

the JOURNAL

NORTH AMERICAN SHORTWAVE ASSOCIATION

VOLUME XXXVII NUMBER 1

JANUARY 1997

UNITE	O STATES,	CARIBBEAN
0000-0100	5960, 9755:	SU: (CBC) QUIRKS AND QUARKS [5] MO: (CBC) TAPESTRY [4]
0200-0300	6010, 9535, 9755, 11725:	TU-SA: (RCI) SPECTRUM [1] SU: (RCI) INNOVATION CANADA [6] (RCI) EARTH WATCH [5] MO: (RCI) ARTS IN CANADA [4] (RCI) THE MAILBAG
0300-0400	6010, 9755:	SU: (CBC) DOUBLE EXPOSURE [4] (CBC) ROYAL CANADIAN AIR FARCE [4] MO: (CBC) THE INSIDE TRACK [3] (CBC) NOW THE DETAILS [1]
1300-1400	9640, 11855:	MO: (CBC) DOUBLE EXPOSURE [4] (CBC) ROYAL CANADIAN AIR FARCE [4] TU-SA: (CBC) AS IT HAPPENS [1] SU: (CBC) QUIRKS AND QUARKS [5]
1400-1500	9640, 11855:	MO-FR (CBC) THE BEST OF MORNINGSIDE[1]
1400-1700	9640, 11855:	SU: (CBC) SUNDAY MORNING [1]
2300-2330	5960, 6040, 9535, 9755, 11940:	MO-FR: (CBC) THE WORLD AT SIX [2] SA-SU: (CBC) THE WORLD THIS WEEK-END [2
2330-0100	5960, 9755:	MO-FR: (CBC) AS IT HAPPENS [1]
2330-0000	5960, 6040, 9535, 9755, 11940:	SA: (CBC) MYSTERY PROJECT [4] SU: (CBC) NOW THE DETAILS [1]



RADIO CANADA INTERNATIONAL

Monitor MORE with advanced equipment from Universal Radio!

SANGEAN

ATS-909





Get a free Radio Stand with your ATS-909 purchase from Universal.

The new ATS-909 is the flagship of the Sangean line. It packs features and performance into a very compact and stylish package. Coverage includes all long wave, medium wave and shortwave frequencies. FM and FM stereo to the headphone jack is also available. Shortwave performance is enhanced with a wide-narrow bandwidth switch and excellent single side band performance (SSB tuning to 40 Hz steps via fine tuning). Five tuning methods are featured: direct keypad entry, manual tuning, auto scan, manual up-down tuning, memory recall or manual knob tuning. The alphanumeric memory system lets you store 307 presets (261 shortwave, 18 AM, 18 FM and 9 longwave plus priority). The 3 event clock-timer displays even when the radio is tuning and has 42 world city zones stored. The large LCD display also features a signal strength and battery bar graph. The ATS-909 will also display RDS on PL, PS and CT for station name and clock time in areas where this service is available. Other features include: Record Out jack, Tone control. Includes AC adapter, carry case and wave guide. For a limited time we will also include the Sangean ANT-60 roll-up antenna. 81/2" x 5½ 'x 1½° 2 Lbs. Requires four AA cells. One year limited warranty.

List \$399.00 Order #1909 \$249.95 (+8 UPS)



NEW RADIO MONITORING: THE HOW-TO GUIDE

By T.J. "Skip" Arey. Here is a very readable guide to listening to medium wave, shortwave, VHF and above. The ANARC review says, "Never has so much useful information about getting started in so many aspects of radio monitoring been packed into one book ... should grace the shelf of anyone in the radio hobby." We agree. @1997 Index 337 p.

Order #3462......\$19.95 (+12 Shipping)

FREEPLAY

You have never owned a radio like this before. The power source for this radio is you! The battery free Freeplay radio is the world's first radio to incorporate the ingenious Baylis generator which combines t

in radio technology with the centuries old clockwork spring. Winding the crank for only 20 seconds provides 30 minutes of listening. the most ecologically friendly radio ever produced. Weighing less than 7 pounds, it is the ultimate camping or emergency radio. Here is assured radio performance, day or night without the worry (and expense!) of batteries Coverage includes AM from 520 to 1600, FM from 88 to 108 MHz and shortwave from 3000 to 12000 kHz. The built-in 3.5" speaker provides full sound. May also be operated from a 3 to 9VDC power source. 15.75" x 12.5" x 8" 6.75 Lbs. Six month limited warranty. Made in South Africa

Order #3123





optional



FRG-100

The Yaesu FRG-100B is a quality communications receiver covering from 50 kHz to 30 MHz in CW, SSB and AM modes (FM optional). A 10 Hz backlit LCD with adjustable brightness provides frequency readout and important With 50 memories, clocks and operational status at a single glance. multifunction scanning plus adjustable AGC, RF attenuator, noise blanker, all-mode squeich and S-meter. Optional BEEI Keypad is only \$59.95. Order #2786 \$589.95 (+99 UPS) List \$719.00



GRUNDIG



vith your YB-400 purchase from Univer-

The Grundig YB-400 is the most highly acclaimed receivers in its price class Here are all the features and performance you want, at a price you can afford. A great way to get someone started in worldband listening.

#0040 Grundig Yacht Boy 400 New

\$169.95 (+16 UPS)

Universal has made a special purchase of Factory Reconditioned Grundig YB-400s. All are in excellent, like-new condition with all standard accessories and carry Grundig's regular 1 year limited warranty 1149.95 (+16 UPS)

#1704 Grundig Yacht Boy 400 Reconditioned

Get 3 FREE GIFTS with either YB-400! ● Lucite Radio Stand (shown)

 DX Tips for Beginners Radio Propagation for Beginners

The Kiwa shortwave preamo amplifies shortwave stations from 1.8 to 30 MHz and reiects interference from the AM band (MW). It has excellent overload immunity. Requires 12 VDC. 50 ohm In/ Out SO239, 4.5'x2.5'x1.5' \$94.95 (+\$5 UPS)



SW-8 CASE

This protective blue canvas carrying case from Drake is just right for transporting your SW-8 safely. A great investment.

> \$48.95 (+\$4 UPS) Order #1342





Quality Equipment Since 1942

Universal Radio, Inc. 6830 Americana Pkwy. Revnoldsburg, Ohio 43068-4113 U.S.A.

800 431-3939 Orders & Prices 614 866-4267 Information 614 866-2339 FAX www.universal-radio.com

Visa, Mastercard or Discover card. Prices & specifications subject to change



COMMUNICATIONS **CATALOG**

Universal's FREE 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 Ďrive Wyomissing, PA 19610 GEnie: R.DANGELO3 Internet: r dangelo3@genie com

New Year's greetings to all members! It's time for another year of bountiful DX'ing!!

As we open the new year, I'm happy to report that Bob Montgomery will be the club's Correspondence Secretary. He will be working very closely with our publisher, Bill Oliver, It's good to have a quality guy like Bob on board. Welcome!!!

From member Bob Padula we learn of the availability of the first edition of the AUSTRALASIAN SHORTWAVE GUIDE. It contains times, frequencies, target areas, relay sites, languages, and broadcast days of external service transmissions on shortwave intended for Australia, Asia, the Far East, and the Pacific, for the W-1996 season. With nearly 600 entries, the data is arranged in two parts: by order of country of originating studio, and by time. Details of broadcasts in English and other languages for transmissions to Australia and the Pacific are shown, together with English broadcasts for Asia and the Far East. Other special features include: (1) SHORTWAVE RECEIVER GUIDE: a listing of currently available shortwave receivers, with prices, and dealers, in Australia and New Zealand, (2) INTERNET ADDRESSES OF SHORTWAVE STA-TIONS: listed in alphabetical order of country, designed to be used for reception reporting and for corresponding to stations with over 70 entries, including Unofficial Stations and Pirates!!, and (3) DXING MADA-GASCAR - an in-depth study of the historical development of Madagascar, with particular emphasis on current shortwave radio broadcasting in the Republic.

The Guide is 32 pages A4 format, professionally printed and bound, and the data has been compiled from information received directly from broadcasters, transmission planners, frequency coordinators, DX Clubs,

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. The net moves to 3940 LSB after the 40m session closes for an informal session. Net Controls Tom Sundstrom W2XO, Hausie WB4JSP, Dave Kirby N1DK, ex-N8JOX, and Bob Curtis WIEXZhost an always lively gang of DX monitors. (Best heard in the eastern half of NAm) Net info also available at http:// www.trsc.com/swl_net.htm>.

DXing Federations, monitoring consultants, technical correspondents, and expert monitors worldwide. The Guide is a special publication sponsored by the Electronic DX Press Australia, and is a non-commercial, non-profit venture. It's edited by DXpert Bob Padula with support from Mick Ogrizek. The cost is A\$10.00 (within Australia), or A\$12.00 / US\$10.00 (or ten International Reply Coupons). Orders for the new guide, with payment, should be sent to:

Robert J. Padula 404 Mont Albert Road Surrey Hills Victoria 3127 Australia

We plan to have a review of this exciting new publication in an upcoming edition of Journal.

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

Our Motto is - "Unity and Friendship"

Calendar Of Events

- Jan 17 Meeting. Philadelphia Area NASWA Chapter. Kulpsville Holiday Inn, Kulpsville, PA at 7:30 PM. For more information contact Dan Cashin at 215-446-7831.
- Jan 17 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/>.
- Jan 18 Meeting. The Miami 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.
- Feb 8 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
- Mar'97 Contest. 1997 North American DX Championships. Further information will be published in the Journal or you can send a self-addressed stamped envelope to 1997 NADXC, c/o Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606.
- Mar'97 Convention. The 10th 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. Further details and information will appear later this year.
- Jun'97 Convention. The 31st Annual European DX Council ("EDXC") Conference will be held on 20-22 June 1997 at the Hotel Lazne in the eastern part of the Czech Republic. It will be organized by the Czechoslovakian DX Club. More details to come.

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: rbrandi@lucent.com).

FRENDX: Twenty Five Years Ago....

January marked the last edition of Shortwave Center under the editorship of Bill Matthews. University of Illinois student Ralph Perry will be taking over the column in February. 111 members purchased the 1972 WRTH through a club offer. Executive Editor Bill Eddings denies rumors of a merger with another club. Renewing members include Anthony Marks (3rd year), Roger Legge and Victor Jaar (4th year), George Schnabel (5th year), Bruce Churchill (6th year) and Glenn Hauser (7th year). Featured QSL of the Month was the extremely rare clandestine, Radio Peyk-y-Iran contributed by Bill Matthews. Last minute flash item from Jerry Berg was a report of Radio Nederland's new relay at Tananarive, Madagascar heard on Christmas Day.

Welcome to the following new NASWA members

C. Jeffrey Brandt, Corvallis, OR James Donelson AB4IF, Lantana, FL John A. Gunther Sr., Colonial Beach, VA Tom Hooker, York Haven, PA Mohammad Keshavarz, Greensboro, NC David Krause, Eastlake, OH Lee R. Lane, Evanston, IL Mrs. Gigi Lytle, Lubbock, TX David Muehling, Portsmouth, NH Boguslaw Mikunda, Woolloomooloo, AUSTRALIA Joe Poluhovich, Long Valley, NJ Philip Schmidt, Chicago, IL Karl Shepard, Hillsboro, OR John Stanley, Pawtucket, RI Mitsuhiro Takaya, Osaka, JAPAN Joel H. Wickens, Shrewsbury, PA Graham J. Wills, Naperville, IL

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

Bob McCurdy, 11 W. Dulles Drive, Camp Hill, PA 17011

I'm going to turn 65 very soon, and I've been a member of NASWA for about 20 years. The ride continues to be a great pleasure.

Like many others, I became fascinated with radio while still very young. I remember being thrilled to listen to the Lone Ranger when I was about 10. I'd tune in eagerly in the late afternoon as the approaching darkness allowed me to hear the signals drifting across the border to my little hometown in northern Canada. Our RCA Victor radio with its magic eye for tuning just barely pulled them in.

I graduated to world band (it was called shortwave then) with an entry-level Hallicrafters S3-8A which I bought for \$49.50 in 1949. One of my first big catches from Upper Michigan was the Voice of Free China in Taiwan, which is now easily available via relay. The Chinese stamps on the colorful QSL card were fascinating.

By now I have a pricey, versatile Drake R8A, and I've heard many rare station but the wonder remains.

I still DX, hunting for the most elusive fireflies—I'm now checking out an obscure signa; that I think is from Myanmar (Burma in my youth). However, I'm also savoring easy-to-hear broadcasts from all over the world.

I've found that the trick is to use your imagination. Trot out your atlas. Study a map of the land from which the broadcast is coming. Turn off the lights. Absorb the news and features. Really open your ears to the details of the Arabic, Indian or Andean melodies. Be receptive to the many ways of thinking. Put yourself into those other nations.

Above all, avoid being greedy. I try to examine jewels one at a time rather than go dashing after the others that might be around. I try to remember that some gold-rushers from California became obsessed that they invaded Latin America to rob the graves of Indians. That kind of memory helps me relax and treasure what I already have.

With that attitude, anyone can be happy with either a simple radio or an elaborate one.

Incidently, I've found that even my mighty R8A has its flaw—sounds a little tinny. I fixed that up, though, with a pair of amplified speakers from radio Shack for less than \$20, and now how sweet it sounds!

Certainly I still pursue the flickering fireflies that are so hard to catch, but only sometimes. I've grown aware that there's a time for DX and a time to relax with some strong and always enchanting signals that anyone can hear with ease.

Shortwave Center

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

Correction: In December we ran an article from the DEVMEDIA list that came to us via Don Moore. My apologies to both for the omission. Here is another that Don sends in:

Another item from the DEVMEDIA list. Some interesting background on govt broadcasting in Angola. I was very surprised that there is absolutely no mention of the Galo Negro station. I posted a message to the list giving the background to Galo Negro and explaining how well heard it is here in North America. I also gently pointed out that professional/academic radio researcher types might do well to pay attention to the shortwave listener hobby press, which obviously knows things that they don't, ;-). Don Moore

ANGOLA: MISA report assesses mass communication in Angola

ORIGINATOR: Media Institute of Southern Africa (MISA), Windhoek

Censorship and a host of other government controls are stifling the growth of an independent media in Angola, a Media Institute of Southern Africa study says. MISA's "Assessment of the Mass Communication System in Angola", just released, says Angola's liberal media laws have done little to promote an independent media in the country.

"The media especially the state controlled radio and TV, are more of a government mouth piece and do not give fair, balanced [and] let alone critical comment on government conduct." The state, which owns both national radio and television, the country's only daily newspaper, as well as the news agency, has kept a heavy hand over the media through controls that include direct censorship.

Self-censorship is also very common. "Angolan journalists are lacking...in professionalism, and with exceptions they are partial, tendentious and mediocre," the study cites a survey respondent as saying. "Most journalists want to be seen to be loyal to the state, meaning, in fact, the ruling MPLA."

Carried out from July through September 1996, the study says that, although govern-

ment denies any interference, it has used "editorial guidelines" to censor the stateowned media.

The study was designed to see how Angola, ravaged by years of civil war, could benefit from the Media Development Fund, a new MISA project. Control of the independent press, it says, is mainly through government's hold over the only fully functional printing press in the capital.

Journalists interviewed indicated government, as the printing company's main customer, could bar it from producing newspapers and journals it does not like. "Regular customers of this company acknowledge the quality of the equipment and its staff but blame them for never meeting their deadlines and for giving priority to government orders."

The MISA study joins those in the Angolan media that have called for the establishment of a printing press outside government control. "In order to promote independent media, it is recommended that a printing press run by an independent media trust be started," it says.

Government subsidies have also allowed the state-owned media to undercut the fledgling

press and radio. This denies them vital revenue. It says the January 1995 assassination of Ricardo de Melo, of the bold and much acclaimed "Imparcial Fax", which had been attributed to the state, was believed to have been designed to silence media persons critical of the state. "The killing of Ricardo de Melo, director of Imparcial Fax'," says the study, "was seen as politically motivated and as evidence that in the present environment, press freedom is still lacking in Angola."

But, it is through a monopoly over the airwaves that the state tries to and remain the most powerful manipulator of Angolan public opinion. With the collapse of much of Angola's infrastructure, national distribution of newspapers and other reading material has become impossible. Production problems, including power cuts, a lack of equipment and finance, have not helped. The circulation of the national daily, "Jornal de Angola", has fallen from some 70,000 shortly after independence in 1975 to a meagre 4,000 in a country of about 12 million people. Distribution, like that of most other publications, is limited to Luanda.

With the publishing industry under severe strain, radio has become Angola's most powerful medium. Control of all broadcasting, however, remains a state monopoly.

Through state control of licensing, the government-owned National Radio of Angola has remained the only country-wide broadcaster through its monopoly over the medium and short wave bands used to transmit over long distances.

Television broadcasting is also a state monopoly. State control is here too, strong. "Some of the informants felt state monopolisation of television and the restrictions on radio activities, especially short and medium wave bands, is especially bad for media development," says the study. The state-owned National Radio of Angola also runs broadcasting stations in each of the country's 18 provinces.

There are only four privately-owned radio stations in four major cities, including Luanda. They are, however, limited to FM transmission that does not carry very far and, according to the study, their autonomy seems limited. "While the operators state that they enjoy editorial independence, sceptics point out that these stations are not really independent." It says the state has in the past ordered at least two of the stations to put some programmes off the air.

Training in government institutions is also seen as another tool to control journalists and public opinion. The study says some of those surveyed felt that journalism courses sponsored by the state "tend to be ideologically biased, and do not emphasise fair, fearless, objective and balanced reporting. As a result, there is very little room for open and meaningful debate on national issues."

The inadequate number of women in the Angolan media has also denied it a proper gender balance. "There is very little women participation in Angola. It is recommended that special efforts must be made to bring women into the fold. To this end, affirmative action programmes should be implemented to redress gender imbalances," the study says.

The study urges the development of an "alternative" media in Angola. This, it says, should help break government monopoly over the print and broadcast media and enhance the quality of public debate and opinion in troubled Angola. "What is needed now, more than at any time, is to hear the many different views about the situation in Angola," says the survey.

"It is the media that can be a vehicle of the culture of pluralism and the existence of several publications would give the public various viewpoints, cultivating in the long term, a climate of informed public opinion," the study says. This could be vital to a lasting peace.

The report on mass communications system in Angola was produced on behalf of MISA by Fernando Lima and Monageng Mogalakwe. It is available from MISA Secretariat and costs USD 24, postage inclusive. Contact MISA, Private Bag 13386, Windhoek, Namibia, tel:+264 61 232975, fax:+264 61 248016, e-mail: dlush@ingrid.misa.org.na, research@misa.org.na.

New Star Broadcasting Station

by Hans van den Boogert

This is a report about the New Star Broadcasting Station, or Xin Xing Guangbo diantai in Mandarin Chinese. I have observed this station on the following frequencies: 8300. 9725 and 11440 (misprint for 11430 or new frequency? Ed), where the latter two seem to be alternates both featuring the third program. Reception is clear and strong local daytime here in Taiwan (2300-1000 UTC). but hardly or not audible at night (1200-1600 UTC). I'm not a propagation expert, so maybe somebody else could give some educated guesses about a possible location.

New Star seems to have different services, or programs. Each frequency identifies itself as "the third" or "the fourth" program ("di san tai" or "di si tai"). Content is different, but program format is the same. Broadcasts range from 5 to 40 minutes and I recorded a broadcast on 8300 kHz in October as typical case.

In order to save my energy I hereby give a list of Chinese cardinal numbers. Ordinal numbers are formed by putting "di" in front of the cardinal number.

Chinese numbers from 1-10:

1 = yi

2 = er

3 = san

4 = si

5 = wu

6 = liu

7 = qi8 = ba

9 = iiu

10 = shi

20 = er-shi

26 = er-shi-liu

Transmission fact:

Frequency: 8300 kHz. Date: October 1996. Time: 0600 UTC.

Transmission details: traditional piece of Chinese music as interval signal, featuring a flute. Once you hear it you never forget it. Usually two women are featured: one for the general announcements, the other for the messages. They are both recorded and this clearly shows in the coded messages which suffer from lack of proper intonation. The outline of the transmissions is as follows:

Station ID + program ID. An example:

Zheli shi Xin Xing Guangbo diantai, di si tai (2x) [Here is New Star Broadcasting Station, the fourth program]

stations have 4 or 5 letter call-signs. Also indicated is the month and number (...yue,th report) of the cables and how many cable characters (dianwen) it consists off. An example:

.....you 5-3-2-5-3 danwei [.....for unit 5-3-2-5-3], shi yue fen di yi hao dianbao [October 1st cable], yi fen dian bao dianwen 53 zi [one cable, 53 characters]. You 4-4-7-1 danwei [for unit 4-4-7-1], shi yue fen di si hao [October 4th cable], yi fen dianbao dianwen 61 zi [one cable, 61 characters]. 5-3-2-5-3 danwei 4-4-7-1 danwei zhuyi chaoshou [Unit 5-3-2-5-3, unit 4-4-7-1, stand by for reception].

between. Then actual code transmissions begin, preceded by this announcement:

Zheli shi Xin Xing Guangbo diantai, di si tai. [Here is New Star Broadcasting Station, the fourth program] Xianzai women.... [Now we....] kaishi..... [begin...] baogao gei nin [with the reporting for you]. Qing nin zhuyi, zhunbei chaoshou. [Please stand by for reception]

twice. If the cable is finished this is also announced:

9093 9033 8799 8799 9989 9989 1956 1956 4244 4244 3904 3904 9939 9939 8988 8988 yishang shi gei 4-4-7-1 [The preceding was intended for unit 4-4-7-1], shi yue fen di si hao [October 4th cable], yi fen dianbao dianwen 61 zi [one cable, 61 characters]. xianzai yijing bowen wan le [now finished with broadcasting the cable].

yishang tejie heyuebosong wanbi. xiexie nin de shouting. zhu nin jiankang kuai le. zaihui. [The preceding special programme......now finished transmission. Thank you for listening. We with you health and happiness. Goodbye.]

Comments from the reporter:

First a diclaimer: my Chinese is not perfect and Xin Xing's audio is not that great, so I might have made minor mistakes in translation, or in copying content (90% is correct though). Even my girlfriend had trouble understanding the Chinese and she is a native speaker, so there you go! (Please send her a nice e-mail at hansfong@ms2.hinet.net and maybe she will let me play with my radio more often then, hi!).

I don't want to give too many comments on

this station. It seems a spy station, pactivery nicely, but from where and for who everybody's guess. The Mandarin use sounds like mainland Chinese Mandarin, but it could as well be from Taiwan. The signal and audio quality also point to mainland China, but then again, at night this station is not audible in over here and so it points to Taiwan again.

Maybe it's not a spy station at all. I remember some years back there was a German number station, also sounding very nice and everybody thought it came from East Germany. Turned out to come from West Germany and relaying results of horse racing (this was before the computer networking craze and turned out to be cheaper and faster than other means of distribution).

Anyway, good luck with hunting this station down. If you hear any other frequencies, please let me know. Good DX.

(You can reach Hans van den Boogert, who lives in Taipei, Taiwan, via an e-mail to hansfong@ms2.hinet.net)

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.

N4946b

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

Hardware Bits by Alan Johnson

SGC AUDIO PROCESSOR—SGC Inc. has announced their "PowerClear" outboard audio processor. It provides DSP noise and heterodyne reduction as well as variable audio bandpass filtering in a compact package. The low and high filter cutoffs are separately adjustable and filter response is graphically displayed by LED's. The suggested list price is \$395.00. SGC, Inc., SGC Building, 13737 S.E. 26th St., Bellevue, WA 98005; (800) 259-7331; E-mail: SGCMKTG@aol.com; WWW: sgcworld.com.

BAYGEN FREEPLAY UPDATE—According to a letter from the director of BayGen USA in the November issue of Monitoring Times, the Freeplay radio (reviewed in the October Journal) will now be available in two models: "A" with shortwave coverage from 3 to 12 MHz and "B" covering 5.8 to 18 MHz.

Listener's Library

T. J. "Skip" Arey N2EI P. O. Box 644 Waterford Works, NJ 08089 Internet: tjarey@mosquito.com

Can you believe we're through another year? In spite of a few doom-sayers the radio hobby remains as robust as ever. If anything, this latest stinky sunspot cycle is building up the tenacity of dedicated listeners. Fear not friends, as surely as time marches on this sunspot cycle will move on too. You newbies haven't lived till you've heard the bands at the peak of a cycle. It's worth waiting for. Meanwhile, there's plenty to read. Why not breeze into the New Year with a shameless plug...

I'm led to believe my book should be available by the time this column hits print. It's been a big project but I think folks will like it. Getting a book into print has a much longer gestation period than I ever expected but it was well worth the time and effort. One minor change is the title. It should be out as...

RADIO MONITORING -THE HOW TO GUIDE

by T.J. "SKIP" AREY published by INDEX PUBLISHING GROUP, INC.

3368 Governor Drive Suite 273

San Diego, CA 92122 1 (800) 546-6707

e-mail: ipgbooks@indexbooks.com Website: www.electricti.com/~ipgbooks/ ISBN 1-56866-101-0

The folks at Index are doing their best to get this puppy out to the "real" world so be sure to check your local bookstores. If you don't see it on the shelves raise a fuss. And by all means, someone read it and send in a review. I've been dishing it out in this column for years, I suppose I can take it as well.

But enough about me...

The first new book of the 97 season should be no surprise to most of you.

1997 PASSPORT TO WORLDBAND RADIO

Editor in Chief -Lawrence Magne 381 pages plus the "Blue Pages" \$19.95

International Broadcast Services, Ltd. ISBN 0-914941-39-9

Ah yes kiddies, sit down on the floor around Old Uncle Skip's rocker and I'll tell you a tale about the days before Passport. If you have any doubts about how far our hobby has come over the past dozen or so years and if you want to know where things may be going, check out how Passport has evolved. It remains the best daily use guide for active shortwave stations but Larry and his folks haven't been hiding from the realities of the computer revolution. The 1997 Passport contains a full study of shortwave related Internet websites including a guide for how to get in on the fun. Now don't go thinking Magne has

I must admit,
hearing a "Real Audio" transmission
of a broadcaster I'm used to hearing
with a heavy fade
and static
is very seductive.
I don't think it will ever
replace
my love for "real" radio but it makes an

interesting adjunct.

sold out shortwave radio. The fact is that a unique symbiosis seems to be developing. Many broadcasters are getting their signals out over shortwave, satellite and yes even the Internet. Instead of shortwave falling aside to these other technologies, everything seems to be coexisting peacefully at this point in

time. Larry points out that "Web Radio" is in its infancy and this can be an exciting thing to follow. I must admit, hearing a "Real Audio" transmission of a broadcaster I'm used to hearing with a heavy fade and static is very seductive. I don't think it will ever replace my love for "real" radio but it makes an interesting adjunct. This effort to put the subject on the table makes a good deal of sense. Once examined, we can all get back to what Passport has traditionally offered its readers. Great listings of shortwave stations and great reviews of shortwave receivers.

Tell me something, if the shortwave hobby is dying, how come all these high zoot companies are sinking so much R&D money into new receivers? Magne's and his lab take a look at the latest crop of general coverage receivers. Many new receivers are premiered, including an in depth study of the AOR AR7030 which many folks got a first glimpse of at the 96 Kulpsville Convention. In the portable category the Sangean ATS 909 gets a deep study as well.

Passports "Addresses Plus" section is a source of information I've grown very comfortable with. Also, hidden within the address and mailing information are many tid bits of sage advice and even a bit of wit as well. The ever present "Blue Pages" in the back of the book remain as useful tool as always. By the end of a year, my Blue Pages are so marked up with notes that I have almost no choice but to prevail upon the powers that be to get a new issue.

Another tradition in this column has become where I pick my favorite picture out of the latest Passport. My 1997 choice goes to Page 83. Radio Budapest's Enkiko" Zsuffa is not only very attractive but enjoys actively participating in motorsports. Fast cars and shortwave radio, where was she when I was single???

PRACTICAL PACKET RADIO
by Stan Horzepa WA1LOU
219 Pages
\$15.95
The American Radio Relay League
Newington, CT 06111

ISBN: 0-87259-530-7

If you want to get an idea about how wrong some of these pundits of the radio hobby can be, take a look at packet radio. Ten years ago the prediction was that packet radio would take the place of every other mode of amateur radio. Well to make a long story short. I still can't find an empty frequency on 40 CW. Packet didn't become the major revolution some people predicted. However, a quieter revolution has taken place over these last dozen years. Packet has become a reliable tool for chasing DX as well as routine and emergency communication. Packet has branched out into several technologies that are only beginning to show their promise. Stan Horzepa's book shows the current state of the art and it proves that, while packet didn't take over the world, it surely made its place in it. Stan's book is a great one stop study of the current state of the packet art. You can read about the latest technology in packet modems and software and even about some of the newer transceivers geared for higher packet speeds. Also included is a very good study of HF packet that should be of interest to utility monitors. The section of satellite operation shows how effective this mode of communication can be when used in space operations. One of the most exciting uses of amateur packet radio these days is APRS ((Automatic Packet Reporting System). Simply put, APRS allows packet radio to be used as en effective mapping and positioning system allowing for tracking of just about anything you can think of. Its biggest uses in the hobby to date include weather condition monitoring and emergency communications networking. In addition to all of the packet radio advances you will find complete studies of all traditional packet communications operations including AX.25, TCP/IP, DX Clusters and ROSE. The Internet may have passed packet by on some levels. but packet remains a solid communications mode for any active ham. Practical Packer Radio is a book that will get you up to speed.

Anyway, everybody have a happy holiday season, May Santa put many new radio toys under your tree. Pray for Sunspots in 97.

Listener's Library Extra

Raiph Brandi 6 Juneau Court Tinton Falls, NJ 07712 Internet: rbrandi@lucent.com

An important new book has been published in the radio field. Happily, the book is written by our very own "Uncle Skip" Arey. Obviously, Skip is too close to the book to review it, or maybe even to include a review of it in his column. We feel the book is too important to ignore, though, so we offer this review, prepared by Rich D'Angelo, as a Listener's Library Extra column. The review is being published without Skip's knowledge.

-Ralph Brandi

RADIO MONITORING
The How-To Guide
By T. J. "Skip" Arey
340 Pages
The Index Publishing Group
ISBN: 1-56866-101-0
Reviewed by Richard A. D'Angelo

Getting started in any facet of radio monitoring is, at best, a hit or miss proposition. There are a number of so-called beginners books or guides that attempt to address certain specialty niches in the radio monitoring field. However, until recently, there has never been a comprehensive guide for beginners to learn about all aspects of radio monitoring. All that has changed with T. J. "Skip" Arey's wonderful book, RADIO MONITORING, The How-To Guide.

For many, Skip Arey is a well-known name in the hobby. He has edited our *Listeners Library* column for a number of years and was our technical editor in a past life. In addition, Uncle Skip (as he is known to most of us) writes for *Monitoring Times* magazine and the All Ohio Scanner Club bulletin on topics related to getting the beginner off the ground and running in this terrific hobby of ours.

At radio conventions, he has hosted numerous seminars designed to give the beginner a handle on various aspects of hobby monitoring. It's not easy explaining what many of us take for granted. However, this is what he does best and this book follows in his own footsteps. For many Skip has become the support lifeline that helps get newcomers immersed in our hobby. Therefore, it seems fitting that Skip would author the most complete book on radio monitoring for beginners since he has had tremendous experience "teaching" the subject through his writings and presentations throughout much of his hobby career.

Uncle Skip's book is a continuation of his free flowing thought process and style that dominates his articles, columns and presentations. His is a very chatty, relaxed and witty style that enables the reader to be comfortable with what the author has to present. Whenever he heads down a technical path he always concludes by reminding hobbyists to have fun since that is what a hobby is all about. Simple advise that occasional needs to be said from time-to-time. Frankly, I can't think of another hobbyist, and I know a bushel full of them, that can present basic monitoring information in as clear and as concise a manner as Skip Arey. Since he is a confessed "DC to Daylight" monitor (someone that monitors everything there is to monitor), he knows from personal experience all facets of radio monitoring. The book is packed with useful tidbits of information that even a seasoned hobbyist can make good use of. For example, how many of us really think about our radio shack layout? or how to get up to speed on other aspects of radio monitoring, i.e. non-shortwave broadcast? This book will help anyone grow into the other aspects of radio monitoring that are out there to enjoy.

RADIO MONITORING, The How-To Guide opens with a brief history of radio followed by a chapter covering the many forms of

listening. The book moves into background information on the radio spectrum including a discussion about propagation and what it means to a radio monitor before delving into each area of interest individually. Since Skip covers the entire radio spectrum, veteran shortwave broadcast hobbyists, like us, who are looking to get into other aspects of radio monitoring will find the sections devoted to long wave, medium wave, shortwave utility DXing, scanner listening, TV and FM DXing particularly interesting as another outlet for fun.

Each section concentrates on the basics—receivers, where and when to listen, antennas, accessories, propagation, techniques, skill development, etc. By the time you reach the end of the book, the reader will have a good understanding of the basics involved with all aspects of radio monitoring.

RADIO MONITORING, The How-To Guide by Skip Arey was published by the Index Publishing Group of San Diego, California. The 5 1/2" by 8 1/2 " formatted book is 340 pages of fast paced reading, including 80 illustrations (pictures, line drawings, and schematics) some of which were generated by Uncle Skip's computer. It sells for only US\$19.95 and is available from both Universal Radio and Giffer Shortwave. I recommend that a copy of this book grace the shelf of anyone with an interest in radio monitoring since this is the most complete "how to" guide I have ever seen in print. Never has so much useful information, about getting started in so many aspects of radio monitoring, been packed into one book.

