

NASA

the JOURNAL

NORTH AMERICAN SHORTWAVE ASSOCIATION

VOLUME XXXVII NUMBER 2

FEBRUARY 1997



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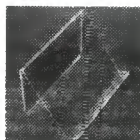


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By T.J. "Skip" Aray. Here is a very readable guide to listening to medium wave, shortwave, VHF and above. The ANARC review says, "Never has so much useful information about getting started in so many aspects of radio monitoring been packed into one book... should grace the shelf of anyone in the radio hobby." We agree. ©1997 Index 337 p. Order #3462.....\$19.95 (+*2 Shipping)

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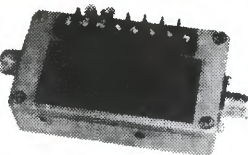


in radio technology with the centuries old clockwork spring. Winding the crank for only 20 seconds provides 30 minutes of listening. This has to be the most ecologically friendly radio ever produced. Weighing less than 7 pounds, it is the ultimate camping or emergency radio. Here is assured radio performance, 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 **\$99.95 (+*5 UPS)**

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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

Congratulations to former editor and long time NASWA member **Bill Matthews** who was the "world winner" of the 10th annual Adventist World Radio DX Contest held in late 1996. Bill becomes the first American to be a world winner! His 115 points outdistanced **Borje Nilsson** of Sweden (113 points) and **Heinz Haring** of Austria (105 points). Contest coordinator, **Adrian Peterson** reports being overloaded with mail for this year's event and looks forward to the 1997 contest scheduled for October. Follow the Calendar of Events for updates. Based on the results, Adrian notes that AWR has issued close to 150 different QSL cards over the past 25 years. It was thought that about 125 different QSL's were issued before the contest.

Country List Chairman **Don Jensen** sends a correction and update along with new year greetings. Georgian S.S.R. (Abkhazia), like Georgian S.S.R. itself, should be under Asia, not Europe. Also, with the recent activation of Dr. Gene Scott's shortwave Caribbean Beacon, the Country List Committee has added Anguilla to the NASWA Country List. As is the case with other West Indian islands, this will be listed under North America. Thanks for the update dnj!

We are just a little over a month away from the 10th Winter SWL Festival. It's time to make sure your reservations have been made with the hotel and your registration is in the mail. As usual, your club will be represented at North America's premiere gathering of radio hobbyists. I look forward to seeing many of our club members at the FEST. I'm looking forward to the annual midnight Saturday ride of **Pancho Villa** once again. Anyone remember which FEST issued the popular, and infamous, "Pancho sez Ola Amigos!!!" coffee mug?

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 W2XQ, Hausie WB4JSP, Dave Kirby N1DK, ex-N8JQX, and Bob Curtis W1EXZ host 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>.

European DX Council Secretary-General **Risto Yahakainu** tells us that the dates for the 1997 gathering have been changed. The new dates are 6-9 June 1997. It will be held at the Hotel Lazne in the eastern part of the Czech Republic and will be organized by the Czechoslovakian DX Club. Check the revised Calendar of Events for additional information.

Once again, a brief reminder. I have a special request to make to long time NASWA members. I am looking for "Frendx" bulletins prior to August 1966 (the month/year we became all shortwave broadcast). I would like to expand the "25 Years Ago" feature with excerpts from the "early days" of the club. Original bulletins would be fine if you are willing to part with them; copies would be okay too. Or, you could ship them to me and I will have copies made. Your original Frendx's would be shipped back to you faster

Our Motto is - "Unity and Friendship"


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.

than you can say "Fred Kohlbrenner." Please contact me at either the masthead address or my Internet address [<r.dangelo3@genie.geis.com>](mailto:r.dangelo3@genie.geis.com) if you can help. Thank you!

Only one more brief reminder stands between you and the rest of the Journal. The NASWA Country List and Awards Program

booklet can be purchased from Kris Field at the Company Store address on the back cover. Just \$2.00 brings a wealth of valuable information for country counters and award chasers. No DX'er should be without it.

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

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 solely 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

Warren D. Anderson [<wdaorcd@usinternet.com>](mailto:wdaorcd@usinternet.com)

If you happen to come across some of the really old journals, you should find a QSL swap column which I handled for Bill Eddings back in the really dark ages. I don't recall how I came to do it; someone probably bailed out and I said I could do it for awhile. I'm guessing I did this somewhere in the '63/4/5 area but I really don't remember exactly.

I am really amazed about NASWA's life. Back in the good ol' days, the SW clubs were born and died quicker than a mosquito. What's even more astounding is that it is still based out of PA. Bill must have put some deep footings down for his baby to survive this long.

I still listen to SW and I'm actually getting more active again now that I have gotten into boatanchors and their refurbishment. There's a lot of pleasure in making those old receivers do their tricks again and they are a whole lot more interesting than my R-5000 (which I couldn't fix if it were to break). Fortunately, I've got an understanding/tolerant wife who merely tilts her head at my acquisitions. Still, I'm not sure she sees the artistry in using a pair of Hallicrafters SX-71's for bookends. Then, there's the great sound from the SX-62A; Hallicrafters really needed a bandspread tuner on that beauty (eye of the beholder, you realize).

This afternoon, I bought WCCO AM 830's old WWV receiver...a Collins 51S-1. It wasn't cheap but it has been exceptionally well-maintained and looks just like it came out of the box. The only thing that is a little disappointing about the receiver is that I no longer have a real lust unit to pursue.

Enough of the rhapsodizing, I just thought I'd check in after seeing the NASWA (NASA) site show up in a web search and your request for old issues of FRENEX (never liked that name, BTW). I wish I could help you with the oldies but I wasn't a vain writer so I only kept the monthly bulletins for a couple of months and then I pitched them.. like a bunch of other stuff that would be valuable today.

(Thanks to Ralph Brandi's efforts, Warren saw our request for old bulletins on our web site and has rejoined after a three decade break—RAD)

Wild Bill Crookham, Crookham Company, P. O. Box 520, Caldwell, ID 83606-0520

Two years ago, I took up shortwave listening. What started as a hobby is now an essential part of marketing.

I am in the vegetable seed business in southern Idaho and we receive visitors from all over the world during the production season in the summer. As the visitors announce their arrival, I switch on my Lowe 225 and pick up the latest news and features from the appropriate countries.

I am just a dirt farmer, but the visitors compliment me on my cosmopolitanism and my knowledge of their particular country. I don't mention my shortwave listening secret.

If one is to use SWL as an international public relations/marketing device, I certainly recommend the purchase of shortwave listening guides edited by John A. Figliozzi and Tom Sundstrom (the two publications compliment each other beautifully). Or one can write to the station and get a more complete topic guide.

For Europe (and I'm going to use Mr. Figliozzi's abbreviations, sorry Tom) I like DW and RN. For some reason (I am located at UTC plus 7 on the 42nd parallel), ABC has the best 24 hour reception and has excellent reports on Asia. For more specific countries, NHK and CRI are excellent. VOR keeps me updated on Russia and both BBC and VOA have excellent Asian and African reports.

We do have some visitors from Argentina and I've yet to find a shortwave source for Latin America, the best being, so far, the Caribbean Report on VOA. Maybe I don't have enough aerial or receiver power.

BBC, VOA, RCI and ABC have taken huge financial hits the last 18 months. But I hear no differences in their English language service. Probably the cutbacks hit their other-than-English services.

Well, this is just a capsule of how I have been cashing in on shortwave listening. There are about eight other countries I lock into that I have not listed here whose shortwaves have great public relations benefit to my company.

Very truly yours—Wild Bill Crookham, Chairman

NASWA

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

Andy Rugg, 375 Ivan Crescent, Cornwall, Ontario K6H 7C7 Canada

After several months' use, I would like to endorse the "KIWA" "POCKET LOOP". It was reviewed in Alan Johnson's "Equipment Reviews" in The Journal, August, 1996.

The Pocket Loop's performance has surpassed my expectations. It also impressed the Montreal CIDX crowd during a demo at a local meeting in a tough location for a test.

You don't have to be a rocket scientist to get results with this accessory. My first set-up, reading the manual, band configuration and coupling to the receiver took only 15 minutes. Collapsing back-into-my-box took 2 minutes the first time and subsequently under 30 seconds. Subsequent set-ups out-of-the-box only take a few minutes at most.

