio is smooth as silk via the large indented main tuning knob. The easy-to-read LCD type display shows you the precise frequency to 10 Hz! The variable Noise Blanker is effective against pulse and ignition interference. The sophisticated memory system stores 100 channels with frequency, mode, AGC, attenuator, VFO, bandwidth and NB status parameters all stored. Both memory and frequency scanning are supported. The Clock-Timer function enables the radio to turn on and off at a specific time and the clock can be set for UTC or local time. The Tone Control, AGC and 20 dB Attenuator let you refine the signal to your personal taste. Other refinements include an analog S-Meter. Tilt-Bar. Up/Down Tuning buttons, Dual VEOs and Dial Lock. Rear panel jacks include External Speaker, Record Jack, FAX/RTTY Line Out and DB-25 RS-232C port. Switch selectable dual antenna inputs are featured to support both wire-type or coaxial-type lead ins. A built-in RS-232 post facilitates connecting a personal computer (4800 baud, 1 start bit, 8 data bits, no parity, 1 stop bit). Exact price is unknown at press time, but is expected to be under \$1000





Universal's free 1997 100 page catalog covers everything for the shortwave, amateur and scanner enthusiasts. With informative photos and full descriptions. To request your copy please call toll-free

1 800 431-3939



Richard A. D'Angelo

2216 Burkey Drive Wyomissing, PA 19610 Wione: P.DANGELO3 Internet: Indende/3@genie.com

Another Winter SWL Festival is in the history books. About 185 enthusiastic hobbyists traveled to Kulpsville for this 10th annual event. The "gang of three" did another excellent job! My retirement as ANARC's Chairman on December 31st enabled me to visit with many more members than I usually get a chance to meet. It's not too early to begin planning your trip to Kulpsville next March. Check out the Calendar of Events for the early line.

At the Winter SWL Festival, our own Marie Lamb announced the recipients of this year's ANARC Awards. Mark Connelly was selected as the DX'er of the Year for his outstanding contributions to the field of international medium wave DX'ing. Kirk Baxter of the Association of Clandestine Enthusiasts was given a special Certificate of Recognition in honor of his outstanding work as system operator of the now closed ANARC BBS and for his 11 years of service to the hobby as president of the ACE, Well done gentlemen!

Special thanks to long time member John Sgrulletta for sending us a copy of the April 1966 edition of Frendx. It was John's sample copy. Unfortunately, he didn't keep any copies starting with his membership in May of that year. Remember, we are looking for back issues prior to the switch to all shortwave broadcast in August 1966. Any help from long time members/collectors is appreciated. Thanks John!

Via PLAYDX we learn that Grigory Grigoriev of Slantzy, Russia with 896 points won the 1996 Memorial Bernhard Gruendl contest. Congratulations!!! He was followed by Vladimir Rozhkov of Kansk, Russia with 755 points and Mauno Ritola of Lappeentanta, Finland with 751 points. Eleven DX'ers participated in the event. ANARC SWL Ham Net

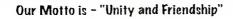
Tune in Sunday mornings at 10 A. M. Eastern Time on 7240 LSB for the latest in shortwave, medium wave and longwave listening, DX tips, and up to the minute hobby news. Contributors share their DX tips via their own amateur radio stations or by telephoning a "gateway" station who then broadcasts the relayed tips. Contributions are also accepted via the Internet Relay Chat (IRC) channel #swl while the net is in progress. Net Controls Dave Kirby N1DK, ex-N8JOX, Hausie WB4JSP, and Bob Curtis WIEXZ host an always lively gang of DX monitors. (Best heard in the eastern half of NAm) Net info is also available at <http://www.trsc.com/ swl_net.htm>.

The Longwave Club of America announced the winner of the 1996 H. John Clements Memorial Award in February's Lowdown. The recipient is long time member and frequent contributor Max Carter.

Fred Vobbe and the DX Audio Service celebrated the 144th edition of their audio magazine in March. It all began in April 1985 with C-60 tapes issued from Westland, MI. In the last 12 years, the operations were moved to Lima, the tapes were standardized to C-90's, and the editing is now done in an all digital mode. Congratulations to Fred and his staff for providing this important service.

Finally, a bunch of new items have been added to the Calendar of Events. I even managed to get some of them on the calendar correctly.

That's it for this month. Enjoy this month's edition of the JOURNAL; it's another good one.



Calendar Of Events

- Apr 18 Meeting. Philadelphia Area NASWA Chapter. Kulpsville Holiday Inn, Kulpsville, PA at 7:30 PM. For more information contact Dan Cashin at 215-446-7831.
- Apr 18 Meeting. The Miani Valley DX Club (all band orientation) meets at 1:00 PM. For more information plus this months meeting location contact Dave Hammer at 614-471-9973 or write to MVDXC, Box 292132, Columbus, OH 43229-8132.
- Apr 19 Meeting. Boston Area NASWA Chapter. The Lexington Club, Rts. 4 & 225, Lexington, MA at 7:30 PM. The location is 1/4 mile west of Rt. 128, Exit 31. For more information contact Paul Graveline at 508-470-1971 or Internet: 74007.3434@compuserve.com. Check the BADX Web Page: http://www.grove.net/~badx/.
- May'97 Convention. ODXA Convention'97 will be held at the CBC Broadcasting Centre in Downtown Toronto on Friday May 2 (Wine and Cheese reception) and Saturday May 3. Advance registration is \$15.00 Cdn. Mail to: Ontario DX Association, P. O. Box 161, Station A, Willowdale, Ontario, M2N 558, Canada.
- May 10 Meeting. The Tidewater SWL's meet at 6:30 PM. For more information plus meeting location contact Joe Buch at 804-721-2782 or Internet: joseph.buch@dol.net
- Jun'97 Convention. The 31st Annual European DX Council ("EDXC") Conference will be held on 6–9 June 1997 at the Hotel Lazne in the eastern part of the Czech Republic. It will be organized by the Czechoslovakian DX Club. Information can be obtained from Jaroslav Bohac, Jizerska 2900/11, 400 11 Usti n. L., Czech Republic; FAX +42 47 5211819, e-mail: khonzik@bbs.infima.cz.
- Jul'97 Convention. IRCA Convention will be held in Costa Mesa, CA on July 25–27 at the Holiday Inn Bristol Plaza. Registration is \$35.00 which includes the banquet. Contact Mike Sanburn, P. O. Box 1256, Bellflower, CA 90707.
- Aug'97 Convention. WTFDA Convention has been tentatively set for August 1-3. Convention host John Broomhall is exploring two sites: North Georgia mountains (about 75 miles from Atlanta) and in or near Metropolitan Atlanta. Activities include station tours, amateur TV demonstration, FCC Regional Field Office visit, guest speaker(s) and informal Q&A panel discussion. Further details when received.
- Aug'97 Convention. NRC Convention will be held Labor Day Weekend (Aug. 29–Sep. 1) in Delaware. Further details and information will appear when received.
- Oct'97 Contest. 1997 Adventist World Radio Contest. Further information will be published in the Journal or you can send a self-addressed stamped envelope to 1997 AWR Contest, c/o Dr. Adrian Peterson, Box 29235, Indianapolis, IN 46229.
- Feb'98 Convention. New Zealand Radio DX League will hold its 50th anniversary convention sometime in February 1998. Exact dates and venue have not been established. Information from NRZDXL, P.O. Box 2956, Wellington, New Zealand. Further details and information will appear when received.
- Mar'98 Contest. 1998 North American DX Championships. Further information will be published in the Journal or you can send a self-addressed stamped envelope to 1998 NADXC, c/o Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606.
- Mar'98 Convention. The 11th Annual Winter SWL Festival will be held at the Kulpsville Holiday Inn (Exit 31 on the Northeast Extension of the Pennsylvania Turnpike) on 13–15 March 1997. Organized by the infamous "gang of three" (Messrs. Brown, Cones, and Field) this all wave gathering attracts over 200 hobbyists each year. See January's Journal for the registration form.

Members are invited to submit items to be included in this calendar to Rich D'Angelo (Internet: r.dangelo3@genie.com) or Ralph Brandi (Internet: ralph@mcs.com).

Contribute!

Send your loggings and QSL information off to our Distributing Editor, Fred Kohlbrenner (2641 South Shields Street, Philadelphia, PA 19142). He will forward them to the appropriate editor. Remember, Fred has now expanded his business to include QSL report information and totals for the Scoreboard column. He can also be reached through the Internet at: fkohl@ix.netcom.com.

Musings

This column provides a forum wheras members can express comments, ideas, and thoughts about NASWA or the SW radio hobby. Please feel free to comment on anything presented this month (or previous months). Opinions expressed here are are soley those of the submitters. Please submit all Musings to Richard A. D'Angelo, 2216 Burkey Dr., Wyomissing, PA 19610 or via email - r.dangelo3@genie.com

John Sgrulletta, New York

In response to your request, I just came across my sample copy of Frendx which is the April 1966 issue. I joined in May of 66 but did not keep any early issues of the monthly bulletin.

1 just got a QSL from Radio Integracao in Acre (State #15 QSL'd) and they sent a pix of the station, 3 postcards, a 3 color pennant with 1997 on it, a 3 page typewritten letter and self-prepared QSL card! This was in 11 months and no follow up was sent!

Keep up the great work at the Journal

73's, John

Francis George (WPE2NOD), 7101 Shore Road, Apt 5D, Brooklyn, NY 11209

I am a new member of NASWA having joined in March. I would very much enjoy hearing from a "pen friend" in England. Could you please mention this in your NASWA Notes column? (No, but this Musing should cover it, hi!-RAD) Also, do you know what happened to Bill Eddings? I was a member of NASWA in the 1970's.

Sincerely and 73's

(Bill Eddings past away in the early 1970's -RAD)

FRENDX: Twenty Five Years Ago....

Bill Eddings remained ill so the HQ section was under the direction of Dan Ferguson. The Board of Directors announced a change in the dues structure with first class delivery at \$10.00 a year possible thanks to the new offset printing process. Renewing for a fifth year were Alan Roth and F. Earle Hall. In the Shortwave Center, Ralph Perry writes about "The Sad Saga of Radio Telefis Eireann's Short-Lived Shortwave" while Al Sizer takes "An Honest Look at QSLs" and Ed Shaw explains the "Phenomenon of the Darkness Pattern." Gregg Calkin's QSL Report reflected returns from Burma, and the German Hydrographic Institute Time Signal Station. Jerry Berg submitted his last Log Report column in April. Larry Magne takes over the column in May.

Jim Renfrew <jimrenfrew@delphi.com>, 61 Wilcox Street, Rochester, NY 14607-3832

When I saw in the WRTH that it has an e-mail address, I took a chance and sent a QSL request via e-mail to Radio Christian Voice, Zambia. I have not had much luck getting any response to previous e-mail messages (usually a "bounce" message), and an e-mail QSL just doesn't look as nice as one received through the conventional mail. But the result was interesting enough to share with NASWA Journal readers! Hope you enjoy it too.

"Good day Jim,

"This is Phil Haggar, Station Manager for Christian Voice in Lusaka."

"Well, I can certainly confirm it was us you heard last weekend. And in a strange way, you have helped me!"

"We operate from a computer produced playlist, but, the presenters do like to put in their own music sometimes. According to the playlist, at 22 minutes past the hour, we had a Zambian gospel song playing, but here is your report:

>0422 UTC: Program of music. Although yours is a Christian station I could not readily identify any traditional Christian music. This program seemed to offer a more popular or "contemporary" variety of songs. The first song that I heard, at 0422, seemed to be a song in the Eric Clapton "white blues" style. There were few announcements."

"So I checked with the presenter, and guess what? He does like Eric Clapton style songs, and although our music library only has music by Christian artists, what you heard was a presenter bending the rules and so I have been able to have a brief chat with him about this!"

"But it was us and I will pass the email along to our Technical Department for you to receive a formal QSL."

"Thanks and regards."

"In Christ—Philip Haggar, Radio Christian Voice"

Nick Terrence <nterrenc@suffolk.lib.ny.us>

As we witness changes in the world of communication, I had a very basic thought. Even though there are budget constraints taking place with many major shortwave stations, a continent like Africa still heavily depends on this medium. In some situations, Africans need shortwave for survival. I have one analog am/fm/sw portable that I would be willing to donate to someone in Africa. Do you have any suggestions as to how I can do this? In fact, there are probably other NASWA members that may want to do the same. We could call it Radios for Africa. Perhaps they can be sent to a missionary for distribution. I would appreciate any help the membership can offer.

73, Nick

N4:446b

Visit our club home page on the World Wide Web at http://www.anarc.org/naswa/

Richard A. D'Angelo, 2216 Burkey Drive, Wyomissing, PA 19610 <r.dangelo3@genie.geis.com>

The 10th annual Winter SWL Festival was a big success. About 185 hobbyists ventured to this DX heaven for the 9th time. Messrs. Brown (and Mrs. Brown and family), Cones, and Field, the "gang of three," staged another incredible event that even had Gerry Dexter yelling, "Amazing!"

The program commenced early Friday morning with a long wave forum lead by our own Bob Montgomery. Scanners, pirates, utilities and easy listening were just some of the topics covered this year. The silent auction raised \$400.00 for Father John Eckert's African relief charity. The FEST concluded with the banquet on Saturday evening. A three piece jazz group kept the natives happy during the cocktail hour.

Of course, the real highlight was the annual midnight ride of Pancho Villa. During this year's record long broadcast, this wildly pirate recounted many of the highlights of the last 10 years as only Pancho could. It was a spectacular event which will go down in the annals of pirate broadcasting as "something special" (or something close to that...).

It's time to make plans to attend next year's Winter SWL Festival in Kulpsville. Watch the Calendar of Events.

73 – RAD

Welcome to the following new NASWA members

Setsuro Asai, Nagoya, JAPAN Charles Furlong, Philadelphia, PA Francis P. George, Brooklyn, NY Milt Harker, La Crescenta, CA Mr. Leonard Jasinski, Depew, NY Terry Kelly, Santa Rosa, CA David J. Kusneske, East Amherst, NY Kenneth M. Levesque, Danvers, MA Sam Maslaney Sr., Pittsburgh, PA Jose Moura, Washington, DC Andrew Ooms, Pine, AZ

WANTED: (1) 1989 Fine Tuning's "Proceedings" <u>or</u> copies of antenna, receiver, and accessories sections from that edition. (2) September 1971 Ham Radio Magazine <u>or</u> copy of the article "Multimode IF Systems". (3) 6E5/6G5/6U5 Magic Eye tubes. Write or call to state price. Ed Kowalski, 10430 Collingham Drive, Fairfax, VA 22032-2608. E-mail edrk@ix.netcom.com. Phone (703) 435-6602.

WANTED: I'm looking for a "Stanley Tape Measure" transistor battery radio. If you have one and are willing to sell, please contace Stephen J. Price, c/o 1351 Oliver Avenue, Johnstown, PA 15909-1427.

FOR SALE: Watkins-Johnson HF-1000 with Grove SP-200 sound enhancing speaker. Price \$2500 plus shipping. Billy Wilcox, 6501 Leffingwell Road, Canfield, OH 44406. Phone (330) 533-2478.

Easy Listening

Lots to report on this month, so let's get right to it!

BBC World Service

As of March 30, the BBCWS has reduced it "streams" from five to three and has (again!) radically revised its program schedules. The former <u>Americas and European streams</u> are now combined. The <u>South Asian and Asia-</u> <u>Pacific streams</u> have also been joined. The African stream remains intact.

Because the program and time changes are so extensive, this month's column includes the new times for all regular programs and notes the series that have been discontinued.

Times listed are for the new Americas/Europe stream, unless otherwise indicated. Frequencies for North America at various times of the day: 5965, 5975, 6175, 9515,9590, 9895, 11750, 11865, 15220, 17840. In some cases, one of a program's air times may be available via shortwave to only one area. These circumstances are denoted by * for the Americas only and ** for Europe only. European frequencies received well afternoons here in NY are 15485, 12095, 9410, 9740 carries the new Asian stream to western North America 1200–1600. Programs carried on this frequency only are denoted with a #.

Current Affairs

The global phone-in series, International Question Time, returns for an eight week run. Panelists change weekly; Sheena McDonald hosts. To participate, contact the BBC after 1200 each Sun. by phone (+44 171 379 7444), or by letter (Bush House, Strand, London WC2B 4PH), fax (+44 171 240 8776) or e-mail (worldservice.letters@ John Figliozzi 45 Algonquin Road Citton Park, NY 12065-7703 America Online: JFigliozzi Internet: iohnlia@earthlink.net

bbc.co.uk). Studio staff will return calls at the BBC's expense. Listen live on Sun, at 1401. A three-part series. Policy and Preiudice, examines how Western statesmen addressed Balkan questions in the early '90s and what historical assumptions shaped those policies. Sun. until 13th 1701, repeated Tue. until 15th 0630. 1130. In Reports From the Silk Road, Paul Bergne, a specialist on Central Asia and Britain's former ambassador to Uzbekistan and Tajikistan, takes a comprehensive look at that region and how the effects of Soviet rule and their five-year experience with independence have positioned them for the future. Airing in 5 parts Sat. 1030, repeated Mon. 0430, 2130.

<u>New Times</u>: Assignment—Thu. 1430#, 1830*; Fri. 0530** and 1030**. Britain Today—Daily 0045, 2115; Mon.—Fri. 1215, 1645. From Our Own Correspondent— (I) Sat. 1715, Sun. 0330; (II) Wed. 1515#, 1730, Thu. 0030, 1145. Letter from America—Sun. 0030, 0715, 1445 (latter time often pre-empted). People and Politics—Fri. 2130, Sat. 0230, 1130. Seven Days—Mon. 1230, 1730; Tue. 0130. The World Today—Mon.—Fri. 1715, 2230; Tue.— Sat. 0330**, 0615.

Arts

<u>New Times</u>: Meridian—(<u>Books</u>) Thu. 0230, 0630, 2130, Fri. 1530#; (<u>Feature</u>) Sat. 0630, 2130, Mon. 0230, 1530#; (<u>Live</u>) Tue. 2130, Wed. 0230, 0730; (<u>On Screen</u>) Tue. 0230,1030, Wed. 1530#, 2130. Spotlight— Sat. 0155. <u>Discontinued</u>: Book Choice, Good Books.

Business and Finance

Global Business is a new 1/2 hour weekly series with interviews, features and discussions focusing on international business. *Sun.* 0430, 1030. <u>New Times</u>: World Business Report (Review)—Mon.–Fri. (Sat.) 1205, 2105; Tue.–Sat. (Sun.) 0305. <u>Discontinued</u>: World Business Brief.

Classical Music

Composer of the Month features an appreciation of the life and music of Johannes Brahms but is now available only at 0730 Thu. (also 1530#), inconvenient times for all but those in the western time zones. But fortunately for lovers of Brahms' music, Concert Hall will present four concerts this month featuring (in succession) his Double Concerto, piano works, one of his Violin Sonatas and, in the fourth week, the Tragic Overture and St. Anthony Variations. The air time of 1515 Sun, (1515 Tue,#) should be more accessible for more listeners. Performance is a new weekly series examining the art of performance in all its aspects with portraits of some of the profession's greatest soloists, ensembles, conductors, musicians and venues. This first run is for five weeks and airs Wed. 1515.

<u>New Times</u>: Greenfield Collection—Tue. 1530. Music Review—Fri. 0730; Sun. 0230, 2130. <u>Discontinued</u>: Record News, Who's Who In Music.

Development and Environment

One Planet is a new 30 minute program focusing on these themes. *Wed. 0530, 1030.*

<u>New Times</u>: The Farming World—Wed. 0030. <u>Discontinued</u>: Development '97, Global Concerns, On the Move.

Drama and Reading

Plays of the Week (Sat. 2230, repeated Sun. 0530, 1830*) this month are:

Ashes to Ashes (60 min. on 5th/6th) offers the British dramatist Harold Pinter's 1996 play which was performed on the London stage last fall. Pinter directs the two actors that appeared in the original production, Steven Rea and Lindsay Duncan in this fascinating and sometimes horrifying twohander. In honor of American playwright and novelist Thornton Wilder's birth 100 years ago this month, his classic play, <u>Our</u> <u>Town(90 min. on 12th/13th)</u>, is presented this month. <u>The Glass Menagerie(In two 60</u> min. parts on subsequent weeks 19th/20th and 26th/27th), one of Tennessee Williams' best loved plays, describes a mother's struggle to find a "gentleman caller" for her crippled and emotionally vulnerable daughter. Recorded at LA Theatreworks, this production features the same cast that performed the 50th anniversary revival of the play on Broadway. Television actor John Goodman narrates.

As a bonus this month, a one-act play by W. W. Jacobs is also presented. Entitled Jerry Bundler and set at the turn of the last century, the plot centers around a practical joke gone awry. *Mon. the 7th at 0330.*

Off the Shelf (Mon.-Fri. 1230#, 0715; Tue.-Sat. 0345**) features these readings: Cheri by Collette about the relationship between an aging courtesan and her young lover. (Beginning Mon. 7th and read in 8 parts.); In Penelope Lively's The Dream Merchant, he tries out one of his own dreams.(17th); In William Trevor's Widows, Catherine learns that her recently deceased husband wasn't all that he seemed.(18th). The Thirty-Nine Steps by John Buchan is a classic adventure tale of the hunt for a wanted man who is innocent.(Presented in 10 parts beginning Mon. the 21st.).

Short Story

Listeners from Sweden, the USA, Australia and Kenya provide this month's works which now air *Sat. at 1245 and Mon. at 0030.*

Education

Learning Zone presents <u>The Making of</u> <u>Hamlet (Sun. 2310)</u> and <u>What's That You're</u> <u>Eating?</u>, which examines personal tastes and feelings about food around the world (*Fri.* 1230). <u>Discontinued</u>: Voicebox.

Entertainment

The musical quiz Counterpoint (Sat, 0730, repeated 1230#, Mon. 1830*) returns for a twelve week run with Ned Sherrin conducting contestants through diverse musical topics.

Songs, Sonnets and Sounds of Laughter is an anthology of poetry, prose and song performed before an invited audience. Its three week run starts on Sat. 12th 1901*, repeated Mon. 0330**.

Features and Documentaries

A Cry in the Dark (Tue. 0030, 1515) features the sounds of local wildlife as recorded in five places around the world by naturalist Joanna Pinnock. Everywoman (Wed. 1530) is a new half-hour series and the first ever regular women's program on World Service. On Your Behalf (Sun. 0130, Mon. 1515) is also a new program and begins a 13 week run featuring Malcolm Billings in pursuit of answers to listener questions prompted by other BBC programs. Among this month's topics on Outlook (Mon.-Fri. 1405, 1901*, 2305; Tue.-Sat. 0430**) is the legacy of Henry , Ford (7th) and the fifth anniversary of EuroDisney (11th). Pick of the World (Mon. 0130, repeated Fri. 0630) returns for 13 weeks and offers a second chance to hear a segment of a BBC program you might have missed. For six weeks, Michael Kaye looks at the stories that lie behind the busy commercial facade of The Streets of London (Sat. 0130, repeated Mon. 0615 and Fri. 1515).

New Times: Omnibus—Mon. 0630, 1030; Thu. 0130. Write On—Sun. 1205 and 2105; Mon. 0305. Discontinued: Network UK, Take Five.

Media

<u>New Times</u>: From the Weeklies—Sat. 0030, 0715. The Insider's Guide—Fri. 1515#, 1730; Sat. 0145.

Popular Music

Jazz Expo (Sun. 0730, repeated Mon. 1130) seeks answers to the question, "What is this thing called jazz?". Malcolm Laycock guides. This is an eight part series that will be succeeded in June by a new half-hour program called Jazzmatazz, which the BBC is billing as a new approach to the presentation of jazz. A new eight week run of the heavy metal Tommy Vance Rock Show (Sun#/Mon. 1530) also starts this month. The Vintage Chart Show (Mon. 0730, repeated Thu, 2330) revisits 1987, 1974, 1969 and 1961.

New Times: A Jolly Good Show—Sat. 1215; Sun. 0630. Andy Kershaw's World of Music—Sat. 2330 (also 1830 via African stream on 15400 kHz.) Anything Goes— Sun. 1130; 1930*. John Peel—Thu. 1530, 1930*. Multitrack—(Alternative) Fri. 1430, 1930*, 2330; (<u>Hit-List</u>) Mon. 1930*, 2330, Tue. 1430; (X-Press) Wed. 1930*, 2330, Thu. 1430. Pop Short—Sun. 2325. <u>Discontinued</u>: Country Style, Folk Routes, Jazz for the Asking, Jazz Now and Then.

Religion

New Times: Focus on Faith—Fri. 0230, 1130, 1930*. In Praise of God—Sun. 1215 and 2330. <u>Discontinued</u>: Words of Faith.

Science and Technology

Anatomy of Addiction examines why humans appear to be prone to addictions. (A four week series commencing on Sun. the 20th at 1701, repeated Tue. 0630, 1130.)

Science Update (Sun 1501#, repeated Tues, 1730, Wed. 1230, Thu. 1515#) is a new umbrella title encompassing five monthly science-themed programs. First, there's Seeing Stars, the monthly astronomy report. The second week features Soundbyte, which focuses on the Internet and other computerrelated subjects. Wildtrack, on the third week, is a new monthly magazine for those interested in the natural world. And Waveguide returns with a look at international radio broadcasting on the fourth week of the month. Finally, when a month has a fifth week, Science Feedback answers listener queries about World Service science programs. The Works (Mon. 0530**, Wed. 1830*, Fri. 0130) is a new 30 min. program that looks at all things technological.

<u>New Times</u>: Discovery—Tue. 0530**, 1430#; Wed. 0130, Thu. 1030. Health Matters—Sun. 2230; Tue. 1230. Science in Action—Fri. 1430#, 1530; Sat. 0530, 1830*. Science View—Sun. 2305; Fri. 0455. <u>Discontinued</u>: New Ideas.

Sport

Football Extra is a new program designed to address the massive global interest in soccer. The program reviews the week's action, looks forward to the weekend matches, hears from the stars and profiles the key players. (*Fri. 1505*)

New Times: Sports International—Wed. 0630, 1130, 1430#. Sports Roundup—Sun. 0145; Daily 0315, 1745; Sun.–Fri. 1245, 2245; Sun.–Thu. 1505. Sportsworld—Sat. at 1405 (3 hrs. with news breaks on the hour.)

Youth

My Generation (Sat. 1930*, repeated Mon. 1430, Tue. 0730) looks at the aspirations of the second generation of Indians, born in Britain of parents who migrated to the UK looking for work. Touched With Fire profiles four child prodigies, including Sonny Pike a 13 year old British soccer player who trains with Ajax Amsterdam, (Series begins Sat 26th 1930*: repeated Mon. 1430, Tue. 0730, Thu. 1615**.) The Good Relationship Guide is a new four-part series that seeks to steer young listeners through the issues that most young adolescents around the world face. (Series begins Sat. 26th 1945*. repeated Mon. 1445, Tue, 0745 and Thu, 1630**.)

<u>New Times</u>: Megamix—Tue. 1930*, 2330; Wed. 1430.

Radio Netherlands Documentaries

(0053 Thu./2353 Fri. on 6020/6165/9845; 0453 Thu. on 6165/9590.)

8th/9th—<u>50th</u> Anniversary Celebrations-Light Music and Jazz. Martha Hawley ruminates through the massive RN music library. 15th/16th—<u>Gypsies in Holland</u>. Helene Michaud's report on their fight for their rightful place in society. 22nd/23rd—<u>Under African Skies</u>. Jaldeep Katwala, RN reporter and Kenyan born, talks with Kenyan Asians about their pasts. 29th/30th—Violent_Women. Mindy Ran looks at the alarming rise in violent crimes committed by women in northern Europe.