73---RAD

19 Nov 96

GV.

Net Notes by Ralph Brandi, rbrandi@lucent.com

Whether you're a fan of CKLW, The Big 8, the top-40 station in Windsor, Ontario in the 1960s, or of CKLW, the shortwave pirate that eerily recreates its sound, down to some of the original commercials and breaks, you may be interested in The Classic CKLW Page at http://www.cklw.org/. Webmaster Jack Decker has managed to put together a compelling slice of radio history on the web, and one that is regularly updated with corrections and new stories as CKLW fans and alumni discover the site. The site has grown quite large, even moreso if you load images, and can take quite a while to download, but the quality of the text makes it worthwhile. Alumni, in particular, have written in with interesting stories, such as the time someone cut the guy wire on a nearby tower, and the jocks kept broadcasting until someone could get to the transmitter site and set up, despite police orders to evacuate and the imminent danger of the tower falling over onto the studio. The page even includes audio snippets of the station, including of that night, which was different than normal, since the transmitter studio wasn't capable of delivering the tightly-formatted programming that the station was known for.

Many members of the CKLW staff of old are paid tribute to, most notably Byron MacGregor of CK's signature "20/20 News", better known for his hit single "The Americans". The story of his funeral gives a strong indication of how much impact CKLW had in the Detroit area (and all through the midwest) even 20 years after its prime. The audio snippets include old airchecks (complete with echo!), plus the jingles that gave the station so much of its sound.

Anyone with an interest in the history of radio, or who's just curious why someone would go to all that trouble to recreate the sound of a long-dead station should find The Classic CKLW Page an interesting and informative diversion.

Technical Topics

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

Mobile SW Listening (Part 1)

Modern life has caused radio frequency noise polution to proliferate. As we crowd together in townhouses and apartments, we have more trouble than ever listening to shortwave radio at home. Outside antenna restrictions can require us to locate our antennas in proximity to our own and our neighbor's noise generators. Switching power supplies in VCR's, TV sets and computers combined with light dimmers, touch-on lamps, and fluorescent lights often destroy the pleasure of listening to distant signals.

Government agencies charged with regulating such interference are primarily responsive to the overall contributions such devices. make to society. Think of the BTU's saved each year by people who merely touch a lamp rather than waste effort by turning the switch. Regulators are also aware of the monetary contributions manufacturers of these poluters make to government legislators who control the purse strings of the regulatory agencies. Consequently regulators do as little as possible to restrict the sale of noise generators. Individual listeners have little influence with the regulators compared with the commercial interests that have the financial horsepower to influence lower regulatory standards on RF emissions.

Modern life also causes us to spend more and more time in our cars. Most of us spend at least an hour or two in our cars each day commuting. The trend to listen to shortwave radio in the car is thus driven by the need to escape RF polution in the home and to fill the long boring hours behind the wheel with an intelligent alternative to the me-too programming found all too frequently on the domestic AM and FM dials.

Since 1993 I have probably listened to more hours of shortwave programming in my car

than I have at home. Two years ago I found myself driving from Washington, DC to Virginia Beach, VA at the time Radio St. Helena was scheduled to make their every-year-ortwo broadcast. I heard enough of their broadcast in my truck to get a QSL from them. Now I'm not big on QSL's but I thought a report to them was in order given all the trouble they go through to present the broadcast. So I have lots of experience in mobile listening and I hope to share some tips with you in coming months.

In this series of articles I will look first at the types of equipment available for mobile listening. I'll examine the pros and cons of various types of receivers. Later parts of this series will provide suggestions for installation, mobile shortwave antennas, and reduction of ignition and powerline noise.

The least expensive way to enjoy shortwave in the car is to connect a converter between the normal car antenna and your normal car radio. These converters are typically fixed-tuned for each band. Tuning within the band is accomplished by tuning the car radio. This means that frequency readout will need some mental gyrations to convert the dial reading to the actual frequency. Before car radios adopted digital tuning, it was easy to tweak the car radio to compensate for frequency drift induced by the converter. Converters designed to work with analog radios will generally not work well with modern, digitally-tuned car radios.

Over the years I have used converters built by Audiovox, Becker and MFJ. You can find these analog-compatible converters at flea markets and hamfests for around \$25. I bought the Becker converter at the Kulpsville SWL convention's silent auction for \$30.

As far as I know, MFJ is the only manufacturer currently marketing a SW converter designed for use with digital radios. They include a small frequency trimmer that allows the user to adjust the converter local oscillator to center the output on an integral 10khz frequency multiple. The trimmer also allows the user to compensate for frequency drift induced by ambient temperature changes in the vehicle. The MFJ-306 covers only the 19, 25, 31 and 49 meter bands. At 49 meters sensitivity tends to fall rapidly either side of the optimum frequency. This roll off results from the O of the fixed-tuned resonant circuits ahead of the mixer. For a given Q the bandwidth of a resonant circuit decreases as the frequency is decreased. A Q of 100 is typical. At 6 MHz such a circuit would have a 3dB bandwidth of only 60 kHz.

The MFJ-306 is sold direct from the factory or you can buy it from Universal Radio for \$74.95 plus \$4.00 shipping. (See the inside front cover for their address and phone.) I would recommend buying through a dealer because I have had bad luck with MFJ product support. Buying through a reputable dealer who offers warranty repair is therefore recommended.

Another option is to use a portable radio in the car. Tony Germanotta and Bob Hill run Sony 2010s in the car with good results. Tony uses his for easy listening in combination with an FM Sender to allow listening with the car's high powered audio system. (The FM Sender was described in the October 1996 issue of the NASWA Journal.) Most portable radios do not have sufficient audio power to overcome ambient road and engine noise when listening in motion.

Tony uses the built-in whip to listen to strong stations. If the BBC, Radio Netherlands, Radio Havana Cuba, Monitor Radio, and Radio Canada International are your targets, this kind of setup should work fine. (If you

want to listen to the tropical band frequies coming from Nashville, I suggested shorting plug in the antenna jack.) You can power the radio from its own batteries or from the FM Sender Model FS-100 if you can still find one.

You can also couple between your SW radio and the car radio by using an adapter that looks like a cassette tape. It plugs into the cassette player. Stores like K-Mart and Wal Mart sell these adapters for about \$20. They have the disadvantage of causing the tape player motor to run generating wear, heat, and potentially electrical-motor brush noise.

If DXing the rare ones is more to your taste, you can take a lesson from Bob Hill. He used his 2010 in combination with an active Sony antenna for DXing while parked in a quiet location away from power lines. Bob consistently heard lots of rare tropical band DX from all over the world using this combination. Remember the secret to successful DXing is maintaining a high signal to noise ratio. I'll show how to keep vehicle noise to a minimum in a later article in this series.

I personally use a ham transceiver, the Yaesu FT-890 for mobile listening. The 6 KHz IF bandwidth in the AM mode allows good quality reception of DSB AM broadcasters. The ability to receive in the SSB mode is useful for stations like RFPI and Radio St. Helena. The radio also features a good noise blanker, pass-band tuning and an IF notch filter to help difficult interference situations. If you can find a modern synthesized ham transceiver with general coverage receiver that has a blown transmitter you can probably get it for less than half its normal price.

Next month I'll discuss three in-dash receivers that are or recently have been marketed for SWL's. We'll also consider installation tips to minimize noise from automotive electronics. Until then stay tuned.

Equipment Reviews

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

Longwire Balun Comparison Test

The random wire antenna is probably the most commonly used antenna in the shortwave hobby. It is simple to construct and erect, inexpensive and offers good performance across the SW spectrum. It is usually erroneously referred to as a "longwire", although a true longwire is at least one wavelength long at the lowest frequency of interest. The typical configuration for a random wire is an approximately horizontal span of wire erected as high as practicable, with a length of wire connected from one end of the "flat-top" to the receiver. This physical configuration is responible for an alternate name for this antenna-the inverted "L". In the classic random wire, the feedline from the antenna to receiver is a length of stranded wire. In essence, the feedline is a continuation of the antenna and is equally sensitive to signal pickup.

Since the feedline can pickup signals and it runs to the receiver in the house, it can pickup interfering signals from within the house. In addition, the single-wire feedline is usually vertically oriented, which tends to increase its susceptibility to noise pickup. Ideally, one would like to place the antenna at a distance that places it outside the noise field for the house and transfer the signal to the receiver via a feedline that would be immune to noise from nearby sources. The use of a shielded feedline becomes a very appealing idea. There are some theoretical disadvantages to simply connecting the center conductor of a length of coaxial cable to the end of the antenna. however. (Please note that antenna theory and antenna practicality are ofter widely divergent. About the only hard and fast rule regarding receiving antennas is "Watch out for power lines.")

The problem arises from impedance—the resistance to flow of alternating currents. which is what radio waves are. Impedance incorporates not only resistance, but capacative and inductive reactance as well. Antennas, feedlines and receiver inputs all have characteristic impedances and maximum power transfer occurs when these impedances are matched. Most coaxial cables have a characteristic impedance of 50 -75 ohms and this is also the impedance that receivers with coaxial type antenna input connectors have. A random wire antenna has a widely varying impedance, depending on the received frequency, but is typically high, in the range of 450 to 600 ohms. Therefore, when a coaxial cable is directly connected to a random wire antenna there is an impedance mismatch and a potential signal loss.

The Balun

A balun is a impedance transformation device, i.e. a transformer. They are designed for use at RF frequencies and are usually constructed to cover a wide frequency range. The usual configuration for the ones we're interested in are several turns of wire on a doughnut of ferrite material. The term "balun" is derived from BALanced to UNbalanced, which is another use for baluns—isolating a balanced system such as a dipole antenna (which is symmetric about its feedpoint) from its unbalanced (coaxial cable) feedline. Using a balun in this circumstance theoretically preserves the symmetry of the antenna's radiation or pickup pattern. Baluns designed for use with random wire antennas are actually "un-uns"-performing an impedance transformation from an unbalanced system (the coaxial cable) to another unbalanced system (the end-fed wire antenna). Yes, there can be "ba-bas", too, but "balun" is used as the generic term for any of these designs.

Baluns are typically built to provide a specific ratio of impedance transformation. A 1:1 ratio balun is used to connect coaxial cable (50 ohms) to a one-half wavelength dipole (typically 50-75 ohm impedance, depending on height above ground). In this case, the balun is used to convert the unbalanced signal on the feedline to the balanced configuration of the antenna without actual impedance transformation. A4:1 balun can be employed to feed a 300 ohm folded dipole with 75 ohm coaxial cable. The impedance transformation ratio is determined by how the transformer is constructed. Baluns used for random wire antennas are in the range of 9:1, to transform the typical (but not always!) 450 ohm impedance of the wire to the 50 ohm impedance of the coax. One other feature that some baluns offer is that the balun provides a path to ground for DC voltages (but not RF!) through the shield of the coax which provides for a degree of protection from static discharge and lightning.

So, a balun designed for use with a random wire antenna should allow one to have the benefits of using a shielded feedline (less noise pickup) without the disadvantage of signal loss due to impedance mismatch between the antenna and feedline. There are now several baluns on the market that are designed for use with random wire antennas. I had previously looked at the RF Systems Magnetic Longwire Balun in July 1992 and I wanted to see if any of the baluns from other companies were any better, as well as check and see if a balun offered any benefits. Thanks to NASWAn and inveterate antenna experimenter John Wagner who loaned me his balun collection, I was able to do a comparison test.

What Is SWR?

For my previous balun tests, I had used a RF noise bridge which, in conjunction with a receiver, permits the measurement of an antenna system's impedance and to what extant it is resistive or reactive. For this test, John loaned me his MFJ-259 SWR analyzer. The MFJ-259 consists of a tunable radio

frequency signal generator, an LCD frequency display and a SWR meter, all in a single, portable unit. It costs \$239, but if you do a lot of antenna construction work, it makes "pruning" antennas a lot easier.

SWR stands for "standing wave ratio". When there is an impedance mismatch between a feedline and a load, a percentage of the signal that is fed into the load from the feedline is reflected back into the feedline. SWR provides a comparison of incident power to reflected power, which is expressed as a ratio. A ratio of 1:1 indicates a perfect match. A 2:1 ratio would indicate that the feedline is 50 ohm, but the antenna is either 25 or 100 ohms impedance. It should be noted that reflected power is not necessarily lost-it goes back to the source and is then rereflected. It is the inherent loss of the feedline that determines what happens to the reflected power-wire feeders have very low loss and loss in coax depends on the frequency and design of the cable. Foam-type cables generally are lower loss. It should also be emphasized that a low SWR is much more important in transmitting applications than receiving applications—generally a SWR of 2:1 or less is fine for transmitting and 4:1 or less is acceptable for receiving. Measuring the SWR may arguably not be the best way to test baluns, but it was expedient, thanks to the MFJ-259.

Test Methodology

My random wire is 120 feet long and is attached to a fifteen feet mast on my chimney at one end and the other end is about forty feet high and attached to a tree. About forty feet of the antenna stretches over the flat roof. I decided to test the baluns by attaching them to the antenna at the chimney end and using the MFJ analyzer connected to the balun through a short length of coaxial cable. The baluns I used were the RF Systems Magnetic Longwire Balun (MLB), the Palomar Engineers Magnetic Longwire Balun (MLB-1) and the Industrial Communications Engineers Model 180A Beverage/Longwire Matching Unit (ICE). The ICE unit provides output taps for 300, 450, 600 or 800 ohms and the center conductor of the coax is isolated from the antenna to a level of 4,000 volts DC for lightning protection. One other caveat concerning the testing methodology is in order here—there was no earth ground used with any of the baluns. The ICE unit is primarily designed for Beverage antennas, which are true longwire antennas that are mounted close to the ground and the instructions state that the 180A should be mounted to a ground rod at the feedpoint of the antenna.

I decided to measure the SWR at the midpoints of each standard tropical or international broadcasting bands. The data is listed in a tabular form for coax alone, the RF Systems balun, the Palomar and the ICE (with data for each tap point). "SHACK" are the measurements made in the shack at the end of a 40' length of coax with the shield connected to an earth ground and using the RF Systems balun (the model I have been using). "O.S." indicates the meter went off the high end of the scale and "INF" indicates a meter reading of infinitely high SWR. Frequency is in megahertz.

COAX	MLB	MLB-1	1CE300	450	600	800	SHACK
4:1	INF	INF	4:1	4:1	INF	INF	0.5.
INF	1.7:1	3:1	1,4:1	1.7:1	2.5:1	3:1	INF
INF	INF	INF	4:1	5:1	5:1	5:1	0.5.
INF	INF	INF	INF	INF	INF	INF	INF
2.5:1	4:1	INF	3:1	5:1	INF	INF	5:1
INF	2.5:1	2:1	2.5:1	2:1	1.7:1	1.7:1	INF
2.5:1	4:1	INF	4:1	5:1	INF	INF	5:1
INF	3.5:1	4:1	4:1	3:1	3:1	3:1	INF
INF	2:1	3:1	1.3:1	1.7:1	2.5:1	3:1	3:1
INF	3:1	2.5:1	3:1	3:1	2.25:1	2:1	3:1
INF	2.5:1	1.7:1	3:1	3:1	1.7:1	1.5:1	3:1
INF	3.5:1	INF	INF	INF	INF	INF	4:1
INF	3:1	INF	INF	INF	INF	INF	3:1
	4:1 INF INF INF 2.5:1 INF 2.5:1 INF INF INF INF	4:1 INF INF 1.7:1 INF INF INF 2.5:1 4:1 INF 2.5:1 4:1 INF 3.5:1 INF 3:5:1 INF 3:1 INF 3:5:1	4:1 INF INF INF INF INF 1.7:1 3:1 INF	4:1 INF INF 4:1 INF 1.7:1 3:1 1.4:1 INF INF INF 4:1 INF INF INF INF 2.5:1 4:1 INF 3:1 INF 2.5:1 2:1 2.5:1 2.5:1 4:1 INF 4:1 INF 3.5:1 4:1 4:1 INF 3:1 3:1 1.3:1 INF 3:1 2.5:1 3:1 INF 3:1 INF INF	4:1 INF INF 4:1 4:1 INF 1.7:1 3:1 1.4:1 1.7:1 INF INF INF 4:1 5:1 INF INF INF INF 2.5:1 4:1 INF 3:1 5:1 INF 2.5:1 2:1 2.5:1 2:1 2.5:1 4:1 INF 4:1 5:1 INF 3.5:1 4:1 4:1 3:1 INF 2:1 3:1 1.3:1 1.7:1 INF 3:1 2.5:1 3:1 3:1 INF 3.5:1 INF INF INF	4:1 INF INF 4:1 4:1 INF INF 1.7:1 3:1 1.4:1 1.7:1 2.5:1 INF INF INF 4:1 5:1 5:1 INF INF INF INF INF 2.5:1 4:1 INF 3:1 5:1 INF INF 2.5:1 2:1 2.5:1 2:1 1.7:1 2.5:1 4:1 INF 4:1 5:1 INF INF 3:5:1 4:1 4:1 3:1 3:1 3:1 INF 3:1 1.3:1 1.7:1 2.5:1 INF 3:1 2.5:1 3:1 3:1 1.7:1 INF 3.5:1 INF INF INF INF	4:1 INF INF 4:1 4:1 INF INF INF 1.7:1 3:1 1.4:1 1.7:1 2.5:1 3:1 INF INF INF 4:1 5:1 5:1 5:1 INF INF INF INF INF INF 2.5:1 4:1 INF 3:1 5:1 INF INF INF 2.5:1 2:1 2.5:1 2:1 1.7:1 1.7:1 2.5:1 4:1 4:1 5:1 INF INF INF INF 3.5:1 4:1 4:1 3:1 3:1 3:1 3:1 INF 3:1 2.5:1 3:1 1.7:1 2.5:1 2:1 INF 3:1 2.5:1 3:1 3:1 1.7:1 1.5:1 INF 3.5:1 INF INF INF INF INF

I then wanted to see what effect the baluns had on received signal strength to assess if there was any insertion loss due to the baluns. Ihauled a Kenwood R-1000 and an extension cord up on the roof to minimize the effects of feedline loss. I used WWV at 5, 10 and 15

MHz as the signal source and tried to change baluns and take measurements as quickly as possible to minimize the effects of changes in progagation on signal levels. Here's the data:

COAX	MLB	MLB-1	1CE3
S9+10	S9+20	S9+20	S9+
S9+30	S9+35	\$9+35	S9+
S9	S9+5	S9	S9
	S9+10 S9+30	\$9+10 \$9+20 \$9+30 \$9+35	\$9+10 \$9+20 \$9+20 \$9+30 \$9+35 \$9+35

ICE300	450	600	800
S9+20	S9+20	S9+20	S9+10
S9+35	S9+30	S9+30	S9+30
S9	S8	S9	S9

What's It All Mean?

I think it means I need to look for another type of antenna, at least in terms of providing resonance on the frequencies of interest. I used the MFJ analyzer to measure the points of lowest SWR on my usual random wire (120' with RF Systems MLB and approximately 40' feedline). The lowest points, typically a SWR of 3:1, were at 3.3, 4.3, 4.7, 6.4, 10.5, 13.75, 19.3 and 22.25 MHz. The SWR varied widely between these points. For comparison, I analyzed my parallel dipole, which I cut to length for the 90 and 60 meter bands by formula and then erected without any additional pruning. It

had resonant points at 3.375 MHz with a SWR of 1.8:1 and a bandwidth between 3:1 SWR points of about 200 kHz and 5.080 MHz with a SWR of 1.6:1 and a 3:1 bandwidth of 110 kHz. In theory, a dipole should also have resonances at odd multiples of a halfwave and I found this to be true. My dipole had SWR dips at 10.2, 15.25, 17.37 and 25.345 MHz with the SWR at these points ranging between 2.8:1 and 2.3:1.

The question is how much difference does resonance make? The dipole does seem to yield very slightly higher signal strengths on bands where it is resonant, for the most part. There is definitely variation depending on the location of the transmitter, since each antenna has differing directional response patterns. The other confounding factor is that the feedline for the dipole is two to three times longer than the feedline for the random wire, so there may be some attenuation there, although only in the range of one dB for foam coax in the HF region, according to the textbooks.

But back to random wire baluns. I don't think that there was any clear winner among the brands tested. Using a balun did seem to yield an increase in received signal strength even though they didn't provide a "perfect" impedance match. They definitely make it easier to provide a weather resistant connection between the coax and antenna wire and I feel that using a shielded feedline is much better than using an unshielded wire to feed the signal to the receiver. The baluns also offer a convenient way to ensure that the antenna wire is at ground potential relative to DC voltages, thus preventing the build-up of

potential receiver-damaging static charges on the antenna, as well as providing some measure of protection from lightning. I think the optimum solution to the problem of matching a random wire's impedance to that of coaxial cable would be a remotely controlled antenna tuner which could be mounted at the antenna's feedpoint. Heathkit made such a unit briefly, but it is now history.

It often seems that antennas are "voodoo" rather than science. This is due to the large number of variables that can affect an antenna's performance. These variables include height above ground, proximity of nearby structures, both natural and manmade and nearby noise sources. The bottom line is don't be afraid to experiment with different antenna types and orientations. As stated above, the only hard and fast rules concerning antennas are to watch out for power lines and be careful when climbing trees or roofs.

Hardware Bits by Alan Johnson

KIWA ELECTRONICS—I recently installed a set of the Kiwa replacement filters for the Sony ICF-2010 and I highly recommend them. The wide filter is a direct replacement and its bandwidth is around 6.2 kHz at -6 dB vs. 9-10 kHz for the stock filter. The narrow filter replacement is a 3.2 to 3.6 kHz bandwidth filter module that is mounted off the board and replaces the stock narrow filter which measured around 5 kHz bandwidth in my '2010. Installation is easy, as long as you have had some experience with soldering and desoldering on high component density printed circuit boards. I would recommend using a narrow tip soldering iron—I used a 1/8" chisel tip which was almost too wide.

New items from Kiwa include extensive modifications for the Japan Radio NRD-535 receiver to improve ultimate rejection, audio performance, sync detector lock and tone control action. These mods require sending the receiver to Kiwa. There are also plans to introduce the "Poster Loop", which will be a 9" by 12" passive loop covering 540 to 1700 kHz to improve the MW performance of portable receivers. It couples to the ferrite rod antenna of the portable radio. Kiwa Electronics can be contacted at 612 South 14th Ave, Yakima, WA 98902; (509) 453-5492; E-mail kiwa@wolfe.net or see their Web page at http://www.wolfe.net/~kiwa/.

MULTIBAND SHORTENED DIPOLE ANTENNA—Although it's getting a bit cold for antenna projects, there is an article on page nine of the November 1996 issue of the ham radio magazine "CQ". It discusses the construction of a parallel dipole which is shortened by the use of loading coils. The coil construction details are given by a computer program "HAMCALC" for IBM PC's, which was written by the article's author and is available on a 3.5" diskette for \$5 US from George Murphy, 77 McKenzie St., Orillia, ON L3V 6A6 CANADA.

Listener's Notebook

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

WHEW! Just enough time after editing this monster to wish all contributors to and readers of LN a happy, healthy, and DX-filled 1997!

COPYRIGHT NOTICE Items credited to BBCM are copyright by the BBC Monitoring Service and may not be reproduced without BBCM permission. $^{\downarrow}$

AFGHANISTAN Nangarhar Radio has installed a new 300 kW transmitter, now capable of "transmissions on both SW & MW." Sked is 0230 0330 and 1130-1330, and, of course, no shortwave freqs were mentioned. (17-Nov/R. Voice of Shariah/BBCM)

ALBANIA Radio Tirana sked:

0000-0500	Albanian	7270v 6120	
0145-0200	English	7160v 6115	
0230-0300	English	7160v 6140v	
0400-2300	Albanian/HS1	6100	
0800-1100	Albanian	7150	
1000-1500	Albanian/HS2	6145	
1500-1800	Albanian	7270v 5985	
1715-1730	English	7155v 6185v	
1730-1800	Italian	7170	
1830-1900	German	7270v 6270	
1900-1915	Greek	7105 6235	
1900-1930	French	7270v 6270	
1915-1930	Turkish	7105 6015	
1930-2000	English	7270v 6270	
2000-2300	Albanian	9740 6170	
2200-2215	Serbian	7170 5985	
2300-2400	Albanian	7270v 6120	
(BBCM)			

Conflicting sked/freqs reported:

0600-1500	Albanian/HS1	6100
0900-1500	Albanian/HS2	6145
2000-2300	Albanian	6170 9725
1900-1915	Greek	5985 7170

(3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

Radio Tirana dismissed allegations that Albanian-language programs of the Voice of the Islamic Republic Of Iran are transmitted via their facilities. The station implied a political purpose to the accusations. (BBCM)

ALGERIA Thanks to a tip on Austria's DX-Telegramm, I heard R. Algiers Int'l in English at a new time 1400 11-Dec a het above 15205—not a good choice, co-channel to VOA. Opened with announcement in English giving 15205, 15160, 11715, and only other English time as 2000 on longwave only, so I suppose the 1600-1700 broadcast heard a few

weeks ago is gone. 6-Dec at 1626, found undermodulated French on 17745, probably Algiers. A month ago Brian Alexander measured this on 15205.16, and that sounds about right; somewhat separable from VOA by tuning to high side (12-Dec/Hauser/ WOR) 15205.23 (22 Dec/Sundstrom)

ANGOLA UNITA's news agency claims the Voice of Resistance of the Black Cockerel, Vorgan, will be privatized as soon as all political issues relating to the Lusaka peace accord have been settled. The buyer will be the Polytechnic Academy, a Luanda-based limited company involved in all media. The new radio station will be called Radio Despertar [Wake Up Radio] and will continue to broadcast on 11830, 7100 and 9700 kHz. (BBCM)

ANGUILLA From a source associated with the organization in question, "Dr. Scott may be about to get approval from the Anguilla govt to start using his 100 kW new Continental transmitter. There was apparently an Executive meeting of the Government last week to approve the go ahead, subject to installing a fence around the site." (Magne/Lamb) In response to the above item, I called the station on 17-Dec and spoke with Harold Vanterpool. He tells me that Dr. Scott told the station to shut down on 24-Nov and that they had been off of the air, both on AM and FM, since then. Vanterpool didn't know why the station had gone off and he didn't know of any plans to start the shortwave. (17-Dec/direct/Johnson/Cumbre)

ARGENTINA

3200.37(h) R. Armonia, hrd around 0600, also at 0738 with romantic tango vocals. (6-Dec/Berg-MA/Cumbre)

6400(h) R. Armonia 0311 Religious pgm "Dios es Amor" fair (4X1600). (10-Dec/Nigro-URU/Cumbre)

13361L Radio Rivadavia 2220-2250 w/ sports nx & talk, lottery numbers, ID and pips at 2230. Slogan "Somos la verdad." (7-Dec/Moore/MARE/Cumbre) 13361

"SMQ" 2302-2335 w/ rock, IDs for 105.5 FM, & phone-ins. This in USB with Rivadavia still there in LSB. This had not been there when I tuned in to Rivadavia just a short time before. Tnx to Harold Frodge & Larry Russell for noticing this. I'm uncertain of the name, but it seemed to be SMQ. Help on this one from Rio de la Plata region would be appreciated. (7-Dec/Moore/MARE/Cumbre)

ARMENIA Voice of Armenia external svce sked:

0200-0230	Armenian	9965
0230-0245	Spanish	9965
0730-0745	Armenian	15270 Su
0745-0800	Persian	15270 Su
0800-0815	Spanish	15270 Su
0900-0930	French	15270 Su
0930-1000	English	15270 Su
1500-1530	Azeri	7480 4990 4810 Mo-Fr
1530-1545	Georgian	7480 4990 4810
1545-1630	Kurdish	7480 4990 4810
1630-1700	Persian	7480 4990 4810
1700-1730	Russian	7480 4990 4810
1730-1830	Armenian	7480 4990 4810
1830-1845	Turkish	7480 4990 4810 Mo-Fr
1830-1900	Turkish	7480 4990 4810 Sa/Su
1845-1900	English	7480 4990 4810 Mo-Fr
1900-2000	Arabic	7480 4990 4810
2000-2200	Armenian	7480 4990 4810
2100-2130	French	11615-(announced)
		9965 7480
2130-2200	English	11615-(announced)
		9965 7480
2200-2230	Spanish	11615-(announced)
		9965 7480
2230-2245	Armenian	11615-(announced)
		9965 7480
(BBCM)		
,		

Radio Intercontinental:

1000-1030	German	15270	
1800-1830	German	9965 Mo-Sa	
1800-1900	German	9965 Su	
1900-1915	German	9965 Mo-Sa	
1900-1930	German	9965 Su	

(3-Dec/NDXC/EDXP/BCDX/Bueschel-FRG & RVI/van Oudheusden/Padula/EDXP & Sundstrom)

AUSTRALIA Radio Australia now using 7380 (ex-7330 & 7150) for its 1430-1600 release. Khmer is now on 7150 (x9500) at 1130-1230. (DasGupta-IND/ Padula)

The new Australian government cut the ABC's budget for the year 1997-8 by \$55m. ABC Board and management team looking at every conceivable way to save money. Apparently, three proposals for downsizing RA are currently with the ABC Board:

- 1. \$1m will be cut from its budget. This would involve 15-20 staff going and loss of French and Cantoness services.
- Pidgin, French, Cantonese, Khmer and Vietnamese language services would go. Mandarin and Indonesian would be cut to only two hours a day and the English service would be a composite of RA's English service and ABC's domestic services.
- ABC would ask SBS to takeover the remaining language services. Also RA's English service would be dropped in favour of a relay of the ABC's domestic services. (21-Nov/RN Media Network/Ogrizek/ Padula/EDXP)

Radio Australia is to introduce a "new and improved" format from 22nd January, listeners to the station's "Feedback" feature were told.