Using a SONY 2010 on SWBC, the Pocket Loop consistently adds a least 2 S-units to marginal signals and often improves the audio quality. Typically, at sunset on January 3, a number of African and Latin American signals on 61 meters initially registered S-5 to 6, at best. After coupling the Pocket Loop, all were boosted to the S-7 to 8 range. The specific channels were 4783, 4830, 4835, 4870, 4917, and 4980.

Other receptions have surpassed my expectations. During mediocre conditions in September, the Voice of Greece on 9420 kHz was inaudible "barefoot" but emerged to an SIO 343 (or S-4 to 6 reading) when the Pocket Loop was connected. The Peruvian Radio Satellite - 6725 also was inaudible "barefoot" but crept up to SIO 232 with the Pocket Loop. A bonus for me is the boosting of mediumwave and amateur signals.

In my travels, I carry it around cushioned by bubble-wrap in a plastic box meant for 4" x 6" file cards. At home, I use it away from the shack for program listening, band-scans, some serious SWBC (and MW) DXing and monitoring various amateur nets.

In conclusion, for the non-technical DXer, the Pocket Loop is conveniently portable, quickly becomes easy-to-operate and commendably enhances marginal signals to copyable levels. Although not a miracle-worker, occasionally it will pleasantly surprise you with the signals that it can boost out of your portable set.

Regards, Andy

Mindy Scheer, Dunnellon, FL <MScheer101@aol.com>

You have certainly have been a big help in the past!

I find my self in a funny situation at the moment, and hope you can help or spread the word amongst other NASWA members who might know about multi-code readers.

I had purchased an MFJ multi-reader, the ad sounded great. It decodes all these messages in a self contained unit. I thought that I would be getting News Broadcasts from all over the world in text. Obviously, there is a lot more to be learned about RTTY, ASCII, CW and AMTOR.

Do I need to further decode these messages?

Any help or advice would be greatly appreciated!

Thank you, Mindy Scheer

Charles J. Shaw, 71 Orchard St., Glen Lyon, Pa. 18617-1243 <cshaw@epix.net>

"If anyone should ask, tell them it's just like fishing."

"What's just like fishing?" he said.

"Why, the difference between listening to a shortwave broadcast over the Internet as opposed to listening to that very same broadcast over the airways, of course," I said.

"Huh?" he said.

"Listen, if I just want to eat fish, I go to the supermarket Seafood section, pick out the fish that I want, and take it home and cook it and eat it, right?"

"Okay," he replied.

"On the other hand, if I choose to be fisherman, I spend countless wonderful and fulfilling hours learning about fish. I learn their idiosyncrasies; I acquire the skills and techniques needed to locate, isolate, and catch the most elusive of them. I sometimes even awaken at rather unusual hours to accomplish this feat."

"Perhaps it's just me, but fish that I catch always taste better than fish that I buy," I explained.

"Hmmm. I think that I get your point," he confessed.

Someone much wiser than I am once observed, "There's more to fishing than catching fish."

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

The first DXpedition to Gifford Pinchot State Park in central Pennsylvania is now history. Kris Field, Fred Kohlbrenner, Bob Montgomery, Dave Valko, and I spent a few wet days at our favorite DX location only to experience mediocre atmospheric conditions during the second weekend of November. We also managed to see the four seasons roll by in four days thanks to some interesting variations in the weather.

Bob was the first to arrive; around 1:30 PM on Wednesday. He carried in a 300 pound communications receiver into the cabin before anyone could show up to laugh at him. Fred arrived next followed by yours truly in a business suit. After dark, Dave arrived and he did his usual long wire magic in total darkness. Kris arrived on Thursday.

The weather was unusually mild for early November in central PA. As a result, we had to contend with almost summer like high noise conditions. Early results were less than terrific with Latins almost non-existent. However, there is always "something" to listen to. Somalian stations were audible as well as La Voix du Zaire and Antarctica. However, domestic Indonesians were rare during our stay.

Friday saw a change in weather as heavy rain, thunder, and a cold front moved through the state. The River Johnson (named after famed DX'plorer Ponce de Hans Johnson many years ago) came to life as the rain piled up. Bob and Kris braved the weather to make a grocery store run only to miss the appearance of LRA36, Antarctica. The usual Friday evening pasta dinner closed out events for the day.

On Saturday we had pretty good listening conditions all day. The evening brought out the North American pirate station; I logged at least 6 different stations that afternoon and evening.

Sunday morning saw ice (for some unknown reason interesting weather patterns always seem to surround our visits to GP!) form on our antenna wires and an early departure as listening conditions didn't encourage any lingering for that last DX catch. I couldn't complain because I had a decent log of Radio Concordia in Peru. After four days of listening, complaining, conversing and unhealthful eating, it was time to pack up and go home. GP #17 is now in the history books.

Calendar Of Events

- Feb 15 Meeting. Philadelphia Area NASWA Chapter.** Kulpville Holiday Inn, Kulpville, PA at 7:30 PM. For more information contact Dan Cashin at 215-446-7831.
- Feb 15 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/>>.
- Feb 16 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.
- Mar 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 Kulpville Holiday Inn (Exit 31 on the Northeast Extension of the Pennsylvania Turnpike) on 13-15 March 1997. Organized by the infamous "gang of three" (Messrs. Brown, Cones, and Field) this all wave gathering attracts over 200 hobbyists each year. See January's Journal for the registration form.
- 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. Information can be obtained from Jaroslav Bohac, Jizerska 2900/11, 400 11 Usti n. L., Czech Republic; FAX +42 47 5211819, e-mail: khonzik@bbs.infima.cz.
- Aug '97 Convention. WTFDA Convention** has been tentatively set for August 1-3. Convention host John Broomhall is exploring two sites: North Georgia mountains (about 75 miles from Atlanta) and in or near Metropolitan Atlanta. Activities include station tours, amateur TV demonstration, FCC Regional Field Office visit, guest speaker(s) and informal Q&A panel discussion. Further details and information will appear when received.
- Oct '97 Contest. 1997 Adventist World Radio Contest.** Further information will be published in the Journal or you can send a self-addressed stamped envelope to 1997 AWR Contest, c/o Dr. Adrian Peterson, Box 29235, Indianapolis, IN 46229.

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....

Ralph Perry presents his first Shortwave Center column and Bill Eddings announces that Jerry Berg will be stepping down as Log Report editor. Publisher Pro Tem Ed Shaw marvels at the physical labor required to produce Friendx which includes roughly two weeks, 80 hours, a month to do all the chores to get the bulletin in the mail. "Honest Ed" Shaw writes about the Hallicrafters SX190 receiver in the Shortwave Center. The featured QSL was from the Vietnamese Clandestine station Radio Liberation which purportedly operated from South Vietnam. In the Listeners Notebook column, Dan Ferguson notes an arrangement has been made with BBC Monitoring Service to use schedule information compiled from by organization. In Al Niblack's Flashsheet column, Chris Drake and Dick Heggs report Swazi Radio was scheduled to commence broadcasting from Feb 1 for 18 hours a day.

Easy Listening

Richard D. Cuff
1016 Chestnut Ridge Drive
Timonium, MD 21093-1716
CompuServe: 73651,153
Internet: rd cuff@worldnet.att.net

Sorry About January

No, not January weather. Sorry I missed my deadline for including *Easy Listening* in the January *Journal*. That was the first time I'd missed a column since assuming the helm as editor. I apologize for any inconvenience.

Changes Ahead

This month, I'm using editor's prerogative to let you know about upcoming changes to *Easy Listening*. I'll be taking a leave of absence from the column for a few months, as I have a few items coming up that will, unfortunately, crowd out my shortwave listening habits for a while. While I could probably handle one of these without difficulty, the combined effect of a new job, new baby, house renovation, and relocation will take their toll on my hobby time. Talk about poor planning: our baby's due date is the same weekend as the 10th Winter SWL Festival!

The good news—no, make that great news—in all this is that John Figliozzi will handle *Easy Listening* responsibilities in my absence. John is a veteran observer of shortwave programming, and his *Worldwide Shortwave Listening Guide*, available at Radio Shack stores in North America, has exceeded sales expectations. John's enjoyment of shortwave radio will be obvious as you read his insights each month.

The world of shortwave broadcasting has certainly changed since I started the *Easy Listening* column, with the parallel utilization of satellite and Internet delivery methods especially for the industrialized, affluent European and North American regions. Most all agree that shortwave broadcasting will continue to have a role for the Third World. Hopefully we're now past some of the funding brinkmanship which Radio Canada International has honed to a fine art.