Potpourri

BIG CHANGES are coming to CBC Radio in July and that means RCI will have big changes then as well. Drastic budget cuts will end programs like Morningside and Sunday Morning, among others, If you enjoy the current CBC fare on RCI and the North Ouebec Service, you have fair warning: get your fill now ... NO ROOM this month for the international holiday list, but be aware that R. Bulgaria will cover the run-up to crucial national elections being held midmonth and that the BBC will cover UK voting to take place in early May ... THE BATTLE for R. Australia continues so far without resolution. If you haven't enlisted, do so now ... BILL BERGADANO on rec.radio.shortwave reported that DW announced on 3/21 that European Journal will soon be replaced by a program called Newslink... THE RECIPE for Tomato and Beancurd Soup is featured on the Cooking Show (19th), the training of air stewardesses is the topic on Listeners' Letterbox (27th/ 29th), ancient history books from Wu State during the Three Kingdom Period are detailed in Cultural Spectrum (19th), the old Chinese tale about The Cowherd and the Girl Weaver known in the West as the stars Altair and Vega is featured in Chinese Folktales (12th), Mongolian folk songs are featured on Music From China (26th), and the Song of the Week (13th) is "The Love" which celebrates the love between children and parents, all this month on China Radio International....JACQUES D'AVIGNON reports that he has heard from a very reliable source that RFI will end the use of shortwave to North America completely and that this could (have) happen(ed) as soon as March 30.

Squeezed in all I could this month. Our discussion about shortwave service downsizing is deferred to next month. Until then, good listening!

Shortwave Center

Hans Johnson 8121 S. Poplar 204D Englewood, CO 80112 CompuServe 73042,3644 Internet 73042,3644@compuserve.com

A Trip to Aparecida

by Pedro M. C. de Castro, Lorena - SP -Brazil

Introduction

Brazil is the largest Roman Catholic country in the world. There are religious celebrations in several cities, and the biggest one is the "Cirio de Nazare" feast, in Belem, State of Para.

Belem, however, is a big city with 1.3 million inhabitants, and the feast itself lasts only one

day. What about a city with only 34,000 inhabitants which receives over 5 million visitors per year?

Where are the biggest Brazilian radio stations? In Brasilia, Rio, Sao Paulo, Belo Horizonte and other big cities, of course. But don't forget to include a small city in this list of giants. Take a look below to learn more about the phenomenon of Aparecida.

The Beginning

The first references on colonization of the site comes from 1640 (1). A statement from 1687, in a notebook of the Diocese of Rio de Janeiro, describes the Parish of Guaratingueta as a "village with 250 inhabitants and 61 houses".

Guaratingueta was a stop-over village for the travelers traveling to the gold mines of Ouro Preto, in Minas Gerais Province. In 1717, the Count of Assumar, governor of the Provinces of Sao Paulo and Minas Gerais, took a rest at the village with his retinue. The fishermen were charged to provide food for the visitors, so they launched their boats on the Paraiba River.

The fishing was poor that day, so the three fishermen tried 3 miles upstream at the port of Itaguassu. At this site, the fisherman Joao Alves hauled in his net and found a little statue of Our Lady without the head. The next time he found the head of the statue, and soon he caught so many fish that the boat almost sank. This was the first miracle credited to the so-called Our Lady Aparecida (the Portuguese word for "Appeared").

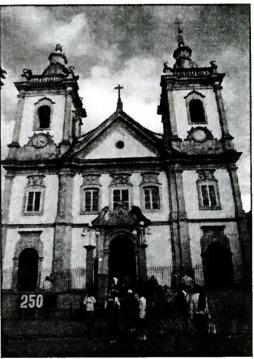


Figure 1: The Old Basilica

The clay statue was made by a monk around 1650 in Sao Paulo, representing the Immaculate Conception, a popular devotion in Portugal. No one knows how it was thrown in Paraiba River.

Felipe Pedroso, partner of Joao Alves, took the statue to his house and started the veneration of Our Lady with his family and neighbours. In 1732, he moved to Porto Itaguassu and took the statue to its first shrine, which was built by his son Atanasio.

Travelers spread out the fame of Our Lady Aparecida and the pilgrims started to come. The people decided to build a bigger church in the top of a hill near Porto Itaguassu to shelter the statue. The church was opened in 1745 when the statue was brought in from its former site and the village of Aparecida was born, as a district of Guaratingueta.

Faith and Devotion Grows

Newspaper articles from Guaratinguetta, Sao Paulo, Rio de Janeiro reported in the 19th century on the pilgrimage to Aparecida. The Frenchman artist Jean Baptiste Debret depicted the pilgrims in 1827, as well as other European artists, while journalists and scientists wrote references in their personal diaries. Some decades later, a new church became necessary, and a bigger one was opened in 1888, on the same place of the former one. It is known today as the "Old Basilica". In 1895, the German Redemptorist missionary, Father Lorenz Gahr, wrote to a friend in Bremen, stating that Aparecida had 1,300 inhabitants and received 150,000 visitors per year, according to local newspapers.

The City of Aparecida...

Aparecida was a district of Guaratingueta until 1928, when it became an independent municipality and elected its first mayor. With an area of 60 sq. miles and at an elevation of 1700 feet above sea level, its present population is 34,000. Located on the highway connecting Sao Paulo and Rio de Janeiro, its distance to Sao Paulo is 110 miles and to Rio is 160 miles (2).

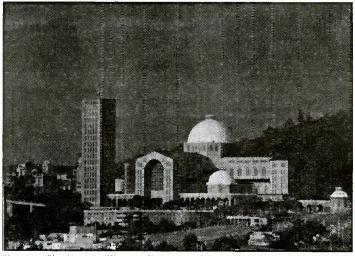
Although the Redemptorist missionaries once again noticed they needed a larger shrine as early as 1926, the site of the new church, the Pitas Hill, wasn't prepared until 1946. The first brick was laid eight years later.

Fifteen million bricks and 110 thousand cubic feet of concrete later, the shrine looks like a cross with 70,000 sq. feet of area and a central dome at 200 feet high. At the north side, a tower with 3600 sq. foot (60×60 f), 17 floors and 300 feet high. The church is so large that the whole population of Aparecida can comfortably visit the church at same time. A viaduct, for pedestrians only, connects the old and the new Basilicas.



Figure 2: Radio Aparecida's QSL shows their home

Page 11



Brazilian radio. Another tropical band frequency was added in 1968.

For the second time, R A faced the need for bigger studios, so they moved to a brand new building in 1975. This new building is huge; with 30,000 sq. feet, 6 studios and an auditorium for 1,200 persons. near the New Basilica. Soon, the mediumwave

Figure 3: The New Basilica. Radio Aparecida's antennas are on the hill behind the basilica, off to the right.

Pope John Paul II himself blessed the shrine in 1980, and now Aparecida is visited by more than 5 million pilgrims per year (3).

...and Radio Aparecida

The Vicar of Aparecida, Father Oscar Azeredo, was the first to ask for permission to set up a radio station in Aparecida early in 1936 (4). However, the Archbishop of Sao Paulo took 14 years to agree to the idea. The Basilica of Aparecida was allowed to request permission to the Federal Government only in 1950.

Radio Aparecida finally came to the air on Sept. 8th 1951, with 100 watts on 600 kHz. At first, the studios were installed in a building aside the Old Basilica but, four years later, they were moved to a bigger building, with 3 floors, near the old studios.

The first transmissions in the tropical bands began in 1952, and on other shortwave bands in 1954, reaching the whole country. A Club of Associates, now with 800,000 members, was founded in 1955, in order to join the listeners and proclaim the Gospel trough the devotion to Our Lady Aparecida. The program "Clube dos Socios", on the air since 1955, is still among the most popular of channel was shifted to 820 kHz, and Frequency Modulation began in 1977. Today, the first site of R A is a book shop and the second one is the Police Station of Aparecida.

There are now 79 persons working at the station, and the frequencies and powers are: 820 kHz 10 kW, 5035 kHz 10 kW, 6135 kHz 25 kW, 9630 kHz 10 kW, 11855 kHz 7.5 kW and 90.9 Mhz 50 kW.

The goal of the programs on shortwave, with national coverage, is the catechism and evangelization. The programs on Mediumwave consist more of music and news, and the FM programs are almost essentially musical, aiming at specific listeners. The "Encontro DX", produced by Cassiano Macedo, is the only Brazilian program for DX'ers, and has been on the air since 1986. It is broadcast on Saturdays at 2300 UTC (2200 summer time) on medium and shortwave. Some news of the "Encontro DX" is sent to Radio Miami International and The Voice of Russia.

Radio Aparecida receives over 3,000 letters per month, from all over the country. Letters from abroad number about 15 to 20 per month, several from Germany, but also from Cuba, United States, Netherlands and Italy. Correct reception reports are confirmed with a QSL card in English. R A is a non-profitable organization (a Foundation). Its goal is the promotion of citizenship, moral, cultural, religious, artistic, literary and scientific education of the Brazilian people.

The address of Radio Aparecida is Avenida Getulio Vargas nr. 185, Aparecida SP Brazil, zip code 12570-000, phone (012) 565-1133, fax (012) 565-1138.

Recent Achievements

Radio Aparecida is now producing a regional news program named "Sao Paulo no Radio", which is relayed by several other stations in Sao Paulo State, linked by satellite, forming the Rede Paulista de Radio (Paulista Radio Network). R A is also one of the headquarters of a national network, the Rede Catolica de Radio, with 120 stations in the whole country. The other headquarters of this network are Radio Difusora in Goiania, America in Belo Horizonte, Clube Paranaense in Curitiba, Maua in Sao Paulo and Cancao Nova in Cachoeira Paulista.

Two new stations were recently purchased by RA: they are Radio Educadora Santa Rita (ex- Radio Educadora Rural) in Fernandopolis, 1490kHz, and Radio Difusora Monte Aprazivel, 780 kHz, in Monte Aprazivel, both in Sao Paulo State. These stations broadcast their own programs for 12 hours and relay RA for 12 hours per day.



Figure 4: The studios of Radio Aparecida.

Conclusion

Our Lady Aparecida is in the heart of every Brazilian. Many people are named Aparecida or Aparecido, alone or combined with Maria, Jose and other names. The name is also part of the Brazilian colloquial vocabulary, as an exclamation of surprise.

Through constant progress, keeping in close contact with his listeners, providing entertainment, the Gospel and the message of

Our Lady Aparecida to the farthest corner of the nation, Radio Aparecida is partially responsible for this devotion. But in this case, not by miracle. Just by work and faith.



References

1- Brustoloni, Father Julio, C.SS.R. -Santuario de Aparecida - Editora Santuario -Aparecida - 1991.

2- Guia Brasil 96 - A Brazilian touristic guide - Editora Abril - Sao Paulo - 1996.

3- Guia Turístico de Aparecida 1997 -Markgraf Edicoes - Aparecida - 1997.

4- Radio Aparecida 45 anos - A newspaper published by Radio Aparecida to celebrate its 45th anniversary - 1996.

> For those interested in knowing more about Brazilian radio, there is an excellent article named "Dxing Brazil - A North American Perspective", by John Fisher, published by Fine Tuning's Proceedings in 1989. Except for the name of the President, this is still a valuable article.

> The author acknowledges the attention devoted by the personnel of Radio Aparecida during his visit, specially Mr. Eriberto Carvalho, speaker, and Father Joao Batista de Almeida, Adminstrative Manager.

Listener's Library

By the time you all read this the Tenth Annual Kulpsville Convention will be history. No doubt I picked up a few interesting items at the show that I'll share in a future installment of this column. Of course if you beat me out of anything at the silent auction or won any prizes that I would have prized, you should take a few minutes to write a review for your fellow NASWAns and send it in. But first lets see what's in the box under my desk that came courtesy of the American Radio Relay League.

THE ARRL ANTENNA COMPENDIUM VOLUME 5 with 3.5" Diskette Edited by R. Dean Straw, N6BV 200 Pages \$20.00 The American Radio Relay League 225 Main Street Newington, CT 06111-1494 ISBN 0-87259-562-5

All too many shortwave monitors throw up a piece of longwire and leave it there until the acid rains corrode it into oblivion. Such folks are missing out on half the fun of playing radio. Fiddling around with antennas is a cheap way to improve your chances of hearing that rare DX station you've been hunting for. Now that we are firmly into Spring, it's a good time to try hanging some new antenna designs to get ready for the next sunspot cycle.

Volume Five of the Antenna Compendium is a collection of 41 articles devoted to various aspects of antenna design and construction. While the applications listed are ham radio frequency oriented, most of what you will read is easily adapted to shortwave monitoring and VHF/UHF scanning.

This book shows the resourcefulness and creativity that makes amateur radio the great hobby that it is. In many cases, you will discover excellent antenna designs that, purT. J. "Skip" Arey N2EI P. O. Box 644 Waterford Works, NJ 08089 Internet: tjarey@mosquito.com

chased commercially, could cost hundreds of dollars. Instead you will find out how to brew your own with a trip to the hardware store and surprisingly few dollars in your pocket.

If your listening runs toward the tropical bands, you should take a look at adapting some of the designs shown for the 75, 80 and 160 meter ham bands. You can string some serious wire for these regions and create directional arrays that will fill your walls with NASWA award certificates. The book's consideration of "wire-beam" designs has a lot of potential for the serious shortwave monitor. One design that receives two treatments in this book is the "Half-Square" antenna. This unique design allows you to create a vertically polarized antenna for low band listening without the traditional need for great height.

If you have a bit of real estate or if you are planing a DXpedition, you will want to take a look at The N6BV 75/80 Mete Quad. This wire bean antenna can be scaled to any frequency you need and can create an excellent directional pattern. The is also the design of K4ERO's Stacked Double Zepp. This antenna draws heavily on existing shortwave broadcast technology to provide yet another unique antenna to go after those hard signals.

If you are interested in beam construction there are several articles that will point you to new thinking, particularly W5THT's uses of PVC plastic for antenna construction. Or, if you really want to shake up the neighbors, how about W8NWF's designs for HF Discones?

As a sideline, if you also monitor in the VHF/ UHF spectrum, you will find a series of antenna designs worth considering to improve your ability as a scannist.

The book includes and entire section on antenna modeling and analysis that can be applied to many applications beyond the designs within this book. Included with the text is an IBM-PC -compatible 3.5 inch disk containing a series of popular antenna development programs.

The latest volume in the ARRL Antenna Compendium series is a winner worth reading by any radio hobbyist who want to move beyond that simple longwire. Better yet, why not join the amateur radio ranks and see how some of these puppies work in transmit mode?

Speaking of which, the ARRL has also come out with a new training manual for folks who want to get the highest class of amateur radio license.

THE ARRL EXTRA CLASS LICENSE MANUAL FOR THE RADIO AMATEUR Edited by Larry D. Wolfgang, WR1B 359 Pages \$12.00 The American Radio Relay League 225 Main Street Newington, CT 06111-1494 ISBN 0-87259-539-0

I sort of hung out at the Advanced Class level for almost fifteen years before I got up the nerve to take a crack at the Extra Class. What had always thwarted my efforts up to that point in time was that I tried to get by just memorizing the question pool. Finally I sat down and actually read the ARRL License Manual and LEARNED the theory that the question pool was based on. I walked out of the test site with a perfect score on Element 4B, but I also had internalized a great deal of radio knowledge that would serve to make me better in all my radio hobby pursuits. Sure, the League's manual has the latest question pool, it's in the back. But much more importantly it has page after page of study material and information that will allow you to breeze through the questions just as I did. Included are great studies of radio wave propagation, Digital mode operation, satellites, advanced electrical principles, practical circuits and antennas. Everything is presented in a friendly, easy to understand manner so you get a sound understanding of the ideas behind the questions. Even the dreaded math needed to get through the test is taught in a manner that will teach you

without making you break out in a cold sweat. If you're ready to go all the way in the amateur radio world, this book is the tool you will need. Oh yeah, there is that little matter of the IC code requirement. This book also gives you a few hints on breaking through the barriers that stand in the way of 20 wpm copy.

Okay, so you've got your ham license now its time to try one of its greatest challenges. QRP (low power) operation. To get there you will want a little help for a fellow NASWA member and a few of his friends.

ORP POWER

Compiled by Joel Klienman N1BKE and Zack Lau KH6CP/1 \$12.00 The American Radio Relay League 225 Main Street Newington, CT 06111-1494 ISBN 0-87259-561-7

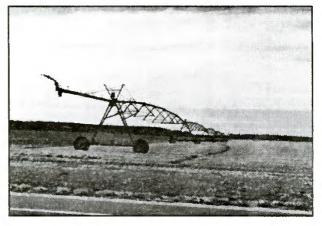
As shortwave broadcast monitors, we are used to listening in on stations that throw a few megawatts around the world. Well how about sending out a signal that is just 5 watts? Or maybe a signal that is even lower power such as 200 millwatts. We're not talking B.B.C. here folks, we are talking the greatest challenge in the radio hobby. ORP operation has grown by leaps and bounds in the past few years largely due to the fact that many very inexpensive transceiver kits have come on the market. QRP Power is a compilation of many recent articles from the pages of OST that trace this resurgence of interest in low power operation. AS you open the book you will find several article by NASWA's own Rich Arland K7YHA. Rich give the reader a clear understanding of the philosophy and practice of QRP. This is followed by a series of articles on how to get into constructing your own radio equipment. You see another aspect of QRP is that half the fun is building your own gear. From there, its right into a whole series of excellent QRP construction projects. If you never thought you could construct a working transmitter, take a look at WA3ULH's design. You will be able to construct a one watt transmitter right from the article. And remember, one watt is pretty respectable ORP power. There is a lot of fun wrapped up in the pages of this book.

Technical Topics

Joe Buch N2JB P.O. Box 1552 Ocean View, DE 19970-1552 Internet: joseph.buch@dol.net

The Rotary Beverage Antenna

We interrupt our series on mobile SW listening this month to bring you some hot news from the NASWA Research Lab (NRL). The NRL always can be counted on to come up with some new innovation to enhance your radio listening. It does puzzle me, however, that they always seem to announce their most amazing developments at this time of year. Maybe it has something to do with those cold winter nights at their facility on the banks of the



Potomac. The mobile SW listening series will continue next time with a description of several antenna options available to the mobile SWL.

The Beverage antenna has long been recognized as the best for Dxing the tropical bands. The Beverage provides directionality, reducing noise and interference arriving from undesired directions. Yes, the Beverage does require a good bit of real estate. A decent Beverage for the 90 meter SW band (3.2-3.4 MHz) should be at least 450 meters (or about 1500 feet) long.

The problem the NRL addressed in their research is a simple one, "How do you receive signals from different areas of the world without putting up a separate Beverage for each direction?". Listeners on the USA East Coast might need a separate antenna for each of Europe and the Middle East, Africa, Central Asia, South America, South Pacific and Eastern Australia, and the Far East. That's six different antennas adding up to more than a mile of antenna wire. The NRL's new invention allows reception from any direction with only one length of antenna.

Our NRL engineers developed a Beverage antenna that can be rotated to point in any desired direction. A prototype is shown in the picture. The antenna is actually a largediameter pipe that rotates around a central coupling device. This coupling contains a magnetically coupled matching transformer to which the feedline and a water supply connects. The feedline is direct burial coax similar to the RG-6 used for satellite receivers. The antenna is supported on triangular frames that in turn ride on rubber-tired wheels to provide insulation.

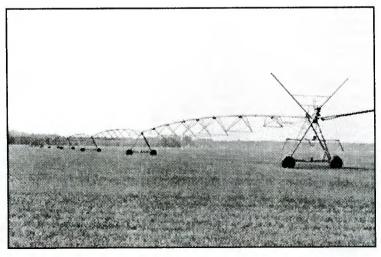
Rotation is accomplished by water-driven hydraulic motors. The antenna is actually a large diameter pipe through which water flows at high pressure. The water sprays out along the length of the antenna through small turbines to provide the basic motive force for each of the wheels. The water spray falls harmlessly to the ground where the moisture increases the soil conductivity and thus the efficiency of the antenna. Moving water was chosen as the power source to eliminate a source of noise that would be present if electric or gasoline motors had been chosen. Water consumption only occurs while the antenna is moving. The antenna should only need to rotate once per day as the sunrise/sunset line moves around the earth. Cost of water will vary depending on your location.

NASWA's engineers found that spraying salt water considerably enhances the ground conductivity compared to fresh water, but good sources of salt water are hard to find in many areas. The Environmental Protection Agency has also raised objections to salt water runoff from the NRL antenna farm. The equipment has been designed to withstand the corrosive effects of salt water for ten years of normal use. There is also no reason liquid fertilizers could not be injected into the water supply to permit crops to be grown under the antenna.

Any Beverage antenna should be terminated at the far end in a 500 ohm resistor connected to ground. The termination absorbs energy arriving from the back of the antenna. Maximum front-to-back gain ratio can be achieved by careful adjustment of the terminating resistor value. The rotary Beverage uses a wire dragging along the ground at the far end. The contact with the ground is not very good but the resistance is in series with the terminating resistor so a few more ohms won't hurt much. The terminating resistance This antenna is now being field tested at many rural locations. You might just happen upon one of our test sites the next time you are out driving in the country. If you do, stop the car and go over and take a close look. On second thought that might not be advisable. I have received word that due to budget cuts at NRL, they have been doing some of this research under contract to the government. Many of the receiving sites you will see are in fact government receiving sites disguised to look like working farms. We all know how nervous those feds get when you go snooping around their facilities. In fact tests are in process at many locations to phase together multiple rotary Beverage antennas into large phased arrays with correspondingly higher gain and directivity. Keep a lookout for these sites in your travels.

The design plans for building your own rotary Beverage antenna should be available from the NASWA store. Contact Kris Field. at the address on the back cover of this magazine for pricing and delivery information. The store also sells a critical parts kit including pre-assembled hydraulic turbines, matching transformers, gear trains, rubbertired wheels, irrigation pipe and direct burial coax. Sorry, this offer is only available to NASWA members. If you are reading this article on the ANARC web site, why not consider joining NASWA so you can help fund its many activities designed to enhance your enjoyment of SW radio. ₫4/

can be reduced tocompensate for ground contact resistance. The purist could drive several stakes into the ground to permit a better connection at each favored direction but connection to the stakes would require a hike to the antenna each time the direction is changed.



Equipment Reviews

Alan Johnson 2490 Sharon Way Reno, NV 89509 Compuserve: 76665,1756 Internet: 76665,1756@compuserve.com

The Target HF-3 Communications Receiver

For some reason, the last few receivers that I've had the opportunity to review have followed the dictum that "less is more", some in terms of controls (the AOR AR7030) or in features (the Drake SW-1). This month's review receiver is a minimalist on both counts.

The Target HF3 is the model designation used by the UK firm of AKD for the receiver they distribute. Lowe Electronics designates the model they sell as the SRX 100. The price for the AKD version is 160 pounds, or about \$240 at current exchange rates. The Lowe Web page gives a price of \$240 for their radio. The review unit was loaned to me by NASWAn John Wagner.

Small And Simple

The HF3 is housed in a gray plastic case that measures $2 \frac{1}{2} \times 7 \frac{1}{4} \times 7$ inches (HxWxD). No weight figure is given in the specifications, but my guess would be around a pound. There is a top-mounted 3 1/2" speaker. The front panel contains a non-illuminated LCD which displays the tuned frequency (to one kilohertz) and a bargraph S-meter. The front panel controls consist of knobs for Power/ Volume, Clarify (fine-tuning for SSB reception) and Tuning. There are four pushbuttons for mode and memory function. That's it! On the back are a "barrel" jack for 12V DC power input, a 1/8" headphone jack, a RCA jack for antenna input (nominal impedance 70 ohms) and a attenuator switch. An AC adapter is included, although the one with the review radio was labeled as 230 volt input and was fitted with a UK-style three prong plug with an adapter for US outlets. I used my bench supply to power the review unit. Current consumption is rated at 300 milliamps. A thirty foot wire with attached RCA plug is provided for use as an antenna.

The Specs

The HF3 covers 30 kHz to 30 MHz, without gaps. It uses the now standard dual conversion design with the first IF at 45 MHz and the second at 455 kHz. The main tuning is synthesized in one kHz steps, but the clarifier control allows adjustment of ±800 Hz. The main tuning rate is dependent on the speed at which the tuning knob is turned-either 10 kHz, 100 kHz, 1 MHz or 10 MHz per revolution. This is pretty handy for scooting around the bands, since there is no keypad tuning. Sensitivity is rated at one microvolt (but the test parameters are not specified) and selectivity is given as 3.8 kHz for SSB and 6.0 kHz for AM (no skirt measurements are given and I could only find a single ceramic filter on inspection of the circuit board). The spec sheet states that AM detection is via a quasi-synchronous detector but no explanation of this is given in the manual. Audio output is rated at 2 watts.

Operation

On power-up, the HF3 tunes to the frequency that is stored in the single memory channel. The receiving mode (USB, LSB or AM) is chosen by the Up/Down Mode pushbuttons. The desired frequency is selected via the tuning knob and the volume is adjusted as desired. Pretty basic, eh? If signals are too strong, or if there is interference from local broadcast stations, the attenuator can be switched in. I found the audio quality to be

quite satisfying, probably due to the relatively wide bandwidth filter used in the radio. When I first used the radio, I thought that the sensitivity was poor, but I discovered that the adapter I was using for the antenna connection was not making proper contact. Repositioning the adapter cured the problem. The variable rate tuning is somewhat "twitchy"-sometimes I would shift the frequency by several hundred kilohertz when I only wanted to move it just a few kilohertz. The memory scheme used is somewhat annoving as well. Pressing the "RCL" button tunes the radio to the frequency stored in memory, but there is no way to return to the VFO frequency short of retuning the receiver.

Although AM reception was acceptable (although being able to select a narrower bandwidth filter when needed would be nice). SSB reception was less satisfying. When trying to use the ECSS technique to reduce adjacent channel interference, the receiver has to be retuned due to the way the SSB offsets are setup. This means that the operator cannot instantly switch between upper and lower sidebands to see which offers the best reception. More importantly, I was unable to easily adjust the clarifier control to get exact zero-beat-there seemed to be a residual "grumble" to the signal no matter how slowly I adjusted the Clarifier control. For actual SSB signals (such as hams), the clarifier worked much better, although the IF filter is too wide for more than casual listening on the ham bands. The audio quality on SSB did not seem as good as that on AM signals—I'm not sure whether this is due to distortion in the product detector or because of the time constants of the AGC system.

Portable Operation

John Wagner sent me the items he uses for SWL'ing from his car, namely a Palomar

Super Snooper whip antenna and a Radio Shack window antenna mount (Catalog No. 20-023). The antenna mount has a BNC jack and the Palomar antenna has a SO-239 connector, so UHF male to male and UHF to BNC adapters are also required to make this setup work. I powered the radio from a 12 volt lantern battery to avoid noise from the car's electrical system and did not make a ground connection to the car's body or chassis. I was quite surprised to find that this "lash-up" actually worked quite well for listening to the major international broadcasters. There was plenty of signal strength and no noticeable ignition noise. It was definitely a temporary setup as I just threw the radio and battery on the passenger seat. Tuning the HF3 while driving is definitely not advised, due to the variable rate tuning, which means the display, rather than the road, must be watched. I also did not test the antenna arrangement at highway speeds, but John tells me that he has had no problems. Where a similar setup might really shine is as a quick and dirty DXpedition-drive out in the country where the noise levels are low, pop the antenna on a window of the car and DX away!

Summary

It's hard for me to know what to say about the Target HF3. It certainly works well within its limits and it is certainly compact. However, it does have its limits, such as the lack of more than one memory, no keypad tuning, a single (and wide-skirted) IF bandwidth in AM mode and poor ECSS reception. There are several similarly-priced portables on the market today that offer more tuning flexibility and equal performance in a smaller package. The distributor's address is AKD, Unit 5, Parsons Green Estate, Boulton Road, Stevenage, Hertsfordshire, SG1 40G, UK. The phone numbers are (1438) 351710 or (1438) 357591. <u>CM</u>

FOR SALE: Kenwood R-5000 with superior YK88A1 AM Filter. In "like new" condition with manual. Only selling to buy a new receiver! Price is \$595 including shipping in the 48 states. Call Rick Bowers at (908) 654-1580 (evenings or weekends) or email to <rickbowers@worldnet.att.net>.