Full details will be released on air and in print nearer the time, but "muzak" which had annoyed a respondent will be removed from the schedule, although music features will remain. The new format will include a 60-minute news and current affairs program every three hours and listeners will still hear 10 minutes of news on the hour, every hour, Radio Australia said. (BBCM)

AUSTRIA Radio Austria International sked, C=via Sackville:

9870 9495 7325

German

0000-0030

Octinon	JU10 J 177 13E3
English	7325
Spanish	9870 9495
German	9870 9495 7325 (not Mo
	0130-0200)
Esperanto	9870 9495 7325 Mo
English	9870 9495 7325
German	9870 9495
Spanish	9870 9495
German	13730 6155 (not Su
	0430-0500)
Esperanto	13730 6155 Su
German	17870 15410 13730
	6155 6015C (not Su
	0505-0530)
Arabic	17870 15410 13730
	6155 6015C Su
English	17870 15410 13730
	6155 6015C
German	17870 15410 13730
	6155 6015C
	6015C
	17870 15410 13730 6155
	17870 15410 13730 6155
	17870 15240 13730 6155
	17870 15240 13730 6155
	17870 15240 13730 6155
	17870 15240 13730 6155
German	13730 6155
French	13730 6155
	Spanish German Esperanto English German Spanish German Esperanto German Arabic English German English German English German English German English German English German

1200-1330	German	13730 6155 (not Su
		1230-1300)
1230-1300	Esperanto	13730 6155 Su
1330-1400	English	13730 6155
1400-1430	German	13730 6155
1430-1500	Spanish	13730 6155
1500-1530	German	13730 11780 9655 6155
1530-1600	English	13730 11780 9655 6155
1600-1630	German	13730 11780 9655 6155
1630-1700	English	11780
1630-1700	German	13730 9655 6155
1700-1730	German	13730 11780 9655 6155
1730-1800	French	13730 11780 9655 6155
1800-1900	German	9655 6155 5945 (not Su
		1830-1900)
1830-1900	Arabic	9655 6155 5945 Su
1900-1930	German	9495 6155 5945
1930-2000	English	9495 6155 5945
2000-2030	German	9495 6155 5945
2030-2100	French	9495 6155 5945
2100-2130	German	9495 6155 5945
2130-2200	Spanish	9495 6155 5945
2200-2230	German	9495 6155 5945
2230-2300	English	9495 6155 5945
2300-2330	German	9870
2330-2400	Spanish	9870
(BBCM)		

BELGIUM Radio Vlaanderen Internationaal (RVI) sked thru 30th March 1997:

	anto Atantide	sien internationaat (RVI)	
sked thru 30th March 1997:			
0000-0025	Spanish	9925 5900	
0030-0055	English	9925 5900	
0600-0655	Dutch	9925 5985	
0700-0730	Dutch	9940 9925 5985	
0730-0755	English	9940 9925 5985	
0800-0825	French	15545 9925 6035	
0830-0930	Dutch	9925 9905 6035 Mo-Sa	
0830-0955	Dutch	15545 9925 6035 Su	
0930-0955	German	9905 6035 Mo-Sa	
1000-1025	English	6035 Mo-Sa	
1000-1025	German	9905 6035 Su	
1030-1055	French	17610 15510 6035	
1100-1155	Dutch	17610 15510 6035	
1200-1230	Dutch	17610 13685 9925	
1230-1255	Spanish	13685 9925	
1300-1325	Dutch	13795 13685 13670 6035	
1300-1325	Dutch	13795 13685 6035 Su	
1330-1355	Dutch	13795 13685 Mo-Sa	
1330-1355	English	13795 13685 Su	
1400-1425	English	13795 13685 Mo-Sa	
1400-1655	Dutch	17690 9925 5910 Su	
1430-1455	French	13685 Mo-Sa	
1530-1555	Dutch	5910 Sa	
1600-1655	Dutch	11850 Sa	
1700-1730	Dutch	11685 9925 5910	
1730-1755	Arabic	11685 9925 5910	
1800-1830	Dutch	9925 7250 5910	
1830-1855	German	7250 5910	
1900-1925	English	9925 5910-(not Sat) Su-	
		Fr	
1900-2100	Dutch	9940 5910 Sa	

1930-1955	French	9925 5910-(not Sat) Su- Fr
2000-2055	Dutch	9925 5910-(not Sat) Su- Fr
2100-2125	Dutch	9850 5910
2130-2155	Spanish	9850 5910
2200-2225	English	5910
2230-2255	French	5900
2300-2400	Dutch	9925 5900
(BBCM/RVI)		

BRTN [Belgische Radio en Televisie] has announced a drastic restructuring of its world radio sce Radio Vlaanderen Internationaal [RVI]. The reform, which will be implemented at the end of October of 1997, includes the axing of RVI's bcs in Spanish, German & Arabic. Broadcasts in Dutch, French and English will continue. Overall SW transmissions will be reduced from the present 300 hours/week to only 140 hours. Wavre site will only be used for transmission to Europe and Africa. Other target areas will be served by German and Russian sites. (10-Dec/RVI/BBCM/AGDX)

BHUTAN 5030 kHz tentatively, Thimpu appears to have gone to winter time sked (=one hour earlier s/off, English at 1315, etc.). Basis of assumption is unheard at 1430 today! (7-Dec/Goonetilleke-CLN/UADX/BCDX/Bueschel-FRG)

BOLIVIA

4471.9 Radio Movima, Santa Ana de Yacuma 2251 with M in non-stop SS talk. (20-Dec/ Steyn/DSWCI DX Window)

4552.4 R. Tropico 2240 Assumed this one with segued EZL pop vocals in Spanish; long, awkward pauses between numbers, giving the impression of some pretty amateurish engineering. Past 2300, no announcements at all. Astounding, room-filling signal—absolutely clear and solid, 100% readable even with wide filter. Very unusual reception! (8-Dec/Hill) 4600 Perla Del Acre, Cobija 0030 blasting in with one of the best signals yet. (16 Dec/Wilkner/DSWCI DX Window)

4599.29 R. Villamontes?, strong carrier 1010, and most mornings, anyone closer to the site care to report if this is VillaMontes? (16-Dec/Wilkner/Cumbre)

4632.43 Radio 11 de Octubre (p) 1051 Iberoamerican pops andMtalk. (14-Dec/ TIN) 4719.8 R. Abaroa, Beni; 0006-0028 mx rancheras, ID. (18-Dec/Arrunategui-PRU)

4875.0 R. La Cruz del Sur, La Paz; 0054-0115 ID
"Por Aniversario de radio La Cruz del Sur.."
s/off (0110) (13 Dec/Arrunategui-PRU)

BOTSWANA Radio Botswana noted at 04-05 using all three frequencies: 7255, 4820 and 3356. (Sundstrom-NJ, Dec 22)

BRAZIL

3255 Radio Dif. 6 de Agosto, s/on with NA *1009. (Klemetz-CLM/Dateline Bogota)

3384.9 Radio Educacao Rural de Tefe, 0015, powerful signal, full ID and into a message slot. (1-Dec/Klemetz CLM/Dateline Bogota)

4845 Radio Cultura Ondas Tropicais; Cumbre had this listed as Radio Cabocla, but according to Dx Window, the station changed its name to the former in March. Thanks to Willi Passmann for pointing this out.(6-Dec/Johnson/Cumbre)

4865.0 R. Verde Flores, Cruzeiro do Sul; 0145-0248 mx in PP and SS, IDs. (18-Dec/Arrunatequi-PRU)

4885.0 R. Difusora Acreana, Rio Branco; 0124-0203 ads, mx, ID "Transmite en 4885 KHz onda tropical radio Difusora Acreana.." (13-Dec/ Arrunategui-PRU)

HF channels currently off the air are 6150 (R. Record), 9695 (R. Rio Mar), 11855 (R. Aparecida) and 15190 (R. Inconfidencia). All other channels seem to be active, although R. Anhanguera (6080 and 11830) tends to be a little irregular. (Jones-PAR/NU/DSWCI DX Window/Cumbre)

R. Brasil Central 4985/11815, now *0600 (ex-*0630), and not all-night as recent rpts have suggested. (1 Dec/Jones-PAR/NU/Padula/EDXP)

R. Nova Visao 5965/11705 has retimed its German broadcasts to 0830-0900. Like the rest of the station's programming, the GG b/cs are a relay of Trans World Radio (Radio Transmundial). (1-Dec/Jones-PAR/NU/Padula/EDXP)

Radio Cultura 6170, has added an hour of its AM programming (//9615 and 17815) at 0800-0900, before switching to a relay of its FM outlet. (1-Dec/Jones-PAR/NU/Padula/EDXP)

According to April 12, 1996 Diario Oficial, the Ministry of Communications has enlarged the SW bands to include 9775-9900, 11650-11700, 11975-12050, 13600-13800, 15450-15600, 17550-17700 and 21750-21850. First permission to broadcast in these new areas has been issued to Radio Nove de Julho, 9820, which should be on air within 6 mos. Belonging to the Archdiocese of Sao Paulo, it was closed by the military regime in 1973. (1-Dec/Loss-BRZ/DX Clube Paulista/Knutsson-SWE/SWB/NU/Padula/EDXP)

BURKINA FASO 9515 Radio Burkina 0840-0914 Tentative w/M&W in vernacular to 0900, then FF talk, Afro mx, interesting drums. Possible ID. Good until 0900 then heavy QRM from much stronger cochannel Brazilian sign-on. Soon faded away. (8 Dec/Moore/MARE/Cumbre)

CAMEROON Radio Cameroon, Yaounde, has reactivated 4850 CRTV, widely noted from around 1800 to

past 2200. Programs in French with some English interspersed, and an English news bulletin from 2100-2115. (Berg/Krone/Goonetilleke/Rausch/Moore/ D'Angelo/Quaglieri)

CANADA Radio Canada International (RCI) once again faced imminent closure, this time in March 1997, but was reprieved by renewed funding. Monies will come from the Department of Foreign Affairs, the Prime Minister's budget, the Department of International Cooperation and Development and the Department of National Defence. (RCI/BBCM)

Schedule effective 27th October 1996–30th March 1997. The relays of CBC domestic broadcasts in English originate from Toronto whilst RCI's own programs and the SRC domestic broadcasts in French come from Montreal. PK broadcasts are for Canadian peacekeeping forces.

0000-0030 English-CBC 11940 9535 6040 Tu-Sa 0000-0100 English-CBC 9755 5960 Su/Mo 0000-0100 Spanish 11940 9535 6040 Su/Mo

0030-0100 Spanish 11940 9535 6040 Tu-Sa 0030-0200 French-RCI 9755 Tu-Sa 0100-0030 French-RCI 11725 9755 9535

0130-0200 Spanish 11725 9535 Tu-Sa 0200-0300 English-RCI 11725 9755 9535 6155

0300-0330 English-PK 9755 6155 Tu-Sa 0300-0330 French-RCI 9505-m 6025-u 0300-0400 English-CBC 9755 6155 Su/Mo

0330-0400 Arabic 9615-w 9505-m 7210-s 0330-0400 French-PJ 9755 6155 Tu-Sa 0400-0430 English-RCI 9645-u 9505-m 6150-s

0430-0500 Arabic 11715-m 9505-w 7200-w 0600-0630 English-PK 11905-u 9760 9740-u 6150 6050-u Mo-Fr

0630-0700 French-PK 11905-u 9760 9740-u 6150 6050-u Mo-Fr 1200-1230 English-RCI 11730-y 6150-y

1230-1300 French-CBC/11730-y 6150-y

1300-1325 Chinese 11955-y 7260-k 6150-y

1300-1400 English-CBC 11855 9640 1300-1400 French-CBC 15425 9650

1330-1400 English-RCI 9535-x 6150-x 1400-1500 English-CBC 11855 9640 Mo-Fr

1400-1700 English-CBC 11855 9640 Su 1400-1700 French-CBC 15325 Su

1430-1455 Chinese 7235-y 6150-y 6030-k

1430-1500 English-RCI 15325-s 11935-u 11915-s 9555-u

1500-1600 French-CBC 17820 15325-(not su) 11935-u 11915-s 9555-u

1600-1700 Russian 17820-(not su) 15325-(not su) 11935-(not su)

9555-u 7265-u 6185-y 6150-k

1630-1657 English-RCI 9550-x 7150-x 1700-1800 Ukrainian 17820 15325 11935 9555-u

5995-u 1800-1900 Russian 17820 15325 13650 11945

7235-u 5995-u

1900-2000) Ukrainian	17820 15325 13650 11945	0900-1000) Chinese	15180 12015 11945
		7235-u 7200-u			11695 11685 11650
2000-2100	French-RCI	17820 15150 13690 13650			11500 9945 9480 6590
		11945 9805 7235-u 5995-u	0900-1000		15440 11755
2100 2200) Fuelish DC	5925	0930-1030		17680 15135 8660 6995
2100-2200	Engusn-KC	15150 13690 13650 11945	0930-1530	•	9855 7190
		11705 9805 7235-u 5995-u 5925	1000-1100		15100 11915 11650
2200-2230	Fooligh CD(2 15150 13690 11945 11705-	1000-1100		12015 11945 11685 659
2200-2250	Lityusii-Cot		1000-1100	3	15440 11755
2230-2300	French-RCI	y 9805 7235-u 5995-u 13690 11945 11705-y 9755	1000-1100	Russian	11980 7820 7110 5145 4815
2200 0220		7235-u 5995-u 5960	1030-1130	Cambodian	11780 9440 6550
2300-2330	English-CB(11940 9755 9535 6010	1030-1130	Indonesian	15135 11445 6995
2220 2400		5960	1100-1130		9480
2330-2400	Engusn-CBC	11940 9755 9535 6010	1100-1200		12015 11945 11685
2220 2700	F11-1 enc	5960 Sa/Su	1100-1200		5850 5145
2330-2400		9755 5960 Mo-Fr	1100-1200		7820 7110 4815
2330-2400		11940 9535 6040 Mo-Fr	1100-1200		9550 6110
c=Cape Gr	eco (Cyprus);	; k=Kimjae (South Korea);	1100-1300		5965
m≈Moosbri	unn (Austria);	s=Sines (Portugal): u=Skel-	1130-1200		11825 9880 6550
ton (UK);	w=Wertachtal	(Germany); x=Xian (China):	1130-1200	3 . 3/	11700 11445 6995
y=Yamata	(Japan). Unm	arked frequencies originate		English	
from Sacky	rille. (BBCM)	•	1130-1230		7350 6590 6010
			1200-1230	3 - 3/	12110 11700 6995
CHILE Re	last month's	LN item about proxy QSLs		English	
for R. Espe	ranza: in a su	bsequent letter. Saul Verga-	1200-1300		11780 8260
ra Valenzu	ela asks the	address be changed to P.O.	1200-1300	Chinese	15260 12015 11945
Box 52248	, Correo Centi	ral 1, Santiago. Do not put	1200 1200	P 11 1	11685
name of st	ation in addre	ss, only his name. Seems to	1200-1300	English	15440 11795 11660
be his per	rsonal fund-ra	aising project; some direct	1200 1200	Managhia	9715 9565 7385 1341
QSLs from	that station h	ave also been reported. (10	1200-1300 1200-1300		5850 5145 4883 4815
Dec/Hause	r/BCDX/Bueso	thel-FRG)	1230-1330		9550 6110 7350 6590
CUTNA CL	n. 1:		1230-1330		15135 11445 6995
CHINA CH	ina kadio ini	ternational sked, compiled	1300-1330	,	11825 9880 6550
entirety no	m monitoring	observations and only in-	1300-1330		11840 11600
Monitoring	se transmissio	ons heard recently by BBC	1300-1400		15260 12015 11945
Monitoring	•		2500 1100	omicse	11685
CRI use	s relay station	s in Canada, France, French	1300-1400	English	11660 9715 7410 7385
Guiana, Ma	lli, Russia, Sp	ain and Switzerland (s=via	1300-1400	Russian	7820 5850 5145 4883
Switzerland	i):	· · · · · · · · · · · · · · · · · · ·			4815
0000-0030	Hakka	12015 9440 8260 7190	1300-1400	Vietnamese	9550 6110
		7110 6550 6140	1300-1500		5965
0000-0100	English	11760 9710v	1330-1400	Burmese	11825 9880 6550
0000-0100	Russian	4883 4815	1330-1430	Indonesian	15135 11445 6995
0000-0100	Spanish	11445 7175	1330-1430	Thai	7350 6590
0030-0100	Chaozhou	12015 9440 8260 7190	1400-1430	Sinhalese	7120
		7110 6550 6140	1400-1430	Tamil	11575 9457v
0030-0100	Portuguese	7435	1400-1430	Turkish	9655 9480
0100-0200	Cantonese	11695v 9710v	1400-1500	Amoy	12015 11650
0100-0200	Spanish	11650 9565	1400-1500	Cambodian	9440 8260
0200-0300		15435 11695 9710v 9690	1400-1500		9785 9535 7405
0200-0300		13685 11650	1400-1500		5850 5145 4883 4815
0300-0400	3	11695 9710 9690	1400-1500	Vietnamese	9550
0300-0400	Russian	15435 11755 11515	1430-1500	Sinhalese	11780 7120
0300-0400	Spanish	11765	1430-1500	Tagalog/	11445 9880 8660 6995
0400-0500	Chinese	9710		English	
0400-0500	English	9730	1430-1500	Tamil	11575 9457v
0500-0600	English	9650	1430-1530	Laotian	7350 6590 6010
0830 -0930	Indonesian	17680 15600 15135 6995	1500-1530	Bengali	11825 7260 6995
			1500-1530	Nepali	11445 6955
			1500-1530	Pashto	9700 7480 5220

1500-1530	Persian	9440 6955	2000-2030	Serbo-Croat	9860 9365 7385
1500-1600	Chinese	9457 7110 6550	2000-2100	Chinese	7780 7660 7435 7185
1500-1600	English	9785 9535 7405			6955
1500-1600	Hindi	9920 7590 7180	2000-2100	English	15110 11715 9920 9440
1500-1600	Russian	7780 7435 7375 4883		•	6950 5220
		4815	2000-2100	Hungarian	9365 7580 5808
1500-1600	Vietnamese	9550	2000-2100	Russian	????
1530-1600	Bengali	7260 6995	2030-2100	Bulgarian	????
1530-1600	Nepali	11445 7260 6590	2030-2100	Italian	9965 7385
1530-1600	Pashto	9700 7480 5220	2030-2100	Polish	7405 7375 4960
1600-1630		9457v 7335 5250	2030-2130	French	9820 7800 7335 7210
1600-1630		9785 7480			7110
1600-1630		9675 7590 6920	2100-2130	Albanian	7405 4960
1600-1700		9760 9440 7130	2100-2130	Chinese	6165S
1600-1700		15130 15110	2100-2130	English	15110 11715 9920 6950
1600-1700		9900 7260			5220
1600-1700		9920 7180 6995 6720	2100-2130		3985S
1600-1700	Russian	9860 9655 7780 7435	2100-2130	Italian	9965 9365
		7375 6950	2100-2130		
1600-1700		7360 6590 6010	2100-2200	Arabic	9440 7260 6955
1630-1700	Swahili	9457 7335 6965 5250	2100-2200	•	7480 7360 6933
1630-1700	Urdu	11690 9675 9675 7590	2130-2200	-	9920 6950 5220
		6920	2130-2200		3985S
1700-1730	Swahili	15110 11790 9455 5250	2130-2200	Hungarian	6150
1700-1800	Cantonese	9900 6920	2130-2200	Serbo-Croat	6165S
1700-1800	English	7405 7335-(to 1730)	2130-2230	French	11790 9820 9770 7800
		7150 6965-(to 1730)			7335 7110
		5220	2200-2230	English	3985S
1700-1800	Russian	11500 9860 9655 7780	2200-2230	Portuguese	7535 7435 6950
4700 4000		7470 7435 7375 6950	2200-2230	•	6165S
1730-1800	Hausa	15110 11790 7235	2200-2300	-1.31.	7170
1730-1830	Chinese	9820 7800 7335 7110	2200-2300	Spanish	13865 7480 7360 6933
		6965 5250	2230-2300	•	9860 6950
1800-1830	Hausa	15110 11790 7405 7235	2230-2300		3985S
		4960	2230-2300	Portuguese	6165S
1800-1830		9860 7385 6933	2230-2330	Chinese	12015 9535 9440 8260
1800-1830		9440 6955			7190 6140
1800-1900	German	9920 6950 5220	2300-2400	Russian	4883 4815
1800-1900	Russian	9535 9365 7780 7435	2300-2400	Spanish	15120 11875v 11445
		7375 7315	2330-2400	Amoy	12015 9440 8260 7190
1830-1900	Bulgarian	9860 7385 6933			6140
1830-1900		9965 7405 4960	(BBCM)		
1830-1900		9785 9440 6955	DIA Tui	inn Frant F	unham Mains of the Charle
1830-1930		11790 9770			uzhou, Voice of the Strait, in the Offshore Islands and
1830-1930		9820 7800 7335 7110			
1900-1930		9965 7385			cation is Standard Chinese: bo Diantai Diyi Tao Jiemu" -
1900-1930		7375 6933			thi Sheng Guangbo Diantai
	Portuguese	9670 6920	Dier Tag lie	mu" - Second	nrogram
1900-1930		????	0000-0200	Chinese	
1900-1930 1900-2000		9785 7405 4960	0855-0959	Chinese	6115 5050 4940
1900-2000	Cantonese	7780	0959-1130	Chinese	7280 6115 4940 7280 6115 5508 4940 4130
1900-2000	English	9440 6955	0333-1130	Gimese	2755
1900-2000		9920 6950 5220	1130-1700	Chinese	5508 5050 4940 4130 3900
1930-2000		9365 7660 7435	1130-1700	Ginnese	2755
1930-2000	Czech	9965 7405 4960	2155-2400	Chinese	6115 5050 4940
	Portuguese	7375 7250	2133-2400	CHILLESE	0113 3030 4940
	Romanian	15110 11715 7385 6835	Voice of	the Strait see	cond program, Fuzhou:
	French	9860 6933 9820 7800 7335 7110	0255-0600	Chinese	9505 6000 Tu
2000-2030	Esperanto		0600-0630	Amoy	9505 6000 We-Mo
2000-2030	Polish	9965 7405 4960 7375 6933 6150	0630-0700	Chinese	9505 6000 We-Mo
2000-2030	Lousit	7373 0933 0130	0955-1230	Chinese	6000 4900

1230-1300 Amoy 6000 4900 1300-1600 Chinese 6000 4900 (13-Dec/BBCM)

CIS 5895nf DW in Russian via Irkutsk, *2000-2100 QRMing Zagreb co-channel (13-Dec/Padula/EDXP) 5935nf DW in Persian via Samara, 1850 (14-Dec/Padula/EDXP) 5940nf AWR in French via Rimatska Sobota, 0815-0830 (13-Dec/Padula/EDXP) 5945nf DW in Russian via Irkutsk, 1930-2000* ex 5895 (13-Dec/Padula/EDXP) 6000nf Deutsche Welle via Samara, Romanian *2000-2100* (13 Dec/Padula/EDXP)

Tikhiy Okean Vladivostok sce in Russian at 0815-0900 observed on 9530, 10344U (satellite delay), and best on 17570 kHz. (15-Dec/BCDX/Bueschel-FRG) 1900-2000 on 7420 and 9850 (3-Dec/Paniview-BUL)

Voice of Russia in English/Hindi/Urdu 1200-1600 on odd 9658.3 and 9791.6 kHz. Mayak in Russian on 6075 kHz (co channel DW!) 1500-2030 & 0400-0500, also on 4825 & 4930 kHz at 1700-2000. (#-Dec/Paniview-BUL)

Radio Belarus, W96 schedule:

1900-1930 Belorussian 6010 7105 7205 7210 1930-1945 Belorussian 6010 7105 7205 7210 Mo 1930-2000 Belorussian 6010 7105 7205 7210 Th/Fr English "Bible 6010 7105 7205 7210 Tu 1930-2000 Focus" German "Die 7210 7205 7105 6010 Su 1945-2000 Antwort" 6010 7105 7205 7210 1945-2000 German "Radiofenster"We/Sa 1945-2000 Polish 6010 7105 7205 7210 Mo

(3-Dec/NDXC/EDXP/BCDX/Bueschel-FRG)

Georgian Radio's external service identifies itself in Russia as "Radiostantsiya Gruziya"; the English service announces itself as "program Georgia":

0100-0700 HS #1 5040 0200-1100 HS #2 1830 [sic...is this 11830? -AQ1 0500-0600 Georgian 6080 Tu/Th 11805 Russian 0600-0630 0630-0700 English 11805 0630-0800 Georgian 6080 Tu/Th 0700-0730 German 11805 0700-1100 HS #1 4875 5040 0800-0830 German 11910 0830-0900 English 11910 0930-1000 English 11910 1000-1030 Georgian 11910 5040 1100-2130 HS #1 6080 Sa/Su 1600-1700 Georgian 1630-1700 English 6180 1700-1730 Georgian 6180 1700-1730 German 11910 1730-1800 English 11910 1830-1900 Georgian 6080 Sa/Su

1930-2000 English 11760 2000-2030 German 11760 2030-2100 Russian 11760 (Gukasov-GEO/Panivew/EDXP/Padula)

W96 for Voice of Vietnam, via Russian transmitters: 0100-0300 EE 5940, 0300-0400 SS 5905, both via Krasnodar. (NDXC/EDXP/Padula)

Trans World Radio W96:

 0000-0030
 Hindi
 7430 (Sat, Sun EE) Irkutsk

 0030-0200
 Asian langs
 9825 Irkutsk

 1130-1615
 Asian langs
 7420 Irkutsk

 1200-1300
 Chinese
 7205 Novosobirsk

(NDXC/EDXP/Padula)

IBRA Radio W96:

1330-1400 Lukta Prabara - 7400 Tashkent Bengali 1700-1730 Azeri 7425 Su-Tu

1700-1730 Persian 7425 We-Sa 2000-2100 Bismilla As Sabakh 7425 7420 5935 - Arabic

(NDXC/Padula)

CLANDESTINE - AFRICA Voice of Oromo Liberation is sometimes referred to as "SBO" after its title in the Oromo-language, "Sagalee Bilisumma Oromoo". It supports the Oromo Liberation Front and other groups opposed to the Ethiopian government. Sked 1600-1700 in Oromo on 9870 Mo/We/Sa. Postal addresses: SBO, PO Box 510610, 13366 Berlin, Germany; SBO, Prinzenallee 81, 13357 Berlin, Germany; (tel: +49-30-4941036; fax:+49-30-4943372); SBO, PO Box 73247, Washington, DC 20056, USA (BBCM)

CLANDESTINE - ASIA New Star Broadcasting Station (Mandarin: "Xin Xing Guangbo diantai") has been observed on 8300, 9725 and 11430. The latter two seem to be alternates, both featuring the 3rd prgm. Reception is clear and strong during local daytime in Taiwan (2300-1000), but hardly audible (if at all) at night (1200-1600). New Star seems to have different services, or programs. Each frequency identifies itself as the "third" or the "fourth" prgm. Content is different, but the program format is the same. Broadcasts range from 5 to 40 minutes, and usually start on the hour with a traditional piece of flute mx as IS. Usually two women are then featured: one for the general anmts, the other for messages. They are both recorded, clearly shown in the coded messages, which suffer from lack of proper intonation.

Outline of the xmsns: Station ID and prgm ID; example: "Zheli shi Xin Xing Guangbo diantai, di si tai" twice ("Here is New Star B/Cing Stn, the fourth prgm"). Then call for particular units (danwei) that cables (dianbao) are coming. These stns have four-or five-letter callsigns. Also indicated is the month

and number of the cables, and how many cable characters it consists off. This is repeated a couple of times, with the IS in between. Then actual code xmsns begin, preceded by an anmt. Each number is repeated twice, and when the cable is finished, that is also ancd. The whole b/c ends with an anmt in CH: "The preceding special prgm . . . now finished xmsn. Thank you for listening. We wish you health and happiness. Goodbye."-New Star seems to be a spy station, packaged very nicely, but from where and for whom is anybody's guess. The Mandarin sounds like mainland China, but it could also be from Taiwan. The signal and audio quality also point to mainland China, but at night the station is not audible in Taiwan, which points to Taiwan. (den Boogert-TWN/DX-Window/Padula/EDXP)

CLANDESTINE - ASIA RADIO FREE ASIA [ed. note: There has been some controversy in other DX publications about whether this is a clandestine or not. To my mind, any station that attempts to hide its transmitter sites and isn't just a pirate falls into this category. Your comments are welcome. - AQ]

Radio Free Asia [RFA] began broadcasts in Tibetan on 1st December, at 2300, 2330, 1300 and 1330. RFA plans to add Burmese, Vietnamese, Lao, Khmer and Korean in 1997.

7415 kHz RFA (UNID site) at 2255 noted w/ancmts in English: "This is channel two. RFA program channel two"(male voice), then repeated by woman in Russian! Her voice is familiar for me from VOA Russian sce. At 2300 progr in Tibetan has started with //7550 kHz which was stronger than 7415 kHz. (14-Dec/Pashkevich-RUS/Cumbre) Noted 1300-1400 on 9440 khz, no //'s found. (2-Dec/Pashkevich-RUS/Cumbre) 11615 kHz RFA. Unid site [KH-BI?], carrier on at t/in 1256 "This is Channel One the RFA program channel" test tape 1302*, then off. (18-Nov/Vitek-AUS/EDXP) What could the secret site be? My guess is KHBN Palau, as Jeff White said this station was considering carrying RFA. Meanwhile, the 11615 kHz RFA test free continues unheard though I can't be sure it is not on the air now with Tibetan. (10-Dec/Hauser) Seemingly originates from Kamo-ARM transmitter site. KHBI Saipan and KHBN Palau are both much poorer here at this time, and audio type is totally different too. (14-Dec/ Bueschel)

CLANDESTINE - LATIN AMERICA La Voz del CID is in financial trouble and could grow silent. Huber Matos says it received large donations from some Latin American governments in the 1980s. The transmitter is in one of those countries, donated by the host government, valued at \$500K. He insists that no aid comes from the U.S. government. A 50 kW power plant [sic] bcs on 9940 kHz, 6305 kHz. An array of directional antennas with a 15-dB gain boosts power to an effective level of 500 kW. (7-

Dec/Armando Correa/Miami Herald/Pilchick/Cooper/WoR/BCDX/Bueschel)

CLANDESTINE - MIDEAST 6055 kHz a station calling itself the 'Voice of Azerbaijan' noted here '1630-1730'. ID in Azeri: "Burasi Azerbaijanins sesi" ("This is the Voice of Azerbaijan"). This was first heard on Dec 2 with very strong signal. I first thought it was a Turkish st, because the music I heard was a Turkish pop song. After the song, I heard ID and talk against the Iranian government and Armenia. Azerbaijani is a familiar language of Turkish, so I understand talk and songs. The said "This broadcast is for unity for south and north Azerbaijan". On Dec 2 the bc was very clear, but on subsequent days, a jammer (I think from Iran) as well as Radio Slovakia International have interfered heavily. (5-Dec/Yasar-TUR/DXW/BCDX/Bueschel)

"Sedaye Mojahed" [Voice of the Crusader] in Persian to Iraq on v4450 ... v6450 kHz. 9430 kHz seems not the same as at 0230-0507 on 9590 kHz, mentioned in 1995 as "Sedaye Mojahed-2" then 6020 & 6175 kHz, broadcasts from Iran, jammed by Iraq. (3-Dec/Paniview-BUL/BCDX/Bueschel)

Voice of the Iraqi People is noted on a new freq of 6244 kHz in Arabic at 1835 s/off with definite ID: "Saut al Shaab al-Iraqi" (13-Dec/Pashkevich-RUS/BCDX.Bueschel) 9568.46 1745 tentative, with Arabic talks on Iraq. Listed to sign off at 1700°. Blocked by jammer at 1747. (20-Dec/Schaay)

v4660.02v kHz Voice of Mojahed, 1700-1715 in Vn, reporting about Iran and terrorists; heavy jamming, QSYing all the time: 4660, 4655.3, 4645, 4655.3, 4650.2, 4645.1 etc. in not more that 10 minutes, always hunted by a jammer; furthermore, I noted no less than 8 jamming sts being active between 4640-4670 kHz at the same time. I really wonder why this particular station is so severely jammed while sts like VoCommunist Iran are more or less left alone. Are some of the clandestine sts in the region in fact black ones the jamming guys don't have to take care of? (4-Dec/Kuhl FRG/DXW/BCDX/Bueschel-FRG) 7225, The Voice of Mojahed, 1900-2100° in Farsi, //9429.95 (1-Dec/Pashkevich-RUS)

Voice of the People of Kurdistan carried the following announcement in its Arabic transmission at 1500 on 10th December: "We wish to draw our listeners' attention to the fact that our radio station will broadcast its programs as of today on a shortwave frequency of 49 metres in addition to our principal wavelength of 75 metres." Station currently observed on 4100 kHz. (BBCM) [Alas, no 49m frequency mentioned - AQ]

Voice of the Worker (Persian: Seda-ye Kargar) is a left-wing radio station which broadcasts in opposition to the Iranian government and in support of the Iranian Revolutionary Workers' Organization. Sked:

1530-1615 Persian 4200v 3930v 1730-1815 Persian 4200v 3930v

COLOMBIA 2920(h) Radio Uno, Barranquilla, Colombia, no longer audible (Klemetz-CLM/Dateline Bogota)

5873.7 Radio El Sol, Villa Moreno (Narino), Colombia, identified Nov 16, acknowledged my report on the phone from the town of Pasto, by way of Jose Francisco Ortega, [phone number (9)27 211047] who originally built this crystal controlled 50 W transmitter. There's no telephone service in Villa Moreno, said Ortega, so that's why he gave me a call instead of the stn owner, who is a friend of his. I have requested a written statement, but who knows, such a paper may be felt as a bit too compromising. After all, this is a pirate. [Announced sked: Mo-Fri 2100-2300, Sat/Sun 1930-2400]. (Klemetz-CLM/Dateline Bogota)

COSTA RICA RFPI came back on 15050 kHz briefly Sat afternoon Nov 30 at 2120 check but by 0200 check all frequencies were off and were still silent Mon Dec 2 at 1400. Hope it's nothing serious. (2-Dec/Hauser)

Faro de Caribe moved to a new transmitter site in San Isidro, Herida, about a year. Air time is from 2000-1200 and English is from 0300-0400. They are using new 5 kW transmitters on 5055 & 9645 khz and an older transmitter on 6175 kHz. This per Minor Enrique, Station Engineer.

Radio Casino is on V5954 kHz from 1030-2400 using the oldest transmitter in Costa Rica. The transmitter, which has a power of about 1 kW, is 51 years old and first came on the air for the first time on Aug 18, 1945. They sign off early due to QRM from larger high-powered sts. Their telephone number is 758-0029 and their fax is 758-3029. Max DeLeon, a POC listed in PWBR, is no longer at the station. This per Edwin Zamora of the news department and their General Manager, Luis Grau.