Radio Australia Changes

Speaking of changes, **Radio Australia** has substantially revised their program schedules, especially weekdays. Gone is **International Report**; it's been replaced by **Date-line**, a current affairs program updated once every three hours with a first airing at 0110 UTC and updates at 0410 and so forth. **Date-line** appears to run for approximately 50 minutes, as the next scheduled program is the news at the top of each hour. An edited version airs at 0310 UTC with a similar three-hour repeat cycle.

New to Radio Australia are ABC domestic current affairs programs **AM**, airing at 2010 Sunday-Thursday, **The World Today**, weekdays at 0210, and **PM**, airing weekdays at 0810. These would appear to be similar to the CBC's **The World At Six**, a world news and current affairs program targeted to a domestic audience. A new Radio Australia-produced program is **Pacific Focus**, weekdays at 0510 and 1710, similar in concept to **Asia Focus**.

Another new program, **Hindsight**, looks at historical events in Australia and elsewhere. The 1130 Monday airing should propagate well to North America.

Hourly newscasts continue, with some emphasizing Asian news, others Pacific news, and others Australian news.

Otherwise, much of the programming remains the same, although broadcast times may have changed. For more details, **Radio Australia** has a good World Wide Web presence at <http://www.abc.net.au/ra/elpl/home.html>. Schedules can be requested by mail from Radio Australia, GPO Box 428G, Melbourne, Victoria 3001, Australia.

Potpourri

Starting Finnish, YLE Radio Finland's language course, has just begun its series over as of January 4. So, interested listeners should be able to pick it up in February without too much difficulty. There is a text offered in conjunction with the course, which is broadcast to North America on Saturdays at 1244 and 1344 on 11735 and 15400.

Swiss Radio International has, as of January 1, begun a new daily program to North America at 0430 on 9905. It's called **Rendezvous with Switzerland** and consists of a relaxing blend of diverse Swiss music, interviews and reports from around Switzerland. The program replaces **Network Switzerland**, which was a series of different daily topical programs on science, business, culture, and the environment. **Rendezvous** can also be heard at 1430 broadcast to southwest Europe on 6165 and 9535. Reception of this transmission in North America is not reliable. These are the only two times daily that **Rendezvous** is broadcast on shortwave as it constitutes the second-hour of a full hour's broadcast. **Newsnet** is still the primary program broadcast in all-hour transmissions.

Radio Budapest celebrates the 40th anniversary of its DX show this year. During February and March they will be attempting to establish a registry of longtime listeners to the program. They ask that listeners verify old radio connections with copies of QSLs, SW club certificates and letters, and by recalling what receivers they used to monitor the program in the past (as far back as 40 years ago.) In May and June they will have a series of quiz segments open to all listeners and centering on DXing. In September, there will be a major contest with results to be announced on the actual anniversary of the program, October 4. There will be a further contest in November. There will be prizes for the winners and a special QSL card for anyone who participates in any of the commemoration events. Their monthly magazine also contains a rather lengthy history of the program which is quite intriguing. **Radio Budapest's DX Show** can be heard twice a week. The first broadcast is on Wednesdays

at about 2010 to Europe on 3975, 5970 and 9840; Thursdays at about 0210 to North America on 5905 and 9840. The second broadcast is on Sundays at about 2210 to Europe on 3975, 5970, 7250 and 9835; Mondays to North America at about 0340 on 6195 and 9840. None of these broadcasts is reliably heard in North America, but the transmissions ostensibly intended for Europe are the better bet.

HCBJ's New Zealand studio produces **Inspirational Classics**, a program featuring what might first be considered classical music but was really regarded as inspirational music by its composers. Judy Gillen hosts, and February program highlights include: February 20th, Wagner, Dvorak, and Tchaikovsky; February 27th, John Adams, Elgar, and the group *A capella*. **Inspirational Classics** airs to North America 0230 and 0530 Fridays; to Europe, 2030 Thursdays; to the South Pacific, 0830 Fridays.

Upcoming **Radio Netherlands** documentaries include:

Thursday, February 13th: An encore presentation of Marijke van der Meer's **The Titanic**, a historical portrait on the doomed ocean liner. Rarely has Radio Netherlands received as many requests for an encore presentation as in this case.

Thursday, February 20th: **Childless By Choice**, with Helen Barrington talking with couples from a variety of countries about their reasons for not wanting to have children of their own.

Thursday, February 27th: **Spanish Catholicism In Flux**, with Eric Beauchemin reporting on the wane of the Roman Catholic church in Spain as the country enjoys a democratic government and membership in the European Union.

Thursday, March 6th: **From the Wireless to the World Wide Web** is the second part of a two-part historical look at Radio Netherlands, celebrating its 50th anniversary in 1997.

Radio Netherlands' documentaries air Thursdays at 0053 and 0453 UTC, and repeated the following Friday at 2353.

BBC World Service Highlights

Documentaries

Fridays, beginning February 11th, 0230: Seven Stages: A History of the British Theatre is an ambitious seven-part 30-minute series on the seven phases—stages, if you will—of British theatre from the 14th century to today. Medieval mystery plays and Shakespeare are subjects of the first programs in the series. Actors of the Royal Shakespeare Company, along with well-known actors like Ben Kingsley, participate in the series.

Mondays, beginning February 17th, 0330: The Missionaries is a six-part, 30-minute series looking at missionary outreach as utilized by Hinduism, Buddhism, Islam, and Christianity. The angle of the series is that missionary outreach is not the exclusive domain of Christianity. Other American airings include Sundays 1130 and 1530; European airings include Tuesdays 1530.

Mondays, beginning February 24th, 1130: Letters Home returns for a seven-part, 30-minute series. **Letters Home** features BBC foreign correspondents serving as guides around the cities from which they report, introducing a selection of letters written by previous notable visitors. The first program features Bridget Kendall, based in Washington, DC, with letters penned by Charles Dickens, Mark Twain, Herman Melville, Walt Whitman, and Matthew Arnold. European airings include Tuesdays 1230 and 1830.

Light Entertainment

Sundays, 0130: Just A Minute returns for a series of 30-minute adventures in extemporaneous ad-libbing. Topics include 'Mooning', 'Fripperies', 'Pottering', and 'Molly-coddling'. Nicholas Parsons hosts and attempts to keep order. European releases include Saturdays 1230 and Mondays 1830.

Music

Saturdays 2330: Anything Goes is a musical request program that might feature Nat King

Cole juxtaposed with Richard Burton reading Dylan Thomas. No set musical style is favored, and requests can be sent to the usual Bush House address. Also airs Mondays 0230 to the Americas.

Wednesdays 1215: The Vintage Chart Show features classic hits, along with some tunes that might have been forgotten, with each show featuring a particular year. Paul Burnett hosts, and features the years 1971, 1963, 1959, and 1975 in February. European airings include Sundays 1930.

Drama and the Arts

Saturdays, 2230: Plays of the Week include offerings timed to coincide with the **Seven Stages** series mentioned above.

February 8th: *Nativity To Judgment* is a modern adaptation of the Wakefield Mystery Plays, one of the earliest forms of British theatre. *Nativity To Judgment* is a series of imaginative bible dramatizations and is told in earthy popular poetry with a simplicity of emotion.

February 15th and 22nd: *Richard II* is the Shakespeare work timed to coincide with the **Seven Stages** series. It's an early Shakespeare tragedy, dealing with the opulent and extravagant life of a king who is later deposed after taking the wealth and titles of a cousin. The torture of Richard II's fall from his lofty position as king is a key element of the tale.

Tuesdays through Saturdays, 0445: Off The Shelf highlights include *Sense and Sensibility* by Jane Austen, which began in late January and runs through Wednesday, February 19th; *Changes*, by Ama Ata Aidoo of Ghana, about careers and relationships, running from February 24th for eight installments.

Mondays, 0130: Short Story continues with reader submissions, including *Laying Hands on Buzzard*, a teenage boy's view of religion, written by Tom Harper in the USA; *Colleen*, about a part-Aborigine who dreams of a better life and gets to live the dream.

Don't forget the 1996-97 BBC short story competition, with the first prize a trip to the

Fifth International Conference on the Short Story in English, to be held at the University of Northern Iowa in 1998. A 2,000 word length is recommended, with entries mailed to the usual Bush House address, or E-mailed to edwarl60@wales.bbc.co.uk.

Science and Technology

Thursdays, beginning February 6th, 2315: **Soundbyte** returns for an eight-part, 15-minute series of news from the world of computing. Virtual games, the death of the mouse, and the role of robots are among the topics discussed. European airings include Fridays 1515.