Listener's Notebook

Al Quaglieri P:O. Box 888 Albany, LIV 12201-0888 FAX. (518) 453-0864 Internet: alcue@albany.net

COPYRIGHT NOTICE Items credited to BBCM are copyright by the BBC Monitoring Service and may not be reproduced without BBCM permission.

ALBANIA Radio Tirana observed: EE 1715-1726 6185 7155; GG 18301857, FF 1900-1927, EE 1930-1957 all on 6270 7270. (8-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS) 7160 R.Tirana *0145-0200* Nx w/ co-chnl R.Ukraine. Both on freq to NAm. *0230-0300* on 6140 drifting +- 0.8KHz. (8-Feb/Price/Cumbre 127)

As the crisis across Albania deepened, the programs of Radio Tirana's external service were unheard from 13-17 March. The English service resumed on 17th March with the announcement: "Hello and welcome back to this English broadcast. We resume our broadcast in English after several days' suspension because of the troubles affecting Albania recently." (BBCM)

Radio Tirana announced on 20th March that the following summertime schedule for English broadcasts would come into effect on 30th March 1997:

0145-0200	6115	7160
0230-0300	6140	7160
1845-1900	7270	9570
2100-2130	7110	9515

(20-Mar/R. Tirana/BBCM)

Trans World	Radio relays:	via Cerrik, Albania:
0500-0515	Kurdish	11635
0515-0530	Polish	9510
0830-0845	Hungarian	9490 Mo-Fr
0845-0900	Czech	9490 Fr
0845-0900	Slovak	9490 Su-Tu/Th
1030-1100	Slovak	9490 Fr
1340-1410	Russian	9665 11635 Sa
1340-1440	Russian	9665 11635 Fr
1340-1455	Russian	9665 11635 Tu-Fr
1355-1455	Russian	9665 11635 Su
1500-1530	Polish	9485
1502-1517	Armenian	9950 12080 Fr-Sa
1502-1532	Armenian	9950 12080 Su-Th
1535-1550	Ukrainian	9970 Fr-Sa
1535-1620	Ukrainian	9970 Su-Th
1600-1645	Farsi	9665 12085
1700-1715	Lithuanian	9495 Su-Tu
1702-1717	Russian	9665 11635 Su
1702-1747	Russian	9665 11635 Mo-Sa
1717-1747	Belarus	9665 11635 Su
1800-1815	Russian	7240 9475 Fi

via Shijak,	Albania:	
0515-0530	Polish	7385 Th-Tu
0830-0845	Hungarian	7385 Mo-Fr
0845-0900	Slovak	7385 Su-Tu/Th
0845-0900	Czech	7385 Fr
1030-1100	Slovak	7385 Fr
1500-1530	Polish	7385
1535-1550	Ukrainian	7385 Fr-Sa
1700-1715	Lithuanian	7385 Su-Tu

(7-Mar/TWR Europe/WWDXC/Bueschel-FRG)

ALGERIA Radio Algiers International Service: 1300-1400 Spanish 15205v-(announced) 15160v 11715v 1400-1500 English 15205v-(announced) 15160v 11715v

(BBCM)

ANTARCTICA 15475.9 LRA36 Radio Nacional Arcangel San Gabriel, 20052048* with LAm music and ballads w/anmts by woman, talk by man in Spanish 2025-2035, canned ID by woman seemingly in English at 2043 and seemingly off mid-song during vocal by man at 2048. Mostly weak/fadey signal. Feb 15 * Vastly better signal next day from 2024 tune-in with clear ID anmt by woman in English in progress, then repeated in French at 2025. Travel talk in English at 2043, same in French at 2048. Full closing ID's at 2055 in Spanish, followed by English and French with fanfares mixed in. Upbeat closing signature song played in full to 2103, whereupon carrier was promptly cut. Fair to good signal all the way! Announces AM mode but this was actually USB+suppressed carrier. (16-Feb/ClarkCAN/Cumbre 127)

ARGENTINA No trace of LV19 Radio Malargue, 6160v or LRA6 Radio Nacional Mendoza, 6180, both checked during the second half of February, both stations are inactive due to transmitter problems, per to phonecalls to the technical departments. (Barreta-ARG)

AUSTRALIA Australia's communications minister, Richard Alston, has indicated that Radio Australia may survive in a reduced form despite a recommendation that it be closed to save money. Senator Alston said the government is keen to keep a radio presence in the Asia-Pacific region if a low-cost way can be found. However, he said a Senate inquiry examining Radio Australia will report back to parliament too late to be acted upon, just a week before the federal budget. (16-Mar/RA/BBCM)

Three world broadcasters have indicated they are keen to lease shortwave transmission capacity into Asia if Radio Australia is forced to cut its broadcasts.

Radio Australia's transmission manager, Nigel Holmes, says the Voice of America, the BBC World Service and Deutsche Welle have written to Radio Australia expressing interest in any spare shortwave transmission capacity. Mr. Holmes says this is despite claims by the minister for communications, Senator Richard Alston, that shortwave is becoming much less significant.

Mr Holmes says at a time when Australia is considering closing its international radio service, other countries are spending hundreds of millions of dollars to boost their coverage and signal strength in the Asia-Pacific region. (17-Mar/RA/BBCM)

AUSTRIA Radio Austria International in English:

0030-0100	9655
0300-0330	9655 9870 13730
0430-0500	6155 13730
0730-0800	6155 13730 15410 17870
0930-1000	15455 17870
1230-1300	6155 13730
1630-1700	6155 11855 13710 13730
2130-2200	5945 6155 13730

(Bueneman)

BELGIUM RVI Brussels amendments in its tentative 297 schedule from

March 30th, as announced in Flemish "Golfgids" progr: 1200-1400 to NoAM 13785 kHz, due to Damascus on 13610. 15585 kHz to SoEaAS. French 0700-0730 on 15545 kHz also. Sports special on Sats 1800-2100 on 13645 kHz. Schedule not fixed yet. (8-Mar/RVI/WWDXC/Bueschel-FRG)

BHUTAN Bhutan BC Service now noted on 6030 (in place of 6035) at 0500-1000 with EE at 0800-0900. (8-Mar/das Gupta-SRI/EDXP 44/Padula-AUS)

BOLIVIA

4719.8 R. Abaroa 1040-1100 fade with excellent signal (21Feb/Wilkner/Cumbre 127)

4924 Radio San Miguel, Riberalta 0230 Popmusic & talk in Sp, with full Id as "Radio San Miguel, la voz del Vicariato Apostolico de Pando". S/ off at 0255. Also noted on 4923 for a while. 242 (21Feb/Pijpers/Cumbre 127)

4924.3-4922.3vRadio San Miguel, Riberalta, drifting once again after several months on 4926.5. (Klemetz-COL)

4939.2 Radio Norte, Montero, has been producing audio almost every night (in the absence of Venezuela's R Amazonas) from about 2300. S/off 0125, w/canned ID's, where phone numbers and postal address was given, one was in Spanish as you would expect, and the other one was, believe it or not, in English. No NA. Very tough copy due to distorted audio. (2-Mar/KlemetzCOL)

4945.0 R. Illimani, La Paz; 0125-0200 ID "Ya son las 9 y 30 de la noche en la emisora del estado.. Radio Illimani desde la Paz.." mx moderna (26-Feb/ Arrunatequi-PRU/Chasqui DX 94)

BRUNEI "RTB itself has no short term plans to operate in the short wave band however I believe that there is a possibility that frequencies have been reserved for Brunei Darussalam in connection with longer term proposals which may or may not be implemented. Sincerely, Ralph Harper, Head of Engineering Secretariat, RTB". (13-Feb/Letter to Marc VissersBEL/DXW/EDXP 44/Padula-AUS)

BULGARIA Sked for Radio Bulgaria through 25-October:

tober:		
0000-0100	Bulgarian	7480 9415 9485 11660
0100-0200	Spanish	9415 9700 11660
0100-0300	Bulgarian	7480 9485
0300-0400	Bulgarian	6035 7430
0300-0400	French	9485 11720 -
0300-1700	Bulgarian*	7670 9850
0400-0430	Greek	6140 7115 Su-Fr
0400-0500	Greek	6140 Sa
0400-0500	English	9485 11720
0415-0500	Turkish	5945 6040 7345 Mo-Fr
0430-0500	Albanian	6140 7115 Su-Fr
0500-0600	Serbian	6140 7115 Mo-Fr
0500-0630	Turkish	7375 Sa
0500-0630	Turkish	6040 7115 Sa-Su
0515-0600	German	9485 11825
0600-0700	French	9485 11825
0630-0730	Albanian	5895 Sa
0630-0900	Serbian	5895 9475 Su
0730-0900	Serbian	5895 9475 Sa
0800-0900	Greek	5930 7135 Su
1000-1100	French	11605 13630
1000-1100	German	11660 15185
1200-1300	English	13790
1200-1400	Bulgarian	6195 7310
1400-1500	Russian	7425 9775 11855
1400-1500	Bulgarian	6195 7310 11760
	100	13715
1500-1545	Serbian	5850 5860
1500-1700	Bulgarian	7425 9775
1515-1615	Arabic	9430 11625
1545-1630	Albanian	5850 5860
1615-1700	German	9700 11720
1630-1715	Greek	5850 5860
1700-1800	French	9700 11720
1700-1800	Bulgarian	7425 7495 9775
1700-2100	Bulgarian*	7670
1715-1800	Italian	5850 7510
1715-1800	Turkish	5860 7355 7455
1800-1900	Russian	7425 9775
1800-1900	Bulgarian	5850 5860 7455 7495
1800-1900	German	9700 11720

1900-2000 English 9700 11720 1900-2000 Bulgarian 7495 1915-2015 Spanish 9500 11660 1945-2030 Greek 5850 5860 2000-2045 Italian 7495 7510 2000-2045 Italian 7495 7510 2000-2100 French 9700 11720 2015-2115 Arabic 11660 13710 2030-2115 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435 2300-2400 Spanish 11660	1900-1945	Albanian	5850 5860
1900-2000 Bulgarian 7495 1915-2015 Spanish 9500 11660 1945-2030 Greek 5850 5860 2000-2045 Italian 7495 7510 2000-2045 Italian 7495 7510 2000-2100 French 9700 11720 2015-2115 Arabic 11660 13710 2030-2115 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	1900-2000	English	9700 11720
1915-2015 Spanish 9500 11660 1945-2030 Greek 5850 5860 2000-2045 Italian 7495 7510 2000-2100 French 9700 11720 2015-2115 Arabic 11660 13710 2030-2115 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	1900-2000		7495
1945-2030 Greek 5850 5860 2000-2045 Italian 7495 7510 2000-2100 French 9700 11720 2015-2115 Arabic 11660 13710 2030-2105 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	1915-2015		9500 11660
2000-2100 French 9700 11720 2015-2115 Arabic 11660 13710 2030-2115 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	1945-2030		5850 5860
2015-2115 Arabic 11660 13710 2030-2115 Serbian 5850 5860 2100-2200 English 9700 11720 2115-2200 Italian 5850 2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	2000-2045	Italian	7495 7510
2030-2115Serbian5850 58602100-2200English9700 117202115-2200Italian58502115-2215Spanish11660 137102300-2400English7480 9435	2000-2100	French	9700 11720
2100-2200English9700 117202115-2200Italian58502115-2215Spanish11660 137102300-2400English7480 9435	2015-2115	Arabic	11660 13710
2115-2200Italian58502115-2215Spanish11660 137102300-2400English7480 9435	2030-2115	Serbian	5850 5860
2115-2215 Spanish 11660 13710 2300-2400 English 7480 9435	2100-2200	English	9700 11720
2300-2400 English 7480 9435	2115-2200	Italian	5850
•	2115-2215	Spanish	11660 13710
2300-2400 Spanish 9415 11660	2300-2400	English	7480 9435
	2300-2400	Spanish	9415 11660

(8-Mar/R. Bulgaria/WWDXC/Bueschel-FRG)

BURUNDI 6140v R. Burundi Off? Untraced. (Valko + Johnson-HI/Cumbre)

CAMBODIA 6089.7 Domestic Service TENTATIVE Steady here, but rarely good enough to get any audio. 1055 instrumental up-tempo song then very weak talk at 1057 by man. 11940.4 National Voice of Cambodia 1308 music, low modulation. 1315 bit of Vietnamese talk by woman, open carrier briefly and off. (Valko + Johnson-HI/Cumbre) 1245 w/ SEA SingSong w/ W vocals. M anner. Peaking nicely at 1300 w/ 2+ 1 time pips when they were promptly wiped out by Romania sign-on. (9-Mar/Rippel/Cumbre)

CHILE Local time will change in Chile on 29 March in this year for the first time, this delay, because of the dry season in Chile. From 29 March, =UTC-4. (6-Mar/Barrera-ARG/EDXP 44/Padula-AUS)

This week I visited the former transmitter site of R. Nacional now owned by Christian Vision, they are now adjusting and testing the station. The 8x100KW Harris transmitters will be repaired. The three Log Periodic antennas will be used and are already OK, but two of the four curtains will not be used any more due to their catastrophic state (those beamed to Americas). They are not permitted to use the frequencies of R. Nacional and are currently trying new ones. If this is a problem the transmitters may be moved to another country, but if everything works out OK they will starting test transmissions at the end of April and official broadcasts in October. (7-Mar/Asenjo-CHILE/Cumbre/EDXP 44/Padula-AUS)

CHINA - TAIWAN VOFC, Tainan site on 9955, will change antenna characteristics soon. 300 degree antenna will be replaced by 325 degrees, to strengthen signal in Northern Europe. German 1800-1900.(25Feb/Klink-FRG/BCDX/EDXP 44/Padula-AUS)

Revised sked for VOFC to Europe includes: GG 1900-2000 9955, GG 21002200 5810 9985, EE 2200-2300 5810 9985, Fr 2000-2100 9610 9985, CC 1857-1957 9955 9985 17760. Some freqs are via the WYFR Florida relay - not specified. (8-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

CLANDESTINE - MIDEAST Freedom Radio, first heard in February 1997, appears to share facilities with the Iraqi Communist Party station, voice of the Iraqi People. ID is "The Freedom Radio Station, Voice of the Communist Party of Iraqi Kurdistan" (Kurdish: Era Ezgay Azadiya, Dengi hizbi Shuyu'i Kurdistan Iraq).

1630-1730 Kurdish 7695 39053955v

(BBCM)

Harim Radio, "Voice of the regional government of Iraqi Kurdistan". (Kurdish: Era Radiyo Harim, dangi hukumati harimi Kurdistani Iraqa) was first heard in February 1997. (In December 1996, Voice of Iraqi Kurdistan, which broadcsts on the same frequency at other times, announced that the Kurdistan government would launch its own radio station "in the near future" and that it would broadcast on shortwave 75 meter for one hour a day.) 1400-1530Kurdish 4070

(BBCM)

The pro-Rabbani anti-Taleban radio station which identifies itself as Radio Afghanistan has been heard again since 22nd February, having been unheard for about two months. Freq varies from 7080-7100 kHz and sked is 0730-0830. Station announces second broadcast at 1330-1430 on same freq. (BBCM)

Voice of the Iraqi People (Arabic: idha'at sawt alsha'b al-iraqi; Sorani Kurdish: Era Dengi Gel-y Iraqi) describes itself as "the Voice of the Iraqi People, the voice of democracy and progress, the radio of the Iraqi Communist Party". In the past, it has broadcast regularly in Sorani Kurdish, as well as Arabic. 0400-0530 Arabic 7695 3905-3955v

1730-1830	Arabic	7695 3905-3955v	
-----------	--------	-----------------	--

(BBCM)

CLANDESTINE - USA The RFA Mandarin service during its transmission from 2300-0000 has added 11970, this is from the VOA transmitting station in Delano, California. It's RFA's first use of a US based facility. VOA has not used California transmitters for broadcasts to China for many years, as better signals can be heard from the VOA relays in the Philippines and Thailand. RFA does not have permission of those two countries for access to those VOA relay facilities. (1Mar/Communications World/Ogrizek + Francis - AUS/EDXP 44/Padula-AUS)

The US government funded Radio Free Asia began broadcasting in Korean on 4 March. This is the fifth of seven planned RFA language services. RFA Korean is transmitted 2200-2300 on 7530, 9455, and 9650; 1530-1630 on 7520, 9955 and 11600. For the RFA Mandarin service, the Delano frequency at 2300-0000 has changed frequency. 11870 replaces 11970, and RFA Mandarin is using a Delano frequency from 1500-1700, it's 9805. RFA Mandarin has added its third hour, 1600-1700, which time has recently vacaated by VOA Mandarin in an agreement between the two stations. (8Mar/Communications World/ Ogrizek-AUS/EDXP 44/Padula-AUS)

The RFA schedule is very dynamic! I have attempted to compile this composite schedule, integrating the recent changes made on 4 March, using data sourced to Nagoya DXers Circle, BC-DX, HFCC W96, and intuition!

Burmese 0030-0130 7455 7515 7530

Vietnamese 0030-0130 5865 7415 9910-KHBN

Tibetan 1300-1400 7355-Dushanbe 9440-Dushanbe

Vietnamese 1400-1500 5865 6240 7520 9930-KWHR

Burmese 1500-1600 6240 7540 9440

Chinese 1500-1600 6240 7495-Dushanbe 7530-Dushanbe 9455-KHBI 9910-KHBN 9805-Delano

Korean 1530-1630 5855 7520 9980 11600

Chinese 1600-1700 7495 7530

Korean 2200-2300 7495 7530 7550 9455-KHBI 9650

Chinese 2300-2400 7495-Dushanbe 7530-Dushanbe 9650 9910-KHBN 11870-Delano, 13800-KHBI

Tibetan 2300-2400 7415-Dushanbe 7550-Dushanbe

HFCC skeds show freqs and languages, but omit all reference to sites and powers! Somewhere in there are Armenian relays! (Padula-AUS/EDXP 44)

COLOMBIA

H3100 HJZI, MCI Radio, Bogota, is gone. Not the slightest spur noted when checking. (24-Feb/ Klemetz-COL)

H4449.3 Third harmonic of Radio Cocorna', 2330 with Catholic mass. Hetting Bolivia's Radio Estacion Frontera, 4449.9, which at this time carries a gospel prgr in Portuguese. (7-Mar/Klemetz-COL)

CONGO 5985 R.Diff.TV.Congolaise,Brazzaville 0500-0530 M in French reading news & comments; weak WYFR audible, growing stronger & almost swamping Congo in the end. Fair to weak. (Pijpers, March 14).

COTE D'IVOIRE "ELWA" has been applying for license to use SW from Abidjan as part of a consortium of Protestant groups, and the govt has virtually confirmed that the consortium will get the license. Though they have been applying for four years, and the govt has been slow to respond, the license has been "an inch away for some time" and could be in hand by March or April. "Everything is ready to roll" except the tower, which won't go up until the license is rcvd. However, it could be up in a few days, permitting test xmsns very quickly. Programming and staff are in the works. Again, not solely an SIM project, but they have been spearheading it. Part of setting up one stn for Protestants, one for Catholics (already on the air), one for Muslims, in the Ivory Coast [not necessarily all on SW, I presume--JB]. (Interview with John Shay [sp?], Sudan Interior Mission/DXPL/NU/DSWCI DX Window)

CYPRUS

From: mustafa tosun, brt@cc.emu.edu.tr

To: Christoph Ratzer, ratzer@ping.at

Dear Mr. Ratzer,

You are saying in your message that you should be one of the first to detect Bayrak Radio II (Bayrak International) on SW. In fact, you are the very first person to report a reception after 14 January 1997, when test transmissions were started.

The transmissions lasted until 14 February. The HF Transmission equipment is being renewed lately. Therefore, it will take a few more months before regular transmissions begin.

Meanwhile, the utilization of a new frequency is being evaluated. May I ask you to supply me with any information you might have, on the spectrum of 49 m. band in your area? I would like to know the real situation in terms of available frequencies. Thanking you, (Ratzer/DSWCI DX Window)

CZECH REPUBLIC Radio Prague English sked thru

october 25.	
0000-0027	5930 7345
0100-0127	6200 7345
0300-0327	5930 7345
0330-0357	9480 11600
0700-0727	7345 9485 9505
0900-0930	15640 17485
1030-1057	7345 9505
1300-1330	13580 17485
1600-1627	5930 17485
1700-1727	5930 15640
2000-2027	5930 11600
2130-2157	9440 9495 11600
2230-2257	7345 11600

(24-Mar/Bergadano)

DENMARK Radio Denmark, thru 26-October, all programs in Danish:

0030-0055	7465 9560 9985
0130-0155	7465 9560 9985
0230-0255	7465 9560
0330-0355	7485 9565
0430-0455	7485 7570 9980
0530-0555	7485 13805
0630-0655	7180 7295 9590 13805
0730-0755	7180 9590 13805 15245
0830-0855	13800 15170
0930-0955	13800 15170
1030-1055	9480 15625
1130-1155	7295 15625
1230-1255	9590 13800 13805 15605

1330-1355	9590 13800 13805 15650
1430-1455	13800 13805
1530-1555	9980 11840 15230
1630-1655	9980 9985 13805 15600
1730-1755	7485 9985 15220 15340
1830-1855	7485 9590 15220
1930-1955	7485 13805 15340
2030-2055	7485 7540 9590 15340
2130-2155	7205 11675
2230-2255	9405
2330-2355	7275 9405 9480

(15-Mar/Koie-R. Denmark)

ECUADOR

2480.2 Radio Sonorama, Riobamba (2 x 1240) 1043 SS, this is the UNID from Cumbre 127. Andean mx, M anncr, canned ID "Hacia Riobamba...provincia... Chimborazo... 26...somos Radio Sonorama, una frecuencia de mucho gusto." Fair to good signal. Even stronger Mar 12 0943 with ments of "Riobamba" (8Mar/Mohrmann/Cumbre)

3283.3 La V del Rio Tarqui is not on the air at present. (Klemetz-COL)

3360 V del Upano, 0047 into distance education program. Usually not on at this hour of the day. (19-Feb/Klemetz-COL)

4770.1 R. Centinela del Sur, Loja; 1137-1155 nx ID "Por Radio Centinela del Sur"advs y nx sobre el crculo periodstico de Loja y su periodo de trabajo en 1997 y sobre el rea de salud # 1 NOTA: Hay interferencia de R. Tarma quien por la cercana y su potencia fue necesario escucharla en USB (26Feb/ Arrunatequi-PRU/Chasqui DX 94)

5060.2 Radio Progreso, noted reactivated 1950, very poor, but growing into a fullfledged signal by 0030, Mar 8, when they ended one of their typical esoteric prgrs. (7-Mar/Klemetz-COL)

HCJB sked thru 26-October:

TIOD SKEU U		
0000-0300	Quichua	3220 6080
0000-0400	English	9745
0030-0100	French	9410
0115-0130	Tajik	5860 Su-Th
0130-0200	Uzbek	5860 Su-Th
0200-0430	Russian	5860
0400-0700	English	9745
0430-0500	Japanese	9765
0430-0500	German	5860 9415
0500-0515	Kikongo	9765 Mo-Fr
0500-0515	Ukrainian	5865 9380
0515-0700	Russian	5865 9380
0530-0600	Slovak	9420 Mo/Fr
0530-0600	Czech	9420 Tu-Th/Sa-Su
0600-0630	German	9765
0630-0700	French	9765
0700-0730	Spanish	9765
0700-1058	English	9645
0730-0930	English	5865
0800-0930	Portuguese	6125

0830-1000	Quichua	3220 6080 6110
0930-1000	German	6125
1000-1400	Quichua	3220 6080
1030-1400	Spanish	6050 9765 11960
1100-1600	English	12005 15115
1130-1200	Japanese	9415
1400-0500	Spanish	6050 15140
1500-1800	Portuguese	15295
1800-1830	Czech	12025 15550 Tu-Th/Sa-
		Su
1830-1900	Slovak	12025 15550 Mo/Fr
1900-1930	German	12025 15550
1900-2158	English	11960
1930-2000	French	12025 15550
2000-2130	Arabic	12025 15520
2130-2228	Spanish	9380 12025
2130-2400	Quichua	3220 6080 9745
2200-2300	Japanese	11615
2230-2300	Russian	12005
2300-0000	German	12005
2300-0230	Portuguese	11615

HCJB also broadcasts 24 hours per day in upper sideband on 21455kHz. (HCJB/WWDXC/Bueschel-FRG)

ETHIOPIA Radio Ethiopia External Service in EG broadcasts 1600-1700 on 7165, 9560 and 11800 kHz. News is at 1630 every day. There is also a relay of the external service Monday through Friday at 1030-1100 on 5990, 7110 and 9705. Address for reports: External Service, Radio Ethipoia, P.O. Box 654, Addis Ababa, Ethiopia. (Radio Japan Media Roundup/Cushen/NZDXT/Lamb/Cumbre)

FRANCE Amended sked for RFI: French to Africa "Service Afrique"

0430-0457	3965 4890
0530-0557	3965 5945 9790
0630-0657	3965 5945 7135 9790 11700
2130-2157	3965 5945 6175 7160 9790, 15300

French to Europe: 1100-1145 6175 1700-1800 6175

1/00-1800	01/5
1800-1900	3965 6175

(3-Mar/Radio World/Van Oudheusden/EDXP/ WWDXC/Bueschel-FRG)

GEORGIA High Adventure Ministry, The Voice of Hope, noted on NF of 7520 from unidentified site since the end of February at 1915-2100 s/off in English. ID "The Voice of Hope for all Europe". Good signal. 6280 carries another px at this time. The announced address is: Voice of Hope, PO Box 109, HR4 9XR, England. (28-Feb/N. Pashkevich-RUS/EDXP 44/ Padula-AUS)

FAX from station advises site as Dusheti (Georgia), 100 kW, antenna 302 degrees to W. Europe. Full address is Box 109, Hereford, HR4 9XR, England. FAX: 01432-263-408. (9-Mar/Rausch/NU/EDXP 44/Padu la-AUS) S/off varies between 2000-2100 (EDXP 44/ Padula-AUS) For Z97, Voice of Hope (KVOH origination) plans to use 9310 (ex-7520) 1900-2100, with 100 kW, 302 degrees, to Europe, from Tbilisi. (18Mar/George Jacobs and Associates/EDXP #45/Padula-AUS)

9494.79 Abkhaz Radio TENTATIVE 0428 Open Carrier, 0430 Interval signal played three times and then talk by man. 0433 instrumental music. Usually just a het most evenings. (Valko + Johnson-HI/Cumbre)

GERMANY Deutsche Welle English schedule:

0100-0150	6040 6145 9640 11810
0200-0250	7285 9615 9690 11945 11965 12045
0300-0350	6085 6185 9535 9615 9640
0400-0450	5990 6015 7225 9565 11765
0500-0550	5960 6045 6185 9615
0600-0650	11915 13790 15185 17820 17860
	21680
0900-0950	6160 12055 17715 21680
1100-1150	15370 15410 17765 17800
1600-1650	6170 7185 7225 9735 9875 11810
	13690 17800
1900-1950	7250 9640 9670 9735 11785 11810
	13790
2000-2050	7170 9615
2100-2150	7115 9670 9735 9765 11785 11865
	15135
2300-2350	5980 7235 9690

(direct)

Deutsche Welle noted being reported as saying their Ext sces have now returned to the planned normal as transmitters in Kigali, Rwanda, and Trincomalee, Sri Lanka are fully operational after being targets in local civil strife. The need to press ahead with automation at these relay sts will mean fewer staff being sent from Germany. This move will figure well with management plans to cut costs which are needed due to reduced funding from the German govt. (Fitzsimons-UK/WDXC Contact/WWDXC/Bueschel-FRG)

Programs of private shortwaver West Coast Radio Ireland originate in the studios of Mid West Radio in Co Mayo (Ireland) and are broadcast via a 100-kW Deutsche Telecom transmitter at Juelich, Germany.