Radio Reloj official schedule is 4832 kHz from 0100-1300, and 6006 kHz from 1300-0100; however, at times someone forgets to switch to 4832 so 6006 kHz is heard at night after 0100. One freq might be used all the time when one of the transmitters being repaired, but they are not on the air at the same time. The station has no plans to expand or change freqs at this time. This per Sharty Coto, Engineer. (3-Dec/DIRECT/Cumbre/Fleming/BCDX/Bueschel-FRG)

CROATIA W96 sked for Croatian Radio:

0000-0200 5895 7165

0200-0600 5895

0600-0700 5895 7165 9830 11830

0700-1000 5920 7165 9830 11830

1000-1230 5920 7165 9830

1230-1600 5920 7165 13830 1600-2100 5895 7165 13830 2100-2300 5895 7165 11635 2300-2400 5895 11635

Programs are in Croatian, excepting news in English at 0706 0903 1303 1903 2303; 0803 1303 1903 2303 Sat/Sun. New technical address is: Zelimir Klasan, HRT, Prisavlje 3 Zagreb, CROATIA telefon: +385 1 6163355, telefax: +385 1 6163347 email: Zelimir.Klasan@hrt.hr (Ogrizek/Padula/EDXP & Roe-UK/WDXC/EDXP/Padula)

CUBA Radio Havana Cuba observed on new chan-

2100-2200 English 9585U 9620 2100-2200 Spanish 9820 9830U 11760

(11-Dec/BCDX/Bueschel-FRG)

CYPRUS BBC in Hungarian via Cyprus now using 7115 from 2200-2230. (7-Dec/Padula/EDXP)

DENMARK Radio Denmark recent changes:

0130-0155 7440

0230-0255 7440

0630-0655 11730 1030-1055 15250 (ex-15220)

1330-1355 9905 (ex-9910)

1630-1655 9985

2030-2055 7540 2130-2155 7540

(BCDX/Bueschel-FRG)

We are sorry to let you know that it still has not been possible to convince the 'heads' of DR Radio about the need for an English program from our station. (Isherwood & Koie/R. Denmark)

ECUADOR

4779.8 Radio Oriental reactivated as of Dec 8, 2200. (Klemetz-CLM/Dateline Bogota)

5050.4 R. Jesus del Gran Poder, Quito; 0204-0240
33333 ads, ID "Por Jesus del Gran Poder.."
pgm musica del recuerdo mx. (4-Dec/
Arrunatequi-PRU)

5050.4 Francisco Estereo seems to be used for a filler by Radiodifusora Jesus del Gran Poder. The Francisco Estereo program was aired from @2215 s/on till 2257, when Jesus del Gran Poder programming - the 6 o'clock mass, in this case -took over preceded by full ID: "Desde el corazon de Quito, y para el corazon de los ecuatorianos, transmite Radiodifusora Jesus del Gran Poder el mensaje del Padre para sus hijos. Sintonice sus frecuencias". Remembered that both studios are inside the San Francisco Cathedral, in downtown Quito]. (13-Dec/Klemetz CLM/Dateline Bogota)

EGYPT R. Cairo noted by ed. on 4900 @1941, confirmed by Bueschel as harmonic of 9800 kHz (sked 0350-2400). "When I was on holiday time on Rhodes/Cyprus island area in the Mediterranean in		0900-1000	French	21620 21580 17620 15605 15315 15300 15195 15155 11845 11670 9660-(to 0930) 6175	
May 1987,	ust across th	e sea, I could easily hear all	0930-1030	Chinese	9660 7420
ic doubled	wave lengt	nd Saudi Arabia on harmon- th in 4800-4925-4950 kHz ings 0400-0600." (Bueschel-	1000-1030	French	21620 21580 17850 17650 17620 15605 15315 15300 15195 15155 11845 11670
FRG)	ic tocal morn	ango o too o ooo. (Daesenet			6175
I NO)			1000 1030	Casalah	
ETHIODIA	6040 nf Pad	lio Fana *0327-0350+ IS; ID	1000-1030	Spanish	9790 9715 5920
at 0220. th	in lana ha	1°W. Exotic vocals. Weak, //	1030-1100	French	21620 21580 17850 17650
6210 /200	calc) TNV W	OR tip. (30-Nov/Alexander)			17620 15605 15315 15300 15195 15155 13625 11845
		940 noted from 0410 t/in,			11700 11670 9830 9790
		UF, language and music fits	4400 4430	F 1	6175
		ast. (1-Dec/Sundstrom)	1100-1130	French	21620 21580 17850 17795 17650 17620 15605 15315
		Internationale (RFI) sked.			15300 15195 15155 11890
		France and at relay sites in			11845 11700 11670 9830
China, Fren	ch Guiana (M	Iontsinery), Japan (Yamata),			9790 6175
Gabon (Moy	abi), Russia	and South Africa:	1100-1200	Laotian	7305
0000-0100	French	9800 9790 9715 7120 5945	1130-1200	French	15530 15300 11700 9790
		5920 3965			6175
0000-0100	Portuguese	15200 13625 11995	1130-1200		21620 21580 17850 17795
0100-0200	French	9790 9715 5945 3965		Africa	17650 17620 15605 15315
0100-0200	Spanish	11995 9800 5920			15195 15155 11845 11670
0200-0300	French	9800 9790 9715 5945 5920			9830
		3965	1130-1200	Spanish	13640
0300-0400	French	9800 9790 7315 7280 7135	1200-1230	French	21620 21580 17850 17650
		6045 5990 5945 3965			17620 15315 15300 13640
0400-0500	French	9800 9790 7315 7280 6045			11845 11700 11670 9790
		5990 5945 5925 5920 3965			6175
0400-0500	French-	7135 4890 3970	1200-1300	Cambodian	7305
	Africa		1200-1300	Chinese	7430 7140
0500-0600	French	11700 9845 9790 9550	1200-1300	English	15540 15530 15195 15155
		7315 7280 7135 6175 6045			11615 11600
		5990 5925 3965	1230-1300		17650 13640 11700 11670
0500-0600	French-	11995 9790 7135 5945	1230-1300	French-	21620 21580 17850 17620
	Africa	4890 3970		Africa	15315 15300 11845 9790
0500-0600	Spanish	9800 5920			6175
0600-0700	French	11685 9845 9805 9745	1300-1330	French	21620 21580 17650 17620
		9550 7280 6175 6045 5990			17580 15365 15315 15300
		5925 3965			15195 15155 13625 11845
0600-0700		15155 15135 11995 11995			11670 9790 6175
	Africa	11700 9845 9790 9790	1300-1330	Spanish	17560 15515 15435
		7135 7135 5945 5945 3970	1330-1400	French	21620 21580 17860 17850
0700-0800	French	15605 11790 11685 11670			17650 17620 17560 15515
		9745 7305 6175 3965			15365 15315 15300 15195
0700-0800		21620 17800 15315 15300			13625 11845 11670 9790
	Africa	15135 11700 9790 7135			6175
0800-0830	French	17650 15605 15315 15300	1400-1430	French	17575 15605 15365 11615
		15195 15155 11790 11700			6175
		11670 6175 3965	1400-1430		21645 17860
0800-0830		21620 17850 15300 11845	1400-1500		17560 12030 7110
	Africa	11700	1400-1500	French-	21620 21580 17850 17795
0830-0900	French	21620 17850 17650 17620		Africa	17620 15460 15315 15300
		15605 15315 15300 15195			11845
		15155 15135 11790 11700	1400-1500		11670 9805
		11670 6175 3965	1400-1500		
			1430-1500	French	21645 17860 17575 15605
					15365 11615 6175

1500-1600	French	21645 17860 17575 15365 11670 11615 9790 9605 6175	the beginnis find another	ng of 1994. Ra partner but c	W partner "SFB Berlin" at dio Bremen attempted to ouldn't so this made it to
	French- Africa	17850 17795 17620 15460 15300 11995 11845	it necessary	for them to en	nd the SW sce. This per a station. Translation from
1500-1600	Serbo-Croa	t 9805 7135	my grandmo	ther, Lilo Vogel	. (28-Nov/Johnson/Cum-
1600-1700	Arabic	9845 9655 7325	bre)	. 3	(=====,========,=====
1600-1700	English	15530 12015 11700 11615 9485 6175	Trans Wo	rld Radio is lis	sted for Jülich, Germany,
1600-1700	French	17630 17620 15300 11965 9790 7315 7160 3965	for W96: 1630-1700		5895
1600-1700		9805 7135	1830-1900		7155 Su
1700-1730	3	12015 11615 9485	1830-1900	Turkish	7155 Mo-Sa
1700-1730	French	17630 15300 11965 11705 9790 7315 7160 6175 3965		CC/EDXP/Padu	•
1700-1800		9845 9655 7350 7325 5990	Kadio Vil	nius, Lithuania	now via Jülich on 5890
1700-1800		7135 5900	nom 0000-0	1030, with En	glish @0030-0100 (15-
1700-1800		12015	Dec/Buesche	(/BCDX)	
1730-1800		17630 9485 7315 6175 3965	GREECE The	ssaloniki regi	onal sce relay via SW,
1730-1800		15300 11965 11705 11615	Greek Sunda	y mass transm	ission sce at 0600-0700
	Africa	9790 7160	Doc/Puosehe	./ KHZ, //993!	5 and 11595.1 kHz. (15-
1800-1830	French	17630 15300 11965 11705	Dec/Buesche	(/ BCDX)	
		9790 9485 7315 7160 7135	Voice of (reece:	
4000 4000		6175 5900 3965	0000-0350	GK/EE	9425 7450 6125
1800-1900		7350 5925	0400-0555	GK/Turk/AA	
1830-1900	French	17630 7135 6175 5900	0600-0800	GK/EE	15175 9425 7450
4020 4000		3965	0900-0950	Greek	15415 15175
1830-1900		15300 11965 11705 9790	1000-1150	GK/Turk	9915 9425
1000 2000	Africa	9485 7315 7160 6150	1200-1250	GK/AA/EE	17525 15650 11645
1900-2000	Fiench	15300 9790 9485 7315	1300-1350	GK/RR	12105
1000 2000	Franch	7160 7135 6175 3965	1300-1450	GK/EE	15175 11645
1900-2000	Africa	15300 9790 9485 7160	1400-1450	GK/AA	9420
1900-2000		6175 3965	1500-1700	Multi/Balkan	9425 9375 7450 792
2000-2000		7350 5900	1710-1750	GK/Pol/RR	9425 9375 7450
2000-2100		7135 6175 5915 3965	1800-1850	GK/EE	15150 11645
2100-2100			1800-2050	Greek	9420 7450-(fm 1900)
2100-2130	riench	15300 9790 7315 7160	1900-1910	English	9375
2100-2200	Romanian	7135 6175 5945 5915 3965 7135 5900	1910-1920	French	9375
2130-2200		7135 5900	1920-1930	German	9375
2130-2200		15300 9790 7315 7160	1930-1940	Italian	9375
2130 2200	Africa	6175 5945 3965	1940-1950	Swedish	9375
2200-2300		7315 5945	2000-2015	Albanian	9375
2200-2300		13640 9800 9790 9715	2015-2030	Serbo-Croat	9375
		5945 5920 3965	2030-2040	Bulgarian	9375
2200-2300	Polish	5915 3970	2040-2050	Romanian	9375
2200-2300		17620 15200 11995	2100-2250	GK/EE	9425
2200-2300	Spanish	5925	2100-2250 2200-2300	Greek	7450-(from 2150) 6260
2300-2400	French	12025 9830 9790 9715		Greek	7450
		9570 7120 5945 3965	2300-2350	SS/EE/PP	11640 9935 7450
2300-2400	Spanish	11995 11670 9800 5920	(BBCM)		
(BBCM & Pa			GIIAM Adve-	tiet We-13 n	dia (VCDA) : "
			2000-2100	more FOCO 1-17	dio (KSDA) in Korean
GERMANY Deutsche Welle changes:			land Nokop	new bybu KHZ	(x5940) and 9495 kHz.
1300-1600		12025 via Krasnodar-RUS	BCDX/Buesche	omming tool.	(3 Dec/Paniview-BUL/
1700-1800	Bulgarian	9805	Popul prescue	1.1 NO)	

GUATEMALA 5150A Radio Coatan? Badly FMing

blobmitter/spurwandering around this area, to -

0233*, caught quick ID as such immediately at t/in

in FM mode, into instl mx & off, "carrier" off 0235.

1730-1800

1800-1830

1830-1900

(3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

3995

Croatian 9615 via Portugal

Albanian 9615 via Portugal

Polish

Good signal; didn't seem // any of the other HF TG outlets in the brief time I had to check. (21-Dec/Crawford/Cumbre)

HONDURAS 4819.2 HRVC La Voz Evangelica de Honduras, noted back on the air 0125, with Yiye Avila gospel campaign. Signal level rather below par. Did they change the antenna as well? (8-Dec/ Klemetz-CLM/Dateline Bogota)

5890 new station HRMI, Radio MI, 1250-1325+, t/in to SP preacher, rather long-winded, mostly prayer, some mx, said px on 6-7 AM. 1310 M ID as "HRMI, La Voz de Misiones Internacionales, Tegucigalpa", gave QTH as Apartado Postal 20583, Comayaguela, Distrito Central, Honduras; telephone 33-90-29. Requesting reports. Then into praise mx to 1325 ID as "Radio MI", 1480 KHz. Good signal, USB+carrier, so maybe one of the old contra/Radio Quince txs? (17 Dec/Crawford/DXFL/DSWCI DX Window) Schedule is 1200-0500 according to Wayne's sister Laura (17 Dec/DIRECT/Fleming/Cumbre/DSW-CI DX Window) [Wayne? Laura? - AQ]

6209.18 ? HR.. 1230 Heard while on a visit to Houston, Texas. Latin and guitar music with a male announcer in Spanish. Heavy, heavy UTE QRM and plenty of folks talking in English about their sailing trips and boats, but did catch part of an announcement "transmite H R" Not a strong signal, but would have been completely readable if not for the QRM. Not heard on other mornings or during checks in the evenings since returning to Colorado. (10 Dec/Johnson/Cumbre/DSWCI DX Window)

HONG KONG Over the last couple of years the BBC WS has been constructing a new relay station to serve audiences in Asia, they've put it up in Thailand and it has been on the air on a regular basis since the end of September. Part of the job is to replace transmissions which BBC Hong Kong Relay, located in a rather remote part of Hong Kong, about 45 minute hovercraft ride from the center of the city, now off the air, with dismantling already begun. The two 250 kW transmitters will be removed for storage and the rest of the equipment disposed of and then the demolition guys will come and knock down the building. There are five towers with four antennas strung between them beaming primarily towards China. (11-Nov/RN Media Network/ Ogrizek-AUS/EDXP/Padula)

British Forces Broadcasting Service (BFBS) Hong Kong will remain operational until the 30-June-1997 handover of Hong Kong to China. Instead of having to abandon a functioning studio and transmission site, BFBS will spend its last weeks on the air broadcasting (on its MW & FM channels) first from a portable, containerized studio, and finally from a Royal Navy ship in the harbor. (28-Nov/RN Media Network/BBCM)

ICELAND Rikisutvarpid Reykjavik at 1900-1930 on new 7735U kHz.//9275 kHz. (12-Dec/Alexander/ WoR/Hauser/EDXP)

INDIA All India Radio schedule for 3 Nov 96 - 2 Mar 1997 per the AIR Web site:

	er the AIR W	eb site:
0000-0045	Tamil	4990 9835 9910 11740
0015-0100	Urdu	6155
0100-0130	Burmese	7165 9950 11620
0100-0200	Sindhi	5990 7125
0100-0430	Urdu	6155 9595
0130-0200	Tibetan	9565 11900 13700
0130-0228	Nepali	3945 6045 7250 9550
0215-0300	Pushtu	7225 9910 13700
0300-0345	Dari	7225 9910
0315-0415	Hindi	11855 15075 15180 17387
0400-0430	Persian	11730 13700 15050
0415-0430	Gujarati	15075 17387
0430-0530	Arabic	15050 17785
0430-0530	Swahili	15075 17387
0700-0800	Nepali	7250 9550 11850
0830-1130	Urdu	9595 11620
0845-0945	Indonesian	15050 17387
1000-1100	English	11585 13700 15050 17387
		17840
1115-1200	Thai	15340 17895
1115-1215	Tamil	13750 15075 15770
1145-1315	Chinese	11840 15050 17705
1215-1245	Telugu	13750 15770
1215-1315	Burmese	10330 11620
1215-1330	Tibetan	7410 9565 11695
1230-1500	Sindhi	6165 11585
1300-1500	Sinhala	9700 15020
1315-1415	Dari	7140 9910
1330-1430	Nepali	3945 4860 6045 7410
		11695
1330-1500	English	11620 13750
1415-1530	Pushtu	7140 9910
1430-1930	Urdu	4860 6045
1500-1600	Baluchi	6165 11585
1515-1600	Gujarati	11620 15175
1515-1615	Swahili	9950 15075
1530-1545	English	7140 7410 9700 9910
		11740
1615-1715	Russian	11620 15140
1615-1730	Hindi	7410 9950 13700 15075
1615-1730	Persian	7265 9910 11585
1730-1945	Arabic	9910 13750
1745-1945	English	7410 9650 9950 11620
		11935 13770 13780 15075
1945-2030	French	9910 13750
1945-2045	Hindi	7410 9950 11620
2045-2230	English	7150 7410 9910 9950
		11620 11715
2245-0045	English	7170 9705 9950 11620
2300-2400	Hindi	9910 11740 13732

(17-Dec/Roe-UK/WDXC/EDXP/Padula)

5050 AIR Aizawl 0035-0100+, Generic AIR ID by M, to an English news bulletin til 0040. Woman ancr with quick ID as "This is All India Radio Aiza-

wl". Contemporary Christian-type mx pgm in EE, with same W ancr between songs past 0100. Weak, but with very quiet conditions. Pretty much gone past 0100. (22-Dec/Martin/Cumbre)

INDONESIA

- 3098 RSPDT2 Halmahera Tengah, Soasio. 1205 Jakarta relay. (25-Nov/Foster/OZDX/ Yamada-JPN/Jembatan DX)
- 3214.8 RRI Manado 2053 EG pops. 2057 RPK. 2100 Jakarta nx relay. Signed on around 2050. Fair. (30-Nov/Yamada JPN/Jembatan DX)
- 3222.9 RRI Mataram 1040 Local traditional mx. 1051 Local pops. Poor. (14-Dec/Yamada-JPN/Jembatan DX)
- 3295.4 RRI Samarinda 1115 ABRI prgr. (21-Nov/ Yamada-JPN/Jembatan DX)
- 3344.8 RRI Ternate on at *2005 w/Holy Koran. 2011 Lagu lagu Qasidah. 2030 M ID "Inilah Radio Republik Indonesia Stasiun Ternate. Fair. (30-Nov/Yamada-JPN/Jembatan DX)
- 3375.9 RRI Medan (t) 1530 very weak signal. (27-Nov/Foster/OZDX/Yamada-JPN/Jembatan DX)
- 3384.9 RRI Kupang 1338 local pops. 1359 IS. 1400
 TPs, local nx. 1407 M ID "Inilah Radio
 Republik Indonesia Kupang" Fair to poor.
 (23-Nov/Yamada-JPN/Jembatan DX)
- 3395.1 RRI Tanjung Karang 1535 Wayang kulit. 1559 Closing anmt then s/off. Poor. (14-Dec/Yamada-JPN/Jembatan DX)
- 3545 RPDT2 Sumba Timur w/popular music, 1029 pres ID by W, musical bridges and further talks - seems to be reactivated. (25-Nov/Schulze/DXW/Yamada-JPN/ Jembatan DX)
- 3693.9 Unid Indo, Lagu hiburan then 1200 Jkt relay on Nov 5. Maybe either RRI Palu (not positively hrd on 3960 for a while) or RPDT2 Buol drifting. Not regular. (Foster/ OZDX/Yamada-JPN/Jembatan DX)
- 3905 RRI Merauke 1115-1130+, slow mixed vocal anthem, with an ID by a W at 1119.
 Presumed local nx, read by same W, to smooth lagu pop tunes. (19-Dec/Martin/Cumbre)
- 3946 RRI Tanjung Karang 1510 IS for 15 mins! till they started pgms at 1525 but not // 3395 or Jakarta. (27 Nov/Foster/OZDX/ Yamada-JPN/Jembatan DX)
- 3976.8 RRI Pontianak 2259 song of the coconut islands and ID at 2300 (20-Dec/Rooy/DSWCI DX Window)
- 4000.1 RRI Kendari 1533 Kroncong mx & local pops. 1549 M ID "Inilah Radio Republik Indonesia Kendari, Programa Satu" & closing anmt. S/off at 1550. Fair. (2-Dec/Yamada-JPN/Jembatan DX)

- 4752.7 RRI Ujung Pandang 1338 local pops, 1359 IS, 1400 local nx "Warta Berita Antar Kabupaten dan Kotamadya Sulawesi Selatan". 1406 M ID then local pops. Fair. (30-Nov/Yamada-JPN/Jembatan DX)
- 4753.2 RRI Ujung Pandang 1543 Wayang kulit from RRI Jakarta(//11785 which s/off at 1549 & 4777.1). 1558 ID of RRI Jakarta, then RPK. Suddenly s/off at 1606. Fair. (23-Nov/Yamada-JPN/Jembatan DX)
- 4753 RRI Ujung Pandang 2158 W/M in BI 2159 SCI, 2200 M ID (20-Dec/Rooy/DSWCI DX Window)
- 4874.4 RRI Sorong 1151 Local pops. 1158 M ID
 "Inilah Radio Republik Indonesia Sorong",
 then RPK. 1200 Jakarta nx relay. Fair. (14Dec/Yamada-JPN/Jembatan DX)
- 4931.6 RRI Surakarta 1801 All night wayang kulit.
 Not relayed Jakarta nx at 1800. Poor. (30Nov/Yamada-JPN/Jembatan DX)
- 5040 RRI Pekanbaru 2334 with local songs into M with Indo announcement followed by E pop song 43433 (21 Dec/Steyn/DSWCI DX Window)
- 5059.2 RRI Yogyakarta 1205 Jakarta nx relay. 1215 Local pops. Poor. (14-Dec/Yamada-JPN/Jembatan DX)
- 5691.3 RPDT2 Berau, Tanjungredeb, 1224 Lagu dangdut. Best in some time. (25-Nov/ Foster/OZDX/Yamada-JPN/Jembatan DX)
- 6069.8 RRI Jayapura 0752 sports cast program. Not relayed Jakarta nx at 0800. Fair to poor. (1-Dec/Yamada-JPN/Jembatan DX)
- 7230.9 RRI Fak Fak 1010-1100+ (presumed); chatter between M and W, with a short piano bridge at 1016. More tlk, with Indo pop/ballads until 1059. No chance for an ID, with R. Pyongyang signing on with big OC from 1055+. Heard again at 1455+, this time covered by pres Russian signing on! Good signal at both times. (9-Dec/Martin/Cumbre)
- 7230.7 RRI Fak Fak 1045 Dangdut mx & CM. 1100
 "Butir Butir Pasir di Laut". 1118 Local
 pops. Poor. (22-Dec/Yamada JPN/Jembatan
 DX)
- 9525.0 RRI Jakarta 1131 Local pops. 1158 W ID
 "Radio Republik Indonesia Jakarta,
 Programa Nasional Satu", then RPK. Fair.
 (1-Dec/Yamada-JPN/Jembatan DX)
- 11750.0 RRI Jakarta 0055 Local pops. 0059 RPK.
 0100 "Warta Berita Ibukota." 0110 ID by W
 "Radio Republik Indonesia Jakarta,
 Programa Nasional Dua", then local pops.
 Fair. (24-Nov/Yamada-JPN/Jembatan DX)
- 11751.0 RRI Jakarta 0658 RPK. 0700 "Fokus Berita". 0731 "Angkatan Bersenjata Republik Indonesia". 0758 Suddenly s/off. Up 1kHz from usual. Fair. (22-Dec/Yamada-JPN/ Jembatan DX)

RRI Bontosunggu, Southern Celebes good 11885 level at 1345 11885 kHz, Indonesian progr in //11785 kHz from Cimanggis near Jakarta. But with slight time delay, satellite feed. (8-Nov/Stewart-UK/ Communication/BCDX/Bueschel-FRG)

RRI Jakarta on 15150 now operates 2200-0200 & 0855-1300, (1-Dec/Yamada/EDXP/Padula-AUS)

Indonesian DX Club editor Aries Subagyo of Kutoarjo/Yoqyakarta sent a detailed list of Indonesian updates intended for WRTH97 but received much too late. Below are new stns or freg changes. There are lots of address changes and stn name amendments too but they'll have to wait for WRTH98.

Radio Kharisma, Jakarta
Radio Merpati, Jakarta
Radio AM 60 Station, Kreo-Tangerang,
Jawa Barat
Radio Citra Nuansa, Jl. Swadaya 25,
Cipondoh-Tangerang 15147, Jawa
Barat
Radio BNC, Jl. Pejuangan Raya 73,
Kebunjeruk-Jakarta Barat 11530
Radio Swara Mitra, Jl. Haji Mencong
Raya 65, Ciledug-Tangerang 15151,
Jawa Barat
Rama Radio, Jl. Pejuangan Raya 25,
Kebunjeruk-Jakarta Barat 11530

(same street as R. BNC !) (Aries Subagyo/Indonesian DX Club/Foster/O2DX/ Yamada-JPN/Jembatan DX)

Local daytime & evening s/off time of RRI stations as monitored on 20-23 Dec-

tions as	monitored on 20-23 Dec:	
3264.8	RRI Bengkulu	1600*
3344.8	RRI Ternate	1515*
3385	RRI Kupang	1430*
3395	RRI Tanjung Karang	1600*
3905.0	RRI Merauke	1400*
3976.8	RRI Pontianak	1605*
4000.0	RRI Padang	1655*
4000.1	RRI Kendari	1550*
4753.1	RRI Ujung Pandang	1605*
4789	RRI Fak Fak	1000*
4845.1	RRI Ambon	1130*
4874.4	RRI Sorong	1500*
4926.9	RRI Jambi	1700*
5040.0	RRI Pekanbaru	1705*
5059	RRI Yogyakarta	1515*
6153	RRI Biak	1500*
7173.2	RRI Serui	0900*
7234	RRI Palu	0900*
7230.7	RRI Fak Fak	1500*
	RRI Jakarta	0755*
15125.0	RRI Jakarta	0755*
15150.0	RRI Jakarta	1300*
(Yamada	-JPN/Jembatan DX)	

RRI Bengkulu on 3264.8kHz changed sign off time from 1600 to 1605. (Yamada-JPN/Jembatan DX) RRI Jakarta on 15150kHz now operates at 2200-0200 & 0855-1300, (1-Dec/Yamada-JPN/Jembatan DX) State radio to install digital FM transmix The digital FM transmitters will soon be installed 27 transmitting stations in 12 provinces of Indonesia. Currently, RRI operates FM transmitters in large cities and SW transmitters in the rest of the country. The SW transmitters will gradually be replaced(!) by FM transmitters. (19-Nov/BBCM/AGDX/ BCDX/Cumbre/Yamada-JPN/Jembatan DX)

On 9 December 1996, the Indonesian House of Representatives passed the country's first broadcasting bill which lays the legal foundation for censorship and government scrutiny of all types of media. Abu Hasana Sazili, chairman of the parliamentary committee overseeing the broadcasting bill, said that the bill now has to be signed into law by President Suharto, but no date has been set. Critics said that the bill is repressive on the grounds that it would allow the government, not the courts, to license broadcasters. The bill would give the government the right to stop the operation of a broadcaster while waiting for the result of the court's decision on whether that broadcaster's licence is to be revoked or approved. (20-Dec/Institute for the Studies on Free Flow of Information (ISAI), Jakarta/DEVMEDIA/IFEX/Moore)

IRAN IRIB Tehran in Italian on new 1900-1927 6005, 7240, and 9610 kHz. (3-Dec/Paniview-BUL/ BCDX/Bueschel-FRG)

I've tried to consolidate oddball collection of recent changes/additions to the VOIRI sked, and come up with:

0330-????	unid	6210
1930-????	unid	7240
0330-0730	Arabic	15355 11930 9530
0430-0530	Turkish	11790 9540
0430-0630	Arabic	11910
0530-0630	Spanish	15260 11790
0630-0730	French	15325 15260 11790
1130-1230	English	15260 11930 11875
1230-1325	Pushtu	15345
1300-1330	Malaysian	13605 15200
1330-1430	Chinese	13605 15200
1530-1600	English	9635v
1630-1700	Armenian	9610 5995
1730-1830	Serbo-Croat	7240
1900-1930	Italian	9610 7240 6005
1930-2000	Hausa	11750
1930-2030	Russian	7305
2030-2100	Italian	7175
2130-2230	Bosnian	7115

(Faniview/BCDX & Jones-PRG/NU/EDXP/Padula-AUS & Schulze-PHL/BCDX/Bueschel & Pashkevich-RUS/ BCDX & Sundstrom & Hill)

IRAQ After around an 18-month absence, Radio Iraq International, the external service of Republic of Iraq Radio in Baghdad, appears to have resumed broadcasts in English. The radio was observed on 10th December with a program in English from 2332-2356 on 11895 kHz. However, the closing announcement stated that English was on the air "at 10 and a half to 11 daily" on 11890 kHz. Prior to the English broadcast, a program in Arabic has been observed from approximately 2100. (BBCM)

Baghdad heard on v17735 kHz around 1030 with what seems home sce in Arabic. The transmitter is unstable and 'jumping' in frequ up and down. Good strength though. (11-Dec/Green-UK/DXM)

Opposition radio claims ministry sets up jamming stations. In cooperation with technical staff at the Directorate of Military Intelligence, the regime's Information Ministry has set up a number of radio jamming sts to prevent citizens from listening to opposition and international radio sts, The regime managed to affect the reception of bcs by the VoA and the BBC. It is also trying to jam bcs by the Voice of Rebellious Iraq. Our sources have said that the cost of importing and setting up the jamming sts totals 5m Dollars, most of which was collected from the state's tax revenues and the fees from telegrams, water and telephone scs, according to a statement made by an informed source at the Ministry of Information. It is worth noting that the regime set up 200 jamming sts in 1981, each costing 250,000 Dollars. Most of these sts were destroyed during Operation Desert Storm in 1991. (2-Dec/ Voice of Rebellious Iraq/BBCM/AGDX)

ITALY 21520 RAI w/HS relay to Africa in Italian @0850, new time. (13-Nov/Vitek-AUS/Padula/ EDXP/BCDX/Bueschel-FRG) RAI Rome ext schedule changes: Italian 1500-1525 on new 9670 kHz, // 5990, 7290 kHz. French/Italian block at 1530-1555-1625 on 5990, 7290, 9755 kHz. Turk/Greek/Bulg block at 1500-1600 on 5975 and 7275 kHz. (21-Dec/ Bueschel-FRG/BCDX) RAI new on 6140 at 1845 in Polish, on 6150 from 2200-2225 in EE, and 7235 0830-0900 Italian HS relay. (Padula/EDXP) Relays of the RAI Domestic Service programs in Italian are listed for W96 as follows: 6060 Caltanissetta 25 kW 0500-2300 6060 Rome 100 kW 2300-0500 6110 Rome 100 kW 0530-1300 7175 Caltanissetta 5 kW 0500-2300 7215 Rome 100 kW 0700-1300 9515 Caltanissetta 5 kW 0500-2300 15240 Rome 100 kW 0600-1300 21520 Rome 100 kW 0600-1300 (Padula/ EDXP)

JAPAN Radio Japan uses relay stations at Moyabi, Gabon (G); Sackville, Canada (C); Montsinery, French Guiana (F); Kranji, Singapore (K); Ekala, Sri Lanka (S); Skelton and Woofferton, United Kingdom (UK); and Ascension Island (A).