Youth

Tuesdays, beginning February 11th, 2315: **What's News?** returns for a new seven-week run of 15-minute programs. A new presenter is aboard, and a **What's News?** reporters' competition invites young reporters to submit 200-word news reports about something from your area or an issue that greatly interests you. Contact the program at

the usual Bush House address. Also airs to the Americas Tuesdays 1145, and to Europe Tuesdays 1515.

Thanks for everything

As I wrap things up, I'd like to collectively thank all those who sent in listening tips, notes of encouragement, and questions or concerns about program listening over these past few years. I'd like to specially thank Peter Bowen for his program reviews, especially his suggestions on improving program listenability; HCJB's Allen Graham, for his efforts to provide advance program information; and Ralph Brandi, for his monthly lay-out of the column in the *Journal*. I'd also like to thank John Figliozzi for his help many times in many ways, and for his willingness to assume the editing of *Easy Listening* as of next month.

See you around the bands.

73 DE Richard



Net Notes by Ralph Brandi, ralph@mcs.com

NASWA's Pete Costello keeps piling up the awards, from both inside the hobby and elsewhere, for his **Shortwave/Radio Catalog**, the site to bookmark if you're going to bookmark only one, at <http://itre.ncsu.edu/radio/>. Most impressive of the recent crop are the 1997 WRTH New Media Award for Most Useful Web Site (volunteer) and a mention in the January issue of *Internet World* magazine as one of their Best Of The Web for 1996. The notice that Pete's site is garnering outside the hobby makes it an increasingly valuable promotional site for the hobby in general. Congratulations, Pete!

Our friends to the north at the **Ontario DX Association** have opened their stand on the side of the information superfootpath at <http://www.oise.on.ca/~mbegley/odxa.html>. There are no samples from their excellent bulletin, but there is membership and contact information.

If it's ever occurred to you to tune to WWV, but not until 19 minutes after the hour, you'll be happy to find the **NOAA Space Environment Center** in Boulder, which posts current solar conditions and reports at the recently-updated URL of <http://www.sec.noaa.gov/>. They even include a link to a page especially for radio users on their front page.

NASWA's own BAD guys of the **Boston Area DXers** have a home page of their own, and it's got some truly useful material, particularly on the subject of antennas. John Doty, whose well-grounded articles are one of the best features of the *rec.radio.shortwave* newsgroup, has contributed some of his more insightful postings on subjects like "Low-Noise Antennas". This one is definitely worth a visit at <http://www.grove.net/~badx/>.

Passport to World Band Radio has joined the ranks of the wired with a site of their own. Unfortunately, it's pretty well bereft of any information except a brief marketing blurb and an order form. If you didn't already know what the book was, you wouldn't find anything to give you an idea of why you should buy it at <http://www.passport.com/>. Hopefully in time, some small taste of the wealth of information in the book will make it to the site to convince the unconvinced.



Shortwave Center

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Reaching The Villages: Radio In Tanzania

By Don Moore

Most of Africa's many nations get little outside attention, and Tanzania is no exception. The only time it really made news was during World War I when it was the German colony of Tanganyika. With the outbreak of war, the Germans were cut off from their homeland by the British navy. Rather than surrender, a small number of German officers and several thousand African soldiers lived off the land and fought a brilliant guerrilla campaign against a much larger force of British and Belgian troops. Their tactics drew worldwide attention and countless news stories told of the Tanganyikan campaign. The Tanganyikan Germans were never really defeated and didn't surrender until two weeks after Germany. Tanganyika became a British territory and slipped into oblivion, overshadowed by Kenya to the north, despite Kenya's having only half the population.

Broadcasting Begins

Compared to other large British territories in Africa, such as Kenya, Zambia, and Nigeria, broadcasting was late coming to Tanganyika. In these other countries, broadcasting was started to serve European settlers and businessmen, but Tanganyika's European population was too small to justify a radio station. Finally in 1951, a BBC official proposed establishing an experimental station "to provide experience in the production of local programmes for a native audience" (Kivikuri). The colonial government put up \$30,000 and the "Dar Es Salaam Broadcasting Station" was founded. At first it only produced a single one-hour program in Swahili each week, which was replayed two more times later in the week and because the

equipment was simple, it could barely be heard outside of Dar Es Salaam. But gradually hours were increased, English broadcasts added, new studio equipment and a higher shortwave transmitter purchased, and the name changed to the Tanganyika Broadcasting Service. When American journalist John Gunther visited the station in 1954, he found a professional operation totally staffed by native Africans, although the station had started "with little more equipment than a microphone and a blanket hung over a wall" (Gunther). It became such a success that it served as a model for colonial services in many other British colonies.

Independence

Throughout the 1950s, African countries began looking for independence, and Tanganyika was no exception. While some countries resorted to violence and riots, Tanganyika gently but firmly made its case for independence through non-violence under the leadership of Julius Nyerere and his TANU party. Slowly the British were persuaded, and in December, 1961, Tanganyika became independent under President Nyerere.

A fascinating man, Nyerere was an intellectual known for, among other things, translating Shakespeare into Swahili. As a leader, he emphasized cooperation and moral values, and by his own example he appealed to his countrymen to work for the betterment of their nation above all else. While some African countries developed restrictive policies towards whites and Asians within their borders, Nyerere believed in nonracialism for all, regardless of how his people may have been treated in the past.

But what a country Nyerere had inherited! It was one of the poorest on the world's poorest continent. Life expectancy was 35, there were few schools, and most people barely survived on the food they raised themselves. The task of developing the country was made harder because 94% of Tanganyika's population lived in villages and farms. The government saw radio as their best means of linking the villages to the government and of motivating people to take pride in their country and to try to make it better. As Nyerere once remarked, "Others try to reach the moon, we try to reach our villages."

The island of Zanzibar, about 35 miles off the Tanganyikan coast, had been Britain's smallest African possession. But in 1963 it was granted independence. A year later the island's African majority revolted and overthrew their hereditary Arab sheik ruler. A few weeks later Zanzibar petitioned to join Tanganyika, and the new nation of Tanzania was formed. However, Zanzibar retained considerable local autonomy under the merger agreement. For example, in the early 1970s just after the Nyerere government decided not to allow television in mainland Tanzania, Zanzibar's local government contracted with a British company to set up a station on the island. The station was built without interference from the national government.

Target Development

To reach its goals of development, Nyerere and the TANU party created a homegrown African style of non-Marxist Socialism with a heavy emphasis in cooperation and self-reliance on the local and national level. The party also set out a strict code spelling out the standards of the simple lifestyle to be expected for all government officials. With this code in place, Tanzania became one of the few African countries where government service was not a road to riches through corruption.

Radio was a key in presenting the ideas and ideals of the government to the people, but there was a problem. The TBC had been set up as an independent public service, just like the BBC, which meant the government had no control over the TBC and often had trouble

getting the network to support government development projects. While debate over issues was seen as healthy as the policies were being formulated, editorial criticism after policies were adopted was confusing to uneducated villagers. In 1965, Nyerere nationalized the TBC, renaming it Radio Tanzania Dar Es Salaam (RTD), and placing it under the Ministry of Information. As one official justified the takeover, "(In) America and Europe where people have ways of getting good food and shelter then this radio can be used for entertainment, but in our country where we ... are fighting a war to raise our people's standard of living we ought very much to be using radio for the benefit of all the people."

About this same time, Nyerere declared Tanzania to be a one party state. In some ways this was needless, as even with complete political freedom there had never been any major political opposition in Tanzania. But the intent was not to restrict political activity, but rather to bring people together. From our perspective, one-party democracy sounds like an oxymoron. Yet, Nyerere made it work. Every five years, TANU holds primaries and chooses at least two candidates to run for each position in the general election. The candidates frequently have opposing views, and during the election process there is always lively and free debate about the issues confronting the country. But once the election is over everyone pulls together in a way not often found in fractional multi-party politics. The voters take politics very seriously and the Tanzanian parliament has had a much higher turnover rate than, for example, the U.S. Congress. While Nyerere was never opposed for reelection, he used campaigns as an excuse to travel through the countryside talking with the people about their problems.