0100-0200	English	5910 Th
1500-1600	English	5970 Sa
1800-1900	English	11665 Th

(BBCM)

GREECE VOA relays cut, MW boosted. In response to the Albanian government's cut-off yesterday of the VoA's Albanian-language broadcasts on local stations, VOA today stepped up its MW broadcasts to the crisisridden Balkan nation. In addition to its two hours of daily Albanianlanguage broadcasts on SW, VOA may now be heard in Albania at 792 MW [via VOA's Kavala-GRC relay transmitter], from 0600-0630, and 17001730.(3-Mar/BBCM/AGDX/BCDX/ EDXP 44/Padula-AUS) GUAM Until the end of W96, KSDA has added 11895 2200-2300, replacing 9495. (George Jacobs and Associates/EDXP #45/Padula-AUS)

HONDURAS 4910 LV de la Mosquitia - Cumbre reported that this one was about to go back on the air a few weeks ago. I haven't heard anything, so I called the to see what had gone wrong. To my surprise, I was told that they had tested all 3 of the station's transmitters on the air and that they hadn't had any problems. I replied that I hadn't heard it in Colorado nor had I seen any logs of it. I was told that they had heard it in Missisippi (I am not sure if he meant recently or not). Is anybody hearing this station? The schedule I was told is the same as before, 2300v-0300v. (21Feb/DIRECT/ Johnson/Cumbre 127)

INDIA AIR noted with two additional channels -1330-1500 in EE to South Asia on 9545 // 11620 13710. Also 11715 added at 0130-0229 in Nepali // 3945 6045 7250 9550. (Alok das Gupn reactivated. First noted 26/2, sign-off time is now 1515. (6-Mar/ Yamada-JPN/EDXP 44/Padula-AUS)

3290 Definitely AIR Gangtok in Sikkim is having problems. Not heard on many checks in February but heard on18/2 at 1325 with Tibetan type music, again on 20/2 at 1520. However 22/2 not at all. This transmitter has been somewhat erratic thruout. This must be quite frustrating to DXers who go on DXspedition hoping to catch this out of many such. 22/2 Following Indian s.on with Interval signal and the usual proceedures. (Goonetilleke/UADX/DSWCI DX Window)

AIR regionals in the trops report. Monitored the following, all stations either site ided (id) or monitored English news (news) in // to other AIR outlets. Also noted a few changes to the W96 sked.

3223 Shimla id 1741*, not 1710.

3245 Lucknow id *1430, not 1415.

3277 Srinagar, not here but 4950

3305 Ranchi untraced

3315 Bhopal id3345 Jaipur id

3365 Kurseong untraced here, 4895 instead.

3365 Delhi id, EE news at 1530

3390 Gangtok sick transmitter, id by Valko

3945 Gorakhpur news

4760 Port Blair id

4760 Leh off? Untraced?

4775 Imphal news

4790 Itanagar id

4800 Hyderabad id

4820 Calcutta id

4840 Mumbai id

4850 Kohima news

4860 Delhi Off? Russian dominating the freq.

4880 Lucknow news

4895 Kurseong id

4910 Jaipur id 1415*

4920 Madras news

4940 Guwahati news

4950 Srinagar news EE news at 1530

4970 Shillong id, plenty of EE programming

5010 Thirupuram still off ? Untraced.

5050 Aizawl id, Valko very happy. (Valko + Johnson-HI/Cumbre)

INDONESIA

3124 RPD Halmahera 1115 pan flute music, then talk by man with music in background. Jakarta news at 1200, but through 1300 with pops. I think Dave got at least a partial id. Heard till 1432*. (Valko + Johnson-HI/Cumbre)

3142.1 RRI Sorong PRESUMED pops through 1030, then 1100, when I said enough. (Valko + Johnson-HI/Cumbre) here, but still a fair signal. St was off for a few days, and usually s/off is after Jakarta nx around 1515*. (7-Mar/Martin/Cumbre)

3205 RRI Bandung. I have been unable to hear this so I had a friend in Indonesia call the station. Station personnel told him that they are off due to technical difficulties. (Atkins/NU/Cumbre/ YamadaJPN/Jembatan DX #16)

3231.8 RRI Bukittinggi. 1503 Jakarta nx relay. 1512 Local traditional mx. Poor. (24-Feb/Yamada-JPN/Jembatan DX #16)

3295.33 RRI Samarinda 1430-1440+, M ancr with a quick site ID, then into a radio drama pgm. UTE QRM as usual 3325.0 RRI Palangkaraya. 1534 Dangdut mx. Suddenly s/off at 1545.Fair. (16-Feb/ Yamada-JPN/Jembatan DX #16)

3344.85 RRI Ternate 1445-1516*, Indo ballads/pops, site ID by M at 1458, SCI, and Jakatta nx. Closing anmnts, gone by 1516*. Inactive the last few days, possibly xmtr repair? Huge signal again, strongest 90mb Indo here. Gone are any chances of hear AIR Jaipur now! (6-Mar/Martin/Cumbre)

3946 RRI Tanjungkarang PRESUMED pops right through 1600, but Indonesian talk and Sci at 1658. Couldnt get local id, though. (Valko + Johnson-HI/Cumbre)

4000.1 RRI Kendari. 1546 Kroncong mx. 1549

Closing anmt. S/off at 1550. Fair. (16-Feb/Yamada-JPN/Jeinbatan DX #16)

4606.3 RRI Serui. 1300 Jakarta nx relay. 1307 Local pops. S/off at 1326. Poor. Reactivated. (2-Mar/Yamada-JPN/Jembatan DX #16)

4696.9 RKIP-Surabaya.1433 Wayang kulit. Poor. (1-Mar/YamadaJPN/Jembatan DX #16)

4766.0 RRI Medan. 1450 Local pops. 1459 RPK. 1500 Jakarta nx relay. Fair. (25-Feb/Yamada-JPN/Jembatan DX #16)

4789 RRI Fak-Fak 2011 Indo covers of EE pops such as "Show A Little Kindness" and "Don't Stand so Close to Me." (1-Mar/Ormandy/Cumbre)

5059.13 RRI Yogyakarta 1450-1515*, Gamelan mx pgm, with W ancr at 1459. SCI, to Jakarta nx. Site ID at 1514 by same W ancr at end of nx, closing anmnts, gone by 1515. Station has been off for some time now, maybe xtmr repairs? Much improved signal, second only to 4753v RRI UP. (21-Feb/Martin/Cumbre 127)

6071 RRI Jayapura still going strong at 1800. (Valko + JohnsonHI/Cumbre) 7231.0 RRI Fak Fak. 1445 Tlk by M. 1446 EG pops. Suddenly s/off at 1450. Poor. (1-Mar/Yamada-JPN/Jembatan DX #16)

RRI Pekanbaru on 5040 reactivated. Sign off time is now 1515. (26Feb/Yamada-JPN/Jembatan DX #16)

RRI Medan changed sign off time from 1500 to 1515. (YamadaJPN/Jembatan DX #16)

RRI Tanjungkarang on 3395.1 changed sign off time from 1600 to 1700 in February. (Yamada-JPN/Jembatan DX #16)

RRI Jakarta on 15150 broadcasts Programa Nasional Satu instead of Programa Nasional Dua. (Yamada-JPN/Jembatan DX #16)

IRAN VOIRI Teheran adjusted their 9590 with 9585 at 1330-1430 Urdu causing cochannel to DW-Trincomalee at the same time. (15Mar/Dasgupta-IND)

VOIRI partial updated sked: ???-2240 Bosnian 7100 9022 0600-1100 Arabic 5995 11875 11930 15084 15260.4 1100-1225 English 1330-1425 Urdu 6175 7115 1330-1425 6050 7215 Chinese 7115 7215 Bengali 1430-1525 English 7215 1530-1625 1700-1725 Swahili 9685 (1-Mai/Panivew-BUL + Bueschel-FRG/BCDX/EDXP #45/Padula-AUS) IRAQ Republic of Iraq Radio (Arabic: "idha'at jumhurivat al-iraq"):

0255-0015	Arabic	9715v-irreg	7150v-irreg
		4615v-irreg	
0315-2130	Kurdish	6560	

1700-2000

Arabic* 9750v-unconfirmed 3935

*=Mother Of All Battles Radio (BBCM)

		. ,
ITALY RAI S	ked thru 26	October:
0050-0110	Spanish	9575 11880
0050-0110	English	6010 9675 11800
0110-0125	French	6010 9675 11800
0110-0125	Portuquese	9575 11880
0130-0305	-	6010 6110 9575 9675
		11765 11800 11880
0305-0325	Spanish	6010 9575 9675 11800
0505 0525	opunion	11880
0330-0350	Russian	5975 7270 9670
		5975 7270 9670
0350-0410		
0400-2200		7175 "Radiodue"
0400-2200	Italian/2	6060 9515 "Radiouno"
0415-0435	Amharic	11905 15400
0415-0440	Italian/EE	5975 7270
0430-1200	Italian	6110
0435-0510	Italian	11905 15400
0445-0505	Lithuanian	5975 9670
0510-0530	Somali	11905 15400
0510-0530	Romanian	5975 7240
0535-0555	Arabic	11905 15400
0535-0555	Russian	9670 11800
	Italian	7240
0600-1300		15240 21520
1000-1100	Italian	11925
1320-1355	Albanian	5990 7240
1330-1355		6035 7290 9670
1400-1415		5990 7240
1400-1430		15250 17780
1415-1435		5990 7240
1435-1455		5990 7240
1500-1520		5970 7240
1500-1525	Italian	5990 7290 9670
1520-1540	Greek	5970 7240
1530-1555	French	5990 7290 9755
1540-1600	Bulgarian	5970 7240
1555-1625	Italian	5990 7290 9755
1605-1625	Russian	9670 11800
1630-1655	French	7235 9670
1630-1655	Arabic	9690 11880 15245
1700-1800	Italian	7235 9745 11840 15230
		15320
1805-1825	German	5990 7130 9670
1815-1830		6110 7145
1830-1845	Slovak	6110 7145
1830-1845	Italian	15250 17780
	Polish	
1845-1905		6110 7145
1910-1930	Somali	9745 11840 15250
1910-1930	Serbian	5955 7145
1935-1955	Hungarian	5955 7145
1935-1955	English	6015 7230 9670
2000-2020	Swedish	7180 9755 Mo/We/Fr
2000-2020	Danish	7180 9755 Su/Tu/Th
2000-2020	Russian	6035 7145 9670
2000-2020	Esperanto	7180 9755 Sa
2025-2045	Arabic	6035 7290
2025-2045		7120 9710 11840

2050-2110	Portuguese	6110 7290 9710 11840 15250
2110-2130	Spanish	6110 7290
2115-2135	Romanian	5970 7120
2135-2155	Czech	5970 7120
2135-2155	Arabic	6110 7290
2155-2210	Slovak	5970 7120
2200-0400	Italian/1	6060 "Notturno dall'Italia"
2200-2225	English	6150 9565 11815
2210-2225	Polish	5970 7120
2230-0050	Italian	6010 9575 9675 11800
		11880

(RAI Web site)

Italian Radio Relay Service, Milano, summer transmission schedule: 050005307125 Sa-Su (Russian)

3922 MO-LI
3955
7125 Russian
3955
3955

Transmissions are in upper sideband mode, with reduced carrier, using 10 kiloWatts. (direct/EDXP #45/ Padula-AUS)

According to the January issue of Adventist World Radio's listener newsletter "Current", the Italian Government has granted approval for a private shortwave station In Italy to Adventist World Radio. The bulletin, received March 10, via AWR-Asia, states approval was granted January 23, 1997. The station will be built on a farm 40 kilometers north east of Forli. Ground breaking is anticipated for late 1997, and completion is expected by the year 2000. (24-Mar/Ziolkowski/EDXP #45/Padula-AUS)

JAPAN NHK Radio Japan Z97 in English: Newly introduced services:

0600-0700 5975UK 7230UK 9835 12030 15230 1700-1800 7110UK 2100-2200 13630

English GS schedule changes: Usual Sackville-CAN 5960 kHz time shift to 0100-0200 (from April 7th). UK Skelton change 0500-0600 7230 (x6150). 0500-0530 13630 & 15230 (x9835&12000) kHz. Moyabi-GAB relay 07000800 15230 (x15165) kHz. GS deleted at 0300-0400, 1400-1500, and 2300-2400 . (16-Mar/NHK RJ Media RoundUp/WWDXC/Bueschel-FRG)

KIRIBATI 9810U Radio Kiribati NEW FREQUENCY After several days of not understanding why we couldnt hear them on 9825, I rang them. According to station personnel, they moved here because listeners on Christmas Island complained of poor reception. Operating here with 1 kW, but only from 0530-0930 (not at other times Kiribati is on). Per monitoring, the English hour is at 0600 starting with R. Australia news. The constant cutting off of the transmitter, according to Valko, is probably a VOX feature on the transmitter that causes it to cut off if no audio is detected. (Valko + Johnson-HI/ Cumbre)

KOREA - NORTH 2349.5 KCBS Sariwon // 2850 at 1208. 4404.9 Radio Pyongyang Unlisted for this service, but heard in English at 1114. // 6575. Uses this channel for several hours. 5700 KCBS New Frequency? I dont recall this one listed anywhere. // 2850 as early as 0900. (Valko + Johnson-HI/Cumbre) [probably a harmonic - AQ]

KOREA - SOUTH RKI Seoul changes in English sce periode Z97 from March 30th, relay site changes only. Schedule of direct bcs fr Seoul transmitter remaining same. RKI via Skelton will be retimed from 1930 to 2100-2130, still on 3970 kHz. Sackville 1130 to be retimed at 1030-1100 on 11715 (x9650) kHz then. (16-Mar/RKI Feedback/WWDXC/Bueschel-FRG)

LAOS 6973v Luang Prabang The listed Nei Menggu that is suppose to operate around here was untraced, so if you here a station around here, you probably got this guy. Sked is *1030v-1400* and they run // to 6130 from 1200 (including the gongs) until about 1230. (Valko + Johnson-HI/Cumbre)

LIBERIA Liberian Communications Network was heard Feb 1 at 0715 in English with traditional music, ID and frequency anmt, citing 5100 and 6100 kHz. While the announced sked says they switch to 6100 at 0300, obviously this is not the case. (Sellers/World Radio Report - DX0/SerraIT)

MALAWI 5993.3 MBC heard at 0410 as well as 1805 when they had English news. Nothing heard on 3380. (Valko + Johnson-HI/Cumbre)

MEXICO 15120 XERTA (p) 1630-1730 Continuous salsa/rap crap music with no announcements of any kind. Signal is quite good, audio good, music selections do not compare to the great stuff on XERMX. This station could quickly undo the positive cultural image projected by R. Educacion, XERMX, and the old Radio Universidad from the University of Sonora, Hermosillo that provided the only source of offair classical music to the southwestern USA for at least two decades. (25-Feb/Buch/Cumbre 127)

MOLDOVA Radio Moldova International in Romanian to N. America scheduled Mon-Fri 1230-1300 on 9400. (8-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

MONGOLIA Z97 sked for Voice of Mongolia:

Russian	15170
English	15170
Mongolian	15170
Chinese	15170
Japanese	15170
Mongolian	12085
Chinese	12085
English	12085
Russian	12085
	English Mongolian Chinese Japanese Mongolian Chinese English

1345-1415	Japanese	12085
1430-1500	Chinese	9720 12085
1500-1530	English	9720 12085
1900-1930	Russian	9720 12015

The Voice of Mongolia provides QSLs for every qualifying reception report, and 9 different QSLs are available. Reception reports and letters should be sent to the language sections (i.e. English section), Voice of Mongolia, C.P.O.Box 365, Ulaanbaatar 13, Mongolia. Two IRC's or 1\$ to cover postage expenses would be appreciated. I am the Mail Editor at the English section and would be very happy to assist you further. Thank you for your cooperation. (20-Mar/Batbayar-VOMongolia/DXW/EDXP #45/Padula-AUS)

A new Mongolian independent station has commenced operations on shortwave. It announces itself as "Radio Blue Sky" and has been heard from 1300 until sign-off at 1500, on 4850. Transmissions have included halfhour news segments in En produced by Radio Mongolia, and En language lessons. (NDXC/Fadula-AUS/EDXP/Cumbre 127)

MOZAMBIQUE Radio Maputo, the external service of Radio Mozambique has this nominal schedule:

 1100-1130
 English
 11835-anned
 11820-anned

 1800-1900
 English
 4855-anned
 3265-anned

(BBCM)

As for Radio Mozambique's domestic services: The National Program is only observed irregularly on shortwave: Frequencies used in the past include (all variable) 11818, 7242, 6112, 5110, 4867 and 3210 kHz. Radio Mozambique also operates regional and provincial stations throughout Mozambique. Beira A prog. is heard on 3370v/6025v and Beira B on 3280v/9637v.

0245-0330 Portuguese 4855-(irreg) 0330-2210 Portuguese 9619v 4855-(irreg)

(BBCM) Noted on 6110.9 and 9618.9 (Clark-CAN + Conradie-RSA)

Radio Mozambique Emissao Nacional 0245-2210 Portuguese 15295v-daytime [local] 9619v 6110v 3210

Radio Mozambique Maputo & Gaza Interprovincial Program

0250-2210 Port/Tsonga 4925v-(4906-4925)

(BBCM)

3210 Radio Mozambique Maputo 1850-1910 PP lively PP vocal MX T/S I/D Frequencies NX 44343 (improved Audio) (20-Mar/Clemitson/DSWCI DX Window)

According to last MOZ feature I made the following observation of Radio Mozambique on 15293.66 at 14:12. language was Port. and they broadcasted a sportsprogram. (14-Mar/Lindenthal/DSWCI DX Window) NETHERLANDS Radio Netherlands Summer '97 English schedule:

ule.
- 6020F 6165B 9845B
5905T 7305A* 9855T 11655A
5905T 7305A* 9855M/T 11655M/A#
9855M 11655M
6165B 9590B
9720B 9820B
9720B 9820B
12065P 13710I
6045W 9860N 12065P 13710I
6045W 9860N
9890M 12090M 15585T
6020M 7120M 11655F
6020M 7120M 9895F 11655F 15315F
17605B
6020M 7120M 9895F 11655F 15315F
17605B
6020F 6165B 9845B

*=until 4-May, #=after 4-May A=Alma Ata, B=Bonaire, F=Flevoland, I=Irkutsk, M=Madagascar, N=Nauen, P=Petropavlovsk-Kamchatskiy, T=Tashkent, W=Wertachtal (direct)

NEW ZEALAND Radio New Zealand International sked, through 3-May:

0459-0758	9795	Sa-Su
0459-0816	9 795	Mo-Fr
0759-1206	9700	Sa-Su
0817-1206	9700	Mo-Fr
1207-1650	6070	occasional sport use
1650-1851	6070	Mo-Fr
1852-1951	9795	Su-Th
1852-1958	9795	Fr-Sa
1952-2306	11735	Su-Th
1959-2306	11735	Fr-Sa
2307-0458	15115	

(Sainsbury-RNZI)

NORTHERN MARIANAS ISLANDS Monitor Radio KHBI schedule for Z97 (which came into force on March 4):0800 15665; 0900 15665 13840; 1000 15725 15665; 1100 9355 9430; 1200 9355 9430; 1300 9355 13840; 1400 9355; 1500 9355; 1600 11550 9385; 1700 11550 9385; 1800 9355 9385; 1900 9355 9385; 2000 11860; 2100 13840; 2200 15665; 0000 15725 15665. (6-Mar/Matt Francis/ EDXP 44/Padula-AUS)

NORWAY Radio Norway International sked thru 26 October:

0000-0030	7465 9560 9985
0100-0130	7465 9560 9985
0200-0230	7465* 9560*
0300-0330	7485 9565
0400-0430	7485* 7570 9980
0500-0530	7485 13805
0600-0630	7180* 7295* 9590* 13805*
0700-0730	7180 9590 13805 15245*
0800-0830	13800 15170*
0900-0930	13800 15170
1000-1030	9480 15625

1100-1130	7295 15330 15625
1200-1230	9590* 13800* 13805* 15605*
1300-1330	9590 13800 13805 15650
1400-1430	11850 13800 13805
1430-1500	11850
1500-1530	9980* 11840* 15230
1600-1630	9980 9985 13805 15600
1700-1730	7485 9985 15220 15340
1800-1830	7485* 9590* 15220*
1900-1930	7485 13805 15340
2000-2030	7485 7540 9590 15340
2100-2130	7205 11675
2200-2230	9405*
2300-2330	7275 9405 9480

*English on Sundays (Grimdalen-NRK)

PAKISTAN 4790.5 Azad Kashmir Radio 1428 Koran, then talk by man. 1430 Chorus singing mentioning Pakistan and Kashmir again and again. Talk by man followed but didnt catch an id. 1459 type-writer theme music, 3 time pips and id "Yeh Radio Pakistan Hai". // 5027 at this time, but not after 1530. 1600 same type-writer music and pips, but English news now. // 5027 again but not // by 1639. 1643 id as "Program (Rubatan) Azad Kashmir Radio". 1700 just like 1500, carrying Urdu news from Radio Pakistan. (Valko + Johnson-HI/Cumbre)

R.Pakistan noted on the new 7235v(7231 7237 etc) // 9516 at 0030-0130 Hindi. (15-Mar/Dasgupta-IND/DSWCI DX Window). Radio Pakistan in English 1600-1630 replaced 9903 by v9513.6 kHz. Urdu 1700-1800 new 9485 (x11570.1). Turkish 1700-1800 new 9510.6 varies up to 9513.6 kHz. Indonesian 0900-1000 new v15026.3 (x15566.2) kHz. (1-Mar/ PaniviewBUL/WWDXC/Bueschel-FRG)

PAPUA NEW GUINEA The NBC has struggled for funds and has been forced to commercialize their two national services, the Karai and Kalang services. For those that don't know the Karai service is now 24hours. Between the hours of 1200 & 1940 the Karai Service carries the Kalang Service. It appears that the provincial (Kundu) stations will in time carry commercials (Baxter/OZDX/Martin/Cumbre) Karai national service has extended its use of 9675 to 0900, formerly 0700. First noted on 8-March. ID's reference "Voice of Papua New Guinea." (18-Mar/ Francis/EDXP #45/Padula-AUS)

3205 Radio Sandaun 1142-1202* Chit-chatty M's Pidgin w/ mx; ID at close and "Good Night Now" @ 1159; children's choir @1200 and then band anthem; off @1202 (8-Mar/Frodge/Cumbre)

3315 Radio Manus 1120 M preaching in Pidgin EE asking listeners to contact him. Pidgin ID at 1130, followed by more preaching. (11Mar/Cumbre)

3335 Radio East Sepik 1120 M & W w/ public svc annements in Pidgin, then ID & pop mx. (11-Mar/Rausch/Cumbre) 3385 R.East New Britain 1100-1115 IS at 1100 followed by news in E until 1115, then back to island music which was DJed by female. (12-Mar/ Hester/Cumbre)

PARAGUAY 5975 R. Guaira, regular every day. Sign on varies a bit, between 1000 to 1200. Often off on Mondays or at least s/on quiet late. Now also asking for report for the SW outlet: "Villarrica como protagonista en el iter mundial, atraves de R. Guaira y sus ondas cortas, en 5975 kilociclos banda de 49m. Escribanos informando la calidad de recepcisn. Nuestra direccisn, Alejo Garcma y Presidente Franco, telifonos 2385 y 2130, Villarrica Paraguay". I call the station, where they said that the transmitter used now is a new one, and power used at the moment is 1kW. The station said the SW outlet usually are un untill 00:00. But I have often heard it untill arnd. 01UTC. On: http://swl.sds.se/hotnews.html there are one audio file in WAV format of R.Guaira. recorded 6 of March at 1420 of the SW outlet. Paraguay changed to normal time (UTC -4) on March 2nd. (Iversen-PAR/DSWCI DX Window)

5976 R. Guaira 1159 Finally could get this one. Man asking for rpts, "...5975 Kcs, banda de 49 metros. escribanos reportandonos la calidad de nuestras emisiones. " Low modulation and het, also R.Guaruja, Florianopolis on 5980 makes reception difficult. '(19-Mar/NigroURG/DSWCI DX Window)

PERU

3234.8 Radio Luz y Sonido, Huanuco, 0026 with "La hora huanuquena", which is aired from 7-8 pm, speaker said. Ads for Comercial San Miguelito, wholesale agents for Cusquena brand of beer. (13-Feb/Klemetz-COL)

3283.3 Estacion Wari is audible most mornings from approx. 1000, rarely at night. First noted on this fq Feb 5, 2335 to past midnight, as reported in the Spanish language version of Dateline Bogota, Fechado en Bogota, Feb 12/97. Reactivated in June of last year, on 3280.6, the stn moved to 3281.6 on Oct 29 and is now to be found on 3283.3, probably at sufficient distance from Ecuadorian La V del Rio Napo, 3279.9, which would otherwise produce a nasty het in the stn's coverage area. (Klemetz-COL)

3339.95 R. Altura, Cerro de Pasco, Pasco Traditional-sounding music with multiple plucked string instruments and melodic vocal. Interrupted in midsong by M 0152 with ID: "...frequencia...Una sola...Radio Altura, un emisora al servicio del pais". (24Frb/Novello/Cumbre 127)

4004.9 Radio La Voz del Campesino, a new pirate station first noticed by FA, is located in San Miguel de El Faique, in the Province of Huancabamba, Department of Piura. The town is located at an altitude of 1060 meters. With a population of about 9000, it is a quiet and pleasant town, conserving the aspect of an old Spanish village with houses roofed with tiles and straws. It is not a particularly interesting place for foreign travellers. The station uses a "FRANVEL" brand transmitter of an output of 250 Watts, which was formerly used by Radio Grau in Huancabamba. (TIN/EDXP 44/Padula-AUS) R La V del Campesino, a new station first noticed by Arrunategui, noticed in Bogota, 2355 until 0100*. No comms, only music, TC's and ID's (carefully avoiding info regarding the station QTH) plus two personal messages, one of which (inadvertently) revealed the probable station QTH, "en esta localidad de El Faique". Sked given at s/off as 2200-0100. Name of owner appeared to be Alberto Soto Santos. Not too bad a signal into Bogota; is on most nights, and DJ seems friendly with the people at Radio San Miguel de El Faique, the new one that took over last month after Radio Sensacion, on 6895.3. ("Alto Piura", mentioned by PFA as the OTH, is the general coverage area of the station. El Faigue is in the mountainous area of Huancabamba province, which in turn belongs to the "departamento de Piura"). (18Feb/Klemetz-COL)

4420.3 Radio San Juan, unheard for a fortnight, now back Mar 2 with selection of tropical dance music, canned ID's and live TC's. S/off 0003* (Mar 3) with a long canned ID. (2Mar/Klemetz/ Cumbre)

4567v Radio Gotas de Oro, Chiclayo, has certified my reception from last year (on 4524) by means of a letter. Letterhead shows "drops of gold" (liquid, not solid...) and signature is illegible. Secretary Celia Purizaca Suxe knows what DXing is about, so letters can be addressed to the station, in care of her, Calle Primero de Mayo 278, Urb. Urrunaga, Distrito Jos Leonardo Ortiz, Chiclayo. Return postage would be appreciated. A pennant is in the making, says Celia in a separate message. (Klemetz-COL)