0000-0030 Japanese 11910 11850 11690 11665

0000-0100 Japanese

9560 6180UK 6155UK 0100-0200 English-GS 17810 17685Alt 15475 13650Alt 13630 11890S 11860K 11840 11790

0200-0300 Japanese 17810 15475 15230 13630 11860K 11840 11790 5960C Bengali 0200-0230 11890S 0230-0300 Hindi 11890S 0230-0300 Persian 7190 6150G 0300-0330 Urdu 11890S 0300-0400 English-GS 17810 15230 11840 11790 5960C 0300-0400 Japanese 13630 11895F 9660F 9515G 0300-0400 Korean 15475 11910 0330-0400 Swahili 15590 6135A 0400-0430 Arabic 7250G 0400-0500 Chinese 15475 11910 0400-0500 Japanese 17820S 17810 11840 6110C 5960UK 0400-0500 Russian 11760 11715 0430-0530 Chinese 17685 15120 0430-0530 Russian 12030G 0500-0530 English 12000 11895F 9635 17810 11920K 11910 0500-0600 English-GS 11740K 6150UK 6110C 0530-0545 Swedish 12030G 11760 0530-0600 Spanish 12000 11895F 9660F 9635 0545-0600 Italian 12030G 11760 0600-0630 Arabic 17780S 0600-0630 German 12030G 11760 0600-0700 English-GS 17810 11910 11850 0600-0700 Japanese 15590 12000 11920K 11840 11740K 9835 7230UK 5975UK 0630-0700 French 17780S 0630-0700 Spanish 12030G 0700-0800 English-GS 17815A 17810 15590 15165G 11920K 11910 11850 11740K 7230UK 0745-0845 Russian 6165 6145 0800-0900 Japanese 17815A 17810 15590 15220A 15165G 11920K 11850 11815 11740K 9750 9685 7125 6070F 0900-0930 Portuguese 9585 6070F 0900-0930 Thai 11740K 0900-1000 English-GS 11850 11815 7125 0900-1400 Japanese-DS 9855 9750 0915-1015 Indonesian 15590 11690 0930-1000 French 17815A 15120A 9600UK 0930-1000 Spanish 6070F 0930-1000 Vietnamese 11740K 17780G 11850 11815 1000-1100 Japanese 9530F 7125 1000-1100 Russian 11710UK 1030-1130 Indonesian 9695 1030-1130 Korean 6190 1100-1115 Swedish 21700G 1100-1130 German 11710UK 9600UK 1100-1200 English-GS 11815 7125 6120C 1115-1130 Italian 21700G 1130-1200 Bengali 12045S 1130-1200 Malay 9695

1130-1230	Chinese	6190
1200-1230	Hindi	12045\$
1200-1230	Thai	9695
1200-1300	Japanese	11815 7125 6120C 6090
1230-1300	Burmese	9695
1230-1300	Urdu	12045S
1300-1330	Vietnamese	
1300-1400	Japanese	21490A 15400A 12045S
		11880S 11705C 9535
1300-1400	Russian	7125
1330-1430	Chinese	9695
1345-1415	Burmese	7260
1400-1500	English-GS	12045S 11880S 11705C
		9535 7200 7125
1400-1500	Korean	9750
1500-1600	Chinese	9750 7125 6090
1500-1600	English-GS	15355G 9535 7240 7200
1600-1700	Japanese	17780G 9535 7240 7200
		6035
1700-1800	English-GS	11905S 11880S 9535 7225
		7200 6035
1800-1900	Japanese	11880\$ 9535 7225 7200
		7140 6035
1900-2000	English-GS	9535 7200 7140 6035K
2000-2100	Japanese	11850 9535 7210UK 6035K
2000-2400		11910 11665
2100-2110	English	11685 9860
2100-2200	English-GS	11850 9825 9560 6035K
2110-2150	Chinese	11685 9860
2150-2210	Malay	11685 9860
2200-2300	Japanese	11850 9825 9685F 9560
		6140UK 6055UK
2210-2230	Thai	11685 9860
2230-2250	Burmese	11685 9860
2250-2310		11685 9860
2300-2400	English-GS	
2310-2355	Indonesian	
2355-2400	English	11685 9860
(BBCM)		

JORDAN Radio Jordan in Arabic 0500-0900 new 15245, 15270, and 15435 0600-0900 11810, 11835. 1300-2300 new 13630. English still on extended 1200-1730 powerhouse 11690 kHz. (3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

KAZAKHSTAN Radio Almaty with fair to good reception in English on 6230 kHz at 0100-0130. They are announcing frequs in meters and NOT in kHz. (27-Nov/Das Gupta-IND/BCDX/Bueschel-FRG)

The weekday 1030 programs in English appear to have been suspended, at least temporarily, and the weekend broadcasts consist of opening and closing announcements separated by concerts of Kazakh music. It is possible they may be recordings of earlier shows. Monday through Friday, the external service is now 1020-1140 in Kazakh, German and Russian. (8-Dec/Jones-PRG/EXDP) [11840 and 9620 kHz - AO]

KOREA Radio Korea international, Seoul W96 frequency schedule: 3970 1930-2200 Skelton-UK relay. 5975 0800-1500, 1600-0100 6135 1000-1400 6145 1100-1130 Sackville-CAN relay. 6150 1500-1600 6480 1800-2300 7235 1700-1800 Skelton-UK relay. 7275 0100 0400, 0800-1300, 1600-2000, 2100-2400 7285 1200-1400 7550 0700-0800, 0900-1100, 1600-2100 9510 0700-0800 Skelton-UK relay. 9515 1600-2000 9570 0800-1100, 1130-1400 9640 1100-1500, 2100-2400 9650 1100-1200 Sackville-CAN relay. 9870 1600 2100 11715 1000-1030 Sackville-CAN relay. 11725 0100-0400, 1000-1130 11810 0000-0400 13670 0800-1500 15575 2300-0400, 1600-2200 (RKI/BCDX/Bueschel-FRG)

KUWAIT New sked for Radio Kuwait, thru 30-March:

0000-0200	11675
0200-0400	6055 11675 15495
0400-0445	6055 11675 15495 15505
0445-0530	6055 11675 15110 15495 15505
0530-0805	6055 15110 15495 15505
0805-0815	6055 15110 15495
0815-0900	6055 15110 15495 15505
0900-0930	6055 15110 15495 15505 17885
0930-1305	6055 13620 15495 15505 17885
1305-1315	13620 15505 17885
1315-1505	9880 13620 15110 15505 17885
1505-1605	9880 13620 15110 15505
1605-1615	9880 15110 15505
1615-1730	9880 11990 15110 15505
1730-1740	9880 11990 15505
1740-1745	9880 11990
1745-1800	9880 11990 15505
1800-2100	9855 9880 11990° 15495 15505
2100-2130	9855 9880 15495 15505
2130-2300	9855 15495 15505
2300-2400	9855 15495

All programs in Arabic, except *=English at 1800-2100 on 11990 kHz. (Pankov/Ivanov/Chengeliev/ Ivanova BUL/Paniview/Bueschel/WWDXC/Kub iak-FRG)

LAOS 6975.6 Luang Prabang Regional Stn., Luang Prabang (?) at 0014 with non-stop Lao songs (22-Dec/Steyn/DSWCI DX Window)

LEBANON High Adventure Ministry, The Voice of Hope, is back to 9960 kHz, with progrs for EU, AF & ME. (2-Dec/Pashkevich RUS/BCDX/Bueschel-FRG) Per Gary Hull, station manager: "I just spent a week in Cairo monitoring our signals. I discovered that our 9990 was wiped out by a strong teletype station. So on Dec 2 we went back to 9960 and we hope to stay there a long time. Due to budgetary concerns we have cut back to 18 hours daily and we also we have had to set all transmitters to low power operation. But I noticed while in Cairo that this does not have much affect on our signal there. 6280 comes in very nicely during the day at 5 kw. 9960 is at 6 kw and is beamed at Moscow at night and the Saudi

peninsula and Ethiopia during the day." (7-Dec/DI-RECT/Johnson/Cumbre)

Many of the private radio & TV stations were due to close down by 30 November. A news wire report from Beirut says that 10 Lebanese MPs have sent an urgent draft law to parliament demanding a five month grace period for the many private stations ordered to shut down. The draft law says the stations must be allowed to broadcast news bulletins and political programs during the grace period which will end on 30 April 1997. Back in September, the government licenced three private TV stations (three of them owned by politicians) and 11 radio stations, while the rest were told to by the end of this month and barred from broadcasting news meanwhile.(21-Nov/Sennitt/RNMN/Ogrizek/Padula/EDXP)

LIBERIA ELWA has no plans to resume shortwave operations in Liberia, but might broadcasting on FM from Monrovia at some point. Having been "burned" twice, it is simply too expensive to try setting up another SW operation. The station has no plans to try and recover the transmitter that was stolen from them and is now being used Radio Liberia. Although Sudan Interior Mission has sent teams to examine the ELWA compound, this area is still not controlled by ELWA. All this per Jennifer Turpin at SIM. Ms. Turpin opined that the 50 kW GE shortwave transmitter (built in 1937 and bought by ELWA from KGEI) had also been dismantled and stolen from the compound. (6-Dec/DIRECT/Johnson/Cumbre)

LIBYA Carrier only at 0830-1100 on 7120, 11815, and 11865 kHz. Must be Libya, observed here in Arabic last winter by Noel Green-UK. Arabic 1600-2100 new 11850 (x15435). 1100-2400 9700 (x15235).

MADAGASCAR R. Madagasikara now on 5009.5, noted @1858-1907*; nothing on 4960.9 or vicinity, so perhaps they've abandoned it in favor of their former freq. (27-Nov/Hill) [They certainly have; 5009.5 heard well here in NY w/IS @*0255 and pgms @0300+ - AQ]

MALAWI 5993.3 MBC Blantyre at 1411 with M in Chichewa with Sports comm. Vern songs at 1413 (14-Dec/Steyn/DSWCI DX Window)

MALAYSIA 4969.9 RTM Kota Kinabalu 2135+ very tentatively this one fading up around 2135 with lagu-sounding numbers and M ancr. Weakened rapidly and was gone by 2215. (21-22-30-Nov/Hill) 9750 Kuala Lumpur. Rearranged sked, Voice of Islam program, EE,*0500,//15295, 14/12 (Padula/EDXP)

MONACO (& OTHERS) This schedule effective, 27th October-30th March 1997, lists TWR broadcasts from transmitters in Albania (a); France (f); Germany (g):
0600-0615 Kurdish 11635a

0615-0630	Polish	7385a 5890a
0745-0755	English	7115f Sa/Su
0755-0905	English	7115f
0905-0920	English	7115f Su-Fr
0930-0945	German	7160f 6230f
0930-0945	Hungarian	7385a 6045a Tu-Sa
0945-1000	Slovak	9490a 7385a Mo-We/Fr
0945-1015	German	7160f 6230f Su
1105-1120	German	7160f 6230f Mo-Sa
1130-1145	Czech	9490a 7385a Su
1130-1200	Slovak	9490a 7385a Sa
1200-1245	Hungarian	7385a 5895a Su
1230-1300	English	7115f Sa/Su
1330-1345	Croatian	7255f Fr-We
1330-1345	Serbian	7255f Th
1345-1415	Croatian	7255f Mo-Fr
1345-1415	Macedonian	7255f Su
1345-1415	Slovenian	7255f Sa
1430-1500	German	7160f 6230f
1440-1455	Russian	9490a 7355a Tu-Su
1455-1510	Russian	9490a 7355a
1510-1540	Russian	9490a 7355a Mo-Sa
1515-1530	Czech	6235f Mo/Tu/Th/Fr
1515-1530	Slovak	6235f We/Sa/Su
1530-1600	Czech	6235f Mo-Fr
1540-1555	Russian	9490a 7355a Mo-Fr
1545-1600	Kurdish	7155a
1600-1615	Armenian	9445a 7155a
1600-1615	Hungarian	6235f
1600-1630	Polish	7385f 5870a
1615-1630	 Armenian 	9445a 7155a Mo-Fr
1615-1630	Hungarian	6235f Mo-Sa
1630-1700	Romanian	5895g
1635-1650	Ukrainian	7385a 6235a
1650-1720	Ukrainian	7385a 6235a Mo-Fr
1700-1745	Persian	9445a 7385a
1800-1815	Lithuanian	7385a 6235a Mo-We
1800-1815	Russian	7355a 5890a
1815-1845	Belarusian	7355a 5890a Mo
1815-1845	Russian	7355a 5890a Tu-Sa
1830-1900	Kurdish	7155g Su
1830-1900	Turkish	7155g Mo-Sa

MOZAMBIQUE 9636.87 former UNID by your editor ID/d as Radio Mozambique Beira 2014-2200+ in local language w/Afropops. Weak and lotsa QRM. (11-Nov/Schaay)

MYANMAR R. Myanmar 4725 observed at s/off 1545, Sun-Fri, despite reports of 1330 s/off. be 1545. (22 Nov/Elsebusch/Passmann/Padula/EDXP)

Defence Forces Broadcast. Unit, Taunggyi 6570.00 1326 W speaker, instrumental Burmese music, probably station tune, best in USB, 1329* (23-Dec/Schaay)

9730 Yangon. Earlier sign-on this freq on Sats, Myanmar news 0320, audible throughout our Australian afternoon period to 0500+, good level throughout, [Daytime Asian Mode] 7/12 (Padula/EDXP)

(BBCM)

NIGER v9705.6 kHz La Voix du Sahel Niamey at 1600 in French male speaker with ID as La voix du Sahel, Radiodiff TV du Niger, and mentioning of Niamey, then phone calls in French. (7-Dec/Rooy/DXW/BCDX/Bueschel-FRG)

NIGERIA Voice of Nigeria confirmed 15120 kHz outlet, sked 0600-1000 and 1500-2000. Signed by Engr. O. I. Odumsi, Ag. Director Engineering for: Director General. Fax number is either 234 01 2691944 as inserted on letterhead, or 234-1-269.944 as on not clearly legible fax machine header at pagetop. (28-Nov/Hauser/BCDX/Bueschel-FRG)

Noted by many on old 7255 @*0600-0830+, no anmts, just music.

Five transmitters were shipped from Europe earlier this year. Three of these have been installed, two of them replacing worn out senders used by the Voice of Nigeria for regional coverage. The reactivated 19m channel indicates a desire by authorities to reach a wider audience. (21-Nov/RNMN/Ogrizek/Padula/EDXP)

NORWAY Radio Norway International now using 7440 (ex-7520) for English 0200-0230 Mondays, // 7465. (23-Dec/Grimdalen/Radio Norway International)

According to the Burmese office in Oslo they have NO plans to move their Burmese transmissions from Kvitsoy to Juelich. If so, it would have been an extra transmission, but due to political reasons the Germans will not allow such Burma transmissions from German soil. (15-Dec/Koie-DEN)

OMAN QBS Doha in Arabic 0400-0800 on new 9510, 0800-1400 on 15140 (x15375). (3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

PAKISTAN Pakistan Broadcasting Corporation Frequency Schedule W96 External Service: K =via Karachi 50 kW. others Islamabad 100/250 kW:

ŧ	0015-0130	Hindi	7290K 9516
	0100-0200	Mitali/	9545 12015
,	0100 0200	Bangla	33.3 12013
	0100-0215	Urdu	15485 17705
•	0215-0245	English 55N	7290 15120K 15485
			17705 17725
(0315-0415	Gujarati	
		15555	
1	0330-0530	Irani	9785 11820
(0415-0630	Urdu	11570 15175 17555
(0645-0745	Swahili	17855
(0700-0800	Myanmar/	15565K 17540
		Burmese	
1	0745-0850	English	15470 17900
1	0800-1104	Urdu	15470 17900
	0900-1000	Bahasa	15565K 17540
		Indonesia	
	1020-1140	Tamil	13665K 15516

1105-1120	English SSN	15470 17900
1145-1300	Hindi	9656 13665K
1200-1400	Mitali/	11935 15625
	Bangla	
1330-1530	Urdu	9485 9900K 11570 13590
1430-1530	Turki	5055 5920
1545-1630	English SSN	9425 9515K 11570 11955
		13590 15555
1645-1800	English	5825 11570
1700-1800	Turkish	7295K 9515K
1700-1900	Arabic	7305 9400
1700-1900	Urdu	5825 11570
1800-1900	Urdu	7125
1915-2030	French	9400 11570

Home sce from Islamabad 100 kW, except API-7

10 KW.		
0045-0345	(Quetta)	5025 Fr
0045-0404	[Quetta]	5025 Sa-Th
0045-0435	(API-8)	4790
0100-0105	Urdu nx(API-7)	7230
0200-0215	Urdu nx(API-7)	7230
0230-0245	English SSN(API-7)	9460
0300-0310	EE/Sindhi nx(API-7)	9460
0330-0445	Balti(API-2)	7350
0400	Urdu nx(API-7)	9645
0400-0820	[Quetta]	7170 Fr
0445-0545	Sheena(API-2)	7350
0500	English nx(API-7)	9645
0600-1115	Urdu/Punjabi/EE(API-4)	7115
0600-1215	[QUetta]	7170 Sa-Th
0600	Urdu nx(API-7)	9645
0608	Sindhi nx(API-7)	9645
0612-0616	Pushto(API-3)	9645
0800-1215	(API-8)	7265 Sa-Th
0900-1000	Indonesian(API-7)	9645
0930-1215	(API-8)	7265 Fr
1000-1215	[Quetta]	7170 Fr
1100-1400	[Peshawar]	7110
1230-1300	Kashmiri(API-7)	9645
1230-1330	(API-8)	4790
1230-1805	[Quetta]	5025
1300-1311	Urdu nx(API-7)	9645
1300-1600	Urdu/Pushto(API-1)	6070
1311	Sindhi(API-7)	9645
1345-1815	(API-8)	4790
1400	English nx(API-7)	9645
1500-1530	Urdu(API-7)	9645
1600-1630	English(API-7)	7230
1700-1800	Turkish(API-7)	7230
(20 Nov /P	Pakistan /Green-IIK /RCDY /	Rueschel-FR

(30-Nov/R. Pakistan/Green-UK/BCDX/Bueschel-FRG + Lytle/World of Radio/Hauser/Padula/EDXP)

PAPUA NEW GUINEA

3205 R. Sandaun, Vanimo 0930-0935 in Pidgin announcing "Half past Seven", wx report from the Sadaun Province. (25 Nov/ Schulze/DSWCI DX Window)

3235 R. West New Britain, Kimba 0936-0945 with reports in Pidgin. (25-Nov/Schulze/ DSWCI DX Window)

3275	R. South Highland, Mendi 0946-1000 with political reports in English and Pidgin, talk about the elections in South Africa. (25-	4826.23	Radio Sicuani 1010 SS, M anner, TC's and huaynos, "Radio Sicuani" at 1019. (21-Dec/Mohrmann/Cumbre)
3355	Nov/Schulze/DSWCI DX Window) R. Simbu, Kundiawa 1010- in Pidgin, female and male talks with musical bridges. (25-Nov/Schulze/DSWCI DX	4886.56 4890.5	Radio Villa Rica, Huancavelica, 1104- 1110, Cmts from both W&M, M ID "Radio Villa Rica" (24-Dec/Rausch/Cumbre) R. Chota, Cajamarca; 2150-2225 mx pgm
	Window)		Sabados Espectaculares ID "manana
PERU			estaremos celebrando el dia del locutor, un saludo de parte de la gerencia de radio
3234.8	R. Luz y Sonido, Huanuco; 2334-2400		Chota" (7-Dec/Arrunatequi-PRU)
	modern mx pgm, ID (4-Dec/Arrunategui- PRU)	4965.8	Radio San Miguel(p) 1015 ballads and huyanos M announcer encouraging
3281.5	R. Estacion Wuari, Ayacucho; 0018-0045 ads Centro dental Ayacucho, ID "Estacion		listeners to get up enjoy the day with mention of Moyabamba and
	Wuari, te saluda en este dia para desearte existos y progreso" pgm impacto		Huancabamba. (8-Dec/Rausch/Cumbre) Unless this was a national news
	deportivo. (11-Dec/Arrunategui-PRU)		broadcast, this is odd in that Radio San
3329.5	R. Ondas del Huallaga, Huanuco; 0004-		Miguel is in Cusco at the opposite end of
	0038 ID "Esta Ud. en sintonia de radio		the country from Moyobamba and
	Ondas del Huallaga" (4 Dec/Arrunategui- PRU)		Huancabamba. They're too small to expect listeners that far away. Peru has a
4039.2	R. Marginal, Tocache; 0048-0110 pgm La		lot of similar sounding place names, so I
	voz de la Liberacion ID "Radio Marginal,		wonder if these might have been
	su estacion da por terminada su		mentions of other towns near Cusco, such
	transmision del dia de hoy" s/off 0106 NA-0110* (11-Dec/Arrunatequi-PRU)		as Cotabamba and Huancarama. (Moore/ Cumbre)
4279.38	, , ,	4890.45	Radio Chota; 1109-1115 program
	huaynos and many local ads. Thanks PFA		"Amanecer Andino" (ex-Recoret a
/612 /**	for this tip. (21-Dec/TIN)		Matinal). with rustic OA folklore. (14-
4612.4v	Radio Soledad now here, 0020, ex-4528v where they were as late as Dec 8, 2300.	5039.2	Dec/TIN) R. Libertad, Junin; 1113-1208 ads
	(14-Dec/Klemetz-CLM/Dateline Bogota)		Cerveza Cristal, ID "Ya son las 6 y 48 de la
4747.37	•		manana en su Radio Libertad" (9 Dec/
	1100 Steady comments noted by a woman. Poor w/QRM. (24-Dec/Bolland/	5068.7	Arrunategui-PRU)
	Cumbre)	5000.7	R. Ondas del Sur Oriente, Quillabamba; 1135-1216 ads Hogar Clinica San Juan de
4750.07	•		Dios en Quillabamba, ID "Gracias a radio
	with flutes, Peru ments by M, fair signal		Ondas del Sur Oriente" advs ID
4763.9	(16-Dec/Wilkner/Cumbre) UNID Peruvian, noticeable between 1020-		"Escuchemoslo por radio Ondas del Sur
4703.9	1050, probably Radio Chincheros, in the	5083.8	Oriente" (14-Dec/Arrunategui PRU) R. Mundo, Cusco 1015-25 long tk no mx,
	town of the same name. No definite ID.		fair. (17-Dec/Wilkner/Cumbre)
1761.0	(Klemetz-CLM/Dateline Bogota)	5144.0	R. Imagen, Tarapoto; 0208-0234 pgm
4764.0	R. Chincheros, Chincheros, Apurimac; 0106-0140 huayno mx, ID "Por radio		Patrullero 1160 nx ID "Por radio Imagen" (13-Dec/Arrunategui-PRU)
	Chincheros" ads AFP Integra (18 Dec/	5385.2	R. Huamarca, Huamarca, Huamcabamba,
	Arrunategui-PRU)		Piura; 0028-0116 pgm el Peru y su
4774.98			folklore ID "A traves de radio Huamarca"
	QRM from AIR on same channel (14-Dec/ TIN)	5730.05	mx (6-Dec/Arrunategui-PRU) Radio Santiago; 1100-1137(f/out) weak
4790.03			signal. Noted its carrier at 1100, but no
	pops, jingles, ID's (16-Dec/Phillips/		audio. At 1115 they began to play OA
4824.4	DSWCI DX Window) R. La Voz de la Selva, Loreto; 0054-0126		folklore, thenMtal k in SS. Several short ID were heard. (14-Dec/TIN)
7027,7	chicha mx, ID "Radio la Voz de la Selva"	5767.12	Radio Universal, Moyobamba; 1040-1051
	mx ID "Radio La Voz de la Selva en sus		p signal w/ute QRM, program with OA
	tres frecuencias, cobertura total" mx.		folklore. ID was announced as "Radio
	(4-Dec/Arrunategui-PRU)		Universal desde Moyobamba para todos los del Peru." (14-Dec/TIN)
			tos det retu. (14-Dec/ IIN)

- 5818.8 R. Victoria, Lima; 2116-2148 pgm religiosos ID "Por la gran cadena de radio Victoria.." advs religioso ID "La gran cadena de radio Victoria.." (14-Dec/ Arrunategui-PRU)
- 5926.56 Radio Peru; slightly drifted from 5926.60khz. Noted at 1120 w/weak signal. (14-Dec/TIN)
- 6095.0 R. Nacional del Peru, Lima; 0055-0148 mx criolla pgm, ID "Radio Nacional del Peru se complace en saludar a los locutores por su dia.." (7-Dec/Arrunategui-PRU)
- 6173.8 R. Tawuantisuyo (Cusco) 1445-1520 ID
 "Llamar al telefono 226411 de radio
 Tawuantisuyo para participar en el
 sorteo..." tropical mx, prog "Bienvenida
 Navidad" (25-Dec/Arrunatequi/Cumbre)
- 6188.1 R. Oriente, Yurimaguas; 2110-2146 ads Comercial Archis, Panaderia Ton en Yurimaguas lo mejor... cartucho federal (7-Dec/Arrunatequi-PRU)
- 6249.8 R. La Voz, Andahuaylas; 0032-0100 mx huayno, ads Cerveza Cusquena, sigan disfrutando.. partial ID "Gracias a radio La Voz...." (18-Dec/Arrunatequi-PRU)
- 6249.6v Radio La Voz, presumably located at Andahuaylas, 1048, with "Amanecer Andino". Seems to come alive around 1030. Quite strong at this hour, better than @2300, but the frequency is very noisy. (6-Dec/Klemetz-CLM/Dateline Bogota)
- 6895.3 R. San Miguel Arcangel (Cajamarca)
 1651-1724 mx ID "Y ya van hacer las 12
 del dia y como siempre por su radio San
 Miguel Arcanagel.. onda internacional,
 uniendo todo el norte del pais.." (25Dec/Arrunategui/Cumbre)
- 7040.25 Radio Melodia (p) also seems to be on in the mornings. Heard at 1209 with huanyos and male announcer. When he spoke, the music cut out. Poor level and hammered by morse QRM starting at 1223. Thanks Klemetz tip. (6 Dec/Johnson/Cumbre)
- 7040.3 Radio Melodia, San Ignacio, announcing forthcoming transmissions on FM, as well as an immediate increase in prgr time, from 5 am to 10 pm, local time. On Dec 12, 1150, in a news prgr called "El matutino, organo informativo de Radio Melodia" mention was made of their address as "Calle Comercio 140", which then supersedes previously reported "Jr. Comercio 740". As is the case with some other Peruvians, this one doesn't seem to be active during weekends. (7-Dec/Klemetz-CLM/Dateline Bogota)

- 7142.90 R. Ayabaca (t) 1000-1030 SS annomnts;
 0A folk mx; tentative ID. TNX to Henrik
 Klemetz tip on WOR; also heard on
 7142.94 (t) from 0230-0328* w/SP tlk;
 0A mx; no ID heard, but signed off with
 Peruvian NA. (22-23 Dec/Alexander/
- Radio Ayabaca, Peru, has a DJ who makes 7143 believe he is on the BCB (medium wave), "en los 7-50 de Ayabaca su radio, sintonia regional, desde la senal de la amistad en el norte peruano". On Dec 7, the stn closed at midnight, promising to return on the air by 5 am. (Klemetz-CLM/ Dateline Bogota) 9504.7 R. Tacna 2245 Peruvian news read by man and woman, then ad block including Coca Cola ad. Then resumption of news. I heard a couple of "ids", but they sounded like R. Tarma, not Tacna, Am I hearing things or does Tacna carry perhaps carry news from Tarma? Killed by s/on of very strong R. Veritas Asia at 2257 on 9505. (7-Dec/ Johnson/Cumbre)

Silent for a long time, the Peruvian on 5767.2 kHz has reappeared. Logged Nov 30, 2230 and past midnight. No longer R. Estelar, although still located in Moyobamba. Now ID as Radio Universal, studio address "Jr. San Carlos a media cuadra del Grupo Petroselva." S/on *1000. (Klemetz/Dateline Bogota/DXW/Cumbre)

PHILIPPINES This month's contender for the LN "Most Confusing Schedule" cup (neck and neck with RCI and FEBA) is FEBC, who reminds all its Lushaispeaking listeners to tune in every Monday from 0115-0130...

0100-0300	English	15450
0115-0130	Chin-asho	15465 Tu
0115-0130	Chin-falam	15465 Th
0115-0130	Chin-tidim	15465 Fr
0115-0130	Jingpo	15465 We
0115-0130	Karen-pwo	15465 Sa
0115-0130	Karen-sgaw	15465 Su
0115-0130	Lushai	15465 Mo
0130-0145	Kuki	15465 Fr-Su
0130-0145	Meithei	15465 Mo-Th
0130-0145	Naga-ao	15465 Mo-Fr
0130-0215	Naga-ao	15465 Sa/Su
0200-0215	Chin-tidim	15465 Sa
0200-0215	Karbi	15465 Su
0500-0900	Mandarin	15450
0800-0830	Banjar	15380
0800-0830	Sasak	12005
0830-0900	Gorontalo	15380
0830-0900	Javanese	12005
0830-0900	Sundanese	12005 Mo/We/Fr
0855-1100	Russian	9465
0900-0930	Makasar	15380
0900-1000	Indonesian	12005
0900-1400	Mandarin	9400

0930-1000	Bugis	15380	1315-1330	Stieng	9795 Sa
0930-1100	English	11635	1315-1330	Whitetai	9795 Mo
0945-1015	Black Tai	15095 We	1330-1345	Jingpo	9795
0955-1600	Mandarin	9495	1330-1400	Amoy	9475
1000-1030	Amoy	9475	1345-1400	Chin, Daai	15095
1000-1030	Minangkabau	12005	1345-1400	Mien	9795
1000-1030	Sundanese	15380	1345-1400	Mnong	9795 Sa
1015-1045	Indonesian	15095	1400-1415	Palaung, Pale	15095 Mo-Sa
1015-1045	Malay	15095	1400-1430	Jarai	9670 We
1030-1045	Mien	11690	1400-1430	Koho	9670 Su
1030-1045	Mnong	11610 Sa	1400-1430	Vietnamese	9670 Mo/Tu/Th-Sa
1030-1100	Javanese	15380	1400-1530	Russian	9465
1030-1100	Swatow	9475	1400-1600	Mandarin	5890 9400
1045-1100	Khmu	11610 Mo/Th-Sa	1415-1430	Chin-asho	15095 Sa
1045-1115	Aceh	15095	1415-1430	Chin-haka	15095 Tu
1100-1115	Mongolian	11650	1415-1430	Chin-tidim	15095 Fr
1100-1130	Blue Hmong	11610	1415-1430	Jingpo	15095 Th
1100-1130	Hmong, White		1415-1430	Karen-pwo	15095 We
1100-1130	Zhuang	9475	1415-1430	Karen-sgaw	15095 Su
1100-1230	Indonesian	15380	1415-1430	Lushai	15095 Mo
1115-1130	Jarai	9795 Fr	1430-1530	Burmese	9670
1115-1130	Katu	9795 Tu	1530-1545	German	9495 Su
1115-1130	Mongolian	11650	1530-1545	Kirghiz	9495 Fr/Sa
1115-1130	Muong	9795 Th	1530-1545	Russian	9465 Tu/We
1115-1130	Stieng	9795 Su	1530-1545	Uzbek	9495 Th
1115-1130	Tho	9795 Mo	1530-1600	Ukrainian	9465 Mo
1130-1145	Bahnar	9795 Sa	1545-1600	German	9495 Su/Tu/We
1130-1145	Bru	9795 Tu	1545-1600	Kazakh	9465 Fr/Sa
1130-1145	Jeh Mon	9795 Th	1545-1600	Osetin Uighur	9465 Th
1130-1145 1130-1145	Nung	15095 9795 Mo	1600-1615 1600-1800	Russian	9495 9465
1130-1145	Rade	9795 Sa	1615-1630	Kazakh	9465 Tu/We
1130-1145	Whitetai	9795 We	1615-1630	Kirghiz	9495 Th/Fr
1130-1143	Chrau	9795 Su	1615-1630	Osetin	9465 Mo
1130-1200	Lao	11610	1615-1630	Uzbek	9495 Sa/Su
1130-1200	Cantonese	9475	1800-1830	Russian	9465 Mo/Th/Sa
1130-1330	Russian	9465	1800-1830	Ukrainian	9465 Su/Fr
1145-1200	Hre	9795 Tu	1830-1845	German	9495 Su
1145-1200	Jarai	9795 Fr	1830-1845	Russian	9465 Tu/Th/Sa
1145-1200	Karen-sgaw	15095	1830-1845	Ukrainian	9465 Fr
1145-1200	Nung	9795 Mo	1830-1900	English	9495 We
1145-1200	Rade	9795 Sa	1830-1900	Romanian	9465 Tu
1145-1200	Rengao	9795 Th	1845-1900	German	9495 Su/Fr
1145-1200	Roglai	9795 We	1845-1900	Russian	9465 Th
1200-1215	Rawang	15095	1845-1900	Ukrainian	9465 Tu/Sa
1200-1300	Khmer	11610	2200-2400	Mandarin	9405
1200-1300	Mandarin	7355	2230-2300	Lao	9875
1200-1300	Vietnamese	9795	2230-2315	Khmer	9495
1215-1230	Lisu	15095	2230-2345	Indonesian	9780
1230-1300	Malay	15380	2300-2315	Akha	11650 Sa/Su
1230-1400	Burmese	15095	2300-2330	Blue Hmong	9875
1300-1315	Bahnar	9795 Sa	2300-2330	Hmong, White	9875 Su-We/Fr
1300-1315	Black Tai	9795 Mo	2315-0015	Vietnamese	9495
1300-1315	Bru	9795 Tu	2315-2330	Lahu	11650
1300-1315	Chru	9795 We	2330-0115	Burmese	15465
1300-1330	Koho	9795 Su/Th	2330-2345	Wa	11650
1300-1400	Vietnamese	9670	2345-0030	Shan	15520
1300-1600	English	11995	2345-0030	Shan,Chinese	
1315-1330	Eastern Cham		(5-Dec/Gray-1	FEBC/Schaay/B	CDX/Bueschel-FRG)
1315-1330	Нте	9795 Tu			
1315-1330	Sedang	9795 Fr			e 2330-2400 new 7235 UL/BCDX/Bueschel-FRG)

VOA English to SoAsia 0100-0300 replaced 21550 by 17820 kHz, Poro 50 kW, 260 degrees. (21-Dec/Elliott/Comm World/BCDX)

PORTUGAL Radio Portugal services to Timor and India now: Timor: Portuguese 1300-1400 Mon-Fri, 0800-1000 Sat-Sun-festival days; Tetum Mon-Fri 1205-1300 all on 17595; India: Portuguese 1300-1430 Mon-Fri, 1600-1900 Sat-Sun-festival days; English 1430-1500 Mon-Fri all on 21515. English to other areas is: Europe 2100-2130 6130 9780 9815, USA/Canada 0430-0500 6150 9570, all Mon-Fri (Padula/EDXP) QATAR QBS Doha in Arabic 0705-1305 now also on 15395 kHz (QRM Dubai here for decades) (x15265). (3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

ROMANIA Radio Moldova International - recent sked as supplied to WRTH97 from a collaborator in Moldova (Romanian transmitters):

0230-0255	Spanish	9400
0300-0330	Romanian	7520
0330-0355	English	7520
0400-0425	Russian	7520
0430-0455	English	7520
1200-1225	Spanish	15315
1230-1300	Romanian	9400
1930-1955	Russian	7520
2000-2025	French	7520
2030-2055	Spanish	7520
2100-2125	French	7520
2130-2155	Spanish	7520
2200-2225	English	7520
2300-2325	English	7520

All transmissions are Mon-Fri only. (Sennitt/ USENET/Ogrizek/EDXP)

SAO TOME VOA morning program 0300-0630 via Sao Tome now on new 4960 kHz. (17-Dec/Ferguson)

SAUDI ARABIA BSKSA from 3/11-2/3/97 shows the following changes: Main AA program: 11910 (x11965) 1700-1800 to W. Europe; Holy Koran program: 9740 0300-0600 (x9620) Egypt, Libya 11935 0300-0600 (x11820) C. Asia, 17720 0300-0600 (x17895) C. Asia 21495 0900-1200 (x21530) SEA; Call of Islam: 11910 1500-1700 (x11965) W. Europe. (3-Dec/Padula-AUS/EDXP/BCDX/Bueschel-FRG)

17880 Riyadh. NF. Koran svce to SEA, 1005 (7-Dec/Padula/EDXP) 21665nf Riyadh, Indonesian, *1000, ex-planned 21670(7 Dec/Padula/EDXP)

Big problems with their transmitters: fr 0300 really on odd 9553.6 instead of 9555. 9619.5 (9620), 9718.3 (9715/9720), at 1200 15277.8 (15280). New progr out of the schedule is on 12038.5 kHz at 1800-2000 in Arabic. (3 Dec/Fadula-AUS/EDXP & Paniview-BUL/BCDX/Bueschel-FRG)

SEYCHELLES 15480 kHz Voice of Tibet via FEBA back here from 15445 kHz at 1142-1157. (5-Dec/ Dasgupta-IND/EDXP/Padula) FEBA now using 11640 kHz with Indian vernaculars at 1257-1413 replacing 11670 (to avoid RFI program) and on 11600 kHz at 1414-1545 replacing 11670 & 11870 kHz. So English is now at 1500-1545 hrs (varying s/off time) on 11600 kHz. (19-Dec/Dasqupta-IND/EDXP/Padula)

SINGAPORE 7205 kHz, BBC London from Kranji tested on this channel on Dec 3 & 4 at 1630-1645 in Bengali for a possible replacement of 7160 kHz. (5-Dec/Dasgupta-IND/EDXP/Padula)

Radio Corp. of Singapore, Singapore 5999.97 1430 presumed with W Chinese talks. Not Voice of the Strait which is also listed here, but I checked their parallel channels. (11-Dec/Schaay)

RSI Singapore in English on new additional 6105 kHz, in //to 6155 kHz at 1100-1400. (ex 31 mb?) (15-Dec/NHK RJ MediaRoundUp/BCDX/Bueschel)

SLOVAKIA Is AWR still on 6055 in English at 2130? No trace of it Sun Dec 15, checking for Wavescan, but BBC 6050 English by Radio, listed Cyprus beamed NW was quite audible. Come to think of it, couldn't hear 6055 the week before, either (Hauser)

SOMALIA 6860nf R. Mogadishu (p) 2035-2100* Ex-6854. Lcl exotic mx; s/off w/NA. Weak. Suppressed carrier USB. Also heard Nov 30 on 6860 at 0308. (28-Nov/Alexander/Cumbre) 6870u Radio Mogadishu Vx of the Somali People 1955 Martial IS EE ID and nx by M. EE pop ballads to same IS and EE ID. Back into Somali at 2015. (7-Dec/Rausch/Cumbre)

Radio Mogadishu, Voice of the Masses of the Somali Republic, which broadcasts in support of the Somali National Alliance headed by Husayn Muhammad Aydid, is currently observed with external-service programs according to the following schedule: English: 1300-1315, 2000-2015 Arabic: 1315-1330, 2015-2030 Amharic: 1330-1345, 2030-2045 Swahili: 1345-1400, 2045-2100 programs in Somali are observed at other times, such as 1700-2000. The English service identifies itself as "the external service of Radio Mogadishu, Voice of the Somali People". The radio, which announces that it broadcasts on shortwave as well as on VHF/FM for listeners in Mogadishu, is currently observed on either 6870 or 6890 kHz. (BBCM)

SOUTH AFRICA The Sentech ex-R.Oranje 100kW transmitter is now standing idle as it is connected to a LP antenna with an azimuth of 275 degrees, which is not much in demand. However, Sentech is planning to relocate the LPA to an azimuth of 5 or 7 degrees, because some clients are interested in using it for transmissions to Zambia and Zimbabwe. Probably this will happen early next year. Sentech may have a new client on the air on short wave before Christmas. (15-Nov/Conradie RSA/Cumbre/EDXP/Padula) ...and the "new client" is...