Rebuilding A Culture

Nyerere knew that a nation needs more than health, education, and an economy. It also needs a culture. Colonialism in Africa had suppressed native culture and tried to make the people into sort of third-rate Europeans. As one British colonial official admitted in 1955, "We ignore their tribal dances and try

to give them cricket. It's awful" (Gunther). In Nyerere's words, "A country which lacks its own culture is no more than a collection of people without the spirit which makes them a nation. Of all the crimes of colonialism there is none worse than the attempt to make us believe we had no indigenous culture of our own; or that what we did have was worthless... A nation which refuses to learn from foreign cultures is nothing but a nation of idiots and lunatics... But to learn from other cultures does not mean we should abandon our own."

Like most African countries, one of the greatest problems confronting Tanzania was tribal and linguistic diversity. Over 120 languages were spoken in Tanzania, none by more than 15% of the people. Most African countries solved this problem by adopting the former colonial language, usually English or French, as their official language even though few outside of the educated elite speak these. In fact, most Africans can't even understand their country's national anthems which are usually in English or French!

To Nyerere, this was just another example of abandoning African culture for European. But obviously the government couldn't just pick one of those 120 native languages as the national language without alienating speakers of the other 119. Nor could it function with 120 official languages. The answer was to turn to Swahili. A mixture of native languages with some Arabic thrown in, Swahili was a trade language that had naturally developed over several centuries through the commerce between tribal fiefdoms and Arab merchants along East Africa's coast. Almost no one spoke Swahili as a native language, but it was widely understood along the coast and somewhat in the interior. One of the first acts of Nyerere's government was to declare Swahili the national language.

When radio was started in Dar Es Salaam, it had made sense to use Swahili because the language was understood by the merchant class up and down the coast, and they were the people wealthy enough to have receivers. As the government began broadcasting more to the interior, there were pressures to add

broadcasts in some widely spoken local dialects, but Nyerere resisted. Instead, RTD joined schools and government offices as a means of spreading Swahili throughout the nation. When English language broadcasts were dropped in 1970, Tanzania became the only African country to use only one language in its domestic radio. (English is still used in the external service.)

Programming

Like most African radio stations, RTD faced two related problems in gaining listeners. First, its signal had to reach the people, and secondly the people had to have radios in listen. At independence, there probably weren't more than 100,000 receivers in the entire country, mostly in the Dar Es Salaam area. On the other hand, the station couldn't be received reliably beyond the eastern coast. Even by the late 1960s, less than 30% of the population listened to RTD on a daily basis. To increase listenership in the rural interior, the government set up community listening sites around central receivers in villages. To make receivers more accessible to families, a radio factory was built in Dar Es Salaam with foreign help.

RTD may not have been very advanced technically in the late 1960s, but then neither were its programs. Over-zealous in its support of the government, the station gave over a lot of broadcasting time to long accounts of repetitive speeches by various officials. When the audience got bored and tuned out, RTD learned it had to be more entertaining. Official censorship became rare, news and talk programs began focusing more on ordinary people, and a wide variety of musical programs was added. Good programming added spice to the monotony of village life and gained RTD more listeners.

But good entertainment programming should also contribute to preserving a country's culture, and the best way to do that is through music. In the mid 1960s parliament debated a law to prohibit foreign music on Tanzanian radio. But, such dictatorial force was not in the TANU party's character. Instead, the law provided for a gradual elimination of foreign

music until today it can only be played by the direct request of a listener, and then not to exceed more than 30% of all music played. To fill its quota of Tanzanian music, RTD sent recording safaris to villages to record regional musicians. As RTD exposed Tanzania's musicians to musical styles from all areas of the country, they began to fuse the various traditions and create new styles of music. Tanzanians took pride in their native music and through this a local commercial recording industry was born. Traditional music, as a central part of Tanzanian culture, has been preserved thanks to RTD.

Entertainment helped bring the country together, but education was needed for it to progress. The government launched a major program to build schools in the villages and RTD participated with several hours of educational programs each day. But in an underdeveloped country, education can't be just for children, so in 1969 an extensive adult education program was launched. Thousands of group leaders were trained in Dar Es Salaam and a few other large towns and then sent to the villages to lead adult study groups. RTD programming provided much of the material to make the project work. Not only did the villagers learn to read and write, but they learned that they could take control of their lives. Thousands of villages organized campaigns to eliminate mosquito breeding grounds, build latrines, and clean up the villages to make them healthier places for all. Nyerere's goal of self-reliance was bearing fruit.

Probably one of the more unusual forms of Nyerere's homegrown socialism was its use of commercial radio advertising. After all, advertising is part of business, and business and socialism don't mix. But besides helping to support RTD financially, advertising of locally-made products was seen as a way to introduce people to Tanzanian products, create a demand, and help make the country more self-reliant. In fact, some of RTD's most popular entertainment programs were (and are) intentionally scheduled when they will attract audiences in nearby countries who will also hear the ads for Tanzanian-made products.

In fact, RTD also operates an external service in English aimed at nearby countries in Eastern and Southern Africa. Listenership is especially high in Uganda and Kenya. However, since the 1960s, much of RTD's external service broadcasting has been used to relay broadcasts from various African revolutionary groups. At times, as many as eight or nine different groups have had broadcasts over RTD—sometimes two or more groups for the same country! There were groups opposed to white supremacist rule in South Africa, Southwest Africa, and Rhodesia, and against Portuguese and French colonial rule in Mozambique, Angola, and the Comoros. One of the liveliest was the Voice of Fighting Angola in the early 1970s, which used its broadcast time to give city dwellers in Angola instructions on committing sabotage and arson.

By the mid 1980s, higher-powered short-wave transmitters had given RTD a good signal across Tanzania and receivers were easily available. A special 18 month training program for announcers combined with workshops by visiting BBC officials had made RTD highly professional. People now saw radio as the only part of the government reaching the entire country. But the problem now was power—rural Tanzania has no electrical service and batteries are expensive. Still, surveys of remote villages have found that 80% or more of the people now listened to RTD daily, although many limited their listening to under an hour a day on weekdays, and under two hours a day on weekends. The expanded listening on weekends includes some sports and music programs, but on weekdays, listening to the news is given priority. Although rural villagers are only marginally literate from adulted classes, curiosity about the world and keeping up on international events has become an expectation and the symbol of an educated individual. Rural Tanzanians might just be better informed than the average American!

Time For A Change

By the mid 1980s, many of Nyerere's goals had been met. Almost every child was attending school and adult literacy had passed

90%. Life expectancy had almost doubled. Tanzanians were working together to improve their communities and sharing farm equipment to increase food production. And Tanzania's move to make Swahili the national language was being compared to Israel's decision to revive Hebrew. Although tribal languages continued to be the language of the home in most areas, nearly everyone understood Swahili and it was seen as a symbol of national unity.

But while the human side of Nyerere's policies had succeeded, his socialist economics had failed. Because Tanzania's economy was not producing the money needed to pay for needed economic and social development, it had developed a large trade deficit and had become the highest per-capita recipient of foreign aid and loans in tropical Africa. Some leaders would have clung to power to the last possible moment, but Nyerere stunned his nation by resigning in 1986 while still highly popular. His work, he pointed out, was done, and the country needed new leadership and new ideas to solve its economic problems. Asked what he wanted to be remembered for, Nyerere responded simply, "Trying."

TANU's one-party democracy slipped into gear and after lengthy debate and new elections the government began moving towards a free market economy. While the economy is being revitalized, broadcasting continues to be important. In 1990 a chain of mediumwave stations was opened in several interior towns, the first stations outside of

Dar Es Salaam and Zanzibar island. To keep younger listeners from straying too much to foreign stations, RTD is giving more attention to sports and modern music—but Tanzanian sports and Tanzanian modern music. And the foreign service has been cut back, with less time given to revolutionary movements.

Perhaps the biggest change is yet to come in Tanzania. Mainland Tanzania has been the biggest country in the world without television, but television broadcasting began from Dar Es Salaam in 1995. The emphasis on the villages is continuing as special mobile studios travel the countryside producing programs in every corner of the country. Still, there are concerns that television will cause urban/rural divisions—only about 20% of the population will be within reach of the main station and its six repeaters and even once another dozen repeaters are added in a few years, less than half the population will have coverage. Clearly, radio will continue to be the media of choice in Tanzania for years to come.