4775.0 R. Tarma, Tarma; 1157-1225 ID "Por Radio Tarma, la primersimaaa..." nx el rio Mantaro ha bajado su caudal en un metro...px Radio Noticia ID "Estimados oyentes a lo largo y ancho del Per, Radio Tarma esta llegando ntidamente con Radio Noticias" advs Cemento andino (26-Feb/ArrunateguiPRU/ Chasqui DX 94)

4279.4 R. Cajamarca, Cajamarca; 1127-1150 nx ID "Aqu estamos presentando Onda Informativa por Radio Cajamarca, amigo visitante cuando vengas a Cajamarca, no te olvides de visitar nuestros centros tursticos.." nx px Onda Informativa (28Feb/Arrunategui-FRU/Chasqui DX 94)

4764.0 R. Chincheros, Chincheros, Apurimac; 1154-1230 px La Hora Municipal advs se avisa a todos lo ganaderos de Chincheros que estra interesados en la inseminacin artificial, inscribirse en la oficina administrativa del Ministerio de Agricultura de Chincheros hablan en quechua y espaol ID "Siempre por su Radio Chincheros.." (28-Feb/Arrunategui-PRU/Chasqui DX 94) 4790.0 R. Atlantida, Iquitos, Loreto; 1135-1218 hablan sobre la salud el cuerpo humano por medio del naturalismo ID "Por Radio Atlntida..." (27-Feb/Arrunategui-PRU/Chasqui DX 94)

5498.1 Radio Las Lajas 0048 Messages and comunicados. "Atencion en esta localidad de Lajas..." mentioning their usual slogan: "Radio Las Lajas la pionera del dial" (18-Feb/Rodriguez/Cumbre 127)

5575.3 R. San Juan, (Ten. Bagua Grarde); 0205-0305 mx ID "Radio San Juan que trahsmite desde Bagua Grande (Creo entender Bagua..) mx ID "Radio San Juan, llegando a sus receptores ntidamente" px Boleros del Recuerdo. s/off 0300* (26-Feb/ArrunateguiPRU/Chasqui DX 94)

5645.9 La Voz de San Antonio, Bambamarca 0320 Andean mx w male in Spanish. "San Antonio" noted, still presumed. Unstable & weak signal, just above noise level. Still on at 0410. (26Feb/Pijpers/ Cumbre 127)

5775.2 A new one is Radio San Juan, Lonya Grande, Provincia de Utcubamba, departamento de Amazonas, until s/off 0319 with NA. Studio address sounded like 28 de Julio 420. - Seems to s/on fairly late, around midnight. Speakers seems fairly confident, do not play hide-and-seek, and they do give their own names on the air. Lonya Grande is "la capital del cafe", it was said. They say they are on 1150 kHz during the day. (1Mar/Klemetz-COL)

6045.3 R. Santa Rosa, Lima; 1229-1300 ID "7 de la maana con 30 en Radio Santa Rosa.." nx sobie el proyecto de titulacin de los campesinos ID "En Radio Santa Rosa le presentamos el comentario de la semana" (26-Feb/Arrunategui-PRU/Chasqui DX 94)

6261.1 UNID Peruvian, Mar 16, from 0055 to past 0200 when weakening considerably. Annoying QRM from the Greek on 6260. Seems to ID as "JL / or: "JR"/ Radio". Varied music and almost no ads, although I noted one for "Bar bodega Cucharon, Jr. Tupac Amaru sin numero". No clear indication of QTH. I haven't had anything on this channel for ages, and this stn does not seem to ID as Radio Juanjui". (15-Mar/Klemetz/DSWCI DX Window)

6479.8 Radio Altura, finally taped good ID at 0112. Good s7 signal. Rapid fire speech, difficult to pick out IDs. Had been trying for more than a week on this one. At this time of the year the grayline is perfectly placed, and the signal peaks s9+ at sunset, drops in level about an hour later, then picks up again early evening. (10-Mar/Sundstrom)

6725.6 R. Satelite, Santa Cruz, Cajamarca 2355 Long lists of comunicados by M announcer, ID's interspered along with telephone number. Occasional musical selections. Loud signal on all antennas, hard to believe this is 300w, per WRTH 97, tonight. (23-Feb/Novello/Cumbre 127)

6895.3 Radio San Miguel, San Miguel de El Faique also uses a "FRANVEL" brand transmitter of 250 Watts, which was formerly used by Radio Sensacion in Huancabamba. Until now, the station has not replied to my reports.(2-Mar/NozakiJPN/EDXP 44/Padula-AUS)

PHILIPPINES Revised sked for Radyo Pilipinas, Manila:

0230-0330	English	118 85	15120	15270
0330-0400	Filipino	13720	15330	17730
1730-1930	Filipino	11815	15190	

(5-Mar/Coceani-AUS/EDXP/WWDXC/Bueschel-FRG)

PORTUGAL RDP Internacional sked:

0000-0430	Portuguese	11840 9635 9600 9570
		6150
0430-0500	English	9570 6150 Tu-Sa
0430-0500	Portuguese	11840 9635 9600 9570
		6150 Su-Mo
0600-0900	Portuguese	9780-(fm 0700) 9630-(fm
		0745) 6130 Mo-Fr
0800-1000	Portuguese	17595 Sa-Su
0800-2100	Portuguese	21655 15515 9780 9615-
		(0900-1030) 6130 Sa-Su *
0900-1300	Portuguese	9780 6130 Mo-Fr
1000-1200	Portuguese	21655 17680 15515 Mo-Fr
1205-1300	Tetum	17595 Mo-Fr
1300-1400	Portuguese	17595 Mo-Fr *
1300-1430	Portuguese	21515 Mo-Fr
1300-2100	Portuguese	17745 15200 Sa-Su
1430-1500	English	21515 Mo-Fr
1600-1900	Portuguese	21515 Sa-Su
1700-2100	Portuguese	9815 9780 6130 Mo-Fr
1800-2200	Portuguese	21655-(to 2100) 15515
		Mo-Fr
2100-2130	English	9815 9780 6130 Mo-Fr
2130-2200	French	9815 9780 6130 Mo-Fr

(BBCM)

RUSSIA According to an E-mail from Khabarovsk, the Komsomolsk-naAmure station is active on the following frequencies: 5920, 6020, 6065, 9565, 9670 and 9675. No times mentioned and no information on whether they broadcast home or foreign service programs. (1-Mar/Ritola/EDXP 44/Padula-AUS)

4040 Evenkiyskaya GTRK Kheglen (Kheglen stands for Milky Way), Tura has local programs at 0100-0200, according to both listening and verification received today. V/S is B. Yuryev, Company Engineer. (14-Mar/Ritola/EDXP #45/Padula-AUS)

According to a verification from TRK Kabbalkteleradio, Nalchik transmits in Kabardin on Wednesdays and Sundays and in Balkarian for fellow countrymen in the Near East on Thursdays at 1830-1900 on 1170, 5905 and 7130 Shortwave frequencies were said to be seasonal, these may already be summer frequencies. Listening observations in February gave MW frequenciesas 1089 and 1170 and a shortwave frequency of 6005 kHz. The V/s was Kamal Makitov, vice chairman. (22-Mar/Ritola/EDXP #45/Padula-AUS)

Voice of Mediterranean frequency change: 7390 now replaced by new 12060 // unchanged 7440; 12060 signs on at 1930 with Voice of Russia German service, at 2000 into Voice of Mediterranean. Site: HFCC lists Almaty, but in fact these outlets may be from the Samara site. (28Feb/Lieberwirth-FRG/Ludwig/ EDXP 44/Padula-AUS) 2000-2100 English, 2100-2130 French, 2130-2200 German (16-Mar/Sundstrom)

Voice of Russia is reducing its Russian language broadcast output, from 18 to 10 hours daily. Operational span now: 2100-0100, 0300-0400, 0500-0700, 1600-1800, 1900-2000. (8-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

Joe Adamov recently answered a listener's question on 'Moscow Mailbag' about the reduction in shortwave broadcasting by the Voice of Russia. Adamov said that VoR now had three times less transmission capacity to the United States. The Russian Ministry of Communications owned the transmitters, not VoR. (6-Mar/Matt Francis/EDXP 44/Padula-AUS)

SAUDI ARABIA BSKSA schedule as compiled BSKSA info and BBCM observations. Valid until 4th May 1997.

0255-0600	General Sce	7150
0300-0600	Holy Koran	11870 9720v 9620 9555v
0300-1500	Second Pgm	9580v
0600-0900	Holy Koran	11785 9715 9530
0600-0900	General Sce	11710v
0900-1200	General Sce	15060 11820v
0900-1200	Holy Koran	21495 17880 11785 9715
1200-1500	General Sce	15380 15230 15060
1200-1600	Holy Koran	15280v
1500-1700	Call of Islam	11950 11910 11780
1500-1700	General Sce	11950v 11910 11780
1600-1800	Holy Koran	11710v 9730
1700-1800	General Sce	11910 11780
1800-2200		11935 9705v
1800-2200	General Sce	11935 9870 9555

(BBCM)

SEYCHELLES	FEBA Radio to 25	October 1997:
0113-0158	Tamil	7350
0158-0228	Telugu	7350
0200-0215	Urdu	9785 Sa-Th
0200-0230	Urdu	9785 Fr
0215-0230	Punjabi	11695 Sa-We
0215-0230	Sindhi	9785 Sa-Th
0230-0245	Hindko	9785 Mo
0230-0245	Pushto	11695
0230-0245	Siraiki	9785 Tu-Th
0230-0245	Baluchi	9785 Fr-Sa
0245-0300	Dari	11695
0300-0330	Farsi	11695
0315-0345	Swahili	9820 Fr
0315-0400	Swahili	9820 Sa-Th
0345-0415	Arabic	11695 We/Fr/Sa

0345-0430	Arabic	11695 Su-Tu/Th
0400-0415	Portuguese	9420 Th
0400-0430	Portuguese	9420 Fr-We
0430-0500	Dari	15555 Fr
0500-0558	Tagalog	15555 Sa
0530-0600	Sinhala	15555 Fr
0800-0815	Oriva	15540 Th
0800-0830	Tamil	15540 Su
0800-0900	Telugu	15540 Sa
0800-0900	English	15540 Fr
0815-0900	Hindi	15540 Th
0830-0900	Malayalam	15540 Su
0900-0915	Kannada	15540 Sa
0915-0930	French	15430
0930-0945	Malagasy	15430 Sa-Su
1000-1058	Tagalog	15540 Fr
1100-1130	Arabic	15540 11
1130-1200	Afar	
1145-1200		15540
	Tsangla	15445 Sa
1200-1205	Creole	11675
1200-1230	Tibetan	15445
1205-1220	French	11675
1230-1245	Nepali	15445
1245-1300	Nagpuria	15445 Th
1245-1300	Mundari	15445 Fr-We
1300-1315	Kui	15445 Su/Tu
1300-1315	Oriya	15445 Mo
1300-1315	Bhili	15445 Fr-Sa
1300-1330	Tamil	9810
1300-1330	Oriya	15445 We-Th
1300-1330	Malayalam	11600
1315-1330	Bhojpuri	15445 Fr-Tu
1330-1345	Marwari	15445 Fr
1330-1345	Chattisgarhi	15445 Sa-Th
1330-1345	Gujarati	11600 Su-Th
1330-1400	Gujarati	11600 Fr-Sa
1330-1400	Sinhala	9810
1345-1400	Hindi	15445
1345-1400	Marathi	11600 Su
1345-1400	Punjabi	11600 Mo-Th
1400-1415	Urdu	11600
1400-1443	Urdu	9810
1415-1445	Bangla	15445
1415-1458	Hindi	11600
1443-1458	Urdu	9810 Su
1443-1458	Hindko	9810 Th-Sa
1500-1515	Tulu	7270 Th-Fr
1500-1515	Konkani	7270 Tu-We
1500-1515	Badaga	7270 Su-Mo
1500-1530	English	11600 Tu-Sa
1500-1530	Kannada	7270 Sa
1500-1545	English	11600 Su-Mo
1500-1600	English_network	9810 Mo-Sa
1515-1530	Kannada	7270 Su-Fr
1530-1545	Nuer	11675 Fr-Mo
1532-1547	Makondi	9795 Th-Mo
1545-1600	Dinka	9795 In-Mo 11675 Fr-Mo
1600-1630	Amharic	
		9865 Fr-Su
1600-1630	Guragena	9865 Mo
1602-1617	Hazaragi	11600
1613-1643	Swahili	9810 Th

1613-1658	Swahili	9810
1617-1632	Dari	11600
1630-1700	Amharic	9865
1702-1732	Somali	11745
1702-1732	Somali	9810
1702-1747	Arabic	9440
1802-1832	Farsi	9455
1832-1847	Azeri	9455 Fr-Mo
1833-1848	French	9500 We
1833-1903	French	9500 Th-Tu

(FEBA web site)

SLOVAKIA AWR has resumed the evening English transmissions from Rimavska Sobota-SVK, but is now only 30 mins 2100-2130 on 6055 kHz incl. AWR Wavescan on Suns. Wavescan is now heard Suns at 0500 on 5905 kHz, previously during the second half hour of this transmission. (Barraclough-UK/ WDXC Contact/WWDXC/Bueschel-FRG)

AWR-Europe is testing on 13680 1400-1430 Eng and 1430-1500 Punjabi to India replacing 9465. Now evening transmission to S.Asia is :

0130	Nepali	9465
0200	Punjabi	11610
0230	Hindi	11610
0300	Urdu	11610
0330	England	11610
0400	Farsi	13715
1330	Dari	13580 Su
1430	Nepali	13580
1500	Punjabi	13580
1530	Hindi	13580
1600	Urdu	13580
1630	English	11600
1700	Farsi	11600

(15-Mar/Dasgupta-IND/DSWCI DX Window)

SOLOMON ISLANDS Solomon Islands Broadcasting Corp. "Radio Happy Isles"

0000-0730	9545 5020 1035
0730-1130	5020
1855-2000	5020
2000-2400	9545 5020

News in English at the top of most hours, plus relays of RA/RNZ/BBCWS news. (BBCM)

SOMALIA has a pipe into Maui. The numbers at the end represent how I would rate reception of these compared to the other Somalis. All of these (including Hargeisa) are USB, plus carrier.

6543.8 Holy Koran Radio *1500 (1600 Fri)-1800* Varies widely, also heard on 6534.8 and 6570, but usually here. Closing announcements and Koran before close. transmitter Fming on at least one day. 6732 Radio Mogadishu Voice of the Somali Pacification*1500 (1530? Fri)-? Always faded out before foreign language segments started. Steady here.

6822 Radio Mogadishu Voice of the Somali Republic Weakest of the lot *1600?-1800*? seeming-

ly. Steady here. 6890 Voice of the Masses of the Somali Republic*1500 (1600 Fri)-? Co-channel PRC at first, but clear by 1700 when they seem to have news in Somali.

7537.7v Radio Hargeisa, a station I have dreamed about since 1976. Heard as early as 1640 fade in and usually till 1800° Ided by Valko one morning as Radyo Hargeisa and about a million mentions of Somaliland (the only time I slept during the whole Dxpediton) This one is constantly drifting and was as high as 7539 by sign off. There is also a steady het on 7535.4 so watch out. This guy is USB and carrier and is drifting rapidly, one had to constantly retune. (Valko + Johnson-HI/ Cumbre)

SOUTH AFRICA The Stocks and Funds network was still not on the air in March. In Febr the company has not registered with the Atlanta Business Licencing Dept. Jerry Hoffman, station owner, was given a two year prison sentence in 1971 for a \$1 million fraud involving mortgage payments and barred from security actions in New York. He was declared bankrupt four years later. The company was evicted Jan 15th from studios at the Protestant Media Centre by court order for non payment of rent. Hoffman claimed Febr 20th they would be on the air in "a couple of weeks". (RNMN/WDXC Contact/WWDXC/-Bueschel-FRG)

SPAIN The new schedule of Radio Exterior de Espana:

110.		
0000-0100	Spanish	5970 6125 9540 9620 9745
		11815 11880(Su-Mo)
		11945
0000-0200	English	6055
0100-0200	Spanish	3210 5970 5990(Th-Sa)
		6125 9540 9620 11945
0115-0145	Sefardi	11775 We
0200-0400	Spanish	3210 5970 5990(Th-Sa)
	•	6055 6125 9540 9620
0400-0500	Spanish	6055 6125 9540 9620
0415-0445	Sefardi	9690 We
0500-0556	English	6055
0500-0700	Spanish	7275 9650 9760 11890
0.500 0.00		11920
0800-0900	Spanish	12035
0900-1000	Spanish	9620(Su) 12035 15110
0,000 1000	-1	17715 17755
1000-1100	Spanish	9620B 12035 15110 17715
	•	17755
1100-1200	Spanish	3210(Mo-Fr) 9620(Su)
	-1	9630(Mo-Fr) 11815(Mo-Fr)
		12035 15110 17715 17755
1200-1300	Spanish	3210(Mo-Fr) 9620(Su)
1200 1900	opennen	9630(Mo-Fr) 11815(Mo-Fr)
		11910X 12035 15110
		17715 17775 21570
1300-1400	Spanish	3210(Mo-Fr) 9620(Su)
1500 1400	opunion	9630(Mo-Fr) 11815 11910X
		12035 15110 17715 17775
		21570
		210.0

1400-1600	Spanish	5970(Sa-Su) 9620(Su)	1600-1650	English	6170 7225
		11815(Sa-Su) 11880(Sa-	1600-1755	German	9655
		Su) 12035 15110 17715	1700-1750	Persian	9575 11705
	• • •	17775 21570	1800-2000	German	9655
1600-1700	Spanish	5970(Sa-Su) 9620(Su)	1900-1950	English	7250 9670
		11815(Sa-Su) 11880(Sa-	2000-2050	Portug.	7250 9670
		Su) 12035 15110	2000-2155	German	9655
		15210(Mo-Sa) 17715	2100-2150	English	9670 11785
1700 1730	Duration	17775 21570	2200-2250	Indones.	5980
1700-1730	Russian	9620 Mo-Fr	2200-2355	German	9715
1700-1800	Spanish	5970(Sa-Su) 6140(Sa-Su) 7275 11815(Sa-Su)	2300-2350	English	7235
		11880(Sa-Su) 17715	2300-2350	English	5980 7235
		17755 21570	(Bueschel-FI	RG/WWDXC)	
1700-1900	Arabic	15110	CWATT AND	Trana World	Radio sked through 26th
1730-1800	German	6125 Mo	October:	Hans world	Radio sked through 26th
1800-1900	French	6125 Mo-Fr		Mahala	2200
1800-1900	Spanish	5790 6140(Sa-Su) 7275	0300-0330	Ndebele Swahili	3200
	opulation	9745 11815 17755	0300-0330 0300-0345	Shona	4760
		17805(Sa-Su) 17870	0330-0345	Swahili	3240
1825-1855	Sefardi	6130 Mo	0333-0404	Amharic	4760 Sa 7215M Sa-Su
1900-2000	Spanish	5970 6140(Sa-Su) 7270	0333-0404	Oromo	7215M Th-Fr
		7275 9630 9745 11815	0333-0404	English	7215M Mo-We
		17805(Sa-Su) 17870	0400-0415	Lomwe	6100
1900-2000	French	6045	0400-0430	German	4775 3200-(not Jun/
2000-2100	English	6125 11775 Mo-Fr	0400 0400	ocriman	Jul/Aug)
2000-2200	Spanish	5970 6140(Sa-Su) 7275	0400-0430	Chewa	6040
		9630 9745 11815	0430-0500	Chewa	6040
~		17805(Su) 17870	0430-0500	Tumbuka	6040 Tu/Fr
2000-2200	Arabic	6045 7270	0430-0600	English	6070 4775 3200
2200-2300	Spanish	5970 6045 7270 7275 9630	0600-0700	Freq	11730 9650 4775
		9745 11815 11880	0600-0700	English	11730M 6100
2200-2300	English	6125 11775 Sa-Su	0700-0735	Freq	9650 4775
2300-2400	Spanish	5970 6125 9540 9620 9745	0735-0805	Freq	9560 9500 6100 4775
		11815 11880 11945			Sa
2300-2400	French	6055	1400-1415	Urdu	15195
X=via Xian, China B=via Beijing, China (REE/ WWDXC/Bueschel-FRG)		1420-1425	Portuguese	7315 Mo-Fr	
		1440-1510	Portuguese	7315	
CDI LANKA Deuterbe Welle Triver als 707 1			1440-1510	French	7200
SRI LANKA Deutsche Welle Trincomalee Z97 sched- ule:		1510-1525	Makua	7315	
0000-0059	Russian	9640 11705	1510-1555	Malagasy	7200
0000-0200	German	9795	1525-1540	Lomwe Yao	7315
0100-0150	Bengali	9615 11965	1528-1543 1540-1555	Tigrigna	7265M 9500 Su/Fr
0200-0250	English	9615 11965	1540-1555	Lomwe	7315 Mo-Th
0200-0300	German	9795	1543-1558	Sena	7265M
0600-0650	English	17820 21680	1600-1630	Kirundi	9850M
0600-0800	German	21640	1600-1630	Tshwa	5965 3240-(not Sat/
0800-0955	German	21640			Sun)
0900-0950	English	17715	1600-1630	Chewa	5965 We-Mo
0900-0950	Persian	21695	1600-1630	Portuguese	3240 Sa-Su
1000-1050	Chinese	15185 21640	1600-1630	Tumbuka	5965 Tu
1000-1200	German	17845	1600-1830	English	9500
1100-1125	Indones	11705 17820	1630-1645	Shangaan	3240
1200-1355	German	17845	1630-1700	German	3200
1230-1300	Japanese		1630-1700	Oromo	9850M Mo-Sa
1330-1355	Chinese	11835 17820	1630-1700	Borana	9850M Mo
1400-1425	Indones.	9535 11865	1640-1655	Somali	9650M
1400-1600	German	9655	1700-1730	Tigrigna	9850M
1430-1515	Urdu	6170 7225	1700-1800	Swahili	5965
1515-1600	Hindi	6170 7225	1730-1745	Pedi	3200 Sa-Su

1730-1745	Sotho	3200 Fr
1730-1800	Amharic	9850M
1745-1800	English	3200 Mo-Fr
1800-1815	Swahili	5965 Sa-Su
1800-1830	Ndebele	3240
1800-2015	English	3200
1810-1825	Kinyarwanda	9850M Sa
1830-1900	Shona	3240
1830-1900	Nupe	9510M
1845-1900	Umbundu	6115
1900-1915	Ndau	3240
1900-1915	Portuguese	6115
1900-1915	Lunyaneka	6115 Sa
1900-1915	Kikongo	6115 We-Fr
1900-1930	Lingala	9525
1900-1930	Yoruba	9510M
1900-1930	Portuguese	6115 Su
1915-1930	Luchali	6115 Sa
1915-1945	Portuguese	6115 Mo-Fr
1930-1945	Chokwe	6115 Su
1930-1945	Kafunga	6115 Sa
1930-2000	Fulani	9510M
1930-2000	French	9525
1945-2000	Kimbundu	6115
2000-2005	Portuguese	6115 Mo-Fr
2000-2015	French	9525 Sa-Su
2000-2030	Hausa	9510M
2030-2057	Twi	9510M
2100-2130	Arabic	7215M
2130-2145	Arabic	7215M Su

M=via Meyerton (BBCM)

SWEDEN Radio Sweden in English:

1730-1800	9590 13800 Su
1730-1830	6065 13800 Mo-Sa
1930-2000	6065
2030-2100	6065 13625 Sa/Su
2130-2200	6065 9430

(direct)

SWITZERLAND Swiss Radio International, through 25-October:

0030-0100	German	6135 9885 9905
0100-0130	English	6135 9885 9905
0130-0200	Spanish	6135 9885 9905
0200-0230	French	6135 9885 9905
0230-0300	Spanish	6135 9885 9905
0300-0315	Italian	6135 9885 9905
0330-0400	German	6135 9885 9905
0400-0430	English	6135 9885 9905
0400-0445	French*	6165 9535
0430-0500	English	9905
0430-0500	French	6135 9885
0445-0500	Italian*	6165 9535
0500-0515	German*	6165 9535
0500-0530	Italian	6165 9885 9905
0515-0530	English*	6165 9535
0530-0600	French*	6165 9535
0600-0630	English	9885 11860 13635
0630-0700	French	9885 11860 13635

0700-0730	Italian	9885 11860 13635
0700-1000	French*	6165
0730-0800	German	9885 11860 13635
0830-0900	Italian	9885 13685 17515
0900-0930	English	9885 13685 17515
0930-1000	French	9885 13685 17515
1000-1030	German	9885 13685 17515
1000-1030	English*	6165 9535
1030-1100	Portuguese	9885 13685 17515
1030-1100	German*	6165 9535
1100-1130	English	13635 15414 17515
1100-1130	French*	6165 9535
1130-1200	Italian*	6165 9535
1130-1200	French	13635 15414 17515
1200-1230	German	13635 15414 17515
1200-1300	English*	6165 9535
1230-1245	Italian	13635 15414 17515
1300-1330	English	7230 7480 13635 15120
1300-1500	Italian*	6165
1330-1400	French	7230 7480 13635 15120
1400-1430	Italian	7230 7480 13635 15120
1430-1445	German	7230 7480 13635 15120
1500-1530	French	12075 13635 15530
1500-1730	German*	6165
1530-1600	German	12075 13635 15530
1600-1630	English	12075 13635 15530
1645-1700	Italian	9885 12075 13635
1700-1800	Arabic	9885 12075 13635
1730-1800	German*	6165 9905
1800-1815	French	9885 12075 13635
1800-1810	Italian*	6165 9905
1815-1830	German	9885 12075 13635
1830-1845	French*	6165 9905
1845-1900	Italian	9885 12075 13635
1845-1900	French*	6165
1900-1930	English*	6165
1900-2000	Arabic	9885 12075 13635
1930-2000	Romansch*	6165
2000-2030	English	9885 12075 13635
2045-2100	Italian	9870 9885 9905 11640
2100-2130	French	9870 9885 9905 11640
2130-2200	German	9870 9885 9905 11640
2215-2230	French	9885 9905 11650
2230-2300	German	9885 9905 11650
2300-2330	Italian	9885 9905 11650
2330-2400	Spanish	9885 9905 11650
1000-1400	opunan	JUDJ 3303 11030

*=HS for Europe (direct)

SYRIA Radio Damascus is now back on 13610 kHz, Arabic 0600-1500,

Russian German French English 1700-0015 . Clandestine st "Voice of Iraq" in Arabic noted till 0530 on v9950 kHz. (1-Mar/PanIviewBUL/WWDXC/Bueschel-FRG)

TAHITI 15167v RFO-Tahiti still on, but weak even here with a pile of wire and an all water path. Congrats to those who have heard this at any distance recently. (Valko + Johnson-HI/Cumbre) TAJIKISTAN Latest sked for Radio Tajikistan, Dushanbe, external services:

unoc, caterine	IL DEL FICE	J.
0100-0200	Dari	4975
0200-0300	Persian	4975
0300-0345	Dari	9905 4975
0345-0400	English	9905 4975
0400-0415	Arabic	9905 4975
0415-0500	Persian	9905 4975
1400-1500	Dari	7245
1500-1600	Persian	7245
1600-1645	Dari	7245
1645-1700	English	7245
1700-1715	Arabic	7245
1715-1800	Persian	7245

(BBCM)

TANZANIA 5985 Radio Tanzania in Swahili noted here at 0350 and 1800. News at 1800. Reactivated or just not many reports on this one? (Valko + Johnson-HI/Cumbre) S/off 2100* (12-Mar/Clemitson/DSWCI DX Window)

THAILAND Radio Thailand now on new 9535, ex 7295, to Scandinavia EE 1900-2000, GG 2000, 2015 Fr, 2030 En, 2045 Thai. (2-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

6149.4 Royal Palace Station PRESUMED 1048 instrumental music, almost classical. Only fair, but clear. 3 minute long songs continued without a break. 1059 Very weak talk by woman, time pips but not sure if they were theirs. Blocked by *1100 KNLS on 6150. Improved by 1134 with light vocals, Carpenters tune, A bridge over troubled waters", etc. 1157 brief talk by man (Thai) and then sax music (perhaps the King himself, I understand he is a sax player) and off at 1158. (Valko + JohnsonHI/Cumbre)

TURKEY Since 17/2, two transmitters at TRT's Cakirlar site are out of service, and TRT has temporarily stopped the SSB transmissions from Emirler (except English 6135 during 2300-0000), as well the Turkish program on 9460 to Europe during 2200-0800. Also, some programs have been transferred from Cakirlar to the Emirler site. Turkish on 15385 at 1700-1000 seemingly off. Night services in foreign languages are shortened to use a single transmitter only. German EMR 6035 LSB, English EMR 5965 LSB, French EMR 7240 LSB, are all OFF the air.