The new shortwave service "Stocks & Funds Television and Radio Network", nominally began broadcasting December 15 from Sentech in South Africa, with transmissions are directed towards Africa & Middle East. The station will use two 250 kW transmitters for some 19 hours a day. Tentative sked:

0200-0300 6195 7175 0300-0400 9775 11985 0400-0800 11985 15225 0800-1100 17735 21745 1400-1600 17735 1800-2200 15420 17890

Address: Stocks & Funds Television and Radio Network, 1733 Clifton Road NE, Atlanta, GA 30329, USA. Telephone: 404-315 9541. (5-Dec/Radio Nederland Media Network/Nordic SW Center)

The final W96 sked for Trans World Radio - TWR, via Meyerton.

0333-0404	Amharic	7215
0600-0657	English	11730
1600-1630	Kirundi	9850
1630-1700	Oromo	9850
1640-1655	Somali	9650
1700-1730	Tigrinya	9850
1730-1800	Amharic	9850
1830-1900	Nupe	9510
1900-1930	Yoruba	9510
1930-2000	Fulani	9510
2000-2030	Hausa	9510
2030-2057	Twi	9510
2100-2130	Arabic	7215

(Sentech web site/Otto/Bueschel/BCDX)

Durban-based Capital Radio 604 ended its broadcast days on Friday, 29th November. The 17-year-old station blamed its closure on its long battle to upgrade from mediumwave transmission to FM in Kwa-Zulu/Natal. (BBCM)

SRI LANKA 9730nf SLBC ex-9720, C&W mx 1328, (25-Nov/Valko/Cumbre) Sked 0030-0430, 1230-1630-1730 weekends (Goonetilleke/Cumbre) EE at 1530-1600 on new 9730, although 15425, 9720 & 6025 were announced at the end of the program. (9 Dec/Pashkevich/EDXP/Padula) SLBC now on 11905 kHz at 0025-0430 & 1510-1700 replacing 11895. (Dasgupta/DSWCI DX Window) SLBC Colombo replaced 11800 by 11895 kHz at 0030-0430 & 1500-1700 in Hindi. (3-Dec/Paniview-BUL/BCDX/Bue-schel-FRG)

Late changes effective Nov 23 by VOA: Tibetan 0000-0100 6105 (x6120) kHz, 7200 (x7165). Bangla 0130-0200 11870 (x11830). Urdu 1330-1430 11715 (x11960), 9575 (x9705). English 15300 (x15370) 0100-0300 from Thailand as monitored in Calcutta. (27-Nov/Dasgupta-IND/EDXP/Padula)

Radio Japan resumed its relays via Sri Lanka on 9-Dec per sked:

English	11890
Ben/Hi/Urdu	11890
Japanese	17820
AA/French	17780
Ben/Hi/Urdu	12045
JJ/English	12045
EE/Japanese	11880
	Ben/Hi/Urdu Japanese AA/French Ben/Hi/Urdu JJ/English

In addition, in order to avoid mutual interference with other stations, the English (60 min) and Japanese (60 min) programs for SoAS during 1500-1700 is transmitted on 7240 kHz instead of 7225 kHz also with effect from Dec 9th. (9 Dec/Hishikawa-JAP/Yamashita/ABI/DXW/BCDX/Bueschel-FRG)

SWEDEN Radio Sweden sked: 0000-0030 Swedish 6065

0030-0100	English	6065
0100-0130	Swedish	7290 7265
0130-0200	English	7290 7265
0200-0230	Swedish	6090
0230-0300	English	6200
0300-0330	Swedish	7115
0330-0400	English	7115
0500-0600	Swedish	9490 6065 Mo-Fr
0600-0715	Swedish	13625 9490 6065 Mo-Fr
0700-0900	Swedish	13625-alt 9490 6065 Sa
0800-1000	Swedish	13625-alt 9490 6065 Su
1000-1100	German	6065 Sa/Su
1100-1130	Swedish	7155 6065-(Sat/Sun only)
1130-1200	Swedish	13740 11650 6065
1200-1230	Swedish	17785 15240 7155
1230-1300	English	15240 11650
1230-1300	Swedish	13740
1300-1330	Russian	9865
1300-1330	Swedish	15240 13740
1330-1400	English	15240 7155
1400-1430	Russian	9865 6000
1430-1500	English	15240 11650 9485
1500-1530	Swedish	15240 11650 9715
1530-1545	Estonian	6065 6000
1545-1600	Swedish	15240 11650 6065 6000
1600-1645	Swedish	6065
1645-1700	Swedish	9700 7155 6065
1700-1715	Estonian	6065 Su
1700-1715	Swedish	9700 7155 6065 Mo-Sa
1715-1745	Russian	6200 6065
1745-1800	Latvian	6200 6065
1800-1900	German	6065
1900-1930	Swedish	9655 7155 6065
1930-2000	English	9655 7240 6065
2000-2030	Russian	7150 6065
2030-2100	English	6065
2100-2130	Swedish	7230 6065 Sa/Su
2100-2200	Swedish	7230 6065 Mo-Fr
2130-2200	English	7230 6065 Sa/Su
2200-2230	Swedish	7315 6065
2230-2300	English	7325 6065
(BBCM)		

TANZANIA - ZANZIBAR 11734.14 RTZ 1950 ID AA mx and ments of Abdul Rakhman, Zaire, Rwanda. ID as "Sault al ya Tanzania Zanzibar" NA, s/off 2000* (20-Dec/Price/Cumbre)

THAILAND Radio Thailand 9535 nf *2000, English ID into French program. (13-Dec/Alexander/Lamb/ BCDX/Bueschel) Observed 9535 2000 2115 x11805, German, E, F, Thai, //v9655.4 kHz (Bueschel/BCDX)

TUNISIA RTT Tunis in Arabic 0400-0700 & 1600-1800 on new v7305.6 (x7280) and v7474.7 kHz. (3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

RTT Tunis in Arabic at 1700-2400 on odd 7286.4 (reg 7280). Distorted audio, due to CHN? jamming around 7287...7290 kHz. Tunis far better on 7475 kHz. (15-Dec/Bueschel-FRG)

TURKEY Voi	ce of Turkey -	TRT winter schedule:
0000-0500	Turkish	5980 6120 9445 9460
		15385
0400-0500	English	7300 9685 17705
0500-0800	Turkish	7300 9445 9460 11925
		11955 15145 15385
		21715
0800-1000	Turkish	9460 11925 11955
		13670u 15145 15385
		21715
0830-0930	Azerbaijani	9765 11835
0930-1030	Persian	9630 11795
1000-1100	Turkish	9460 9560 11955 15350
1000-1200	Arabic	11690 13710
1030-1130	Romanian	7110
1030-1130	Serbian	9505
1100-1400	Turkish	9460 9560 11955 15350
1100-1600	Turkish	11910 Fr
1130-1230	Greek	7110 7150
1200-1300	Chinese	13710
1230-1330	Albanian	7165
1230-1330	Bulgarian	7110
1300-1400	Urdu	11900
1330-1430	English	9630 9630
1400-1500	Persian	9710
1400-1500	Russian	9675
1400-1600	Turkish	9460 9560 11955 13670u
		15350
1430-1530	German	9445
1500-1600	Azerbaijani	6050
1500-1700	Arabic	6120 7130
1530-1630	Greek	6090
1600-1700	Turkish	5980 9460 9560 11955
		15350
1630-1730	Hungarian	7240
1700-1800	Bulgarian	5960
1700-2200	Turkish	5980 6120 7110 9460
		9560 15385
1730-1800	Macedonian	5970
1800-1900	Russian	6135
1830-1930	German	5935u 5970

1900-2000

Bosnian

6135

1930-2030	English	59701 6000
2030-2130	French	7150u 7255 7270
2200-2300	Turkish	5980 6120 7110 9560
		15385
2300-2400	English	7280 6135u 9560 9655
2300-2400	Turkish	5980 6120 9445 9460
		15385

(Klink-FRG/Bueschel/BCDX & Padula/EDXP)

UAE VollAE Abu Dhabi in Arabic 1400-2400 new 6015, 1400-1600 9605, 1500-1800 9695, 1500-2400 9770, 1600-2400 11710, 1800-2400 new 7220 kHz. (3-Dec/Paniview-BUL/BCDX/Bueschel-FRG)

Abu Dhabi seems to have dropped its English transmissions on shortwave. Whereas in the past the Arabic broadcasts to Europe, North Africa and the Middle East ended at varying times between 2120 and 2150, all current channels (6015, 7220, 9770 and 11710) are now observed to 2202* approx, so there's no way the station can broadcast to North America at 2200. In fact, the Arabic transmissions to the Western Hemisphere may also have disappeared; I can't find any trace of them. (8-Dec/ Jones-PAR/Cumbre)

UNITED KINGDOM 3970nf for R. Korea Int'l. via Skelton. FF 2020 (13-Dec/Padula/EDXP) 7165nf BBC-Rampisham. *2200-2230* Serbo Croatian (Padula/EDXP)

BBC German 0600-0630 is now on 3980 (x3985), Skelton. (1-Dec/Volk)

URUGUAY 6140 R. Montecarlo, Montevideo, resumed b/c after a couple of weeks inactive due to technical problems. Noted on Dec.8 at local morning /afternoon w/ Referendum coverage. On Dec. 10, at 0052 on 9595. This day, 6140 s/on was observed at 1100, but spurious are still present on 6213 (distorted), 6070 (rather good), 5929 (distorted). (8/ 10-Dec/Nigro URG/Cumbre) 9650 Em. Ciudad de Montevideo, 2M speaking sports (4-Dec/Liangas-GRC/Cumbre)

USA Former Clinton deputy chief of staff Evelyn Lieberman has been named as new director of the Voice of America. (BBCM)

VOA English at 1400-1800 now on 7125 kHz from Udorn Thani-THA and 7215 kHz from Ekala-CLN (Sri Lanka), previously 7125 was from Sri Lanka and 7215 from Thailand. Also noted new 11720 khz (x-11905) at 1600-1700 in Hindi parallel to 6060 and 9595 kHz. (19-Dec/Dasgupta-IND/BCDX/Bueschel)

More changes: Tibetan 0000-0100 6105 (ex 6120), 7200(ex 7165). Bangla 0130-0200 11870 (ex 11830), Urdu 1330 1430 11715 (ex 11960), 9575 (ex9705) as monitored in Calcutta. (24-Nov/das Gupta/BCDX/Bueschel)

In light of the continuing crisis in Eastern Zaire, Rwanda and Burundi, VOA has expanded its broadcasts in the Kinyarwanda and Kirundi languages. They are at 0400-0430, now daily, rather than Monfri as before, on 5975 (Botswana, 6170 (Ascension) and 7290 (Sao Tome). (23-Nov/Communications World/Ogrizek/EDXP/Padula)

On December 7, WRMI began broadcasting a weekly program from the Khmer Community Rescue Association of Seattle, Washington. "Thansour Thmey Radio" is aimed at U.S. Cambodians Sked is Saturday from 2200-2230 on 9955 kHz. From 2230 2300, program is in English and is called "Voice of Cambodia Radio International." (direct)

On December 9, WRMI began re-broadcasting a daily 15-minute SS program from Vatican Radio, at 0215-0230 Tuesday-Saturday, and 0145-0200 Sunday on 9955 kHz. (direct)

WINB is about to come back on the air, says George Jacobs & Assoc in a revised client schedule, around Dec 16, showing WINB:

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

All 50 kW (via George Thurman, World of Radio) Station does not believe that they will be ready to transmit by then as the transmitter is still being worked on. The transmitter is still the 50 kW Continental that the station went on the air with in 1962. The station still has only one antenna and programming will be Christian music, with blocks of time being sold. All this per Sally Spiker at the station. (6-Dec/DIRECT/Johnson/Cumbre)

UZBEKISTAN Radio Tashkent has introduced two additional 30 min EE broadcasts at 2030 & 2130. Tom Sundstrom & Lou Josephs heard them on 4850, 5995, 7105, 9540 & 11905. Target area announced as Magreb?? but HFCC says to Central Asia. (22 Nov/Sennitt/RNMN/Ogrizek/EDXP/Padula)

Uighur 6230* 6160* 5060

Official W96 sked:

0030-0100

0030 0100	O.g.iu.	0230 0100 3000
0100-0130	English	7285 5975 5955
0130-0200	Dari	7285 5975 5955
0200-0230	Pashto	7285 5975 5955
0230-0330	Uzbek	9540 7285 5975 5955
0400-0430	Turkish	15330 15165
1200-1230	English	9715 6025 5975 5060
1230-1300	Uighur	6230* 6155* 5040
1230-1300	Urdu	9715 6025 5975 5060
1300-1330	Hindi	9715 6025 5975 5060

1330-1400	English	9715 6025 5975 5060			
1400-1430	Urdu	9715 6025 5975 5060			
1430-1500	Chinese	6230* 6155* 5040			
1430-1500	Hindi	9715 6025 5975 5060			
1520-1550	Dari	9540 7285 6025 5975			
1530-1600	Uighur	6230* 6155* 5040			
1550-1630	Uzbek	9540 7285 7105 6025 5975			
1630-1700	Persian	9540 7285 7105 6025 5975			
1700-1730	Arabic	7285 6025 5975			
1700-1730	Turkish	9540 7105			
1730-1830	Uzbek	9540 7285 7105 6025 5975			
1830-1900	Persian	9540 7285 7105 6025 5975			
1900-1930	Arabic	9540 7285 7105 6025 5975			
1935-2030	German	11905 9540 7105 6230 5060			
		5035			
2030-2100	English	11905 9540 7105 5995 4850			
2130-2200	English	11905 9540 7105 5995 4850			
2330-2400	Chinese	6230* 6160* 5060			
*=via Almaty transmitters, (NDXC + Sennits/RN MN +					

VATICAN 6065nf Vatican Radio *2200 CC, // 7305 5935 (13-Dec/Padula/EDXP)

Ludwig-FRG/Bueschel/BCDX)

ZAIRE Radio Agatashya's transmitters and studios in Bukavu were damaged in the fighting and the station has been off of the air since October 27th. The station is looking into alternative ways of transmitting, including shortwave transmissions via Switzerland. All this per Marco Domeniconi at the Hirondelle Foundation, the station's backer. (7 Dec/DIRECT/Johnson/Cumbre)

UNIDENTIFIED 3295U at 2033 This one observed again with talk, then slow, anthem-sounding orchestral selection and into what might have been a sporting event; too little audio to be sure. First (and last) heard Nov. 1 in same carrier-plus-USB mode. Belarus? (27-Nov/Hill)

5990 at 0127 Subcontinental vocals and talk past 0130; very poor and mixing with another station. AIR listed here in Sindhi 0100-0200 // 7125, which is thoroughly covered by a Russian-speaker. (1-Dec/Hill)

6039.94 poss Jiangxi, CC talk by W, sudden s/off just before 1500.(Schaay-NETH)

7120.2 around 1240 Chinese drama with lots of shouting and general emoting; nothing listed for 7120 or vicinity. Almost fair level—a real triumph given the conditions, which were wretched as usual. (22-Dec/Hill)

Pirate Radio Report

Chris Lobdell P.O. Box 146 Stoneham, MA 02180-0146 CompuServe: 75720,253 Internet: pirodio@usa1.com

Hello and welcome to the January edition of the PIRATE RADIO REPORT.

Happy New Year to everyone. I hope you all had some time to do some pirate DXing over the holidays.

In this month's report we'll start off with a nice Station Profile sent in to us by Woody B. Serious of Up Your Radio Shortwave.

Station Profile: "Up Your Radio Shortwave"

"UP YOUR RADIO SHORTWAVE was conceived in 1996 as a response to the right-wing domination of talk radio. Rush Limbaugh, for example, delights in saying liberals don't have a sense of humor. He's wrong as usual.

Our objective is to deliver some well-placed (and well deserved) jabs at the radical rightwing. The religious right, who controls the Republican Party, seeks to destroy organized labor, end public education, censor the media, repress women, minorities and homosexuals, and impose fundamentalist Christianity. Our effort to expose the Right would be useless if not entertaining, so we spend a lot of time producing each program.

Each program is produced digitally on a computer. Our trademark is edited political speeches. There's a grain of truth in every political speech if only you read between the lines. That's what we do. Rather than playing what they actually said, we bring you what they actually meant.

Music heard on our show is a combination of recent material by The Foremen and classics by Allan Sherman and The Chad Mitchell Trio.

We keep our studio engineer, Chuck U. Farley, locked in the refrigerator during each broadcast because he tends to hog the mic.

Accurate reception reports to the Blue Ridge Summit, PA drop [Box 109, 17214]merit an

official UP YOUR RADIO SHORTWAVE "Rush Limbaugh As A Pig" QSL sheet. More designs are coming. Studio tapes are available through DVS Communications [Box 1, Belfast, NY 14711]".

Please remember that the opinions expressed in station profiles are of the originator and not necessarily those of NASWA or the PIRATE RADIO REPORT. Thanks again to Woody B. Serious for the nice profile.

Weiner Book Delayed

Last month we mentioned that Allan Weiner's book "Access To The Airwaves" was due out in January. Anita McCormick has informed us, that due to a publishing delay, it looks as though February or March is more realistic. We'll let you know more when we find out.

Loggings...

Some nice logs this month, including the low powered Latin, Radio Pirana International:

RADIO FREE LONDON, a Europirate, was heard by John Fisher while in Newfoundland. They were noted at 2315 on November 9th with pop music and reception reports being read.

RADIO FREE SPEECH RELAY SERVICE was noted relaying HITCHIKERS GUIDE TO THE GALAXY, a narrated science fiction drama by a male with a British accent. Reception reports sent to the BRS maildrop will be QSLed. (Nick Terrance)

RADIO PIRANA INTERNATIONAL was heard on 6925.6 kHz in the AM mode by Don Moore from 0350-0432 UTC on December 7th. Programming consisted of mostly rock music, with IDs and talk mostly in Spanish but with some English.

That's all we have this month. Hopefully we'll be back to our usual two pages in February! Happy pirate DX.

English Schedules

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

Prepared December 23.

Armenia. The Voice of Armenia English language releases are 0930-1000 UT Sundays on 7480; 1845-1900 Monday-Friday on 7480, 4990, and 4810.

Botswana. We've been hearing R Botswana on all three frequencies (3356, 4820 and 7255) from 03 UT or so. As sunrise overtakes the transmitter site, only 7255 is heard beyond 05 UT... and we heard news in English at 0505-0520. The times vary a bit each night. On the 21st and 22nd, music prior to 05 was Christmas music... in English.

Cuba. Radio Havana Cuba changed its frequencies to Europe for French at 20 and English at 21 UT. The new ones are 9620 and 9585 USB.

Nigeria. Broadcasters with an interest in Africa were asked by Radio Nigeria to monitor test transmissions. The nonstop African music on 15120 has been widely reported, but Chris Hambly, Australia, reported non-stop African music on 7255 after 08 or so. Closing in on Christmas, we were up late a few nights, finishing Web page projects for WWCR and Radio Netherlands, and parked the NRD-535D on 7255. As R Botswana fades into the sunrise, we note

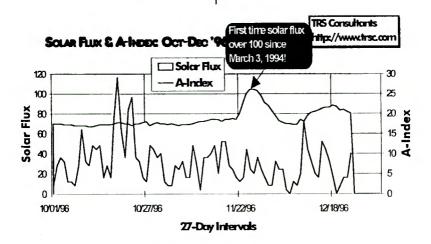
a strong open carrier on c.0540 UT. A 1 kHz test tone starts by 0545, and non-stop African music starts 0559:30. No IDs at all. The signal is very strong, averaging 30 db/s9 on the NRD-535D. It's also easy to hear on the Sony SW-100 with its whip antenna, well past sunrise in Nigeria. We set the sleep timer and nod off. On the 23rd, Christmas music in English was heard in place of the native African music from 06 past 08.

Norway. To avoid interference, R Norway has juggled frequencies on 3 English language releases. Sunday 13 to se Asia is now on 15605 and 9905; Monday 02 to NAm/CAm now on 7465 and 7440; and Monday 04 to wNAm on 7520. (Joe Hanlon/direct)



Internet "stuff". Coming to the Winter SWL Festival for the first time? (This one, number 10, ought to be a hummer!) We have a map posted on our Web site at http://www.trsc.com/swl_fest.htm.

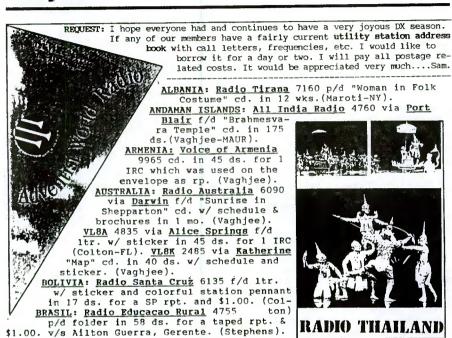
Interested in Antique and Old Time Radio? In December we added more than a dozen entries to the page we compile for Radio Netherlands? Dial up http://www.mw.nl/en/pub/antique.html and have a look at the more than 120 sites we review.



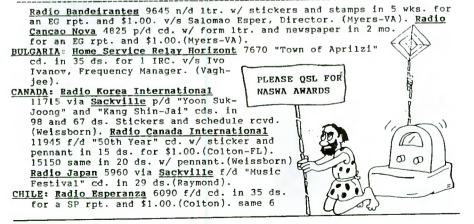
http://www.trsc.com

QSL Report

Sam Barto 47 Prospect Place Bristol, CT 06010



SPECIAL OFFER: We are still offering 600 foreign (large) postage stamps for \$5.00 or 1300 for \$10.00 or 2000 for \$15.00. In addition, for each \$5.00 order I will include an additional 300 US commemoratives absolutely free! That comes to 900 stamps for \$5.00, 1900 for \$10.00 or 2900 for \$15.00. Please enclose \$3.00 for shipping costs. It would be appreciated. The stamps make for excellent enclosures in your reception reports...Sam.



FRE TESEAMICHAEL Yoice of the Revolution of Tigray P.D.Box 450

18 Sentember 1996

Mekelle, Tigray Ethiopia

color cd. in 76 ds. for a SP rpt. Also rcvd. postcds., stickers, stamps and a banknote. The station is difficult to hear since

Radio Bandeirantes is only 110 miles away. (Coelho de Castro-BR).

and schedule. (Hosoya-JPN).

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

Dear Mr D'Angeln

CHINA: China Radio International 11675 "Tian An Men Rostrum" cd. w/ sticker in 80 ds. (Vaghiee). Swiss Radio International 7480 via Beijing "Basel" cd. in 28 ds. w/ schedule and stickers. (Hosoya-JPN) Radio Canada International 11795 via Xian cd. in
996 tust now. L'm pleased 25 ds. W/ personal ltr., sticker

I've received your letter of 7 September 1996 just now. I'm pleased to hear from a place from which I' we never expected the reception of

Though you got the reception with a special antena, your information is important to us. Infact reception would have been better by tunning the 7,515 KHz frequency especially after 0700hrs in the morning and 1800hrs In the evening. On Saturdays and Sundays we broadcast

If you could do it, we would appreciate if you could send us books on media business (experiences of different medias).

from 0700 - 1100 hrs in the morning. You can follow that.

Thanks a lot and home to hear from you again.

CLANDESTINE: Radio Democrat International 6205 via Meyerton f/d "SENTEC" cd. in 2 wks. w/ sked. for Channel Africa. (Field-MI). f/d info. sheet in 2 wks. after a f/up rpt. and \$1.00.(Myers-VA). Radio Kudirat Nigeria 6205 via in 2 mo. Meverton f/d form ltr. for 2 IRCs. (Lobdell-MA).

COSTA RICA: Radio For Peace Interhear from you again.

Anniversary" certificate in 45 ds. for \$1.00. v/s James

Latham, Station Manager. (Weissborn). f/d B&W "Building" cd w/ schedule in 175 ds. (Vaghiee).

FRE TESEANICHAEL DIRECTOR - VORT CROATIA: Hrvatski Radio 13640 f/d ltr. in 45 ds. after 2 f/up rpts. for \$1.00. v/s Bozidar Tomanek. (Martin-CA). 7370 f/d 1tr. in 5 mo. for 3 IRCs. (Dybka-TN).

CZECH REP: Radio Praque 7345 f/d cd. w/ schedule in 28 ds. (Pasquale-PA).

NOTES: Larry Colton says he finally got to send a few f/up reports. Although QSLs have been sparce, when one replies the colorful pennants and stickers make the

hobby most enjoyable. Carl Mann is still

To: HENRY WEISSBORN

We are pleased to confirm your reception of the Voice of America on SEPT. 7, 1996 at 1041 UTC. Frequency: 11875 Via: LAMPERTHEIM Thank you for your report.

struggling for a KAIJ OSL after numerous FAX's and reports. The address I printed hasn't paid off yet. Anita Glockner says the QSLs are few and far between but she is pleased with the KAT and Moscow QSLs. KAT said they received 19 reports. The Moscow QSL took almost 5 months as the first report I sent via registered mail was apparently lost....Maybe...Sam.

DOMINICAN REPUBLIC: Radio Barahona 4930 p/d 1tr. w/ 2 stickers in 108 ds.

after 2 f/up rpts. in SP w/ \$1.00 v/s Ing. Roberto Lama S., Administrador General. Thanks to DXer

Cesar Objio who took my rpt. to the station. (Stephens-AL). Onda Musical 4780 f/d 1tr. w/ postcard

WIN.

in 108 ds. after 2 f/up rpts. in SP. Again thanks to Mr. Objio. (Stephens-AL). Radio Cristal International 5010 f/d professionally printed cd. in 6 mo. v/s Dario Bad-

ia. (Lobdell-MA). ECUADOR: HCJB 9745 f/d "Hotel Quito" cd. in 55 ds. for ms. Schedule rcvd. (Weissborn). 9415 same cd. in 25 ds. for a Grand Ole Opry Radio Network

Free Radio Listener: Verification number 35 confirms your reception on 7/24 34 from 1250-232 UTC on the FCC approved frequency of 6/255 kHz. Of transmitter was operating in the 44 mode with an output power of kHz. Our walls. WSM broadcasts from "Music City, U.S.A." --- Nashville, TN,

An initial test broadcast was conducted on October 16,1993 around 2300 UTC in the 41 meter band. Although the shortwave service is new, the Grand Ole Opry radio program has been around since 1925.In1974 it was moved to Opryland,an entertainment park near Nashville. The staff of pirate station WSM enjoys bringing to you the best of country music past and present. We invite musical requests, comments and whatever else you may have. Until we meet again over the airwaves, keep on supporting free radio! Thank you for the reception report.

WSM Post Office Box 605

Huntsville, AL 35804



JP rpt. (Hosoya). Radio Baha'i 4949.8 f/d cd. w/ ltr., pennant and brochures in 3 wks. for a SP rpt. and \$1.00. v/s William Rodriquez Barreiro, Coordinador.

* (Kohlbrenner-PA). La Voz de Los Caras 4795 p/d 1tr. w/ "50th Anniversary" pennant in 1 mo. for a SP rpt. and \$1.00. v/s Ing. Marcelo Nevarez Faggioni, Director General. (Stephens).

ENGLAND: Midwest Radio 7325 via BBC site. f/d "Scenes of County Mayo" cd. w/ p/d ltr. and a personal note w/ sticker and newsltr. in 47 ds. (Stephens).

EUROPEAN RUSSIA: Voice of Russia 9480 via St. Petersburg f/d cd. in 2 mo (Field-MI). 9710, 9880 and 11630 via Moscow f/d cd. in 2 mo. (Field). 11675 via Moscow f/d "Friendship House" cd. in 59 ds. (Levison-PA). same in 65 ds. (Levison).

TRADIO

昼CORA

NOTES: Denis Pasquale has had a few QSLs trickle in lately. The pirate stations seem to QSL better than most of the larger international broadcasters. I'm still a little hesitant to send reports to the Latin stations as my Spanish and Portuguese is not that good. Try to develop a form in SP or PT until you get more proficient...Sam. Denis - thanks for the stickers...Sam. <u>Allan Loudell</u> was home sick for a short bime when the USPO delivered him two new countries in one day (!) Sao Tome and Bangladesh! What a tonic to get well! Jim Fedor says the last time he talked to me was at Black Rock State Park during one of the infamous outings! I have wondered where you went. Glad to hear you're out on parole. Hi!,...Sam.

ETHOPIA: Radio Ethopia 9560 f/d blue cd. w/ sticker & schedule in 33 ds. after 2 f/up rpts. w/ \$1.00. v/s Miss Woinshet Woldeyes. (Martin-CA). Voice of the Revolution of Tigray 5500 nice 3 pg. 1tr. w/ postcard and a prepared cd. filled= in. This was in 1 mo. for a taped rpt. v/s Fre Tesfamichael.(Berg-MA). same in 3 wks.

(Field-MI). EURO-PIRATE: Weekend Music Radio 6952.6 f/d green cd. w/ ltr. and info. sheet in 3 mo. Jack Russel. (Lobdell-MA).

FINLAND: YLE Radio Finland 15400 f/d "Finnish Coastline" cd. in 60 ds. for \$1.00. Schedule was rcvd. (Weissborn).

FRENCH GUIANA: Radio France In-ternational 11995 f/d "Ant-enna" cd. w/ schedule in 60 ds.(Vaghjee). RFO Guyane 5056 f/d cd. w/ sticker in 2 yrs! for \$1.00.(Dybka-TN). Swiss Radio International 9905 f/d "Solothurn-Inn of the Red Tow-er" cd. in 19 ds. for 1 IRC. Schedule rcvd. (Weissborn-TX).

GABON: Africa No. One 9580 n/d cd. w/ ltr. and stickers in 6 wks. after a f/up rpt. w/ \$1.00.(Myers). Radiodiffusion Television Gabonaise-Chaine 1 7270 1tr. in 150 ds. (Vaghjee).

Lima, 21 de junio de 1996

CN* 257-96-00

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

Patimado amigo:

Recibi su comunicación. Muchas gracias Radio Core del Però, es una ecrisora joven, salimos al aire por primera vez el 01 de enero de 1986. Soy el propietario, pero trabajo 52 años como locutor.

En otrus emisoras he sido locator comercial, enimador, narrador de noticias, comerciarista politico, director, administrador, sub gerenta y genesa. 1804 soy genesa genesal de mi projei notico, y sigo en el microficor, pues hago "Las Noticias..., el radiopertádico de Cora", de 04.30 a 1000 horas. Se trata de un radiopertádico con reductores, corresponsales y crusistas de on JUNE 10/MO IRITHAL DE UNI TRESOPERIODEO CON PERIODEO CONTRIPORADAS Y ENCIRCIDAD (CONTRIPORADA POR CONTRIBUIR DE UN SERVICIO IMPORTANTE Y PERSPONDACIÓN CONTRIBUIDA DESTE LAS 24 horas, com mission variada y chos ediciones mas de "Las Nedicias...".

Teoremos la regunda ristonia en el Perú, donde operan 625 astaciones de AM y FM. Operamos con equipos Electra Bauer de 10 kilowatios. Onda Media, 600 Khz y Onda Corta Tropical, banda de 60 mts., 4915 Khz, con aisterna especial de antenas disentadas en U.S.A., pera duplicar su potencia.