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Welcome to the following new NASWA members

Warren D. Anderson, Plymouth, MN
Frank Colini, Fort Myers, FL
David Doblack, New York, NY
Sal Dominianni, Beaver Falls, PA
L. D. Egnor, Huntington, WV
Elise Gignac, Saskatoon, SK CANADA
Mohammad Keshavarz, Greensboro, NC
Barbara Mitchell, Fresno, CA

Tom Morris, Houston, TX
Jack Petrycki, Campton, NH
Robert Reynolds, Cary, NC
Lynn P. Sirotnak, Clarks Summit, PA
Mike Strain, Bayville, NJ
Joseph Vargo, Livonia, MI
Stephen Winter, Acton, ON CANADA

Listener's Library

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

Happy New Year!!! Well...Are you ready for Kulspsville??? This is going to be a big year, the Tenth Anniversary no less. I'm looking forward to seeing your face in the place so get those reservations in.

A great big box of books has once again come my way from the folks at the American Radio Relay League. Their long standing commitment to the radio communications hobby has allowed for some excellent books to come our way. We may not all be hams (and why not?) but most of their publications have use for everyone in the HF receiving world as well. Let's open the box and see what's inside.

THE ARRL HANDBOOK
The 74th Edition.
Edited by Paul Danzer N111
1190 Pages and 1 software disk (PC format)
\$38.00

The American Radio Relay League
225 Main Street
Newington, CT 06111-1494
ISBN 0-87259-174-3

Once again the ARRL has outdone itself. The Handbook is back in large format softcover with almost 1200 pages of information and over 1000 illustrations. In addition this year is a disk of useful software programs. Each edition expands upon the last, bringing the radio hobbyist the latest information about amateur radio practice, much of which remains useful to the shortwave listener. My long standing statement about The Handbook is that, when you first read it through (no small task) you will probably not understand much of what it talks about. As you grow in your understanding of the radio communications art, you will find more and more useful information each time you work your way through the pages. I bought my first handbook in the sixties (I still have it) when I was learning electronics from my

teacher Col. "Blinky" Austell. I didn't even get around to becoming a ham until the mid seventies. By then The Handbook was already a trusted friend. Now, whenever one of my readers throws me a poser, I can more often than not depend on The Handbook to bail me out and help me look like a really know what I am talking about. The folks at The ARRL have experimented with formats for The Handbook over the years, some have been better than others. This Seventy-fourth Edition is broken down into a series of major topic heading that seem to make a great deal of sense for someone trying to make practical use of the vast amount of information this book has to offer.

The initial Introduction section serves to introduce the reader to amateur radio, its activities and the modes of operation that are available to the ham. This includes a short glossary of common amateur terms to help the first time reader get a better handle on things as they move through the book.

The second section is made up of the five chapters dedicated to the Fundamental Theory behind electronic communications. This has really been refined over the years into a useful short course in electronics. You may walk away from it scratching your head, but when a problem comes up you will know where to look for guidance.

The third section is what many hams wait for every year. Practical Design and Projects. This is where you take that theory and put it to use. This fifteen chapter section starts off appropriately enough with a chapter on safety. Your about to learn how to bend electricity to your will, you should at least learn how to respect and control it first. The next several chapters take you through the basic building blocks that make up radio communications equipment, giving the reader a component level understanding of what makes a radio system tick. By chapter 17 you're really

ready to melt some solder. Here are dozens of receiver, transmitter and transceiver projects to allow you to try your hand at becoming the next Watkins-Johnson. This is followed up by further information including a study of transmission lines and antennas that should give you more than a few ideas about how to improve upon your existing antenna farm. A chapter I always find myself turning to each year is the Accessory Projects, this year in chapter 22. This year I may try my hand at building an interface for my PC to allow it to be used as a voltmeter and SWR bridge.

If your going to have a go at building some of the projects in this book for the first time, the section on Construction techniques is must reading. In addition to teaching you the right way to turn a pile of components into a working radio, you will get good guidance in troubleshooting and repairing existing equipment. On home repair job that saves a trip to the shop will cover the cost of at least tow handbooks.

The final section is listed as Operating Practices but it goes beyond that. It also includes information on electromagnetic interference and many pages of reference information.

Now lets take a look at this software package that comes with this year's Handbook. The disk is a standard 1.4 M 3 1/2" PC format floppy that contains both DOS and Windows based programs. It includes a handy install program for the entire disk. Among the programs that are useful to the SWL are Shadow, which allows the user to locate true North for antenna orientation. UTC Zone which give the UTC zone and time offset for each of them. Many of the other programs are geared to the experimenter or are designed for specific use with projects included in The Handbook.

If you have experienced The Handbook in the past the 1997, 74th edition is a great upgrade. If you are experiencing The Handbook for the first time, this is the best year ever.

Want to start out the New Year with a bit of antenna planning for the Spring? Take a look at this new release from the folks at MFJ.

ANTENNAS AND TRANSMISSION LINES

by John A. Kueken

320 Pages

\$19.95

MFJ Publishing

PO Box 494

Mississippi State, MS 39762

John Kueken is a Consulting Engineer with over thirty years of experience in the area of research and development of antenna systems and transmission lines. He also ranks in the top 1% of American inventors as ranked by the number of patents held. This is his twelfth book.

Antenna texts are a lot like the three bear's bedroom furniture. Too hard (overly technical for the needs of the hobbyist), too soft (simple follow the directions, measure and cut texts) and just right. Mr. Kuecken's book falls in the area of firm but not too hard. It represents a great study of antenna theory with practical applications.

This book consists of 37 chapters that can be adapted to a home study of antenna design and use, perfect for the radio hobbyist. The first third of the book covers basic antenna theory including such often overlooked topics as point array sources, wave interference, standing waves, lenses, apertures and simple radiators.

The second third of the book is devoted to transmission lines including topics such as impedance matching, Smith charts, lumped circuits, waveguides, directional couplers, reactive elements, resonant circuits and Q (Not the guy on Star Trek).

The final third section covers selected antenna subject including some very interesting and unusual antenna designs. I found the chapter on Frequency Independent Antennas very intriguing. If you want to take a shot at designing a Log Periodic Antenna you will find all the necessary calculations right here.

If you are an antenna aficionado, this book belongs on your shelf.



Mobile SW Listening (Part 2)

This month I will present four in-dash radios that have been used by SWLs for mobile listening. They are generally available. There have been other receivers over the years but they are not widely available on the used market. I will also present some installation tips.

The market for in-dash mobile receivers is limited. There is only one new receiver currently being marketed in the USA. It is the Becker Mexico model 2340. It has AM, FM, LW, cassette player with Dolby b&c and 5.9-15.7 MHz short-wave coverage. This coverage will allow reception of the major broadcasters any time of day but it misses some important SW broadcast bands including tropical, 16 meter, and 13 meter bands. The radio is being sold for \$549 by mail order. Passport to World Band Radio for 1997 has a review of this receiver on page 127. The distributor has an advertisement on page 53.

SONY sells car radios in Asia with short-wave. Sudhakar Ganti of Nepean, Ontario, Canada visited Singapore recently and posted his observations on rec.radio.shortwave. SONY models XRS-666, XR-6450, XR-C214, XR-C290, XR-C300 and XR-C500 are available in Singapore. They have different audio amplifier output power levels and features. The "C" versions control CD changers. As an example the XR-C500 has four 35 watt amplifiers. It also has 20 FM, 10 AM, and 20 SW preset memories.

The radio comes with two short-wave bands with 10 memories for each band. SW1 covers from 2940kHz-7735kHz (90m-41m band) while SW2 covers from 9500kHz-18135kHz (31m-16m).

Either scan tuning or manual tuning is available but only with the help of forward/re-

verse type buttons. There is no direct entry of frequency. Manual tuning is awkward as the same button is used for both manual tuning and automatic seek. A tap on the button and the radio goes into seek mode while a longer press switches it to manual-tuning mode.

Beware that SONY sells a car radio in North America with the same model number but without SW coverage. No report on actual performance was given. If you are inclined to visit the Far East anyway, you may wish to check the prices on the SONY SW car receivers.

The third in-dash receiver you may wish to consider is the Phillips DC-777. This receiver is no longer being manufactured but they are available used. A new unit still in its original box was recently offered on the Internet for US\$350. Postings on the Internet indicate this receiver may have a generic display reliability problem. If you decide to buy one, be sure to fire it up and check the display before plunking down your money. There have been several reviews of this receiver in the SW literature. The May 1991 issue of the NASWA Journal featured a review by Ralph Brandi on page 20. Other reviews appeared in the handbooks and SW magazines of that era.