Turkish noted at 1800-2100 on 5980 6120 7110 9460 9560. Russian 1800-1900, Serbo-Croatian 1900-2000, both on 6135. German at 1830 on 5950 only, English follows at 1930 on 6000, French on 7255 and 7270 at 2030-2125. (25-Feb/Klink-FRG/ BCDX/EDXP 44/Padula-AUS)

6900.09 Turkish Metrological Station (t) @ 0506 with Middle Eastern type chants. Into W anncr. Could copy this on Carolina 80M beam when my 40M dipole wouldn't hear it. The 80M Carolina Beam works better in most situations than anything I now have in the air. (18-Mar/Rippel/DSWCI DX Window) 7370 Turkish Police Radio 0745 Turkish songs, only one short announcement in Turkish at 0757 (9-Mar/ Koutamanis/Cumbre)

UGANDA 4976 and 5026 are both on, but 5026 doesnt not have English news at 0400 as listed. (Valko + Johnson-HI/Cumbre)

UNITED ARAB EMIRATES UAE Radio, Dubai, EE to Europe now 25 minutes: 1030 13675 (ex 13665) 21605 15395 17630; 1330 21605 15395 17630; 1600 11795 15395 17630 (2-Mar/Radio World/Van Ousheusden/EDXP 44/Padula-AUS)

UNITED KINGDOM The BBC recently announced the successful completion of sale of its Home Service Transmission business to Castle Transmission Services for 244 million pounds. The proceeds of the sale will be invested in the BBC's transition to the digital age. Included in the deal are 500 staff and some 738 HST sites including equipment. The BBC is also proposing to privatise its World Service transmission business. Last November, Merlin Communications International, a management and employee buy-out team, was named as the preferred bidder for the WS business. The sale includes the WS program delivery service (67 staff plus access to the Bush House control room), WS transmission operations (270 staff) and operation and maintenance of seven overseas sites (but not the sites themselves which will be retained by the BBC and Foreign & Commonwealth Office), as well as four UK sites. The deal also includes commercial contracts for hiring out transmission capacity in the UK and/or overseas. (6-Mar/Matt Francis/EDXP 44/Padula-AUS)

The BBC Albanian FM relay has been discontinued, in favor of SW. BBC World Service is extending its SW broadcasts in Alanian following the closure of its FM relay yesterday (Sun 2nd March). The transmitter on Mount Dajti in central Albania was switched off after the declaration of the state of emergency throughout the country at 1630 . From today there will be three daily SW transmissions to Albania from the UK and Cyprus. In addition to the usual transmissions at 0630 & 1800, the 1415 program, normally on FM only, is being switched to SW. Last month, the BBC extended the 1800 transmission from 30 to 45 mins on weekdays. BBC Albanian broadcast resumed in 1992 after 25 years off the air. The BBC Albanian Service can be heard at 0630 on 7210, 9915 & 11780; at 1415 15215 & 11680, at 1800 6050, 7210 and [cut off -AQ] (3Mar/AGDX/BCDX/EDXP 44/Padula-AUS)

BBC new frequency for GG to Europe 1630-1700 6010, parallel: 3955 1296 648. (2-Mar/Radio World/ Van Ousheusden/EDXP 44/Padula-AUS)

URUGUAY

4620H CV154, R. Centro, Cardona, Dpto. de Colonia, (3x1540) 1147 Ads, promo, Gloria Estefan mx and ancmt: "Seguimoscompartiendo la manana en radio" Good/Fair. (8Mar/Nigro-Uru/DSWCI DX Window)

4641H CW116, R.Agraria, Cerro Chato, Dpto. de Treinta y Tres, (4x1160) 1037 w/ ID in progress: "...R.Agraria, desde Cerro Chato, Uruguay". Ancmt y male: "A partir de este momento cuando son exactamente las 7 - 37 minutos, ahora en R. Agraria, para todo el territorio nacional estamos dando comienzo a nuestro encuentro con la musica tipica y folklorica, juntos para compartirla aqui en el punto 1160 de su dial". Folk mx. (7-Mar/Nigro-Uru/DSWCI DX Window)

9595.1 R. Monte Carlo 0037 Thought to be this one with romantic folksounding vocals and announcements in Spanish by man and woman; seemingly an ad in there, too. Weak to fair level at first, though pounded by slop from BBC/9590 and (especially) Lisbon on 9600. Around 0050, suddenly dropped sharply in strength; still there after 0100 but completely unreadable. (16-Mar/Hill)

9650.2 CXA42, Em Cd de Montevideo, "la radio del carnaval", most nights between 2300 and 0030 when buried by carrier. Tough to read, mainly due to "low key" speaking habits, especially when reading ads ("frases"). Totally devoted to the coverage of carnival "murgas" and their performances; not even international football /soccer/ matches will make them change their minds. (Klemetz-COL)

USA VOA Hindi 0030-0100 is now using 6170 7295(ex 9650) 9650-THA (ex 11835). The new 7295 is co-channel with Radio Malaysia and also often by Pakistan 7290. (15-Mar/Alok Dasgupta-IND/Padula-AUS/EDXP #45)

KNLS tentative sked thru 28-September:

0800-0900	English	9615
0900-1000	Russian	9615
1000-1100	Mandarin	9615
1100-1200	Russian	6150
1200-1300	Mandarin	7365
1300-1400	English	7365
1400-1500	Mandarin	9615
1500-1600	Mandarin	7355
1600-1700	Mandarin	7355
1700-1800	Russian	9615

(KNLS Web site)

For Z97, Japanese services from KWHR are listed:

0900-1030 Sat on 9930, 2200-2330 Mon-Fri on 17510, 1200-1300 Sun on 9930. Vietnamese programs are 1400-1430 daily on 9930. (23Mar/Coceani-IT/EDXP #45/Padula-AUS)

WINB, the mighty Christian voice of Red Lion, PA, operates thusly:

0000-0300	English	11950
1700-1900	English	15715
1900-2200	English	11740
2200-0000	English	11950

(BBCM)

Shortwave station WRMI in Miami, Florida has received a construction permit for a new antenna beamed to North America. The new antenna -- a totatable log/yagi -- has two beam positions authorized by the U.S. Federal Communications Commission. The first position is an azimuth of two degrees, which is centered on Toronto, Canada, and will cover eastern North America. The second position is an azimuth of 284 degrees, which is centered on the city of Hermosillo in northern Mexico. This position will cover western North America, roughly from Vancouver to Mexico City.

Jeff White, WRMI general manager, says that work has already begun on the new antenna, and he's hopeful that it can be on the air within the next few months or so if all goes according to schedule.

The FCC construction permit also allows WRMI to add a second 50,000watt shortwave transmitter in the future. The first priority, however, according to White, is getting the new antenna up and operating. WRMI is currently operating a 50,000-watt shortwave transmitter on the frequency of 9,955 kHz with a corner reflector antenna beaming 160 de² grees from Miami towards the Caribbean and Latin America. With the addition of the new antenna, WRMI will be able to provide virtually complete primary coverage of the entire Western Hemisphere.

The station is owned by Radio Miami International, a privately-owned company which is not affiliated with any government, political or religious organization. It sells airtime to a wide variety of clients who produce information, entertainment, political, religious, and cultural programming. (21-Mar/ White/DSWCI DX Window)

WWCR sked from 6-April thru 31-May:

Transmitter #1

0000-04003215 (-0405 Mo-Fr)

0400-10003210 (0405- Mo-Fr)

1000-230015685

2300-24009475

Transmitter #2 1200-0100 13845 0100-1200 5935

Transmitter #3 1300-2300 12160 1100-1300 7435 2300-1100 5070

Transmitter #41200-230094750100-120023902300-01007435

(WWCR Web site)

VIETNAM Voice of Vietnam now on 9840 and 15010 (ex 12020), 27 minutes, EE to Far East 1330; Africa 1600; Europe 1800 1900 2030; FF to Asia 1300; FF to Europe 1830 1930 2100. (2-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

I was able to monitor the following Vietnamese regional stations and I recorded most of the sign-on/ offs for them. The ids are my best guess, but if someone knows Vietnamese, I would be happy to share my tapes. 4677v *1000-1500* Lao Cau Poor modulation and just cuts the feed at sign off. // Hanoi 5924v from 1400-1500. 4739v *1200-1400* Son La, poor modulation, 5030 No chance to hear the reported Hmong service here, China dominates the freq with a weak Malaysia underneath. 5597v *10001500* Lao Cai // 6702 at times.// Hanoi 5924v from 1400-1500. Weak modulation. 6531 *1200-1400* Cao Bang Anthem type music at sign on. Modulation ok. 6548v *1030-1200* Yen Bai Amthem type music and alternating man and woman talking. Modulation ok. 6702v See 5597v. (Valko + Johnson-HI/Cumbre)

ZAIRE Radio Star has been renamed 'Voice of the People', noted on 5066 with news (also in French) 0430-0500 and 1500-1530. (8-Mar/Radio World/Van Oudheusden/EDXP 44/Padula-AUS)

5066 A radio station identifying itself as "Voice of * the People" has been heard broadcasting from Bunia, in northeastern Zaire, using the same shortwave frequency (5066 kHz) used by the Bunia-based educational station Radio Candip (see below).

The following station identification in French was heard at 0430 on 18th Feb on 5066 kHz:

"Hello, dear listeners. Following is the local news from the Voice of the People broadcasting from Bunia, Ituri [northeastern Zaire] sub-region in the Democratic Republic of Congo. Bulletins will henceforth be broadcast from 1500 to 1530, resuming the following morning from 0430 to 0500".

The town of Bunia is in territory controlled by the Zairean rebel alliance led by Laurent Kabila.

The radio's use of the name "Democratic Republic of Congo" further suggests that it is rebel-controlled or affiliated.

"Voice of the People" is the same name used by a radio which has been heard broadcasting on FM from Goma, and is also similar to the pro-rebel "Radio of the People" station which has been heard broadcasting on FM from Bukavu in eastern Zaire.

Following the station identification in French cited above, "Voice of the People" from Bunia broadcast a five-minute news bulletin in French, followed by repeats of the same bulletin in Swahili, Lingala and vernacular languages.

The radio then broadcast music interspersed with local public service announcements. At 0528 the radio broadcast the following station identification for Radio Candip, Bunia, followed by detailed schedules of educational programming for Radio Candip:

"Following is the schedule for Radio Candip broadcasts from 16th February 1997, Monday to Saturday."

(Radio Candip is an educational station operated by the Centre d'Animation et de Diffusion Pedagogique - Candip - in Bunia. For a report that Radio Candip had come under Zairean rebel control in December 1996.) (BBCM monitoring research 18 Feb)

ZAMBIA Roger Stubbe of HCJB shed some light on plans for an expansion of the station's broadcasting activities in Africa in an interview with Ken MacHarg of the 'DX-Partyline' on 1/3. He said that an application was 'pending' for a 'middle-sized' station in Zambia. Possible languages for the station included Portuguese, English, French and possibly some Spanish as well as vernaculars However, we shouldn't hold our breath- Stubbe indicated that things are moving very slowly, probably because of local sensitivities about basing an international SW station in the country. Although the privately-run 'Christian Voice' is already operating, its primary audience is domestic with programs in English only. Stubbe made reference to an application by another organisation in another country which had been in the works for some five years, and was still unresolved. (6-Mar/Francis-AUS/EDXP 44/Padula-AUS)

UNIDENTIFIED 2340 1137-1144 w/ CenAm ranchera ballads, Brief M/W drama type feature, then into marimba song. Faded quickly and did not come back in several checks. Probably 2x1170 harmonic. Maya de Barillas on 2360 was in very well at the same time, so good conditions into CenAm. (21-Feb/ Moore) (21-Feb/Moore)

Pirate Radio Report

Chris Lobdell P.O. Box 146 Staneham, MA 02180-0146 Internet: piradia@usa1.com

Hello and welcome to the April edition of THE PIRATE RADIO REPORT. I hope all of those of you who made it to the 10^{TH} WINTERFEST in Kulpsville had a great time. I understand there were several FM and shortwave pirate signals to be heard throughout the festivities. Your editor hopes to be in attendance next year.

In this edition, we'll be presenting a book review on a new publication hot off the press co-authored by pirate veteran Andy Yoder.

Electra Radioship Project Is On Hold

As you may recall from earlier articles written in the subject that Allan Weiner in conjunction with Scott Becker was working on a radioship which was to be launched last winter. This project is currently on hold.

Anita McCormick, who is a friend of Weiner's, has told us that one of the major backers of the project was a preacher [no, not Brother Stair] that has been backing away from the deal. At the present moment they need about \$20,000 to \$30,000 US \$ to get the ship ready and on the air.

Your editor hopes to speak with Allan in the next few weeks, so hopefully I'll have some more information for the May issue of THE PIRATE RADIO REPORT.

Access To The Airwaves Due Out In April

The biography of Allan Weiner as told to Anita Louise McCormick should be out by the time your read this. We have to have a review for you no later than the June edition of this column.

Book Review

Pirate Radio Operations by Andrew Yoder and Earl T. Gray. [Loompanics Unlimited, soft cover, 1997, 364 pages].

Veteran author Andrew Yoder is no stranger to pirate radio. In 1990 he wrote *PIRATE RADIO STATIONS, Tuning In To Undersground Broadcasts.* This book was the first to give a comprehensive history of shortwave pirate activity in North America. In 1996, Yoder's *PIRATE RADIO, The Incredible Saga Of America's Underground Illegal Broadcasters,* was published.

This book was basically an updated version of his first book and included information on pirate activity in other areas of the world. A CD was included which contained short audio clips from various pirates.

In Andrew Yoder's latest book, which is coauthored with the help of Earl T. Gray, the authors go beyond the history of pirate radio and take us into the mind of the pirate, into his studio and transmitter room and on location into the woods. If anyone out there was interested in setting up their own pirate station, this would be the book to help. The information is not technical, in that there are no detailed plans or schematics for construction of your own shortwave transmitter. That type of information will have to be found elsewhere.

There are chapters on outfitting a studio in which Yoder goes through the basics of telling us what a pirate studio should have for tape decks, mixers, turntables, microphones and how they should be located for ease of use. Then there is a chapter for production. How do pirates put programs together? Yoder and Gray comment on various formats that range from a couple of guys playing music and BSing to the slick original comedy formats used by stations such as The Voice Of Laryngitis and K2000.

There is an excellent chapter on antennas. The techniques and formulas for building your own dipoles, verticals and the like are covered in detail, as is a chapter devoted to broadcasting on location in the woods, at a state park or behind your local K-Mart!

Yoder and Gray also give us a rather detailed behind the scenes look at the FCC, the equipment they use and DFing techniques employed in the past to track down pirates.

The book closes with a chapter on safety issues to make sure you don't electrocute yourself while tinkering with a transmitter. There are several reference lists in the back of the book to enable the reader to locate radio parts, tubes, etc as well as a complete 'list of North American and European maildrop addresses.

If you have more than just a casual interest in pirate radio, *PIRATE RADIO OPERA-TIONS*, is a book you should add to your radio collection. It can be ordered through Cabinet Communications, Box 642, Mont Alto, PA 17237. The price is \$18.00 plus \$2.00 shipping, PA residents please add \$1.20 sales tax. Be sure to tell them your read about the book here in THE PIRATE RADIO RE-PORT.

Radio Free Speech Calls It Quits!

Well, it was just a few months ago that Dick Pistek of The North American Pirate Relay Service [NAPRS] closed down after 4 years of operation, now we hear from Bill O. Rights that he will be leaving the air shortly. We'll have to say good-bye to the likes of Earl Pitts [not the accused CIA spy!] and the Reverend Holy Moley. RADIO FREE SPEECH has been one of the most active stations over the past couple of years and has managed to make it to Europe, even though they only use 10 watts of power in the AM mode. Bill is currently airing his "Farewell Broadcast". If you hear it, the station will send you a special QSL in return. You can address your reception reports to either Box 109, Blue Ridge Summit, PA 17214 or Box 1, Belfast, NY 14711. This is one station that will be missed.

George Zeller To Speak In Toronto

Pirate DXpert, Monitoring Times editor and co-author of the annual PIRATE RADIO DIRECTORY will be a speaker at the ONTARIO DX ASSOCIATION'S convention in Toronto, Ontario. This will take place on May 3rd at the CBC Broadcasting Center, located across the street from the SkyDome and the CN Tower. For more information about this event, please contact Ken Alexander by email at: kena@interlog.com. [Info from Free Radio Weekly]

Loggings....

Gee, we only got one logging this month, from our friend down in Argentina, Gabriel Ivan Barrera, known affectionately as GIB to his DX friends. He heard New Zealand's KIWIRADIO on 7475 kHz USB on 9 March 1997 at 0701 UTC s/on. Programming consisted of relays of ROCK-IT-RADIO and RADIO MARABU.

Reception was poor in Argentina until 0831 s/off.

Pirate Poll!

Don't forget to either drop me a post card or email me with a list of your top three pirates. Also, if you have a particular show by a pirate which stands out as a favorite of all time, mention that as well. The deadline for entries is June 1st, so write today!

Until next month, Happy Pirate DX!

English Schedules

Tom Sundstrom

PO Box 2275 Vincentown, NJ 08088-2275 Fax 609-859-3226 trs@trsc.com

Prepared March 28.

Albania: Albania has been in the news this past month. The country has been torn apart by riots caused by citizens affected badly by a failed pyramid scheme.

Radio Tirana was off the air for a few days in March due to the troubles in the country. Radio Tirana announced the following summer schedule for English broadcasts effective on March 30:

0145-0200 6115, 7160 0230-0300 6140, 7160 1845-1900 1458, 7270, 9570 2100-2130 1395, 7110, 9515

Further, we found the Web site of the Albanian Telegraphic Agency at http://www.telpress.it/ata. There are news stories by date, in English. If you have a decoder, ATA "prints" on 9133 kHz during the European morning and mid-day hours. The decoder settings are 50 baud and 500 Hz shift.

Australia: The Sydney Morning Herald of March 28 reports:

"The Government has agreed to a plan by the Minister for Communications, Senator Alston, to scale back Radio Australia to an English-language service delivered via the Falapa satellite and costing only \$3 million.

But while the decision will help the ABC meet the \$55 million funding cut imposed on it in last year's Budget and due to take effect on July 1, the national broadcaster still faces having to make substantial cuts to its domestic programming to meet the total savings."

Bulgaria: We have conflicting info for the NA service this summer as indicated by the "/" below. I would think the higher 11720 frequency would be used, but check it out for yourself.

North America:

0400-0500 11720/7480 9485 2300-2400 9435 11720/7480 East Asia: 1200-1300 13790 Europe: 1900-2000 9700 11720 2100-2200 9700 11720

(Bill Bergadano & Jim Frimmel)

Israel: Israel shifted to summer time in mid-March, and changed its frequencies March 30. Via Daniel Rosenzweig, the Kol Israel English language broadcasts:

0400-0415 7465, 9435 1400-1430 15650, 12080 1900-1925 7465, 9435, 11605

Japan: Radio Japan's fiscal year ended March 31. Staff and program budget cuts are being implemented. The cause of all of this is the financing necessary for an international television service in Japanese and English.

Though the permanent RJ staffers will not be laid off, some or all freelancers will go. This includes Mari Kishi, the host of "Media Roundup". Another is a non-Japanese cohost of the weekday "Magazine Hour" shows.

The "Media Roundup" show ended March 23. "Magazine Hour" and the Saturday "This Week" shows will probably be affected as well. (tnx Ian McFarland)

Lithuania: Radio Vilnius' new sked eff 3/30 is 0030-0100 UT on 5910 (Jim Frimmel).

USA: Glenn Hauser's "WORLD OF RADIO" has new air times on WWCR. The entire schedule is: Thu 2030 15685, Sat 0530 5070, Sat 1130 7435, Sat 1300 15685, Sun 0730 5070, Sun 0900 3210, Sun 2330 5070, Tue 1230 15685. These air times are effective April 6. (direct)

WHRI cancelled the UT Fri 2330 Cumbre DX show as it moves some programs around for the summer season.

Ж

After more than a decade of collecting Enlish language schedule data and writing receiver control software, in March we closed this component of our business. Other obligations and time constraints made this decision necessary. Mark Fine (mfine@crosslink.net) of Fineware is continuing to provide schedules data via the Internet. No print version is available.

As we will not have the schedules data to continue this column nor the time to collect same, this is our last "schedules" column. Watch for an announcement from Dr. Harold Cones, NASWA's Managing Editor.

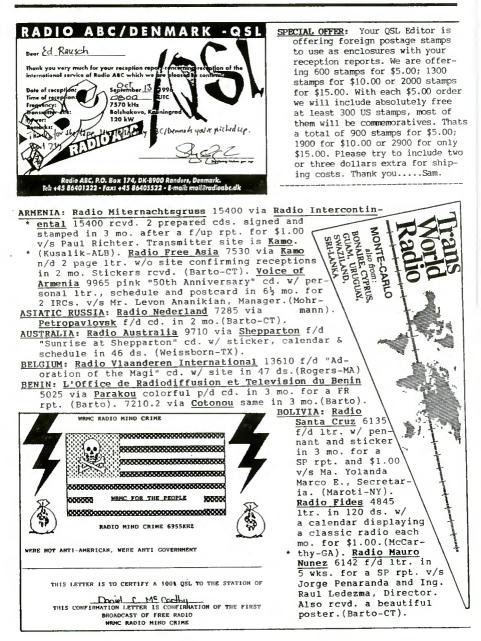
We continue to design Web pages for WWCR and other customers, and write for Australia's "Radio and Communications" magazine, Radio Netherlands and the WRTH.

Thank you for all your support these past years. I appreciate it.

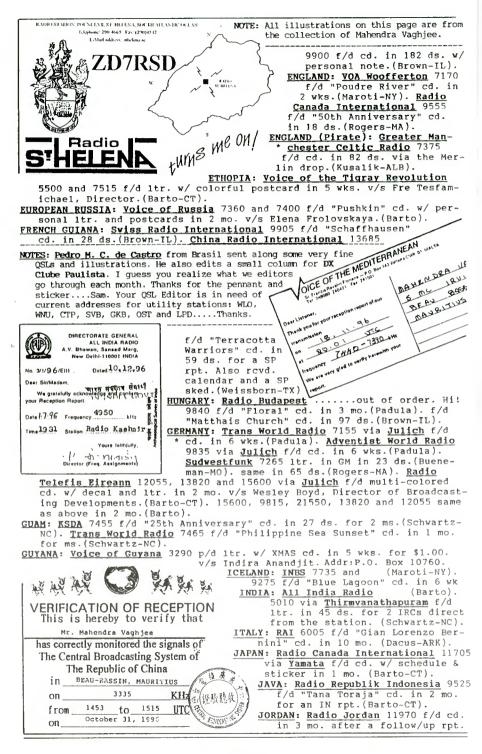
http://www.trsc.com

QSL Report

Sam Barto 47 Prospect Place Bristol, CT 06010



RADIO BOTSW	ANA: Radio Botswana 9640 f/d "Zebra"
	d. w/ incorrect freq. in 3 wks. for FAXed rpt. (Maroti-NY). 4820 "Tso-
	ilo Hills" cd. in 11 wks. for \$1.00.
	Maroti). 4830 "Bull Elephant" cd. in
	0 ds. for \$1.00. v/s Ted Makgekgenene, hief Engineer.(McCarthy-GA). 7255,
	356 and 4830 f/d "Scenic/Historical
	reas" cd. in 5 wks.(Barto-CT). Voice
	f America 15445 f/d cd. in 1 mo. (Zio- kowski).
	IL: Radio Integração 4765 f/d prepared
thatie * c	d. w/ 3 page personal 1tr. in 11 mo.
	or a PT rpt. and ms. v/s Oscar Aives stcards and a station pennant.(Sgrull-
etta-NY). <u>Radio Nova Visao</u> 11705	f/d prepared cd. w/ ltr. in 6 wks.
	nal Service! v/s Jose Eduardo Dias,
Director Executivo. (Moore). CANADA: Radio Korea International 1	5575 and 11715 f/d cds. in @ 200 ds.
via RCI (Brown-IL). CHNS 6130 f/	
in 23 ds. for ms.(Schwartz-NC).	
<u>ional</u> 5925 via <u>Sackville</u> f/d "Lo 3 wks.(Barto-CT). <u>Radio_Japan</u> 59	60 via Sackville f/d
"Urban Architecture" cd. in 15 d	
NOTES: George Maroti has offered to compil	s. (Brown-IL).
QSLs received by NASWA members during th	le past year. Seems / Laur March Co.
like a worthwhile project. I suppose it	can be useful in / s shut set of
many different ways. Check with the powe You have my OKSam. John Sqrulletta sa	
drought he finally got a few QSLs. (I wo	indered where you we will we have une
went toSam). Great going with the QSI how you make outSam.	
TARJETA QSI,	her WEIL
Beijing 18-1-97 CHINA	PEOPLES REP. OF: CNR
	twork 1 11100, 9380 and 7504
	d cd. w/ pennant and stickers 5 wks.(Barto).
del dis 10 -12 -96 . de s 2.00 sog .00 hors UTC. CLAND	ESTINE: Radio Democrat International
	05 (<u>Meyerton</u> ?) f/d ltr. in 2 mo. Addr: 0. Box 9663, London SEl 3ZD.(Barto-CT)
de recepcion auvos anhre nuestros programas	RICA: United Nations Radio 6205 via
Rac	io For Peace International f/d "UN
	go' cd. in 48 ds. (Weissborn-TX).
in 115 ds. (Rogers-MA).	Radio Habana 6000 f/d "Club DX" cd.
	f/d "Karlstejn Castle" cd. in 53 ds.
for 1 IRC.(Weissborn). 9430 f/d ' (Barto). f/d "Strahov Library" co	"Marianske Lazne Spa" cd. in 1 mo.
DOMINICAN REP: HIMI Radio Cristal In	
for a SP rpt. v/s Fernando Hermor	A.(Barto-CT).
ECUADOR: HCJB 9745 f/d cd. in 42 ds.	
RADIO AUSTRALIA In louch with the wo	6050 f/d "Loma de Puengasi" cd. in 141 ds. for a SP rpt
To commemorate 50 years of transmission from Shepparton Redio Australia Redigners in Literaria around the world to tail	(Weissborn), 12005, 15540 &
Us sooul reception in your area.	6135 f/d "Ouito" cd. in 2
We confirm your reception report: HENAY WEISBORN Radio Australia	mo.(Barto). <u>Radio El Buen</u> <u>Pastor</u> 4815 n/d ltr. in 3
Date/lime Frequency Cell SID PO Box 428G Melbourne 200 34//2/96	mo. for a taped rpt. v/s
R:41 9710 VLC 253	Segundo Poma, Director.
1 PU	About 2 wks. later I rcvd. a 2nd ltr. signed by Juana
	Guaman, Secretaria.(Berg).
	EGYPT: Radio Cairo 9900 f/d
Lunamitian Unamitian	cd. in 56 ds. for 1 IRC. newpaper and sticker rcvd.
NATIONAL TRANSMISSION INFINIT TRANSMISSION INFINIT IN INFINITI INFINITI IN	(Neal-TX). f/d cd. w/ same
AGENCY BIANDA 12770E	goodies in 129 ds.(7io1kow')







Dats Wort - die kosmische Welle Postfach 5613 - 97006 Witzburg - Germany tel 00/19/231/3903 0 fax 3903 299	
OM CARD Number:	
Hunk you for your reception report of our transmission:	
w E. ope - firm R. Rute Rom	Edward Rousch
un Aussellery.2	
11: 1346 -1430 UTC	17 Vunderberg Pl Cedar frewer, NJ 07007
freq: 4710	Cular Prove AT AZOR
which is in accordance with our schedule.	
We hope that you will continue to enjoy our programmes	U
* <u>Radio Rukhi Miras</u>	12075 f/d "Pushkin"
cd. in 71 ds. for	2 IRCs. (Kusalik-ALB)
SAINT HELENA: Radio S	aint Helena 11092.5
	ap in 65 ds. for 1
IRC.(Vaghjee-MAUR)	
SAIPAN: KHBI 9430 f/d	"Antenna Array" cd.

in 2 mo. for \$1.00. (Maroti-NY). SAO TOME: Voice of America 4960 and 11975 f/d ltr. from v/s Charles Lewis direct from the site in 1 mo. for \$1.00.(Mar-oti-NY). f/d "River Rafting" cd. in 20 ds.(Ziolkowski). 11975 "Le Conte Glacier" cd. in 1 mo.(Padula-AUST). 7290

f/d "Niagara Falls" cd. in 5 wks.(Barto). 6035 f/d cd. w/ sticker and pennant in 1 mo.(Barto). 4750 f/d "Golden Isles" cd. w/ sticker and pennant in 5 wks.(Barto). 4750 f/d personal ltr. in 5 mo. for a rpt. direct from the site. v/s Manuel Neves, Transmitter Plant Technician who welcomes reports.Addr: Box 522, Sao Tome e Principe.(Lobdell-MA). "SOUTH AFRICA: Radio Nederlands 11655 via Meyerton f/d "Flevo" cd. in 4 wk (Padula). Channel Africa 3345 f/d "Satellite Antenna" cd. in 6 wks. v/s Kathy Otto. (Padula).