Nuestros estudios se ubican en el Centro Cívico, Paseo de la República Nº 144, ofic. 5, Lima-1, Perú. Teléfonos 433-0848 y 433-1188.

Nuestra Planta de transmisión se encuentra ubicada en el Distrito de Puente Piedra, a 27.5 kilómetros al sur de Lima.

Esperamos contar con su amistad siempre.

Alequamento jaminos. Juan Ramtrez Laro

11.10 RUBUUSULA QUBL 50 YOKE OF ARAKANA

1947 - 1997

via Vaghjee

GERMANY (West): Radio Bremen 6190 f/d "Antenna Towers" cd. w/ booklet in 3 wks. for 2 IRCs (Krepp). Bayerischer Rundfunk 6085 p/d cd. in 18 ds. for 1 IRC.(Neal-TX). Suddeutscher Rundfunk 6030 f/d cd. in 8 wks. for 2 IRCs (returned)(name?) Radio Telefis Eireann 15600 via Julich p/d "Irish Landscape" cd. in 58 ds. for 1 IRC. (Weissborn). same in 55 ds.(McCarthy-GA). 12055 f/d cd. w/ site in 39 ds. for \$1.00.(Kusalik-ALB).

OSL GERMANY (East): Deutsche Welle 9730 via Neuen n/d cd. in 114 ds. v/s B. Klaumann. (Glockner-PA).

HONG KONG: BBC East Asia Relay Station 5990 "Sunset over Hong Kong" cd. in 27 ds.(Hosoya-JPN).

ICELAND: INBS 13860 f/d "Amazing Blue Lagoon" cd. in 3 wks. (Maroti-NY).

INDIA: All India Radio 4850 via Kohima f/d cd. in 10 mo. for ms. (Pitts-MN). 5010 via Thiruvananthapuram p/d personal ltr. direct from site in 7 mo. after a f/up rpt. v/s N.M. Kumar, Station Engineer. (Lobde-RADIO SOFIA

11-MA). in 171 ds. after a f/

(347-2) 570970, 552650 Frequency: 9965 Kliz. up rpt. for 2 IRCs.(Kusalik). 4775 via Imphal f/d "Devidol, Gaurisagar Temple" cd. in

This verifies your reception

23.8.1996

20.32 UTC.

report on our transmission

Date:

Time:

"VOICE OF ARMENIA" Alck Monukian 5

Verevan 25

Republic of Armenia

153 ds. after a f/up rpt.(Kusalik). IRAN: IRIB 9022 f/d cd. in 85 ds. or 2 IRCs. Also rcvd. booklets.(Colton-FL). VERIFICATION SIGNERS: Radio Cultura de Foz Iguazu 6105 Francisco

Pires Dos Santos. Radio Transmundial 11705 via Radio Nova Vis ao Jose Eduardo Dias, Gerente. Addr: C.P. 18300, Sao Paulo, SP. TIFC Faro del Caribe 5055 Mauricio Ramires. Radio Federacion Shuar 4960 Yurank Tsapak Gerardo....via PLAY DX...Sam.

IRELAND: United Christian Broadcasters Ltd. 6202.8 f/d cd. in 2 wks. for an E-mail and a taped rpt. 1.5 kw. v/s Graeme Wilson, Technical Manager. (Berg-MA). <u>JAVA: RRI Jakarta</u> 9680 cd. w/ schedule in 163 ds. for \$1.00.

I also sent stickers, stamps, postcards, etc. v/s Dr. Syamsul Muin Hararap, Station Manager. (Coelho de Castro).

KALIMANTAN TIMUR (Borneo): RPDTk Dua Berau 5692 f/d 1tr. w/ prepared cd. in 118 ds. after a f/up rpt. in IN for \$1.00. v/s

IRAIDIO IFOIR IPICACIE INTIFIERNATIONALL NINTH ANNIVERSARY BROADCAST 1996 Reception Verification Certificate

your reception of RFP1's Math Anniversary "Fiesta-o took place September 17, 1996 from UTC 0000-0400.

adio For Peare International greatly appreciates your interest in this very special event.

Thank you for the opportunity to contribute to your shortwave listening pleasure.

nting LTC September 17, 1967 at UXUI on 7 380 httls with 40 wats of power. In increased its power to 1,000 wats. Today, RFPI operates one 10,000 wast trans-two 2,900 wast transmitters and a 30,000 wast transmitter.



NAME HENE WEST BORN TIME 0009 - 0010 1/11 FREQUENCY 11305 1/11

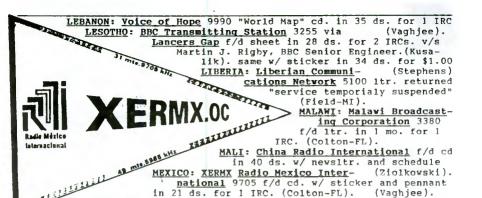
BITT FO BUX BE SANTA ANA, COSTA RICA

M. Auzi, Kepala Stasiun. (Kusalik-ALB). RRI Banjarmasin 3249.5 f/d prepared cd. in 31 ds. for ms. v/s Drs. H. Harmyn Husein. (Martin-CA).

BULGARIA

KOREA, REPUBLIC OF: Radio Korea International 7275 "Cha Bum-suk Writer" cd. in 28 ds. for a JP rpt. Also rcvd. sked. and sticker. (Hosoya).

KUWAIT: Radio Kuwait 11990 f/d folder cd. w/ schedule in 68 ds.(Glockner). same in 30 ds. (Vaghjee).



VERIFICATION SIGNERS: Radio Africa 15185 Terry Kramer, Chief Engineer. Radio Banqladesh 7185 Serajul Islam Khan Saheb, Senior Engineer of the Research and Receiving Centre. Radio Santa Cruz 6135 M. Yolanda Marco, Directora. Addr: Casilla 672, Santa Cruz. Radiodifusora 6 de Agosto 3255 Francisco Evangelista De Abreu. Radiodifusora Londrina 4815 Walter Roberto Manganoti. Radio Rural Santarem 4765 Joao Elias B. Bentes. Addr: Av. Sao Sebastino 622-A, Santarem 68005-090. Radiodifusora Roraima 4875 Francisco Ceraldo Franca, Director Geral. Addr: Avenida Capitan E. Garcer 830, Sao Francisco, 69300 Boa Vista, Roraima. Radio Cancao Nova 4825 Claudia santana...via PLAY DX...Sam.

MOCAMBIQUE: Radio Mozambique 6115 blue "Map" cd. in 45 ds.



Country #100: (Myers-VA).

MOLDOVA: Radio Moscow 7125 via Kishinew f/d cd. in 1 mo. for 1 IRC. Also rcvd. personal 1tr.(Neal-TX).

MOLDOVA (Rep. of Pridnestrovye)
Radio Dniestr International
6205 f/d ltr. w/ postcds. &
schedule in 180 ds. for 1
IRC.(Colton-FL).
OMAN: BBC Eastern Relay Station

15310 f/d 1tr. in 41 ds. v/s Chris Doiman.(Hosoya-JPN). PAKISTAN: Radio Pakistan 9425 "Pakistani Women" cd. in 1

mo.(Vaghjee). 13590 cd. w/details on a piece of paper in 45 ds. v/s Muhammad Ismail, Senior

Broadcast Engineer. (Vaghjee).

PAPUA NEW GUINEA: Radio Madang 3260 very friendly ltr. in 37 ds. after a f/up rpt. for ms. v/s Geo Gedabing, Provincial Programme Manager.(N PERU: Radio Satelite 6725 f/d "Logo" cd. w/ personal (Martin-CA). ltr. in 7 wks. for a SP rpt. and \$1.00. v/s Sabino Llamo Chavez. (Maroti-NY). f/d cd. w/ 2 page ltr. in 6 wks. for a SP rpt. and ms.

RIO MUNI: Radio Africa 15185.7 f/d cd. w/ 1tr. and schedule in 3 wks. via the CA addr. for ms.(Maroti-CA).

RUSSIA: Voice of Russia 7240 f/d cd. w/ postcards, schedule and a personal 1tr. in 169 ds.

(Glockner-PA). 9595 f/d cd. w/ sked.

in 75 ds.(Vaghjee). Voice of the

Mediterranean 12060 f/d

"Auberge de Castille Bldg"
cd. w/ schedule in 18 ds.
after a f/up rpt. w/ \$1.00.
(Kusalik). 12065 and 9765 f/d

cd. in 2 wks.(Field-MI). (Vaghjee). SAIPAN: KHBI 9385 f/d "Antenna" cd. in 150 ds.

SAO TOME: VOA 6035 f/d "Washington Mountain Range" cd. w/ schedule and stickers in 35 ds.(Vaghjee).
7180 f/d "Michigan Grand River" cd. in 35 ds.(Vaghjee).
7290 f/d cd. in 43 ds.(Mann-NE).



Radio Miami International

8500 SW 8th Street, Suite 252

Telephone (305) 267-1728 Fax (305) 267-9253

WRMI CERTIFICADO OSL CERTIFICATE

This QSL certificate verifies that Henry Weissborn Houston, TX-USA heard WRMI on May 11 96 (UTC) at 0102 -0200 UTC on 9955 kliz. Thank you for your report, and we hope you will stay tuned to WRMI.

Studio and transmitter location: Miami, Florida, USA Transmitter power: 50,000 watts Antenna: Corner reflector

Azimuth: 160 degrees

Primary Target: ITU zones 10-16 (Mexico, Central and South America and the Caribbean)

SEYCHELLES: FEBA Radio 15445 "Control Room" cd. in 58 ds. for 1 IRC. (Vaghjee). <u>BBC</u> 9630 f/d personal 1tr. in 26 ds. for

1 IRC. (Neal-TX). SLOVAKIA: Radio Slovakia International 7300 f/d "Map" cd. in 25 ds. for 1 IRC. (Neal-TX). Adventist World Radio f/d cd. in 35 ds. w/ newsltr. v/s E. Gysin. (Ziolkowski) 7215 via <u>Rimavska Sobota</u> "25th Anniversary" cd. in 145 ds. (McCarthy-GA).

SOLOMON ISLANDS: SIBC 5020 f/d "Logo" cd. w/ sked. and form ltr. in 1 mo. for \$1.00.(Maroti-NY). SOUTH AFRICA: Channel Afr-

ADIO KOREA

INTERNATIONAL

ica 7155 via Meyerton "African Village" cd. w/ newspaper and schedule in 38 ds. (Hosoya-JPN). same in 35 ds. for 1 IRC(returned). (Vaghjee). 9525 cd. in 55 ds. w/ schedule.(Vaghjee). BBC 6190 via Meyerton f/d personal ltr. in 1 mo. from the site. (Mann-NE).

SUMATERA: RRI Jambi 4925 f/d prepared cd. w/ very friendly ltr. in 23 ds. for an IN rpt. and ms(used). This after 2 f/up rpts.(Martin-CA). Sorry...the v/s is Buchari Muhammad. RRI Tanjung Karang 3395 f/d prepared cd. in 49 ds. for an IN rpt. and ms.(used). This after a f/up rpt. (Martin-CA). RRI Bengkulu 3264.8 f/d prepared cd. w/ station seal in 108 ds. for an IN rpt. and ms. v/s Drs. Jasran Abu Bakar.

NOTES: Denis Pasquale says QSLing has been slow but he did manage to get one from the Voice of Russia. At least it was something. Thanks for the stickers...Sam, <u>lkenhan</u> says he received a very nice personal letter from the VOA Sao Tome relay station. It came direct from the site even though I sent my report to DC. (It seems backward to me...Sam). The v/s is Charles L. Lewis (ham operator), Sao Tome Relay Station, P.O. Box 522, Sao Tome e Principe, West Africa.... Thanks for the nice information...Sam.

SWITZERLAND: United Nations Radio 10461 f/d UN cd. for * a special broadcast to UN Balkan troops by a low powered transmitter in Geneva. This was in 114 ds.

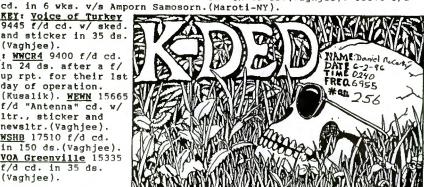
SYRIA: Syrian Broadcasting and Television (Kusalik).

Service 12085 "Globe" cd. in 4 mo. for 2 IRCs.(Mohrmann) TAIWAN: Voice of Free China 11745 "Dragon Dance" cd. in 44 ds. for a JP

rpt. Sticker rcvd. (Hosoya). THAILAND: Radio Thailand 7210 "Queen Sirikit" cd. in 50 ds. (Vaghjee). 9885 "Thai Doll in Dance Costume" cd. in 55 ds.(Vaghjee). 15370 f/d

TURKEY: Voice of Turkey 9445 f/d cd. w/ sked. and sticker in 35 ds. (Vaghjee).

USA: WWCR4 9400 f/d cd. in 24 ds. after a f/ up rpt. for their 1st day of operation. (Kusalik). <u>WEWN</u> 15665 f/d "Antenna" cd. w/ ltr., sticker and newsltr.(Vaghjee). WSHB 17510 f/d cd. in 150 ds.(Vaghjee). VOA Greenville 15335 f/d cd. in 35 ds. (Vaghjee).





Radio Miami International

Radio Telefis Bireann 5065 via WWCR3 p/d "Doors of Dublin" cd. in 77 ds. for 1 IRC. v/s Wesley Boyd.(Weissborn). Radio Hiami International 9955 f/d "Certificado de QSL Certificate" in 186 ds. for SASE. Also

(Stephens-AL). same in

127 ds. for \$1.00.(Mc-Carthy-GA). 6955 f/d

sheet in 1 mo. (Lobdell).

<u>VERIFICATION SIGNERS</u>: <u>Radio Miskut</u> 5770 Evaristo Mercado Perez, Director. <u>Radio East Sepik</u> 3335 Elias Albert, Assistant Provincial Program Manager. <u>Radio Maranon</u> 4835 Luis Tavara, Director. <u>Radio Victoria</u> 6018.3 Marta Flores Ushinahua, Secretary. <u>Estacion Radial Luz y Sonido</u> 6473 Orlando Bravo Jesus, Director. <u>Radio Amazonas</u> 4940 Luis Jairo, Director...via Play DX.....Sam.

rcvd. sticker, schedule and tourist info.(Weissborn).

<u>USA (Pirates): Friday Radio</u> 6954 f/d "Friday Or Bust" sheet in 130 ds.

HORIZONT- RADIO TOTAL BULGARIA

The present QSL - card is the in a series of reports of reception in a period of reception in the series. The last QSL - card will be #CESTIFFHHIE DYNAMICS JAN Frequency Managers

checked and found correct.

KCHZ-SW 6955 f/d orange sheet in 3 wks. for 3 ms. (Lobdell-MA). KAT 6950 f/d sheet in 61 ds. for \$1.00. (McCarthy). 6949 f/d sheet w/ many enclosures and a tape of the broadcast in 62 ds. for 3 ms. (Glockner-PA). Radio Azteca 6950 f/d cd

w/ frog seal in 25 ds. for \$1.00. (Pasquale-PA). 6955 cd. w/ metallic frog attached in 28 ds. for \$1.00. (McCarthy-GA). same in 3 wks.(Field-MI). Radio Fusion Radio 6955 f/d sheet in 2 wks. for 3 ms. and address label(used).(Dybka-TN). same in 2 wks.(Field-MI). Bullfrog Radio 6955 f/d sheet in 2 mo. for 3 ms.(Dybka-TN). WSM 6955 f/d sheet in 25 ds. for \$1.00 via Huntsville addr.(Pasquale-PA). WTNT 6955 f/d color bundle of dynamite sheet in 29 ds.(Stephens). Tellus Radio 6955 f/d sheet "Skull and Crossbones" in 9 ds.(Stephens-AL). Radio Eurogeek 11092 f/d sheet in 25 ds. for \$1.00.(McCarthy). Radio CSA 6955 f/d "Rambo"



Q 8 L Certificado de Bintonia ESPERANZA, CE-609, Onda certa (SW) Banda de 49 m. en 6.090 KHz. de la certifica que for Tenuco. en Republica de Chile, certifica que for MINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

WINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

WINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

WINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

MINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

MINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

MINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

MINONIZADO NUESTRA EMBORA, Rado Esperanza, el día OZ. JAMA, 1998.

MINONIZADO NUESTRA EMBORA, RADO ESPERANDO NUESTRA EMBORADO NUEST de Jennes de Sincipe de La Servicio del La Servicio de La Servicio del La Servicio de La Servici OIO ESPERANZA, de Temuco, Chile, le agradece su des frate malmente en Cristo. 49 METROS Eleazar H. Jara

sheet in 28 ds.(Kusalik). WGLR 6955 f/d sheet in 47 ds.(Kusalik). Radio XANAX 6955 f/d cd. in 17 ds. (Kusalik). Radio One 6950 f/d "Map of the World" cd. w/ studio photo in 31 ds. (Stephens). Radio Two 6955 f/d cd. in 44 ds.(Stephens). Radio KAOS 695! f/d "QSL Certificate" in 3 wks. v/s Joe Mama (i only put these in if they are funny and unique...Sam). (Field-MI). same in 5 wks. for \$1.00.(Lobdell-MA). f/d ltr. in 20

VOICE OF HOPE

LA VOIX DE L'ESPÉRANCE

DIE STIMME DER HOFFNUNG

ds. v/s Roger Wilco. (Stephens). Mystery Radio 6955 f/d sheet in 55 ds. (Stephens). f/d "Plnk Floyd" cd. in 3 mo. for a rpt. to ACE (Stephens). Biq Johnson Radio 6955 f/d cartoon sheet w/ bikini clad babe in 20 ds. v/s E. Normous Johnson. (Stephens). One Voice Radio 6955 f/d blue "Foot w/ Face' cd and a personal note in 11 ds.(Stephens). WRRN World Republican Radio Network 6955 f/d "Dole and Kemp" sheet w/ newsitr. & personal note in 47 ds.(Stephens-AL). AWR 20th ANNIVERSARY

NOTES: Charlie Gaharan says he listened to both broad casts from RTE Ireland and hopes they establish a permanent schedule to the Americas. Jennifer Gri-

EMISORAS ESPERANZA

POR TODA LA TIERRA BALJO SU VOZ Y HASTA EL EXTREMO DEL MUNDO 8US PALABRAS (BALMO 18:4)

via Weissborn



200-4 F.M. STEREO - 108.9 MHZ. CE-609 - ONDA CORTA - 8.090 KHZ. BANDA 49 M

FONO FAX: (58 45) 240161 CASILA 830

TEMUCO - CHILE

ffin took a Spanish course this past summer and is now taking a course in Swedish! I wish I was as daring...Sam

Radio Sparks 6955 via WERC f/d "Leprechaun"

sheet in 15 ds. for \$1.00.(Kusalik). CSHT 6955 f/d sheet for a rpt. in ACE. (Kusalik). WPRS 6955 f/d 1tr. w/ station info. in 28 ds.(Kusalik). K-2000 7415 f/d multi-colored "Logo" cd. in 79 ds. after 2 f/up rpts.(Stephens). Up Your Radio 6955 f/d cd. in 1 mo.(Field-MI). WRV Radio Virus 6955 f/d cd. in 1 mo.(Field-MI).....More pirate QSLs next month.

UZBEK: Radio Tashkent 15295 "Map" cd. in 150 ds.(Vaghjee)
WEST IRIAN: RRI Sorong 4875 p/d ltr. in 44 ds. after a f/up rpt. in in ror ms used,..., ZAMBIA: Radio Christian Voice 6065 p/d (Martin-Ci form ltr. in 146 ds. for ms. v/s Miss 2320 2370 in 受信確認証 in In for ms(used). v/s Drs. Sallomo Hamid. (Martin-CA).

L. Nanyangwe. (Mann-NE). 3330 same in 75 ds. v/s B. Phiri. (Kusalik). p/d ltr. in 11 wks. for \$1.00.

(Myers-VA).

Best of DXing to everyone in the New Year!!!

Hosoya Mosao

長方の受信報告書を確かに受け取りました。 今後も関心をもたれ、KBS 定族として韓日間 の友好親善にご尽力下さいますようお願い申 しトげます

图波数. 1204 受信時間. 21:00-22700 受信日時: 196 8/13

Radio Korea International



Ata hun another wonderful year editing the QSL Column. Keep your reports flowing.

Page 52

Contributors' Page

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

LOGGINGS CONTRIBUTORS-NEXT DEADLINE IS THE 10TH OF THE MONTH

The following members contributed loggings: Brian ALEXANDER, Mechanicsburg, PA Gabriel Ivan BARRERA, Buenos Aires, ARG Jerry BERG, Lexington, MA Erik BUENEMAN, Hazelwood, MO Pedro M.C. de CASTRO, Lorena, Brasil Rich A. D'ANGELO, Wyomissing, PA Ralph FAMULARO, Hyugo-ken, JAPAN Marlin FIELD, Hillsdale, MI John FISHER, Calgary, ALBERTA Bob FRASER, Cohasset, MA Bill FLYNN, Cave Junction, OR Peter HAISHUN, Hurst, TX Bob HILL, Holliston, MA Hans JOHNSON, Englewood, CO Ben KREPP, Chamberlain, ME Harold LEVISON, Philadelphia, PA John LYON, White Bear Lake, MN Steve C. MARTIN, CA William McGUIRE, Cheverly, MD Mark MOHRMANN, Coventry, NY Don MOORE, Brighton, MI Kevin MURRAY, Holliston, MA Gary NEAL, Sugarland, TX Ed NEWBURY, Kimball, NE Marina PAPPAS, Huron, SD Denis PASQUALE, New Brighton, PA Sheryl PASZKIEWICZ, Manitowoc, WI Stephen PITTS, Minnetonka, MN Christos RIGAS, Wood Dale, IL Chuck RIPPEL, Cornland, VA Betsy ROBINSON, Clinton, TN Mike RYAN, Bangkok, THAILAND Giovanni SERRA, Anzio, ITALY Nick TERRENCE, Huntington, NY Mahendra VAGHJEE, Rose Hill, MAURITIUS Lowe Europa 225 100' LW Henry WEISSBORN, Houston, TX

AOR AR-7030 100' LW NRD-525 32m dipole R8 165' LW ATS-803A homebrew antenna Sony ICF-2001D 20m LW MFJ-16010 R8 HF150 AD-DX/SWL Sloper 100' LW ICF-SW55 ATS-803A R5000 LW

R71-A beverages Sony ICF-2003 ICF-SW100S 2m LW R8 DX-Ultra inverted V ICF-2010 indoor LW Sony 2010/whip 120' dipole RW Loop R8 2-500' LW's R8-A 2010 60m dipole 500' beverage R8 R70 YB400

DX-380 NRD-535D V beam @ 180 degrees Sony 2010, various beverages R8 AOR 7030 Beverage and loop antennas Grundig YB-400 WJ-1000 R8 60'Sloper 20' loop R8 indoor dipole DX-440 10m LW R8 NRD-525 60' LW Eavesdropper NRD-535D FRG-7 Eavesdropper RW Loop R-2000 Sony 2010 & 2002 AD Sloper AN-1 R390A R8A R1051H SP-600 51S-1 LW's Sony 2010 Indoor antenna

NRD-525 AD Sloper

Grundig YB500 R8 Sloper SPS NRF-7 SEM QRM Eliminator

Happy New Year!

Dan ZIOLKOWSKI, South Buffalo, NY

Tropical Band Loggings

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

```
UNID 11/5 1032 LA ballads, TC, ID Radio Mar? (Mohr-VT) CUBA R Rebelde 11/19 1037 SP pgm //5025 (Mohr-VT)
2020.5h
2360hp
2460h
              USA WANO 10/28 1047 Cellular 1 ad, ID 2x1230 (Mohr-VT)
                                                                                               11/29
             0800 wx, ID, pops (Alex-PA)
USA WZAN 11/1 1118 EG ID, Goodyear ad, wx 3x970 (Mohr-VT)
COLOMBIA HJVH 10/9 0905 ID, RCN jingle 2x1460 (Mohr-VT)
USA WQEW 10/18 1037 nx, ID 2x1560 (Mohr-VT)
2910h
2920h
3120h
3140h
              DOM REP 12/8 1040 R Amanacer rel tlk //6025 (Moor-IA)
              SUNDAS RRI Mataram 11/21 1324 IN pops, tlk, IDs (John-CO)
3222.9p
3223
              INDIA AIR Simla 11/11 *0043 IS, ID, strings, nx (Fish-NF)
             SUMATRA RRI Bukittinggi 11/10 2307 nx, NA, pops (Fish-NF)
HONDURAS R Luz y Vida 11/17 0252 EG rel, tlks (Ziol-NY)
LESOTHO BBC 11/3 0315 nx, sports (Newb-NE)
CHINA Guizhou PBS 12/7 1438 CH tlks, no EG lesson (John-CO)
3231.9
3249.9
3255
3260t
              NEW GUINEA R Madang 11/10 1054 Pidgin hymn, ID, flute (Famu-JP)
3260
              NAMIBIA NBC 11/20 0404 EG tlk, //3290 (Newb-NE)
PAPUA R South Highlands 12/1 1030 Pidgin C&W, tlk abt
3270
3275
              marijuana (Famu-JP)
              GUYANA GBC 11/10 0900 weal audio (Fish-NF)
UNID 11/27 2033 orch mx, sports? Belarus? (Hill-MA)
3290t
3295U
              ZIMBABWE ZBC 11/3 0315 non-stop hilife in lang (Lyon-MN) 11/13
3306
              0320 Afr mx, EG promos (Newb-NE)
              ADMIRALTY ISL 11/29 1150 long tik, bird call, NA (Lyon-MN) INDIA AIR Bhopal 11/13 *0023 IS, anthem, s/on anmt, SC mx, ID
3315
3315
              TP, Hindi nx //4860 (Fish-NF)
SIERRA LEONE SLBS 11/19 0635 BBC Radio Drama (Lyon-MN)
3316
              GUATEMALA R Maya 11/23 1150 tlk, mx, ID (Ziol-NY)
3324.8
              ZAMBIA Christian Vo 11/6 1445 mx, rel tlk, ID, nx (Vagh-MAUR)
3330
              12/6 2200* EG rel, over CHU (Moor-IA) 11/21 0300 EG rel, ID
              faded (Flyn-OR)
             TAIWAN BCC 11/16 1305 CH nx (Pitt-MN)

NEW GUINEA R Milne Bay 11/1 1057 EG chorus, nx, ID (Mohr-VT)

BRAZIL R Educadora 10/26 0953 anmts, ads, mx, IDs (Mohr-VT)

CHINA CNR 11/18 1330 tlk, march mx (Pitt-MN)

GUATEMALA R Chortis 12/7 1130 ID w/calls, greetings (Moor-IA)
3335
3365t
3375
3375
3380
3385
              BRAZIL R Educ Rural 12/3 1007 ment Jornal Brasil, IDs (Mohr-VT)
3607.50
              JAPAN NHK Tokyo 12/6 1256 JP tlk, TP (John-CO)
3970
              FRANCE? RFI 12/12 0437 FR nx, sfx //4890 (Pasz-WI)
              S KOREA R Korea 10/30 2046 FR pgm (Vagh-MAUR)
FRANCE? RFI in GG 10/30 2035 (Vagh-MAUR)
ITALY IRRS 12/1 0700 EG ID, phone no, UN pgm (Alex-PA)
ITALY SW R Switzerland via IRRS 11/9 2300 after SRI s/off.
3970
3985
3985
3985
              anmts, addr in Basel, 10 kW (Berg-MA)
3985
              ITALY Sunshine Radio over IRRS ID, addr, rock mx (Berg-MA)
3995
              GERMANY DW GG pgm 10/30 2044 (Vagh-MAUR)
              CLAND Vo Iraqi Kurdistan 11/13 0345 martial mx, Call to Prayer
4070
              mx, anmts, nx, seemed diff than 4097 (Fish-NF)
                                                                                11/9 0350
              Koran, ME mx (Alex-PA)
              CLAND Vo People of Kurdistan? 11/8 0344 martial mx, tlk (Alex)
4090.4
4097.5
              UNID 11/14 0349 ME martial mx, anmt, Call to Prayer, ID, Mid-
              night in Moscow march, ID, nx, mx (Fish-NF)
CUBA R Rebelde 11/13 1040 //5025 (Mohr-VT)
4200hp
4202
              UNID 11/14 0344 lang tlk, mx bridge, ment Iran & Kurdistan
              jammed 0348 (Fish-NF)
              CUBA R Rebelde 11/13 1040 //5025 (Mohr-VT)
4260hp
              PERU R Norandina 11/10 0416* flute, ballads, NA (Alex-PA)
4461
4526.6t
              BOLIVIA R Hitachi 12/5 1049 mx, W tlk, poor (Fiel-MI)
4552.3
              BOLIVIA Rdf Tropico 12/7 2316 msgs, tlks (Barr-ARG)
4600t
              BOLIVIA Perla del Acre 10/9 0942 anmts, mx, TCs (Mohr-VT)
```

```
BOLIVIA R 11 octubre 12/7 0953 rel chorus, weak (Moor-IA)
4632.5
                 11/23 0905 rel pgm ID (Mohr-VT) 11/23 0925 tlk, mx (Alex)
                 TAJIKISTAN TR 11/13 *0101 NA, IDs, anmt, mx (Fish-NF)
4635
                 BOLIVIA R Santa Ana 11/19 0325* ballads, Macarena, TC, ID(Mohr)
4649
                BOLIVIA R Paititi 12/7 1013 mx, M tlk, poor (Fiel-MI)
4682.5p
                BOLIVIA R Abaroa 12/7 2337 msgs, folk mx (Barr-ARG)
4719.8
                MYANMAR Vom 12/3 1428 lang tlks, ute QRM (Flyn-OR)
4725
                TAJIKISTAN VoRussia 12/3 1330 nx, ID, song (Famu-JP)
PERU R Huanta 2000 11/25 1029 ID, anmts (Mohr-VT)
4740
4746.8
                PERU R Huanta 2000 11/25 1029 1D, anmts (Mont-VI)
SULAWESI RRI U-P 11/29 2145 tlk, mx (Ziol-NY) 11/4 2207
nx, NA, ID (Pitt-MN) 11/3 1303 IN nx (Newb-NE)
ANDAMAN ISL 11/10 *2324 IS, YL singing (Fish-NF)
SWAZILAND TWR 11/1 0320 Afr tlk, gospel mx, IS (Newb-NE)
INDIA AIR 11/2 1118 tlk, SC mx, Pt. Blair or Leh? (Mohr-VT)
ECUADOR Centinela del Sur 11/19 1100 ID, ballads (Robi-TN)
NIGERIA R Nigeria 11/23 0600 TP, TC, ID, fair (Riga-IL) 11/1
4753p
4760
4760
4760
4770
4770
                 0533 EG public outcry tlk (Newb-NE)
PERU R Tarma 11/11 1032 EG ID, SP Andean mx (Mohr-VT)
4775
                 UNID 12/1 1212 Pacific Isl mx, one EG word, not India (Mohr-VT)
4775
                 GABON RTV 11/30 2259* FR hilife, anmts, fair (D'Ang-PA)
4777
                 BOLIVIA R Andes 11/11 *0934 instl, anmts (Berg-MA) 10/19 0927
Andean mx, ID (Mohr-VT) 12/7 0935 Andean folk mx, ID, drama
4777.7
                 (Moor-IA) 11/23 0934 CP mx, flutes, ID (Alex-PA) ECUADOR R Oriental 11/2 1107 Mx, tlk, ment Monterey (Buen-MO)
4780t
                 MALI RTVM 11/24 0803* FR tlk, Afr folk mx //5995 (Alex-PA) INDIA AIR Itanagar 12/7 1430 EG thru "hour" of 1430 (John-CO)
4785
4790t
                 PAKISTAN Azad Kashmir R 11/10 0148 Call to Prayer (Fish-NF)
4790p
                 BRAZIL Rdf Amazonas 11/15 0055 mx, ID s/off (Ziol-NY)
BRAZIL Rdf Londrina 12/7 0156* ID, anmts, mx, rel (Moor-IA)
BURKINA FASO RTV 11/19 0650 FR Afr pops, ads, ID (Lyon-MN)
4805
4815
 4815
                 11/24 1935 mx, FR, weak (Fiel-MI)
BOTSWANA RB 12/7 2200* lang tlk, Roberta Flack, pops (D'Ang)
4820
                 HONDURAS HRVC 12/11 0530 Encuentro con la palabra pgm (Weis-TX)
 4820
                 11/1 0148 SP preaching (Newb-NE)
                 INDIA AIR Calcutta 11/24 0024 IS but not much else (John-CO)
4820p
                 PERU LV de la Selva 10/26 1014 anmts, pop mx, ID (Mohr-VT)
 4824.4
                 THAILAND RT 12/7 1418 EG tourism pgm (John-CO)
 4830
                 COSTA RICA R Reloj 11/18 0330 musica romantica, drama (Flyn) GUATEMALA R Tezulutlan 11/2 1125 SP, plane sfx (Buen-MO) 11/1 0150 marimba, Indian lang tlk, promos (Newb-NE)
 4831.9
 4835
                 INDIA AIR Bombay 11/13 *0014 IS, anthem, s/on anmts (Fish-NF)
 4840
                 MANCHURIA Heilongjiang PBS 11/30 1245 CH tlks, vcls (Lyon-MN)
 4840
                 GUATEMALA R Kekchi 11/9 1120 NA, mx, ID, tlk (Ziol-NY) 11
0157* Indian tlk, rel, marimbas, ID (Alex-PA)
INDIA AIR Kohima 11/12 *2358 IS, NA, SC mx (Fish-NF) 12/7
 4845
 4850
                 1427 Kenny Rogers, EG nx, lcl ID (John-CO)
UZBEKISTAN UR 11/11 *2350 OC, tones, IS, ID, anmts, nx? (Fish)
UNID 11/30 2100 FR Afr stn, hilife, pops, tlk, Cameroon? but
 4850
 4850
                 non-Cameroon like phone audio (Berg-MA)
                 MOZAMBIQUE RM 10/31 1655 PT pgm (Vagh-MAUR)
 4855
                 AS RUSSIA Chita? 12/7 2358 non-RS tlk, TP, RS tlk (John-CO)
 4860
                 UNID 12/6 1105 mx by same artist, fade 1122 (Fiel-MI)
BENIN ORTB 11/2 2255 FR hilife, excited ID (Lyon-MN)
0558 NA, ID, fair (Riga-IL) Hi Chris!--sp 11/24 220
 4865
 4870
                                                                                          11/24 2205
                 Christian mx, FR s/off B4 2300 (Fiel-MI) 11/20 0520 FR nx(Newb) ECUADOR LV del Upano 11/21 0133* tlk, ID, addr (Alex-PA)
 4870
                 GEORGIA GR 11/13 0202 GG nx //5040 and 1044, ID (Fish-NF)
 4875
                  SITE? VOA 12/1 1300 EG VOA Europe ID, nx, Top 20, too early
 4875
                  for Africans here, CIS testing? (Famu-JP)
BANGLADESH RB 11/11 0001 Koran, tlk, poor (Fish-NF)
 4880
                  INDIA AIR Lucknow 11/13 *0023 IS, poor (Fish-NF) 11/13 1316
 4880
                  lang tlk, mx, interview, flute, ID (Pitt-MN)

BRAZIL R Clube 12/7 0054 pops, IDs, ads, TCs (Moor-IA)

PERU R Villa Rica 10/14 1001 Andean mx, IDs, TC (Mohr-VT)

PAPUA NBC 11/16 1145 EG Amer pops, ID, NA to close (Lyon-MN)

11/4 1150 pop mx, EG ID, NA 1202* (Newb-NE)

BRAZIL R Bare 11/7 0947 PT ment Manaus, FC, dance mx (Buen-MO)
 4885
 4886.5
 4890
 4895
                  10/16 0858 ID, vcls (Mohr-VT)
CHAD RNT 11/4 2201* FR drums, ID, anmts, NA (Pitt-MN)
  4904.5
                  0510 FR tlk show, phone ins, steel drums, mx (Newb-NE)
                  CHINA CNR 11/21 2225 tlk, flute, EG lessons (Pitt-MN)
ZAMBIA ZNBC 12/7 0305 Afr mx, tlk (Moor-IA) 11/24 *0257 NA
  4905
  4910
```

```
no IS, anmts, ID, Afr pops (Alex-PA) 11/4 2204* NA (Pitt-MN)
            11/2 0255 NA, EG anmts, chorus (Newb-NE)
            PERU R Cora 11/1 1035 SP nx (Newb-NE)
4914.5
            GHANA GBC 11/1 2215 Afr chanting (Newb-NE)
4915
            ECUADOR R Quito 1130 ID, nx, mx (Robi-TN)
4919
                                                                 11/1 0156 folk mx,
            canned IDs, promos (Newb-NE)
4920
            RUSSIA? VoRussia 12/3 2010 Moscow Mailbag (Famu-JP)
            HONDURAS R Int'l 11/9 1120 tlk by 2M, IDs (Lyon-MN)
4930
            SITE? R Mayak 11/27 1913 RS tlk, oldies, IS (Hill-MA)
4930
           RRAZIL R Capixaba 10/23 0402 tlk, ID (Mohr-VT)
KENYA KBC 11/13 2007 US pops, EG tlk, NA 2109* (Ripp-VA) 12/8
2108* EG vcls, ID, nx summary, NA (D'Ang-PA)
PERU R Tropical 11/11 1036 laughing, tlk, TC, ment Tarapoto
4935
4935
4935p
            (Mohr-VT)
            UNID R Norte de Montero 12/7 2226 ID, rel pgm (Barr-ARG)
4939.3
4940p
            INDIA AIR Guwahati 11/24 0014 IS, tlk, NA (John-CO)
4940
            VENEZUELA R Amazonas 11/29 0945 mx, IDs (Fiel-MI)
                                                                          12/4
            *0901 anthem, ID, anmts, mx (D'Ang-PA)
4949.8
            ECUADOR R Bahai 11/11 0915 weak w/full ID (Berg-MA)
            KASHMIR AIR Srinagar 11/12 *0119 IS, NA, SC mx, nx (Fish-NF)
VIETNAM HS 12/7 1425 EG lessons, CH lesson (John-CO)
4950
4959.6
4960
            ECUADOR R Federacion 11/9 0056* pops, SP rap, NA (Alex-PA)
            MADAGASCAR RM 10/11 1130 pops, tlk, ad (Vagh-MAUR)
4960
4960
            SITE? VOA 12/17 0300 Daybreak Africa, 4750 not on (Pasz-WI)
4965
            BOLIVIA R Juan 23 11/21 2300 dance mx, flute/drum to 0030*
            s/of w/o NA, some IDs (John-CO)
PERU R San Miguel 11/17 1010 ID, mx (Mohr-VT) 12/8 0046
4965.8
            tlk abt quackery in Cusco, folk mx (Barr-ARG)
SABAH RTM Kota Kinabalu 11/21 2135 numbers & anmts, tlk, weak
4969.9t
            & choppy like other Malaysians (Hill-MA)
            VENEZUELA Ecos del Torbes 11/1 0243 SP pop, tlk (Newb-NE)
4980
            CHINA Hunan PBS 11/25 1410 CH monologue (Flyn-OR)
4990
            PERU 11/5 0920 Andean mx, ID (Mohr-VT)
4990.9
            SURINAM R Apintie 11/6 1040 tlk, pop mx, ads, ID (Lyon-MN) 11/12 0850 chorus, poss rel pgm //820 (Fish-NF) 11/30
4990.9
            0406* DT anmts, jazz, NA (Alex-PA)
HAWAII WWVH 11/2 0525 TC by W (Newb-NE)
5000
5003.6
            RIO MUNI RN 11/30 2202* SP instls, NA (D'Ang-PA) 11/22 2159*
            hilife, NA (Alex-PA) 10/29 2026 mx, SP tlk, QRM to WWV (Vagh)
            11/9 0525 SP tlk, mx (Newb-NE)
NEPAL R Nepal 11/11 *0011 IS, anmt, singing (Fish-NF)
MADAGASCAR RM 11/27 1858 mx, tlk (Hill-MA) 12/17 030
5005
5009.5
                                                                  12/17 0301 IS,
            INDIA AIR Thiru. 11/11 *0018 ID, SC mx, nx (Fish-NF) 11/13
5010
            0018 IS, mx, tlk (Berg-MA)
5010.3
            ECUADOR Esc Radiofon 10/11 0917 ID, Andean mx, ads (Mohr-VT)
            TURKMENISTAN TR 11/11 0117 Asian strings, Orbita pgm (Fish-NF)
5015
5015.6
            PERU R Juliaca 11/20 2351 ads, ID, flutes (John-CO)
            NIGER LV du Sahel 11/30 2205 Afr pops (Ziol-NY)
                                                                         11/21 2201*
5021.3
            FR drum mx, anmts, prayer, flute, NA (Pitt-MN)
5025
            BENIN R Parakou 11/30 2301* FR pops, ballads, NA (Alex-PA)
            CUBA R Rebelde 11/19 0323 sports, questions abt provinces(Flyn) 11/19 1200 nx abt Castro in Rome (Robi-TN)
5025
5030
            COSTA RICA AWR 12/1 1238 prayer for victims of Oklahoma bombing
            anti-violence tlk (Famu-JP)
            SARAWAK R Malaysia 11/10 1233 tlk in lang, Koran (Famu-JP)
5030
            CENT AFR REP 11/16 2055 mx, FR tlk, NA (Ziol-NY) ECUADOR LV del Upano 11/15 2334* rel mx, ID, echo (Alex-PA)
5034
5040
            GEORGIA GR 10/29 1945 class mx, tlk, piano (Vagh-MAUR)
SUMATRA RRI Pekanbaru 11/30 1704* IN vcls, SCI, nx (Flyn-OR)
5040t
5040t
            UNID 11/23 0230 SP ballads, tlk, Yopal? (Alex-PA)
5040
            BRAZIL R Cult do Para 11/21 1000 ID, poor (Ziol-NY)
5044.9
5047
            TOGO R Lome 11/20 0515 FR nx (Newb-NE)
            ECUADOR R Jesus 11/8 0220 anmts, ID, ads, jingles (Alex-PA) IRELAND? RT Radio 1 11/30 1116 EG ID, nx (Newb-NE)
5050.4
5070
5076.8
            COLOMBIA Caracol 11/1 0140 SP tlks (Newb-NE)
5085
            USA WGTG 11/18 0325 rel pgm w/800 numbers (Buen-MO)
                                                                              10/9
            0834 testing, IDs (Mohr-VT) 11/10 0450 EG North of 49 (Flyn) CHINA CNR 11/21 0950 CH tlks, strong & fluttery (Ziol-NY)
5090
            11/21 2235 tlk, nx //5125 (Pitt-MN)
5100
            LIBERIA R Liberia 11/15 2254 Afr chorus, ID, panel discuss,
            also 0533 devotion, anmt, ment Cuckoo's Nest Bar Restaurant
```