Finally, consider the Kenwood RZ-1 receiver. This is a multimode receiver with AM and narrow and wideband FM reception covering 500kHz to 900 MHz. Because these receivers cover the cellular telephone frequencies, Kenwood no longer markets the RZ-1 in the USA. Used ones are still found occasionally. A recent rec.radio.shortwave posting offered one in mint condition at US\$450. Shortwave performance of this receiver is only about as good as a cheap portable. Tuning steps on SW are 5 KHz and

there is no provision to receive SSB. Low audio output power of 2 watts does not help in the mobile environment although there are jacks on the back to permit connection to an external amplifier. If the wide frequency response of this receiver is your main interest and SW is only a secondary consideration, then you should check out the review of this receiver that appeared in the 1989 WRTH. (This edition may be hard to find because it was the last year that the WRTH included musical notation for the interval signals of most broadcasters.) If SW is your main interest you would do better to select one of the other radios.

Whether you are installing a dash-mounted radio or adapting a table top radio for use in the car, you must pay attention to the power wiring. Most car radios use a tap off the instrument panel wiring and the frame of the automobile for the return path to the battery. For SW reception you must be careful to keep ignition noise out of the power supply. Run separate wires from both the hot lead and the frame of the radio to the vehicle battery. This will keep currents in the return path of the ignition system from generating noise voltages as those currents flow through the resistance of the vehicle frame. If the radio and the ignition system share the same return resistance, this noise voltage will be sensed by the receiver as pulses of noise interference.

SW signals are often less than 100 millionths of a volt. Good receivers can operate quite well at signal levels of 2 or 3 millionths of a Volt. It only takes .1 ohms resistance in a vehicle frame return path carrying 1 ampere of pulsing DC from the ignition or fuel injection system to generate noise voltage spikes of .1 volts. That's 1000 times the amplitude of that 100 microvolt SW signal you may be trying to receive. This noise voltage is in series with the antenna to earth path formed by the capacity of the vehicle body to the ground. By keeping the return currents of the ignition system in the frame of the vehicle, a separate return wire from the radio to the battery will not feel these noise

voltages. Try grounding the antenna feedline only to the frame of the radio and only ground the radio through a separate wire to the battery. This arrangements will keep ignition currents from flowing in the shield of your coax cable and may reduce noise.

One way to implement the power wiring is to use coaxial cable. The impedance does not matter. Make sure the wire size can accommodate the current drawn by the radio. The coax outer shield should connect to the radio frame and the negative battery terminal. The center conductor connects to the hot lead from the radio and the positive battery terminal. Be sure to put a fuse in both the positive and negative lead to prevent damage to your radio as explained below.

The best way around the ignition noise problem is to use a separate battery supply. A good source of information on batteries is a book available at Radio Shack called ENERCELL Battery Guidebook 62-1304. It is 232 pages of application data to help you select the right battery and also to get maximum life from your battery.

One way to approach the installation problem is to first try connecting to the vehicle battery. Without any antenna connected to the receiver, run the engine while listening on several SW frequencies. If you don't hear any noise, it is likely that your power source is not going to limit your reception. If you do hear noise, you should consider filtering the power leads or resorting to a separate battery supply.

A word now about safety. Car batteries pack a lot of stored energy. Always disconnect the negative post of the battery before doing any work around the battery or the electrical system. It is also recommended that you put an in-line fuse in each power lead to the radio. A fuse in the positive lead will protect the battery from shorts to the frame. A fuse in the negative lead can prevent your radio from damage under certain failure modes.

Until next time, stay tuned.



Equipment Reviews

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The AOR AR7030 General Coverage Receiver

I cannot remember a receiver in recent times which has been greeted with so much controversy at its introduction. The manufacturer's published specifications were called into question and whether or not the radio's operating system was designed for use by mere mortals was a point of contention. However, as owners and reviewers have gained experience with the receiver, it is now being praised as offering an excellent combination of performance and value, and was selected as the "Best Tabletop Receiver 1996/1997" by the World Radio TV Handbook.

Origins

AOR is a well-known Japanese manufacturer of UHF/VHF scanners and wide-band receivers. A few years ago they entered the HF only market with the AR3030 receiver, which I have not had the opportunity to review, but reportedly offered decent performance at a reasonable price. AOR UK was initially set up as a distribution arm for AOR (Japan), but AOR UK's director of sales developed the concept of the AR7030 and AOR UK became a manufacturing concern.

The AR7030 was designed by John Thorpe, who was responsible for the ground breaking "HF" series of receivers from Lowe (through the HF225 Europa). The new receiver was to be transportable, provide "open" architecture to permit upgrading, provide exceptional strong signal handling performance and be reasonably priced. The result is the AR7030.

The Externals

The AR7030 is a radical receiver, both internally and externally. The case is heavy

cast aluminum finished in black with gently rounded sides. The dial escutcheon is curved at the end closest to the tuning knob and flares as it approaches the knob, yielding a very "dynamic" appearance. The control layout follows the minimalism of previous Thorpe designs, with three rotary knobs and nine pushbuttons. Most of the pushbuttons and one of the knobs have varying functions, depending on what menu choices have been made in the operating system. The controls that are dedicated to a single function are the power switch, the fast tuning and mode buttons (arrayed in an arc above the tuning knob) and the tuning knob itself, which is a heavy cast unit with a "spinning" dimple. To steal a line from the automobile commercial—"This is not your father's Hammarlund!"

On the back are the antenna connectors—a SO-239 for coaxial cable or a whip and spring clips for a high impedance wire. There are two DIN sockets: one for computer control and the other for tape recorder activation, line level audio, mute and IF out. The back panel also has connectors for the outboard power supply and an external speaker.

The overall size is 9.4 x 3 x 8.9 inches (WxHxD) and the weight is 4.8 pounds. The external "brick" power supply puts out a regulated 15 volts DC at 800 mA.

The Internals

The AR7030 has been designed for excellent strong signal capability and low oscillator noise. It is a dual conversion design with intermediate frequencies of 45 MHz and 455 kHz. Frequency coverage is from 0 to 32 MHz and sensitivity in the medium wave

region has not been deliberately reduced. The tuning is synthesized and uses a TCXO (Temperature Compensated Crystal Oscillator) frequency reference for stability and single-loop Direct Digital Synthesis for low phase noise. The phase noise specification is $<-158\text{dBc/Hz}$ @ 100 kHz spacing. The synthesizer tuning steps are 2.655 Hz in SSB/CW/DATA modes and 10.62 Hz in AM/NFM.

The receiver's resistance to overload and distortion from strong signals is due to the use of relay switching instead of diodes in the front end, use of shielded inductors and a lateral DMOS FET QUAD first mixer running at 15 volts. (The radio can be run from a DC power source of 12–15 volts with slightly degraded performance.) The claimed dynamic range specification for the 2.2 kHz filter with a signal spacing of 20 kHz is 104 dB with a third order intercept point of +32 dBm. The blocking dynamic range is 137 dB. This was another area of controversy, as Radio Nederland's testing showed a third order intercept point of 0 to 2 dBm at 200 kHz spacing—not an exceptional figure. The manufacturer's claimed specifications have since been confirmed by several other independent reviewers, both in the U.S. and Europe. Some reviewers found that the performance of the AR7030 pushed the capabilities of their test equipment to the limit! The discrepancy in the test results are due to differences in testing methodology, according to the review in the 1997 World Radio TV Handbook.

DX'ers will really appreciate the IF filtering capabilities of the AR7030. Four filter bandwidths are standard: 2.2, 5.5, 6.6 and 9.5 kHz. These are followed by "tail" filters which permit the use of reasonably priced ceramic filters without compromising ultimate selectivity. There are spaces on the main PC board for two additional filters, which can be just about any type of filter having a 455 kHz center frequency. Holes are pre-drilled on the board for a variety of filter sizes (there are even solder pads for replacing the standard filters, except the 9.5, with higher quality ceramic units). This capability allows the user to tailor the IF bandwidth response to whatever is best for

their particular type of listening. Optional filters that are available through AOR are Collins mechanical filters of nominal 0.5, 2.5, 4.0 and 6.0 kHz bandwidths, Murata ceramic filters of 1.0, 3.0 and 4.0 kHz bandwidths and a crystal filter of 2.4 kHz. A separate daughterboard is recommended for installing crystal filters. KIWA filter modules could also be used. The unique feature of the AR7030's filtering (at least for receivers in this price class) is that the radio self-aligns to optimize filter performance. What this means is that the radio generates a variable frequency signal which is passed through the filter and the radio's computer determines the filter's bandwidth, center frequency, slope response and injection frequencies for proper USB/LSB reception. Once the filter's calibration characteristics are determined, the receiver can adjust the frequencies of its various oscillators to maximize each filter's performance.