SPANISH MOROCCO: Voice of America 9680 via Breich f/d "Colorado Rafting"

	Radio Misión Internacional
5	Frecuencias: 1480 AM - 5890 SW
3	Comunicando el Evangelio Completo I

igeno completo :

via Edward Rausch

15 de guero 1997 Consyaguela D C Honduras C A

NYE petimado y piel Gyente, glvard Beusch Reolbao las mas picas Bendiciones de Yuseiro Gran Señor Jesusziało. getoy myy Arrańscido y al Alemo Lisapo Dellondo, por ese resporte tan positivo que Gendiras muetra Señal es la Gud corte.ro SGT VATNE DONAY Bestor de la Iglesia y Director de Radio H I Alul en regristalpa Bonduras.

The contare algo de gonduras de nuestro Ministerio Tableo. MISIONES INTEGNACIO-NAIES, 50 uma Organización para el establecisiento de Iglesias del prangello Trabalaces en herito, atá, sur America, polivis, parte de Africa, Centro A serica y los Fitados puidos, Numarios de primar de africa, Centro A serios y los Fitados puidos, Numarios de primar de africa de la construir en plutiente estable de africa de ponte estable de africa de la construir la Para estrar en plutiente de la construir de africa de construir la Radio qui an gonduras Tenesos pue portes no basos tensinado de construir la Radio qui an gonduras Tenesos pue potres de abelia estamos juiotado para trammitir en 5000 gilo de potrecia en la porta esto restance de aguino y vesto por Ciertas Initaciones cu porta solo guparar suy prosto, gesero que estas Informaciones is Notivas integrarse en a Crupo de aguinos que orem por guestros y nos apora "conceiensente con con lo que plos puede Bendeciria."

gonduras es un país de mas de cinco pillones de Abitantes, has del 65 por ciento Asoucha La Redio. los problemas son típicos y similares a otros Países, Familias piridicas, mujeres solteras y abadomados por falta de Besbres fieles y nesponsables, gijos en la čalle, y en los Biclos, Problemas genomeiras muy serias, Bastante Bosque y Tierra que yotaris no ha sodo Trabojadas.

getoy enviando eà Calendario de escritorio que sepero que sirve para United se Acuerde de Nosotros, en sus Draciones y podemos maniener lacos de Amistad Atraves de las Cartas.

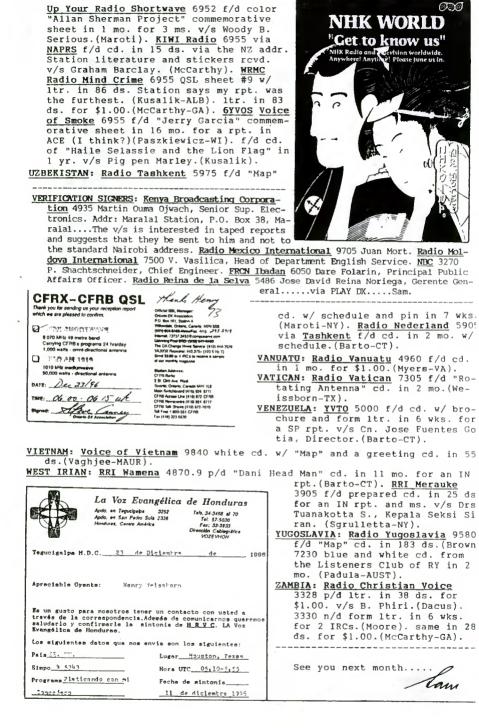
cd. in 1 mo.(Padula). SWAZILAND: Trans World Radio 4760 via Mpangela Range f/d cd. in 1 mo.(Barto-CT). SWEDEN: <u>Radio</u> Sweden 11650 f/d "Lund" cd. in 41 ds. (Brown-IL). 11650 and 1524(

VERIFICATION SIGNERS: Radio Andes 4777 Sr. Francisco Quisbert Salinas. Addr: Calle Final Uruguay, s/n, Casilla 16, Uyuni, Depto. Potosi. Radio Brasil Central 4985 Sergio Rubens. Radio Esperanza 6090 Eleazar H. Jara. Addr: Casilla 830, Temuco. Radio TV Congolaise 5985 Zaou Mouanda. Adventist World Radio - Costa Rica 5030 Rosaura Barrantes B., Secretaria. HD20IA 7600 Jose Olmedo Moran, Director. United Christian Broadcasters 6202 Graeme Wilson, Technical Manager. Addr: P.O. Box 255, Stoke on Trent, ST4 8YY, UK.

> f/d "Reindeer" cd. in 16 ds.(Schwartz-NC).

TADJIKSTAN: Radio Free Asia 6240 via Orzu (presumed) n/d 2 page ltr. w/o site confirmation but confirming reception in 2 mo. Stickers rcvd. (Barto-CT).





Scoreboard

Jerry Lineback 220 West Third Garnett, KS 66032

Greetings and welcome to the SCOREBOARD. The SCOREBOARD is a quarterly feature of the NASWA JOURNAL. In it, DXers, from beginners to seasoned pros get to share their progress in the hobby. C/H = countries heard and C/V = countries verified. Country counts should be made according to the NASWA Radio Country List. You must update at least once a year to remain on the SCOREBOARD. When updating, please update all totals. The SPOTLIGHT this guarter is on Europe. Welcome to new contributors and thanks to all who support the SCOREBOARD by listing your totals. Next deadline is May 15 for the June issue. The Spotlight then will be on North America.

For those interested, I can be reached by E-Mail using jalinebk@kanza.net 73.3-3

Name, State	Total C/H		Europe C/H	c/V	Best European QSL
Dan Henderson, MD	243	233	45	43	WMR Scotland
Marlin Field, MI	240	237	46	46	EMR 6235
Jerry Berg, MA	238	236	47	46	Polish Pathfind
William Flynn, OR	238	222	45	41	R. Dublin Int.
John Sgrulletta, NY	230	230	44	44	WMR Scotland
Steven Lare, MI	228	207	43	43	Karelo-Finnish
Nobuaki Takahashi, Japan	226	201	39	36	R. Andorra
Terry Palmersheim, WA	224	213	43	41	WMR Scotland
Richard A. D'Angelo, PA	220	213	45	44	Karelo-Finnish
Sheryl Paszkiewicz, WI	217	210		42	
Paul Buer, FL	217	204	44	42	R. Dublin
Ron Howard, CA	215	200	34	34	RIAS Berlin
Niel Wolfish, Ont.	214	163			
Fred Kohlbrenner, PA	213	189	43	42	WMR via Andorra
Christos Rigas, IL	212	193	43	43	Petrozavodsk
Jerry Klinck, NY	212	189	34	33	R. Fax
Stephen E. Pitts, MN	207	196	38	37	Iceland
Jerry Lineback, KS	206	108	38	29	Andorra
Charlie Washburn, ME	204	163	41	39	R. Andorra
Stephen Price, PA	187	161		38	Sicily
Allan Loudell, DE	182	153	39	37	R. Minsk
John C. Eckert, PA	179	162	39	37	R. Stella Int.
Daniel McCarthy, GA	178	154	40	37	R. Dublin Int.
Ross Comeau, MA	175	142	41	38	WMR Scotland
Bill Bergadano, NJ	175	120			
Gary Froemming, AZ	175	43	38	14	RID Russia
Andy Rugg, Que.	173	155	43	41	NIRS 6273
Richard Hankison, KS	164	141	35	33	VoMed, Malta
Scott Helm, KS	163	115	36	33	DLR 106
Carl Radtke, WA	153	153	31	31	Albania
Philip Atchley, CA	151	104	30	27	Iceland
Dan Ziolkowski, NY	150	63	36	21	Iceland
Wally Peters, MN	142	114			
Bob Raymond, NH	137	110	33	31	R. Mayak Moscow
Robert E. Gearing II, FL	135	105			VoMed. Malta
Joseph P. Zobro, MI	130	94	35	32	Luxembourg
John S. Brown, OK	121	111	34	30	Poland
Jill Dybka, TN	112	84	32	28	R. Luxembourg
Gary R. Neal, TX	94		31	28	R. Croatia
Don Dacus, AR	65	31	26	19	R. Dniester
Kelvin Buechert, MB	50	20	25	10	
Signee Hoffman, CA	39	28	15	12	

Contributors' Page

Fred S. Kohlbrenner 2641 S. Shields St Philadelphia, PA 19142 Internet: fkohl@ix.netcom.com

LOGGINGS CONTRIBUTORS-NEXT DEADLINE IS MAY 1st

The following members contributed loggings: Brian ALEXANDER, Mechanicsburg, PA Gabriel Ivan BARRERA, Buenos Aires, ARG Michael BEU, Austin, TX Jerry BERG, Lexington, MA Erik BUENEMAN, Hazelwood, MO David CLARK, Thornhill, ONTARIO Ralph FAMULARO, Hyugo-ken, JAPAN Bob FRASER, Cohasset, MA Bill FLYNN, Cave Junction, OR Bob HILL, Holliston, MA Hans JOHNSON, Englewood, CO Harold LEVISON, Philadelphia, PA Gigi LYTLE, Lubbock, TX Ken MALTZ, Syosset, NY Steve C. MARTIN, CA George MAROTI, Mt. Kisco, NY William McGUIRE, Cheverly, MD Kevin MURRAY, Holliston, MA Gary NEAL, Sugarland, TX Ed NEWBURY, Kimball, NE Denis PASQUALE, New Brighton, PA Stephen PITTS, Minnetonka, MN Ed RAUSCH, Cedar Grove, NJ Jim RENFREW, Rochester, NY Christos RIGAS, Wood Dale, IL Chuck RIPPEL, Cornland, VA Betsy ROBINSON, Clinton, TN John ROGERS, Belmont, MA Allan ROSEWARNE, Rolling Meadows, IL Mike RYAN, Bangkok, THAILAND Giovanni SERRA, Anzio, ITALY Mahendra VAGHJEE, Rose Hill, MAURITIUS Henry WEISSBORN, Houston, TX Dan ZIOLKOWSKI, South Buffalo, NY

AOR AR-7030 100' LW NRD-525 32m dipole DX-160 Palomar Loop R8 165' LW ATS-803A homebrew antenna R8A ANC-4 Carolina Beam ICF-SW55 ATS-803A R5000 LW Sony ICF-2003 ICF-SW100S 2m LW R8 DX-Ultra inverted V Sony 2010/whip 120' dipole RW Loop R8 2-500' LW's R8 R70 YB400

Sony 2010 30' dipole MFJ-956 tuner DX-380 R8 AOR 7030 Beverage and loop antennas Grundig YB-400 WJ-1000 R8 60'Sloper 20' loop Sony 2010 beverage antennas NRD-535D FRG-7 Eavesdropper RW Loop R5000 Sony 2010 MFJ-959 Eavesdropper R8 2010 MJF-959B A/D Sloper R2000 Sony 2010 and 2002 Sloper AN-1 R390A R8A R1051H SP-600 51S-1 LW's Sony 2010 Indoor antenna

FRG-8800 Eavesdropper

NRD-525 AD Sloper Lowe Europa 225E Sony 2010 LW ARA60 Grundig YB500 Drake SW-1 30' LW R8 Sloper SPS NRF-7 SEM QRM Eliminator

The 10th Winter SWL Fest has come and gone. More than 150 folks attended, and the usual great time was had. I enjoyed meeting many of you as you visited the NASWA table, and am already looking forward to next years gathering.

The deadline for next months contributions will be May 1st. Please remember to mail your contributions early. Items received after the deadline will be held over for the following month. The normal 10th of the month deadline schedule will resume in June.

73's till next month.

Tropical Band Loggings

2000-5900 kHz

Shery! Paszkiewicz P.O. Box 152 Manitowoc, WI 54221-0152

2310	AUSTRALIA ABC 2/9 1045 EG tlk but poor (Buen-MO)
2340t	CHINA Fujian PBS 2/29 1251 CH tlk (Beu-TX)
3220	SOUTH AFR Channel Afr 1/4 0319 sports, mx, ID (Serr-IT)
3223	INDIA AIR Shimla EG 2/8 1656 instls, ID, nx //others (Serr-IT)
3223	UNID 2/10 1313 flute sounded Indian, Shimla? (Pitt-MN)
3232	SUMATRA RRI Bukittinggi 2/27 1450 rel pgm, mx, IS, nx (Vagh)
	SUMAIRA ARI BURILLINGGI 2/27 1450 LEI PGM, MA, 10, MA (Ugh)
3245	INDIA AIR Lucknow 2/27 1502 HD tlk, nx, ID 1515 (Vagh-MAUR)
3260	PAPUA R Madang 3/14 1130 C&W, TC, ID (Raus-NJ)
3265	SUMATRA RRI Bengkulu 2/27 1506 IN tlk, mx, long tlk (Vagh-MAUR)
3270	NAMIBIA NBC 3/6 0315 US pops, EG nx cmtry, wx (Ripp-VA) 1/7
	2031 tlk, pops //3289.9 (Serr-IT)
3280	ECUADOR LV del Napo 2/27 1023 tlk, mx, 1118 ID (Buen-MO)
5200	2/18 1030 ID, programa Cristiano, prayers, amigo song (Robi)
	2/22 0250* tlk, HC mx, ID, NA (Alex-PA)
2220	
3290	GUYANA GBC Radio 3/4 0610 tlk, soul, jazz, fair (Buen-MO)
	tent on 3290.03 VOA pgm 0400 2/9 sev VOA pgms, no Guyana
	pgms, Guyana itself noted other times on 3290.03 (Alex-PA)
3300	GUATEMALA R Cultural 3/4 0355 Thru the Bible, ID, read John
	3:16, Insight for Living (Buen-MO) 2/24 0240 US mx, ment
	Guat. in EG (Serr-IT)
3305	NEW GUINEA R Western 2/22 1159* mx, drums, horn (Murr-MA)
	ADMIRALTY R Manus 3/11 1120 EG preacher, ID (Raus-NJ)
3315	ADMIRALII & Manus S/11 1120 EG preacher, 1D (Raus W)
3315	INDIA AIR Bhopal 2/10 1327 SC mx, lang tlk, flute, ID (Pitt)
3325	GUATEMALA R Maya 3/2 1027 rancheras, ID, ment Guat. (Buen-MO)
3330	ZAMBIA Christian Vo 2/13 0415 EG gospel mx, jingle ID (Maro-NY)
	3/5 0444 ID, LSB full PET got rid of 70% CHU on R8A (Ripp-VA)
	2/16 0400 EG anmts, FC, gospel mx, jingle IDs (Alex-PA) 2/22
	1812 chant, poor (Serr-IT)
3335	NEW GUINEA R East Sepik 3/11 1120 PD PSAs, ID, pops (Raus-NJ)
3335	TAIWAN CBS 2/22 1821 long tlk, poor (Serr-IT)
3340	PERU R Altura 2/23 1100 Mx, ID 1104 (Beu-TX) 3/2 1104
	anmts, ID, folk mx, fair (Alex-PA)
3345	INDIA AIR Jaipur 2/2 0028 instl, TP, anmts, nx (Serr-IT)
3356	BOTSWANA RB 1/4 0340 pops, EG anmts (Serr-IT)
3360	GUATEMALA LV de Nahuala 2/16 0304* anmts, marimba (Alex-PA)
3365	INDIA AIR Delhi 1/14 1841* mx, anmts, ID, nx (Serr-IT)
3375.4	BRAZIL RN Sao Gabriel 3/6 1025 TC, ID, FC (Raus-NJ)
3376	BELARUS R Mayak 2/15 2232 jazz, IS, RS tlk, vcls (Hill-MA)
3380	GUATEMALA R Chortis 2/16 0358* anmts, pops, IDs (Alex-PA)
3385	NEW BRITAIN RENB 3/11 1100 preaching, drums, ID, nx (Raus-NJ)
3390	SIKKIM AIR Gangtok 2/14 1200 ID, anmts, exotic mx, still
	testing, many EG IDs, nx, oldies (Ryan-THAI)
3396	ZIMBABWE Radio 3 3/3 0314 TCs, Afr pops, ID (Ripp-VA)
3439.9	UNID 2/23 0312 ballads, march, SP anmts, harmonic? (Hill-MA)
3550h	CUBA R Rebelde 3/2 0855 ballads, anmts //710, 5025 (Alex-PA)
3636t	SULAWESI RPD Buol Tolitoli 2/10 1427 poss IN tlk (Flyn-OR)
3970	ENGLAND R Korea 2/23 1935 EG nx, ID, SW Feedback (Famu-JP)
3976.8	KALIMANTAN RRI Pontianek 2/26 1110 tlk, tone IS (Murr-MA)
5270.0	2/18 1509 Jakarta nx relay, world datelines, QRN (Flyn-OR)
4010	
4010	KYRGYZSTAN KR 2/2 1627 tlk, ID, mx, drama? (Serr-IT)
4035	TIBET Xizang PBS 1500 EG pgm! ment pgms for overseas listeners
	to be hrd in future! (Ryan-THAI)
4070	CLAND Vo Iraqi Kurdistan 2/8 0405 AR or KK, mx (Alex-PA)
	2/2 1647 hymn, Koran, strings, IDs, flute (Serr-IT)
4120.1	CLAND Vo Peop Kurdistan 2/23 0403 AR tlk, fanfares, ME vcls,
	ment "sha'ab al-kurdistan" (Hill-MA) 2/8 0405 ME mx, tlks
	f-g (Alex-PA)
4418.9	PERU R Bambamarca 1/26 0231 ads, msgs, ID, folk mx (Barr-ARG)
11110.7	
	on 4419.5 3/1 0405* tlk, folk mx, canned IDs, NA (Alex-PA)

3/4 0235 folk mx, concert promo, ID (Raus-NJ) CLAND Vo Natl Salvation 1/19 1528 KR tlk/mx //4557 (Serr-IT) 4450.3 PERU R Norandina 1/26 0246 folk mx, greet, ID (Barr-ARG) 2/26 0353 Andes drums, mx, weak (Flyn-OR) Any Andes candies? RUSSIA R Rossii 2/25 1900 RS nx, tlk //5290 (Ryan-THAI) CHINA Xinjiang PBS 2/9 0021 tlk/mx, p-f (Serr-IT) KAZAKHSTAN KR 3/9 0117 vcls in patriotic musical, anmt (Hill) 4460.8 4485 4500 4545 PERU R Gotas de Oro 2/26 0300 echo ID, huaynos (Maro-NY) 4567.2 BOLIVIA R Villamontes 1/24 1040 ads, ID, QTH (Barr-ARG) 4599.2 IRIAN JAYA RRI Serui 1055 Macarena, pop mx, IN tlk (Famu-JP) 4606.4 BOLIVIA R Santa Ana 2/12 0015 march, ID, special for Shrove 4649.9t Tuesday? (Flyn-OR) JAVA RKIP Surabaya 3/10 1307 nx, //RRI, NA, p-f (Famu-JP) CHINA Xinjiang PBS 2/27 1535 drama, mx, nx (Vagh-MAUR) 4696.9 4735 TAJIKISTAN Vo Russia 2/18 1450 lang mx, IS, NA, EG nx 1500 4740 site tentative (Flyn-OR) SULAWESI RRI U-P 2/27 1545 IN mx, IS, nx & off (Vagh-MAUR) 4754 BRAZIL unid 2/2 0046 songs, anmts, TC (Serr-IT) BRAZIL unid 1/18 0152 tlk, jingles, mx (Serr-IT) ECUADOR Centinela del Sur 2/24 1120 SP love songs (Lyt1-TX) 4755 4765 4770 NIGERIA RN 3/6 2235 Brubeck, jazz, ute QRM (Famu-JP) 4770 INDIA AIR Imphal 2/10 1337 tlk/vcls (Pitt-MN) GABON RTV 3/4 2255 tlk, ment Gabon, lite mx in FR (Buen-MO) ECUADOR R Oriental 3/2 1045 native mx, IDs (Buen-MO) 2/20 1004 NA, anmts, ID, HC mx (Alex-PA) 4775 4777 4780 PAKISTAN Azad Kashmir R 1/19 1609 nx, ID, chants (Serr-IT) 4790.5 BRAZIL R Difusora 3/8 2304 EZL, rancheras, low audio (Hill-MA) ARGENTINA R Armonia 1/24 1052 folk mx, ID (Barr-ARG) 4795 4800.5h BRAZIL unid 2/9 0041 Braz dance mx, ment Rio (Serr-IT) BURKINA FASO RTV Burkina 2/17 2205 FR nx, ID, hilife, 4805 "Le 4815 Panorama de La Litterature Orale" (Maro-NY) ECUADOR R Buen Pastor 3/13 0205* ballads, ID (Raus-NJ) 4815 4820 HONDURAS HRVC 3/4 0508 contemp Christian mx, sermon, IDs (Buen) GUATEMALA R Mam 3/5 0455 on late w/story, mx, IDs (Buen-MO) 4825 PERU R Lircay 3/1 2332 pres w/OA vcls, TCs (Hill-MA) COSTA RICA R Reloj 3/6 0710 TCs, ID, pop mx f-exc (Buen-MO) INDIA AIR Mumbai 2/10 1428 tlk/SC mx, TP, ID (Pitt-MN) 1/6 4830.6 4832 4840 1730* chorus, anmts, IDs (Serr-IT) BOLIVIA R Fides 3/2 1050 tlk on phone, ID //6155, 9624.9 (Alex) 4845.1 3/15 0505* rancheras, ID, NA (Raus-NJ) INDIA AIR Kohima 3/17 0140 diff IS, SC mx, ID (Raus-NJ) 4850 UZBEKISTAN UR 2/15 0010 ME mx, tlk //7105 (Alex-PA) INDIA AIR Delhi 2/17 0130 TP, ID, SC mx (Ripp-VA) 2/15 *0024 4850p 4860 IS, vcl, tlk lang, SC mx (Alex-PA) 3/17 0025 wailing, ID nx (Raus-NJ) 2/9 1743 Indian mx, tlk, anmts (Serr-IT) BENIN ORTB 3/5 0600 FR tlk/mx p-f. Sent tape. (Buen-MO) BRAZIL R Roraima 2/19 0314 rel, hymns, poss ID (Flyn-OR) 1/11 0339 rel tlk, hymns, sermon (Serr-IT) PAPULA NEC 3/3 1000 protive are FC tlk and the transformation 4870 4875 PAPUA NBC 3/3 1009 native mx, EG tlk, ment Pt. Moresby (Buen) 4890 PERU R Chota 2/16 0418* anmts, rustic mx, ID, NA (Alex-PA) 4890.5 3/7 1133 nx during PNG xmsn break (Famu-JP) INDIA AIR Kurseong 2/23 0057 IS, anmt, chorus, mx (Hill-MA) CHINA VO Strait 1/6 1601* CH pops, anmts, TP, ID (Serr-IT) SHRI LANKA SLBC 1/12 0133 tlk, chant (Serr-IT) CHAD RNT 2/22 1735 tlk/mx, ID, fair (Serr-IT) 4895 4900 4902 4904.5 ZAMBIA ZNBC 2/9 0409 hilife, IS, lang tlk, drums (Renf-NY) 0350-0500 fair sig (Lytl-TX) Tnx Gigi--sp 4910 ERAZIL R Anhanguera 1/18 0024 nx, TC, jingles, ID (Serr-IT) GHANA GBC 1/17 1802 nx, ID in EG (Serr-IT) 4915 4915 ECUADOR R Quito 1/11 0404 nx, TC, anmts, ID (Serr-IT) BOLIVIA R San Miguel 3/3 1015 lots of tlk (Famu-JP) 4919 4924t SUMATRA RRI Jambi 2/10 1436 Special Ramadan pgm, SCI (Flyn) 4927 KENYA KBC 2/27 1705 EG rel on divorce, mx, ID, ad (Vagh-MAUR) BRAZIL R Difusora 2/23 2316* tlk, sfx, ID (Alex-PA) nice one 4935 4944.9 KASHMIR AIR Srinigar 2/27 1730 EG sked, into HD, muslim song 4950 ID (Vagh-MAUR) UGANDA RU 2/24 0405 EG nx not //5026, good (Clar-ON) 2/16 0355 Afr pops EG/lang anmts, EG nx, ID (Alex-PA) 2/27 1743 long list of names, press conf rpt, football scores (Vagh) VENEZUELA Ecos del Torbes 3/2 0950 "La Musica de Venezuela" 4976 4980 pgm, IDs (Buen-MO)

4985	BRAZIL R Bras Central 1/18 0109 songs, jingles (Serr-IT)
4990.9	PERU R Ancash 3/1 0504* anmts, ID, OA mx, exc (Alex-PA)
5005.6	PERU R Jaen 2/6 2350-0011* tlk, OA mx, fair (Alex-PA)
5009.5	MADAGASCAR RM 2/16 *0259 drum IS, ID, poor (no name) 3/1
	*0256 IS & muddled tlk, mx (Renf-NY) 2/23 *0255 IS, NA
	ID, chorus, prayer, sermon (Alex-PA) 3/5 *0255 IS on xylo,
	NA, ID, tlk (Ripp-VA) 1/30 1810 chants, tlks (Ryan-THAI)
5019	COLOMBIA Ecos del Atrato 2/16 0118 tlk/mx, ment Quibdo (Renf)
	2/24 0405 ballads (Serr-IT)
5019.9	PERU R Horizonte 3/1 0125* Andean mx, rel tlk (Alex-PA)
5020	SOLOMON SIBC 3/15 1115 pop mx, trop disturbance warning for
	Guadalcanal Prov. ID (Raus-NJ)
5030	CHINA CNR 1/20 2140 CH mx, anmts, poss ID, jingles, tnx Hill
	(Serr-IT)
5030.1	COSTA RICA AWR 2/24 0343 rel story, chorus, ID (Serr-IT)
5035	UZBEKISTAN R Tashkent 1/15 2030* GM pops, ID (Serr-IT)
5035.1	
	BRAZIL unid 2/24 0322 phone calls, mx, poss ID (Serr-IT)
5040	UZBEKISTAN R Tashkent 2/23 Oll2 EG interview //7105, 7285(Hill)
	2/4 *1430 IS, ID in CH, Uzbek mx, *1530 in lang (Ryan-THAI)
5050	INDIA AIR Aizawl 2/4 1730 EG nx to 1735* (Ryan-THAI)
5050	ECUADOR R Jesus 2/16 0334 w/Super Poder slogan (Renf-NY)
	3/9 0822 mx, big ID w/Francisco Stereo (Berg-MA)
5054.9	FR GUIANA RFO 1/8 0256 pops, nx, ID, tlk (Serr-IT)
5055	PAKISTAN RP 2/22 *1430 IS, recit, ID, fair (Famu-JP)
5075nf	CHINA Vo Pujiang 2/26 1325 ment Deng Hsiao Ping, speech (Famu)
5163	CHINA CNR 3/2 1135 CH tlk, good //weak 6890 (Alex-PA)
5385.2	PERU R Huarmaca 2/23 0302* anmts, IDs, folk mx, NA (Alex-PA)
	you get xtra points for spelling it rightsp
5498	PERU R Lajas 2/11 0102 fast tlk ment Moyobamba, ID (John-CO)
5500	CLAND Vo Tigray Rev 2/9 0355 IS, slogan, ID (Renf-NY) 2/7
	1601* 3 speakers in lang, brief mx, anmts (Flyn-OR) 2/16
	*0356 IS, lang tlk, folk mx (Alex-PA)
5560.6t	PERU R El Sol 2/11 0055 pops, tlk (John-CO)
5619.2	PERU R Ilucan 2/23 0015 echo anmts, OA mx, IDs (Alex-PA)
5645.9	PERU LV de San Antonio 1/26 0218 greet, ID as R San Ant. (Barr)
5700	PERU R San Ignacio 3/3 0230 ballads, ID, good (Ripp-VA)
5775.2	PERU R San Juan 3/3 0330* ballads, ID, NA (Raus-NJ)
5860	ECUADOR HCJB 3/6 0816 Woman to Woman pgm, promo, ID (Buen-MO)
5890	GERMANY R Vilnius Relay 2/16 *0000-0100* GM into EG Press
	Review, strong (Renf-NY)
5890	USA R Marti 2/9 1105 SP nx, features, IDs, test? (Buen-MO)
5895	
5895	CROATIA Croatian R 2/17 2300 EG ID, nx, into Croatian (Robi-TN)
	all including first time contributor GIGI LYTLE. This
	ould give you plenty of target stations to go after. Next
deadline	in Manitowoc will be <u>April 18</u> . Hope everyone had a Happy
Easter.	
This mont	h we had contributions from 11 states, 1 Canadian province
	ries. I'm surprised at some of the LA stations that are
	ties, i m sulprised at some of the LA Stations fildt are

being hrd in the evening.