No.

(Fish-NF) 11/21 2250 EG Afr mx, pol speech, ID (Pitt-MN) COSTA RICA R Alajuela 11/14 1104 rancheras, TC, Happy Birthday 5119.7h song, IDs 4x1280 (Berg-MA) CHINA CNR 11/16 1145 CH tlk, mx, TP 1200 (Ziol-NY) 5125.1 PERU R Apurimac 12/7 2257 folk mx, ID, ads (Barr-ARG)
AS RUSSIA Krasnoyarsk R 11/11 1134 RS? tlk (Mohr-VT) 11/12 5235.2 5290p 2155 tones, OC, TP, tlk (Ziol-NY) CHINA CNR 11/12 0950 CH tlk, mx, TP (Ziol-NY) 5320 5385.3 PERU R Huarmaca 11/21 0045 ID, mx, echo anmts, tnx PFA (John) 5407.2 CLAND Vo Prov Govt 12/7 2339 Cambodian tlk (John-CO) CLAND Vo Tigray Rev 11/13 *0325 IS //7515 & 4999.8 echo anmt 5500 tlk (Fish-NF) 5504.2t BOLIVIA R 2 de Febrero 11/26 2358 horn mx, anmts, accordion, no echo or sfx (John-CO) PERU R Sudamerica 12/1 1050 SP pgm, mx, echo anmts (Mohr-VT) 5522.6p PERU R Ilucan 10/26 1032 Cutervo Canta y Baila pgm, IDs (Mohr) 5619.2 5645.9 PERU LV de San Antonio 11/15 0131 Andean mx, ID (Mohr-VT) 11/29 0407* OA mx, anmts, echo, ads (Alex-PA) N KOREA KCBS 11/12 1226 lite piano, fair 2x2850 (Famu-JP) PERU R Santiago 11/21 0040 on later than thot (John-CO) 5700h 5700 5700 PERU Frec San Ignacio tent 11/23 0050 poor w/mx pgm (Fiel-MI) 12/8 0233 cumbias, IDs, FC, mx (Barr-ARG) NICARAGUA R Miskut 11/9 2335* pops/ballads, ID, NA (Alex-PA) CHINA CRI 11/24 1150 CH vcls, weak & fluttery (Ziol-NY)

Eric, thanks for the Christmas card. Hope 1997 is full of great DX! This month reporters from 16 states, 1 province & 3 countries! Thanks to all who contribute. Next deadline January 17.

5770 5850

Your editor just bought a Select-a-Tenna MW antenna as advertised in some radio magazines. This is the first time I have used any type of loop. It works really good compared to a stationary antenna. couple days after it arrived, Ken MacHarg featured KJNP on DX Party Line. They are located in North Pole, AK, and they said they sell many of these to help listeners hear KJNP better!

The Bucks are doing all right this year. I saw them play Charlotte 11/30. They lost but still a good game. I've got two more games coming up in the new year, Philadelphia and New York.

There have been some great African openings in the evenings. Here's one tip--if the 9 and 11 MHz bands are pretty dead, check the lower frequencies in the tropical bands.

VOYAGEUR VI.1 for DOS

The newest database suite from Orchid City Software has just been completed. It is the Voyagaur version 1.1 Radio Database for DOS. The Voyageur v1.1 is a comprehensive suite of database programs for Broad-cast Radio Station's information geared towards the Radio DXet on Listent. The program includes RADIO STATION DATAFILE - UTILITY LOG WRITING - RADIO STATION ADDRESSES: RADIO STA-TION SLOGANS - RADIO STATION DX/SWL PROGRAMS. Each of the database programs in the suite is easy to use with extensive sorting plans. The Yoyageur v1.1 is completely read/write and can be updated, changed or data added. Each database contains thousands of records already. To receive your copy send \$29.95 to

> ORCHID CITY SOFTWARE P.O. Box 18402 West Palm Beach, FL 33416

IBM Compatible, 3.5 HD diskettes unless otherwise specified. U.S. Funds Only. Overseas Orders Add \$10.00 for additional postage

International Band Loggings

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

5905	HUNGARY R Budapest in EG 0225, short wave DX pgrogram, ID (Paszkiewicz WI 11/14)
5905	NORWAY R Norway Int in EG 2315, feature on winter weather, f (Fraser MA 11/10)
5910nf	GERMANY West Coast R Ireland relay in EG 0130, ID, read recep rpts, Irish mx (Field MI 11/21)
59246	VIETNAM VoV Hanoi in lang 1143, tilk, ballads, ID?, NA, p, //10060 (Mohrmann VT 11/23)
5960	CANADA R Japan relay in EG 0300, ID, world & natl nx, elections in Japan (McGuire MD 11/18)
5970	BRAZIL R Itatiaia in PT 0812, lite pops, ads, TC, wiped out 0326 w/ Netherland s/on (Moore 12/8)
5975	ANTIGUA BBCrelay in EG 0105, report on Chernobyl nuclear plant, ID (McGuire MD 12/1)
6010	MEXICO R Mil in SP 1025, ID, Mexican mx, TC's (Rigas IL 11/17, Weissborn TX 11/12)
6035	COLOMBIA LV Guaviare in SP 1023, live coverage of local festival, R Marti QRM (Moore 12/7)
6040	CANADA RCI in SP 0030, world nx, tlk of shutting down RCI 3/31/97 (Weissborn TX 12/11)
6040	BRAZIL R Clube Paranaense in PT 0830, Xmas message, TC, ID, ads, jingle, pops (Moore 12/8)
6045	GERMANY R Nederlands relay in EG 1319, "Research File", s/off anmt 1325 (Famularo JAPAN)
6055	JAPAN R Tampa Tokyo in JP 1020, drama, instrml mx, tlk/laughter (Vaghjee MAURITIUS 11/1)
	in JP 1235, saxophone mx, jazz, tlk between songs, TC, ID "Tampa", nx (Ziolkowski 11/17)
6095	VATICAN STATE Vatican R in IT/EG 0249, tlk on Hong Kong development (Newbury NE 11/1)
6110	CANADA R Japan relay in EG 0500, feature "This Week", many subjects (Weissborn TX 12/7)
6135	BOLIVIA R Santa Cruz in SP 0910, Andean mx, nx, L AM mx, 1D (Newbury NE, Lyon MN 11/13)
6140nf?	SPAIN REE in SP 2029, OM anneing Barcelona vs Real Madrid soccer match, f (Famularo JAPAN)
6155	AUSTRIA RAI Vienna in EG 2251, tlk on airport security services, ID, QTH (Newbury NE 11/4)
6160	ANTIGUA D Welle relay in EG 0936, tlk on agriculture, fqys, ID, off 0950 (Bueneman MO 11/20)
6160	CANADA CKZN St Johns in EG 0955, NA, lite vcl mx, ID, relay MW CFCB (Bueneman 11/20)
6265nf?	ZAMBIA ZNBC in lang 0402, nx?, fish eagle IS, ID, many ments Zambia, drums (Berg MA 11/11)
6480nf?	PERU R Altura Huarmaca in SP 2345 to as late as 0500, s/off at different times, ID's, mx sels, TC's
	signal slowly improves as nite progresses (Field MI) ED: Probably moved from 7143.
6550	LEBANON VO Lebanon Beirut in AR 2019, pop mx, ads, Macarena mx, g (Fisher NF 11/10)
6570	MYANMAR Def Forces BC in lang 1227, pleasant SEA vcls, f, f/o 1245 (Murray MA 11/30)
7110	ETHIOPIA R Ethiopia in Amharic 0345, long tlk, vol AR mx, ID, nx, f (Lyon MN 11/29)
7115	MONACO TWR in EG 0816, "Insight for Living", Christmas spec pgm (Weissborn TX 12/10)
7115	BOSNIA R Yugoslvia relay in EG 0100, nx, cmntry, ID, feature (Levison PA, Flynn OR 11/22)
7130	TAIWAN VOFC Taipei in EG 1210, nx, 1D, "Jade Bells & Bamboo Pipes" (Newbury NE 11/14)
7143nf?	PERU R Ayabaca in SP 2348, TC, ID, Latin vcls, some ham QRM (Johnson CO 11/23) in SP 1100,
, 145111	musical pgm, ID garbled (Field MI 11/22) ED: PWBR lists R Altura but see 6480 above.
7145	THAILAND R Thailand in JP/CH/Thai *1301, ID in EG, wx rpt (Famularo JP, Murray MA 11/30)
7165	ETHIOPLA R Ethiopia in AR 1405, nx, ID, AR mx (Johnson CO 11/23) PWBR lists EG at 1600.
7200	SUDAN Rep of Sudan R in AR *0256, IS, NA, TP, ID, chants (Lyon MN, D'Angelo PA 12/1)
7215nf?	
7213111	QATAR QBS in AR *0243, IS on string instrut, clear ID 0245 (Fisher NF 11/14) Move from 7210?
	SWEDEN R Sweden in EG 0153, fqys, tlk on psychological problems, ID (Newbury NE 11/3)
7305	KAZAKHSTAN R Nederlands relay in EG, ID's, nx, Yeltsin to have heart surgery (Newbury 11/5)
7325nf?	AUSTRIA RAI in EG 0035, rpt on Cent European Inst meeting, no ID rptd, g (Fraser MA 11/10)
7335	BULGARIA R Bulgaria in EG 2045, rpt on decline of Black Sea Fisheries, g (Fraser MA 11/11)
7405	CHINA China R Int Jinhua in EG 1450, tlk on unfairness of U.S. Helms-Burton law (Newbury NE)
7430	GREECE RS Makedonias in GK 2130, call-in show, ID w/ment of 102 FM, QRM (Rigas IL 11/29)
7475	TUNISIA RTV Tunisienne in AR 2250, AR vcls, nx, fqy, mention Tunis, g (Lyon MN 11/23)
7480	CHINA Swiss R Int relay in EG 1323, rpt on child labor in poor nations (Famularo JAPAN 12/3)
7620	CHINA CPBS Beijing in CH 1320, Taiwan 1 xmsn, Western pops, tlk, f (Rigas IL 11/23)
9445	TURKEY V of Turkey Ankara in TK/EG 2220, native mx, into EG 2300, //9460 (Terrence 12/2)
95047	PERU R Tacna in SP 1015, huaynos, TC, ID 1030, p (Moore 12/8) in SP 2245, lcl nx, ad block,
	ID's sounded like R Tarma?, blotted out 2257 by R Veritas Asia s/on (Johnson CO 12/7)
9515	BRAZIL R Novos de Paz in PT *0901, Christmas mx, relig tlk, canned ID, f-g (Moore 12/8)
9515	BURKINA FASO(t) R Burkina in lang/ FR 0840, Afro mx, drums, ID7, g until 0900 (Moore 12/8)
9535	ANGOLA R Nacional Luanda in EG 1920, tlk, flute mx, ID, Afro pops (Lyon MN 11/9)
9535	JAPAN R Japan/NHK Tokyo in EG 1430, "Magazine Hour", Kabuki theater (Newbury NE 11/1)
9565	GERMANY D Welle Wertachtal in EG 0640, Euro econ nx, cmntry, f-g (Famularo JP 11/12)
9570	PORTUGAL RDPI Lisbon in EG 0430, sked, nx, Musical Kaleidoscope (Paszkiewicz WI 11/20)
9605	MADAGASCAR R Nederlands relay in EG 1950, "Sincerely Yours" feature, g (Fraser MA 11/10)
9615	AUSTRALIA RA Darwin in EG 1720, rock mx, oriental flutes, //9860, 11880 (Bedford TX 11/29)
9640nf	
	BOTSWANA R Botswana in Vern/EG 0256, IS, soul mx, UN pgm, g, //4820 (Murray MA 11/30)
9650	CANADA R Korea relay in EG 1130, nx, interview, country on exodus of 17 N Koreans to Hong
0660	Kong, S Korean president to visit Japan (McGuire MD 11/20, Weissborn TX 12/6)
9650	URUGUAY Emis Ciudad de Montevideo in SP 1917, mx, ads, ID, //MW outlet (Barrera ARG 12/7)
	D 50

BRAZIL R Marumby in PT 0934, ID, anmts, Bible verse, sked of fcl meetings, f-g (Moore 12/8) 9665 BRAZIL R Cancao Nova in PT 0911, choral relig mx, g, //4825 weak (Moore 12/8) 9675 9705 MEXICO R Mexico Int in EG 1500, nx re Mexican support for Guatemala, mailbag (Pasquale PA, Weissborn TX) in SP 1350, lively Mex mx, full ID, tlk (Vaghjee MAURITIUS, Rigas IL) MONGOLIA R Ulan Bator in RS/EG 1925-1956, in RS to 1930, ID into EG pgming (Moore 12/7) 9745 in EG 1937-1959*, interview w/laughter, econ review, tlk, nx, QTH (Vaghjee MAURITIUS) ECUADOR HCJB Ouito in SP 1309, lite ballads, tlk, ID 1314, fgvs, f (Famularo JP 12/3) 9765 ARMENIA V of Armenia in EG 2129, tlk on Armenian history, nx, IS (Flynn OR, Moore 12/7) 9965 110925usb ST HELENA R St Helena in EG *1900-2303*, special one day pgm on 10/27, phone-ins, Western mx, info on St Helena, Tony Leo host, s/on w/IS, NA, ID (Pappas SD, Mohrmann VT) INDIA AIR Bangalore in lang? 1700, percussion mx, sitar, vcf w/shouting, //11620 (Newbury NE) 11585 NETHERLANDS RN Flevo in EG 1823, sex, AIDS & the cultural revolution, ID (Newbury NE) 11655 JORDAN R Jordan Amman in EG 1553-1715, phone-ins, quiz, nx, lcl wx, ID, semi-classical mx, 11690nf rpt on Israel vs Palestine (Pickard IL 12/16, Newbury NE 11/10, Flynn OR 12/2) NO KOREA R Pyongyang in EG 2320, cmntry on "murderous So Korean regime" (Pasquale PA) 11700 11705 BRAZIL R Nova Visao in PT 0938, Christian pop vols, ID as "R Trans Mundial" (Moore 12/8) 117341 TANZANIA V of Tanzania Zanzibar in SH 1750-2000, tlk, flute mx, hi-life mx, ID & anmts on hr, nx, ME mx, prayers, NA at 1959 s/off (Krepp MA 11/17, Moore 12/7, Paszkiewicz WI 11/18) BRAZIL R Guaiba in PT 1003, rustic guitar mx & tlk, p/heavy splatter from 11780 (Moore 12/8) 11785 11800 ITALY RAI Rome in EG 0145, pop mx of 50's, ID, nx, //9675 (Newbury NE 11/7) BRAZIL R Brasil Central in PT 1007, TC "en Goiania", into rustic mx, f (Moore 12/8) 11815 BRAZIL R Anhanguera Goiania in PT 0002, L Am nx, traffic rpts, TC's, ads, f (Flynn OR 11/15) 11830 11895 FRENCH GUIANA R Japan relay in EG 0500, world nx, lcl mailbag, into SP 0530 (Weissborn TX) 11925 BRAZIL R Bandeirantes in PT 0339, tlk on Brazilian issues, exc (Moore 12/7) in PT 0850, ID, Icl ads, "Informacion", nx/tlk format, jingle ID, f-p (Bueneman MO 11/20) ROMANIA R Romania Int in EG 1300, rpt on Rom troops w/UN in Angola, g (Pasquale PA 12/9) 11940 11960 ECUADOR HCJB Quito in EG 2100, "Mountain Meditations", relig reading, g (Fraser MA 11/17) SAO TOME VOA relay in EG *1800, nx, "Encounter" meaning of Clinton's win (Flynn OR 11/17) 11975 11990 KUWAIT R Kuwait in EG 1838, nx re efforts of Canadians in Zaire, f (Pasquale PA 11/29) VIETNAM V of Vietnam in EG 1230, ID, nx, vcls, string instrumentals, g (Robinson TN 11/18) 12020 MONGOLIA R Ulan Bator in JP 1247, traditional Mongolian ballad, anmts, pop songs to 1259 12085 abrupt s/off - perhaps an extension of published 1200-1230 JP xmsn, BBC QRM (Murray MA 12/1) CZECH REPUBLIC R Prague in EG 1400, ID, nx rpts, into CZ 1430 (Robinson TN, Rigas IL) 13580 13655 PHILIPPINES VOA relay in CH 0200*, tlk, VOA theme, ID in EG, jamming (Famularo JP 12/1) 13685 FRENCH GUIANA China R Int relayin SP 0240, CH pop mx, history lesson (Weissborn TX 12/10) BELGIUM R Vlaanderen in EG 1400, nx re cutack on R Vlaanderen xmsns (Pasquale PA 12/9) 13685 CUBA R HC in EG 2105, nx re Texaco's "racial & environmental scandals" (Fraser MA 11/15) 13725usb AUSTRIA RAI in EG 1330, ID, nx on exploitation of working children, exc (Robinson TN 11/18) 13770nf? MARIANAS IS R Free Asia via KHBI in CH 2359*, march bridges, ID in EG, vg (Flynn OR 12/2) 13800nf? 15120nf NIGERIA V of Nigeria in lang? *1454-2000, Afro/reggae mx non-stop, nice lively fare but no anmts or ID's, abrupt s/off 2000 (D'Angelo PA 12/1, Flynn OR 11/11, Terrence 12/1) 151605 ALGERIA RTV Algerienne in EG 1653, "Week in Review", sports results, sked (Flynn OR 11/9) 15167 SOCIETY ISLANDS RFO Tahiti in FR 0115, French & US pop mx w/DJ, f (Lyon MN 11/14) ZAIRE La Voix du Zaire(t) in FR1832, distinctive Cent Afr mx, no ID rptd, p (Fisher NF 11/11) 152446nf? RWANDA Deut Welle relay in EG 2100, rpt on situation in Zaire, ID, g (McGuire MD 11/26) 15270 SAUDI ARABIA BSKSA in Urdu 1210, prayer, tlk on "Namaz", AR mx, ID (Vaghjee 11/10) 15345 15400 FINLAND YLE R Finland in EG 1240, ID, rpt on monetary units in Finland, g (McGuire 11/20) BRAZIL R Nac Brasilia in EG 1247, BR folk & pop mx, movie songs in PT/EG, ID (Newbury NE) 15445 15445nf? ROMANIA R Romania Int in SP 1300, ID, nx of S Africa, Moldova etc, IS, g (Robinson TN 11/18) 15615 ISRAEL Kol Israel in FR 1430, ID, nx of Arafat & Peres, Tel Aviv, "Shalom" (Robinson 11/18) NETHERLAND ANTILLES RN relay in EG 1830, "Newsline", features, ID (Weissborn TX 12/9) 17605

17780 GERMANY D Welle Wertachtal in EG 1104, "World AIDS Day", Ukraine closes another nuclear plant at Chemobyl, space-shuttle walk cancelled, ID, f-p (Famularo JP 12/1) 21705 SLOVAKIA R Slovakia Int in EG 0840, press comments, ID, //17845, f-p (Famularo JP 12/1)

CLANDESTINE STATIONS

SO KOREA V of the People in KR 2315, xmsn to N Korea, //6600, readable (Johnson CO 12/7) 6518 SOMALIA(p) R Mogadishu? in lang 0351, Horn of Africa styled string mx, f (Fisher NF 11/10) 6940 8300 CHINA New Star BC in CH 1352, YL reading numbers, o/c to 1359, flute IS, ID repeated twice, IS resumed 1403, no sign of sometime //'s 9725 & 11430 (Johnson CO 11/24)

NOTES

Report from Barrera (Argentina): LRA36 Radio Nacional Arcangel San Gabriel (Antarctica) which xmts on 15476 & is curently inactive will return approx March 97. Base Esperanza is undergoing personnel changeover now. New funds have been alloted to Antarctic base. During this summer in the Antarctic, personnel will profit from the natural light for maintenance of the Bases and they plan to reactivate LRA36 on shortwave by next March.

Last Minute Mail: A new contributor (Wilder Pickard II of Evanston, IL) sent in his logging of Radio Jordan and it arrived here just as I was typing this page. He rpts that he uses a Drake R7 and random wire. Unfortunately, I did not have time to advise Fred Kohlbrenner in time to get in the credit page.

IO YEAUS AGO...

Radio Berlin International was still on the air...

PAANO MOEKBA HAS BROADCASTING PROPAGANDA...

and the legend of the Pink and Purple Room was born...

Winter SWL Festival

March 13-15, 1997 Holiday Inn Sumneytown Pike Kulpsville, Pennsylvania

We will officially open the Tenth Annual Winter SWI, Festival Forums on Friday morning and continue all day Saturday. As usual, there will be door prizes, station freebies, (please bring items to be donated for the silent auction), and a banquet on Saturday night. Bring items for sale or swap for an equipment swap meet on Friday afternoon. Also bring your receivers to let others try out!

· HHEAVIE

The Forums will include:

Longwave DXing

Address City Circle:

TULL.

	76	• recu tobic	S trom nester, kippet & Buci
 Medium Wave 	DXing • TV/TM Dxing	· Collectors	
 SW DXing 	• Pirates	• And More	To Be Announced!
Registration Opt	ions-		
FULL	— Includes forums, hospitality room, kuncl	handbanquet -435	2
PARTIAL.	— Includes forums, hospitality room but N		Ch!
SPOUSE	— Includes hospitality room and meals	- *19	
GRAND PRIZE	l'o be announced		
SPECIAL Regist TREE entry towa	er early and win a SW portable! Your registr rds this early bird registration door prize.	ation received by midnight Februa	ry 11, 1997 will allow you one
Please bring iten	ns for the Silent Auction. Proceeds are donat	ed to charity.	
Inn at (215) 368	e made payable to WINTER SWL FEST. Regis 800 As soon as possible! Special rates - 859 erefer to this to get the special room rates. I Info.	single, \$64 double. Our function co	de with the hotel is WINTER
The Holiday Inn the south with t	is located at EXIT 31 of the PA Turnpike Nor ne Blue Route—ask for details. Limo service i	theast Extension-Lansdale Intercha s available from Phila. Intl Airport d	nge. Improved access from
Please submit th	e following form with your registration amo	ount or send for more information t	0:
	WinterS	WLFestival	
1,	POI Colman	Box 591	101
	Colmar	: PA 18915	
Name			

PARTIAL. SPOUSE (Spouse Name Banquet - Check: Roast Beef____ Chicken Registration Fee Enclosed: Tickets Fee Enclosed: I wish to purchase _____ raffle tickets (\$1 ea./ 6 for \$5/ Special 13 for \$10) Total check/money order enclosed:

Registration cancellations after 2/28/97 cannot be refunded, however we will refund raffle ticket money if you have to cancel.

COME JOIN US IN CELEBRATING TEN YEARS OF COMPADESHIP!

E-mail address if available to verify registration

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.







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!



SHORTWAVE

52 Park Avenue • Park Ridge, New Jersey 07656





ORDER TOLL-FREE 1-800-GILFER-1 (In NJ 201-391-7887)





New Gilfer Internet Addresses: E-Mail: info@gilfer.com • Web: http://www.gilfer.com

North American Shortwave Association 45 Wildflower Road Levittown, Pennsylvania 19057

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

FIRST CLASS MAIL



ISSN 0160-1989

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 1905'

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,

128 Greenoak Blvd., Middletown, NJ 07748

Shortwave Center: Hans Johnson, 8121 S. Poplar 204D, Englewood, CO 80112

Easy Listening: Richard Cuff, 1016 Chestnut Ridge Drive, Timonium, MD 21093-1716

NASWA Portraits: Jerry Klinck, 43 Lein Road, West Seneca, NY 14224

Listener's Notebook: Al Quaglieri, P.O. Box 888, Albany, NY 12201-0888; Chris Lobdell, P.O. Box 146, Stoneham, MA 02180-0146

Technical Topics: Joe Buch, N2JB, P.O. Box 1552, Ocean View, DE 19970-1552

QSL 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 P.O. Box 2275, Vincentown, NJ 08088-2275

Listener's Library: Skip Arey, WB2GHA P.O. Box 644, Waterford Works, NJ 08089

Destinations: Don Moore, 11434 140th St., Davenport, IA 52804-9538; Al Quaglieri, P.O. Box 888, Albany, NY 12201-0888

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) ... Canada & Mexico (First Class Mail)\$27.00 Overseas (ISAL Mail): Central & South America and Europe \$29.00 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.mcs.com/~ralph/html/naswa/