FOR SALE: 1962 National Radio NC-190 general coverage receiver (with manual), has both Ham and International Broadcast bandspread fine tuning feature. I'm the second owner, and this classic tube set is in very good working condition. I hate to part with it, but I'll sell it for \$175 including shipping in the 48 states. Call Rick Bowers at (908) 654-1580 (evenings or weekends) or email to <rickbowers@worldnet.att.net>.

International Band Loggings

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

5930	CZECH REPUBLIC R Prague in EG 0005, IS, ID, sked, nx (Rosenware IL 2/17, McGuire MD 3/4)
5960	CANADA Deut Welle relay in EG 0130, rpt on Kurdish refugees in Germany (Newbury NE 2/27)
5970	COSTA RICA RE Espana relay in SP 0356, tlk, ID, s/off, splash from BBC 5975 (Bueneman MO)
59858	MYANMAR RM in Barnar? 1233, tlk, local songs, f until BBC Thailand *1300 (Famularo JP 2/16)
6035	BELGIUM RVI in EG/DT/FR 1004, nx, sports, wx, press review, ID, pop mx, fqys (Serra IT 1/18)
6045	INDIA AIR Delhi in Nepali 1418, trad vocal, ID, nx items, f (Famularo JP 3/10)
61109v	MOZAMBIQUE RM Maputo in PT 0310, pop vcls, anmts, QRM requiring USB (Clark ONT 3/2)
61156	COLOMBIA LV del Llano in SP 1010, ads, tlk, ID, fqys, fair sig with het (Ziolkowski NY 2/20)
6130	LAOS Lao Nat R in lang 1135, vcls, tlk, 7 gongs 1159, lD, g with 50 deg Bev (Murray MA 2/26)
6180	CYPRUS BBC relay in EG 2135, rpt on international banks & multi-nat cos., f (Fraser MA 2/17)
6270nf	ALBANIA R Tirana in EG 1950, Alb folk mx, ID, NA 1956*, hrd before unrest (Famularo JP 2/23)
64798	PERU R Altura in SP 0230-0340+, tlk, OA folk mx, pops, echo anmts, QRM (Alexander PA 2/23)
7100	IRAN VOIRI Teheran in FR 2234, xmsn skeds, suddenly off 2240, //6030, 9022 (Hill MA 3/8)
7150	SLOVAKIA RSI in RS *1830, multi-lang ID's, IS, nx, f-g (Famularo JP 2/20)
7180	UKRAINE RUI in EG 0100, rpt on new agrement between Georgia & Ukraine (Pasquale PA 2/19)
7210	OATAR QBS in AR *0243-0300+, s/on anmts 0245, tlks, into Koran 0248 (Alexander PA 3/2)
	IVORY COAST R Cote d'Ivoire in FR 0630, catchy Afro mx, ID, phone-in, f (Newbury NE 2/26)
7215	
7235	KAZAKHSTAN R Almaty in RS 1635, piano mx, tlk, class mx, ID (Vaghjee MAURITIUS 1/30)
7250	INDIA(GQA) AIR in Nepali *0127, many IS before 0130 ID, mx, tlk, //9550 (Renfrew NY 2/16)
7265	GERMANY Sudwestfunk in GM 2038, continuous pop tunes, ID, pips, nx (Ziołkowski NY 2/15)
7300nf	TURKEY V of Turkey in TK/EG *0355, IS, into EG 0400, sked, ID, nx, ex-7100 (Alexander 2/8)
7325	AUSTRIA RAI in EG 0044, cmntry on Ping's death and future of CH & Hong Kong (Newbury NE)
7365	VATICAN STATE Vatican R in Lithuanian *1820, IS, ID, YL with nx (Famularo JP 2/20)
7390	BULGARIA R Bulgaria in EG 2237, econ rpts on ties w/Russia, ID (Famularo JP 3/11)
7455	GUAM KSDA AWR in CH 1116, sermon, lyrical song, piano mx, IS, ID/fqy in EG (Serra IT 1/26)
7520nf	GEORGIA V of Hope Dusheti in EG 2013, "Audio Prophecy Digest", UK address, mx, couple of
	xmtr outages, into "Unfolding the Gospel" 2032, s/off 2102 after anmts, f-g (Berg MA 3/8)
8638	AUSTRALIA VNG Llandilo Time Stn 1015, time sigs, ID in Morse code, f-g (Bueneman MO 2/19)
9022	IRAN VOIRI Teheran in EG 0049, nx, econ relations w/Morocco, ME mx, //9685 (Newbury 2/27)
9025v	SUDAN V of Sudan in lang 0415, tlk, ME type mx, weak but good on //8000 (Alexander PA 2/8)
9200	SUDAN R Omdurman in AR 0320, tlk in lang, 1D (Rippel VA 3/3) in AR 2020-2301*, Koran, talk,
1200	mx, "Sudan" ID? 2030, NA, //71999 (Renfrew NY 3/3, Alexander PA 2/15)
94051	PHILIPPINES FEBC in CH Mandarin 1355-1402*, tlk, mx break, ID, fqy in EG, IS (Serra IT 2/1)
9435	ISRAEL Kol Israel Tel Aviv in EG 2008, cmntry on housing for Palestinians, f (Newbury NE 2/26)
9485	BULGARIA RB Sofia in EG 0000, IS, ID, rpt on Bulgaria's role in NATO, fqy (McGuire MD 2/18)
9525	INDONESIA VOI Jakarta in EG 2100 [*] , mx, local info, few bars Love Ambon, nx (Clark ONT 3/1)
9535nf	THAILAND RT in EG 1935, ID's, travel pgm, chimes 2000, into other langs 2001 (Alexander 3/2)
9550	BANGLADESH RS in EG *1230, fgys, ID, national nx, //7185, stronger but QRM (Famularo 2/15)
9555	SAUDI ARABIA BSKSA Rivadh in AR 2226, ME mx, tlk, ID, nx bulletins, f-g (Bueneman 2/21)
9580nf?	THAILAND BBC relay Nakhon Sawan? in EG 0000, "Newsdesk" (Flynn OR 2/11)
9590	IRAN VOIRI in Urdu 1333, Qur'an recitations, tlks, ID, p-f (Famularo JAPAN 3/4)
9600	VATICAN STATE Vatican R in EG 2245, "Laudetur Jesus Christus", ID (Bueneman MO 2/21)
9600	ASCENSION IS BBC relay in EG 0300, rpt on political crisis in Albania, g (McGuire MD 3/2)
9645	THAILAND VOA relay in EG 1200, "Radio Theater Live", p (Rogers MA 1/26)
96502	URUGUAY RC de Montevideo in SP 0003, sporting events, LA mx, p (Hill MA, Clark ONT 2/28)
9655	THAILAND RT Pathum Thani in EG 0030, IS, ID, Thai history, nx, sports, wx, p (Renfrew NY 3/9)
9660	VATICAN STATE VR in EG 0632, county on repression, human rights, Christianity (Famularo JP)
9660	AUSTRALIA RA Brandon in EG 0757*, current affairs, financial rpt, ID, f-p (Bueneman MO 3/6)
9675	TURKEY V of Turkey in RS 1455*, lcl chants, tlk, pop mx, ID?, brief IS, f (Serra ITALY 1/19)
9685	SOUTH AFRICA Chan Africa in EG 1755*, ID, "Africa This Week" (Famularo JP 2/13, Serra IT)
9690	SPAIN China R Int relay in EG 0320, "China Snapshots", CH lesson (Weissborn TX, Levison PA)
9729	VIETNAM V of Vietnam Hanoi in EG 1120, ID, new telephone code for VT (Vaghjee MAURIT'S)
9745	GREECE VOA relay in Uzbek 1527, nx headlines, ID in EG, IS s/off 1530 (Famularo JP 3/6)
9750	MALAYSIA VoM Kajang in Malay? 1859*, cocktail jazz, amnts, vp, //15290 (Hill MA 2/17)
9810nf?	THAILAND R Thailand in EG 1235, national nx, cmntry, Thai mx, world nx, f (Rogers MA 2/9)
9810nf	NEW ZEALAND RNZI in EG 1810, wx rpt, oldies mx, ID, sked (Flynn OR 2/18, Serra IT 1/14)
9835nf?	INDIA AIR in Urdu 1544, anmt & ID in EG 1600, feature re Freedom Fighter (Vaghjee MAURIT)
9835nf?	GERMANY AWR via Julich in FR 2159, trumpets, ID "R Mundial Adventiste" (Renfrew NY 2/10)
98399	<u>VIETNAM</u> V of Vietnam Hanoi in FR *1930, ID, nx, unusually clear signal (Hill MA 2/22)
9920	<u>CHINA</u> China R Int in HD 1632, tlk re computer in CH home, ID, CH mx (Vaghjee MAURITIUS)
	CHILD, CHINA AND TOTA, ON TO COMPACE IN CELINOR, D., CELINA (Augujet Mitorer 100)

11402 ICELAND ISBS Reykjavik in IC 1955*, tlk in lang by M/W, //13860 to 2011* (Alexander PA 3/2) 11580 GUAM KTWR Merizo in EG 1500, "On Track" a Christian mx pgm, p (Rogers MA 2/1) 11595 GREECE RS Makedonias in GK 1658, GK song, ID, nx, instrum mx, tlk (Vaghjee MAURITIUS) 11605 ISRAEL Kol Israel Tel Aviv in EG 1525, phone-in re banking services in Israel, f (Fraser MA 2/16) 11620 INDIA AIR in EG 1800, ID's, nx, cmntry, Indian classic chants, NA, //7410 (Serra ITALY 1/25) 11635 PHILIPPINES FEBC R Int in EG 0934, mx pauses, relig sermon, QTH, ID (Serra ITALY 2/23) 11690 JORDAN R Jordan in EG 1650, pop mx, ID, nx, wx rpt, Holy Koran (Fraser MA, Rogers MA) 117001 NORTH KOREA R Pyongyang in EG 2300, nx, cmntry, tlk re Great Leader, p (Rogers MA 1/31) 11730 SOUTH AFRICA TWR in EG *0645, lite mx, rel pop song, ID's, IS (Famularo JP, Serra ITALY) NEW ZEALAND RNZI in EG *1952, IS, ID, fqy, wx rpt, TC, pop mx, sport nx (Serra 2/13) 11735 ANGUILLA Caribbean Beacon in EG 1225, Dr Scott requesting \$1000 per donee (Rigas IL 2/17) 11775nf? BRAZIL R Globo in PT 2013, BR dancing for Rio carnival, chats, ID's, ads (Serra ITALY 2/11) 11805 BRAZIL R Brasil Central in PT 2030, excited tlk, interview, ment "do Brasil", p (Serra 2/11) 11815 KAZAKHSTAN R Almaty in EG/GM 1044, tlk on econ cooperation, Kazakh folk mx, instrum and 11840nf? pop mx, ID, QTH, end of EG pgm 1059, pips, into GM 1100, IS, //9620 (Serra ITALY 1/18) IRAN VOIRI Teheran in EG 1150, lcl nx, pgm on Ramadan, "Hello Again", ID (Vaghjee MAUR) 11875 11905 THAILAND RT Udon Thani in EG *0027, clock chimes, "News Hour"including business & sports TC, full ID, "Page from Thai History", Bangkok wx rpt, //9655 (Flynn OR 2/17, Renfrew NY 3/9) 11915 BRAZIL R Gaucha in PT 2100, lively tlk re futbol, ment BR towns, p w/QSB (Serra ITALY 2/2) 11925 BRAZIL R Bandeirantes in PT 2115, lively discussions, ads, mx breaks, TC, ID (Serra ITALY 2/2) 119404 CAMBODIA Nat V of Cambodia in Lao 1245, SEA sing-song vocals, peaking nicely at 1300 with 2+1 time pips when they were wiped out by Romania s/on (Rippel VA 3/9) ED: EG pgm *1200 11990 KUWAIT R Kuwait in EG 1830, ID, nx, mainly national items, p (McGuire MD 2/8) 13580 CZECH REPUBLIC R Prague in EG 1400, ID, tlk re the Czech economy, exc (Robinson TN 2/16) 13675 UNITED ARAB EMIRATES Dubai in EG 1030, nx, ID, wx rpt, mx break,QTH, request mail, AR flute mx, //17630 (Serra ITALY) in EG 1330, Islamic history, ex-13665, ID (Alexander PA 3/2) 13685 BELGIUM R Vlaanderen in EG 1400, nx, rpt on discovery of murdered child (Pasquale PA 3/8) 13780nf? INDIA AIR GOS in EG *1747, ID, HD mx, subcont vcls, //11620 (Hill MA, Barrera ARGENT'A) 15075 INDIA AIR Delhi in HD 1716, ID "Yeh All India Radio", HD mx (Barrera ARGENTINA 1/25) 15160 MOROCCO VOA relay in AR 0533, YL tlk, JD, intsr mx, AR mx, f-g (Famularo JP 3/1) 15185 INDIA AIR Delhi in EG 0839, natl nx, update on India-NZ cricket match (Famularo JP 2/18) 15260 IRAN VOIRI Teheran in EG 1120, nx, ID's, instr mx, sked *1130, on early? (Famularo JP 3/10) 15270nf? PHILIPPINES R Pilipinas in EG 0256, ID as "Voice of Democracy", mail (Barrera ARGEN 1/25) 15410 RWANDA Deut Welle relay in FR 1250, tlk, vcl in GM, ID's, into Hausa 1300 (Ziolkowski 3/2) 15430 MOLDOVA V of Russia relay in EG 1237, ID, tlk re beaufiful city in Russia (Ziołkowski 3/2) 15650 GREECE V of Greece in EG 0750, GK-related cultural nx, ID, into GK 0754 (Famularo JP 3/4) 15445 SEYCHELLES FEBA in Vern/HD 1317, chants, tlk, ID's, QTH, instrum mx (Serra ITALY 2/1) 15445 BRAZIL R Nac Brasilia in EG 1200, mx, nx "5-10 million crocodiles in Brazil" (Robinson TN) 15476 ANTARCTICA LRA36 R Nac Arcangel San Gabriel in SP/EG/FR 2005-2049*, mostly YL SP tlk, some mx until 2025 EG pgm, mail, into FR 2030, EG ID 2044, ancd daily xmsn sked 1900-2100, invite req for QSL cards, closing song a lively YL/OM duet (Murray MA 2/23, Maroti NY 2/23) 15485 UNITED KINGDOM BBCWS in EG 1550, pgm re Liberia & film mx, repl 15070 (Rosewarne IL) 17550nf CHINA CNR-1 in CH 0528, taped interview ment Deng Hsiao Ping, //17605 (Famularo JP 2/26) 17720 ROMANIA RRI Bucharest in EG 0654, tlk on UN Security Council, ID, folk mx (Famularo 3/3) 21715 TURKEY V of Turkey in TK 0634, Qu'ran recitations, g, //15145 (Famularo JP 3/7)

CLANDESTINE STATIONS

- ETHIOPIA V of the Revolution of Tigray in Lang 0355, IS starts 0355 but carrier on at 0330, pgm started at 0359, move from 7515 slot, //5500, need LSB to minimize ute QRM (Berg MA 3/5)
 ERITREA V of the Broad Masses of Eritrea in Vern *0354, guitar mx, operning anmts 0359, new s/on time, f-g (Alexander PA 2/23)
- 7390 <u>ERITREA</u> V of the Broad Masses of Eritrea in Vern 1559, repetitious stringed mx (IS?), OM w/nx, Afro-AR choral mx, f-p (Famularo JP 2/12)
- 9750 ANGOLA A Voz da Resistencia do Galo Negro in PT *0449, guitar/cock crow IS, ID, anthem, choral mx, Afro hi-life & pop mx, anmts, strong but mixing w/VOA til 0500 (Alexander PA 2/16)

MAYBES AND DON'T KNOWS

6155	LIBYA(p) Libyan Jamahiriyah BC in AR 0845, AR mx, Qur'an recitations, het QRM and fade in
	by R Singapore by 0930. Could be Libyan test as heard only a couple of days (Famularo IP 2/23)
6390	UNIDENTIFIED in Lang? at 1930* t/in, ME style instrum mx and off (Hill MA 2/9)
65602	IRAO(p) Rep of Iraq R? in Kurdish 0335, Mideast chants, not hrd next nite (Alexander PA 2/8)
6745usb	SOMALIA(p) in Somali? 1936, s/off w/o ceremony 1942, carrier still on 2000 (Hill MA 2/9)
7570	UNIDENTIFIED Clandestine? in Amharic 1650, AR type mx, abrupt off 1718 (Vaghjee MAUR)
9510	UNIDENTIFIED Arab-type stn in AR 0930, AR mx, long tlk in AR, s/off 1004 (Vaghice MAUR)
11610	UNIDENTIFIED China PR or Philippines?? in Far Eastern lang 1047-1100, YL chat until 1059,
	poss ID, pips 1100, pgm lost under heavy QRM splat from R Bulgaria 11605 (Serra ITALY 2/23)
13365usb	ARGENTINA(p) six pips hrd 2300, seemed to be a break in SP play-by-play, possible mx on LSB
	at same time, not 13361 as in Jan NASWA (Renfrew NY 2/15)

TDP, c/o Ludo Maes P.O. Box 1 2310 Rijkevorsel Belgium



Tel : +32 3 314 78 00 Fax : +32 3 314 12 12 E-mail : tdp@ping.be Web : http://www.ping.be/tdp

TRANSMITTER DOCUMENTATION PROJECT

For the 4th year now, detailed information is available about transmitters used by shortwave radio stations around the world.

TDP SW-97 -- the "Transmitter Documentation Project" -- has just come off the press in Its fourth edition. TDP is the result of more than 10 years of research by Belgian DXer Ludo Maes, with the cooperation of weil-known radio personalities, international organizations, publications, DX clubs and programmes, transmitter manufacturers and the radio stations themselves.

IDP has been expanded by another 12 pages to an 80-page booklet listing shortwave broadcast transmitters worldwide, arranged by country. Each listing indicates the name of the station, transmitter site, geographical coordinates and call-sign. It also shows the number of transmitters at the site, their power, manufacturer, type number and year of installation and year out of service.

This year, a lot of information on shortwave transmitters from Central and South America has been added, thanks to the collaboration of Takayuki inoue Nozaki, a reat expert in the field. Certainly an improvement over last year's edition is the addition of a column with the transmitter's call-signs and the split of the "year of installation" column into a column "year in" and another "year out". Furthermore, a number of new shortwave transmitters have been added and the historical data updated.

This informative publication also contains a list of shortwave transmitter manufacturers and their headquarters, plus statistical breakdowns of the number of shortwave transmitters in use around the world, grouped by power level, country and manufacturer. An article about the history of a transmitter manufacturer (Omnitronix) and an article about Skywave 2000 by Thomcast concludes the booklet.

IDP is read year after year by radio stations, transmitter manufacturers, radio consultants and engineers, as well as by the dedicated radio hobbylst.

TDP, the "Transmitter Documentation Project" has recently begun a web-site as well. Please have a look at http://www.ping.be/tdp. This service has just been started but it will be expanded soon.

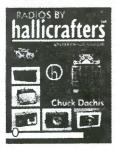
EDYP c/o Bob Padula

To order a copy of the TDP SW-97 -- the "Transmitter Documentation Project" -- send the appropriate amount to one of the following distributors :

ALISTDALIA +

JAPAN:			404 Mont Albert Road Surrey Hills, VIC 3127 AUSTRALIA IBS Japan, c/o Toshimichi Ohtake 5-3-6 Tamanawa Kamakura 247 JAPAN						
Prices for worldwide delivery :									
European Ur "8" Economy "A" Priority Me	Mail	BEF 200 270		DEM 10 14	<u>GB£</u> 4 5	lRC's 6 8	<u>US \$</u> 6 8		
Rest of Euros "B" Economy "A" Priority M	Mail	<u>BEF</u> 220 290		DEM 11 15	<u>GB £</u> 4 6	<u>IRC's</u> 7 9	<u>US \$</u> 7 9		
Rest of the V "B" Economy "A" Priority M	Mall	<u>AUS \$</u> 9 12		<u>CAN\$</u> 10 13	<u>IRC's</u> 7 10	<u>US \$</u> 7 10	<u>Yen¥</u> 900 1200		

Attention Radio Collectors!



RADIOS BY HALLICRAFTERS

by Chuck Dachis

Covers every known Hallicrafters model and accessory. A comprehensive history of the company is provided, repair methods are discussed, and all the units are pictured and listed in almost 700 photographs. Technical specifications are provided in detail for each model, along with dates of production, customer options, color and design variations, tube types and more. Absolutely indispensible for the Hallicrafters collector. A current price guide is included. 224 pp. Order # \$14401 GILFER PRICE: \$29.95

THE ZENITH TRANSOCEANIC

by John H. Bryant and Harold N. Cones With access to the Zenith corporate archives and their long experience as radio enthusiasts and writers for both the popular and scholarly press, "The Radio Professors" Bryant and Cone present the fascinating stories of the development and use of the Trans-Oceanic throughout its forty year life. A wealth of never before published photographs, documents, and information concerning these fascinating radios, their collection, preservation, and restoration. 160 pp. Order # \$14400 GILFER PRICE: \$24.95





RADIO RECEIVER: CHANCE OR CHOICE MORE RADIO RECEIVER: CHANCE OR CHOICE by Rainer Lichte

A two-book set covering all of the great receivers from the 1970s and 1980s. Book one reviews 75 receivers from the past 20 years, including the classics: Yaesu FRG-7, JRC NRD-505 and NRD-515, Drake SW4 and R7, and more. Book two covers later receivers like the Kenwood R-5000 and JRC NRD-525.

Order # G01402 GILFER PRICE: \$12.95/pair

Special offer for NASWA members: Order the Hallicrafters and Zenith books together and receive both Chance or Choice books FREE!



North American Shortwave Association 45 Wildflower Road Levittown, Pennsylvania, 19057

First Class Mail U.S. Postage PAID Levittown, PA Permit No. 319

ISSN 0160-1989

FIRST CLASS MAIL



The Journal of the North American Shortwave Association

Executive Director: Richard A. D'Angelo, 2216 Burkey Dr., Wyomissing, PA 19610 Publisher / Business Manager: Bill Oliver, 45

Wildflower Road, Levittown, PA 19057 Executive Council: Jerry Berg, Ralph Brandi,

Bob Brown, Dr. Harold Cones, Rich D'Angelo, Kris Field, Bill Oliver

EDITORIAL STAFF

Managing Editor: Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606 Desktop Publishing/Graphics: Ralph Brandi, 6 Juneau Court., Tinton Falls, NJ 07712 Shortwave Center: Hans Johnson, 8121 S. Poplar 204D, Englewood, CO 80112 Easy Listening: Richard Cuff, 1016 Chestnut Ridge Drive, Timonium, MD 21093-1716 Listener's Notebook: Al Quaglieri, P.O. Box 888, Albany, NY 12201-0888 Technical Topics: Joe Buch, N2JB, P.O. Box 1552, Ocean View, DE 19970-1552 OSL Report: Sam Barto, 47 Prospect Place, Bristol, CT 06010 Distributing Editor: Fred S. Kohlbrenner, 2641 S. Shields St., Philadelphia, PA 19142 Tropical Band Loggings: Sheryl Paszkiewicz, P.O. Box 152, Manitowoc, WI 54221-0152 International Band Loggings: Wallace C. Treibel, 357 N.E. 149th St., Seattle, WA 98155

- Scoreboard: Jerry Lineback, 220 West Third, Garnett, KS 66032
- NASWA Awards: Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606 English Schedules: Tom Sundstrom, W2XQ
- English Schedules: Tom Sundstrom, W2XQ P.O. Box 2275, Vincentown, NJ 08088-2275
- Listener's Library: SkipArey, WB2GHA P.O. Box 644, Waterford Works, NJ 08089 Destinations: Don Moore, 11434 140th St.,
- Davenport, IA 52804-9538
- Equipment Reviews: Alan Johnson, N4LUS 2490 Sharon Way, Reno, NV 89509 The Company Store: Kris Field, 705 Gregory
- Dr., Horsham, PA 19044

MEMBERSHIP FEES:

United States (First Class Mail)	\$26.00
Canada & Mexico (First Class Mail)	\$27.00
Overseas (ISAL Mail):	
Central & South America and Europe	.\$30.00
Asia, Africa and Pacific	.\$32.00
Overseas (Air Mail):	
Central & South America and Europe	\$36.00
Asia, Africa and Pacific	\$42.00

All remittances must be in U.S. funds and mailed to:

NASWA 45 Wildflower Road Levittown, PA 19057 U.S.A.



N4546b: http://www.anarc.org/naswa/