Operating System

One element of the AR7030 that has produced a great deal of comment is the operating system. The AR7030 has almost all of the bells and whistles that are expected of modern communications receivers: dual VFO's, memory channels (100), selectable AGC, passband shift, synchronous detection, squelch, timer operation, etc., but the radio has just a few buttons and knobs to control all of these features. The knob and button count was kept low to maintain the designers' objectives of compact size and affordable pricing. The solution taken by the AOR designers was to set aside a rotary control (referred to as the "spin wheel" in the operating manual) and a pushbutton ("General button") to control various functions. The function assignments are made by selecting from menus brought up by the other front panel pushbuttons. For example, if the "Filter" menu is selected, the spin wheel becomes the Passband Shift control and the general button is used to step through the filter selections. Some of the other possible spinwheel/general button assignments are IF gain/AGC speed, Squelch level/VFO swap, Memory channel/Channel recall, PBS/BFO offset and Squelch level/Scan Start/Stop.

Sounds complicated, doesn't it? In all honesty, I was able to use the receiver straight out of the box without referring to the manual for basic DX'ing. I did have to study the manual to understand how to use the memories, scanning and clock/timer. It does take a bit of getting used to, but the manual is well-written and the system is easily mastered with just a bit of practice. I found the spinwheel/button arrangement to be ingenious and quite logical after I got used to it. For DX'ing, I would use the PBS/Filter combination for interference rejection. If I was primarily program listening, I would select the tone control assignment. For checking my "hit list" stored in memory, I would switch to the Memory select/recall combination.

The Setup Shortcut

There are three global setup receiver memories that are available at initial power-up. These memories save desired settings of filter bandwidth, AGC, passband shift, BFO offset, etc. This permits setting up the receiver for a particular type of reception, such as RTTY, and being able to return to that configuration without stepping through the menus to reset all of the receiver's parameters.

The Arm Chair Approach

All of the above discussion becomes rather moot if one decides to control the receiver via the included wireless remote control. All of the receiver's functions with the exception of AGC speed, BFO offset and IF gain are available via the remote. The tuning step of the Up/Down tuning buttons on the remote can be set to any value between 2.7 Hz and 50 kHz. I set the tuning step to 5 kHz and used the remote to bandscan while using my computer, which is located about 6 feet away from the receiver. The remote can be used for direct frequency entry in either MHz or kHz format or for memory channel selection. The remote will operate the receiver at a maximum range of at least twenty feet, but I couldn't read the display at more than six feet away. The infrared sensor seems to have a wide angle of response—I was able to utilize the remote with the controller flat on the desk, just a few inches away from the receiver, even with the receiver's tilt bail extended. This avoids having to use the remote with two hands for up-close operation. The

receiver has infrared sensors on both the front and rear panels, for flexibility in receiver placement. I did notice that the receiver won't accept entries from the keypad while the sync mode is in the process of locking. The receiver can not be turned on or off via the remote and a Mute function to immediately silence the radio would be a nice feature to add to the remote.

Performance

I think the AOR AR7030 is a great receiver—I was particularly struck by how quiet it is. I think that this is due to the excellent strong signal handling capability that helps to reduce intermodulation products that tend to raise the noise floor and the Direct Digital Synthesis frequency synthesis that reduces phase noise. Sensitivity was excellent with an outdoor antenna—I didn't test the radio with any type of indoor or active antenna.

Filtering

Selectivity is good, although I would like to see a different selection of stock filter values. The nominal IF bandwidths that are supplied with the receiver are 10, 7, 5.5 and 2.2 kHz—in the review receiver, the self-alignment program measured them at 9.5, 6.6, 5.5 and 2.2 kHz. For SWBC DXing, I like to have a filter of approximately 4.0 kHz available and some DX'ers like to have an additional narrow value in the range of 3.0 kHz. In all fairness to AOR, nearly all communications receivers suffer from this bandwidth gap, being fitted with a 6 kHz filter for AM reception and an approximately 2.4 kHz filter for SSB. The good news is the AR7030's capability to accept a wide variety of optional filters, as previously noted. Several different optional filters are available from AOR, although it appears that these are more readily available in Great Britain than in the U.S.—I requested that the review unit be fitted with a Collins 4 kHz filter (which the receiver measures as 3.6 kHz) and the radio had to come from England.

The filter skirt selectivity is excellent. I tended to use the 5.5 kHz filter for program listening and occasionally the 6.6 kHz filter if the station was in the clear, although there was usually an audible heterodyne with the 6.6 kHz filter, which was knocked out by switching

to the 5.5 value. For tougher signals, the 3.6 filter was great for listening in either the AM or sync modes. For really tough catches, I would switch to the 2.2 filter and listen in either USB or LSB. The passband shift control was very effective in shifting the filter's "sweet spot" for greatest intelligibility. The 9.5 kHz filter is included for narrowband FM reception—a mode that is sometimes used by hams above 29 MHz and for Citizen's Band services in some countries. It could also be used for reception of MW signals with little interference. I couldn't tell much difference in the sound between the 6.6 and 9.5 kHz filters—perhaps the overall audio frequency response is the limiting factor here.

Audio Quality

This is one of the best sounding radios that I have used in a while. There is a top mounted 3.5 inch speaker which is good, but even better sound is achieved by using an external speaker. The audio output amplifier supplies 2.2 watts into an eight ohm load. Total Harmonic Distortion (THD) is rated at 0.2% in SSB modes and <1.3% for AM modes which are outstanding specs for a communication receiver. The tone controls are very effective in shifting the tonal balance of the received signal due to the chosen turn-over points of 200 and 2000 Hz.

My only complaints about the audio of the AR7030 concern the headphone output. The jack is a 1/8 inch stereo jack, which is fine for Walkman type headphones, but most headsets designed for communications applications have a 1/4 inch plug. In addition, the output level through the headphone jack is very low, requiring that the volume control be advanced to about 80% of full rotation. Using headphones of differing impedances had no effect on this phenomenon. There are separate amplifiers for the speaker and headphone outputs, so I assume that the level of the headphone amp has deliberately been set lower. One other disquieting discovery concerning the use of headphones with the '7030 is that when the sync detector is in use, there is sometimes a repetitive "click" audible in the 'phones. I couldn't hear this in an external speaker, but could when the external speaker output was used to drive an amplifier.

Users of outboard decoding devices, recorders, etc. may be interested to know that there are two independent line level outputs, whose levels can be set independently and can be muted by the squelch control. There are two sets of relay contacts for controlling tape recorders—the relays can be activated either by the single-event timer or by the squelch.

AGC/Sync

Good audio in a receiver is determined by much more than just the audio amplifier. The automatic gain control, which serves to smooth out variations in the receiver's volume as the signal level fades, is one of many determinants of how a radio sounds. The AGC in the AR7030 is excellent. Three decay rates (Fast, Medium and Slow) as well as AGC Off are selectable. There are separate attack rates for AM and SSB modes. The AGC action is very stable and is free of "pops" and overshoot. The AR7030 produces some of the smoothest SSB reception that I have heard in a long time.

Synchronous detection has been a major advance in the past decade in improving the quality of shortwave broadcast reception. Synchronous detection reduces the distortion caused by the phenomenon of selective fading, in which the levels of the sidebands of the signal relative to the carrier vary due to propagation. The '7030 has an intelligent sync detector which automatically fine-tunes the receiver to the carrier frequency of the signal. This process takes a second or two to occur and the receiver mutes while the sync is locking. The detector will track the carrier if the station should drift. Sync mode will automatically deactivate while the tuning knob is being rotated but will reactivate when tuning is completed. The manual states that the tuning accuracy of the automatic sync is to within 100 Hz (typically 30 Hz) of the actual carrier frequency. The automatic tuning feature can be defeated, in which case the operator must tune the receiver to zero beat for the synchronous detector to lock properly. In manual mode, the display will indicate in which direction to tune if the receiver is not tuned close enough to the carrier frequency for lock to occur. Detector calibration is bypassed in manual sync mode.

and the frequency display may not indicate the exact carrier frequency, although the signal is tuned to zero beat. The AR7030's synchro is one of the most tenacious I've encountered. I never heard it lose lock when in the Automatic sync mode, although it did occasionally when in the "wide" manual mode. On the '7030, sideband selection in sync mode is done via the Passband Shift rather than the switching arrangement on some other receivers.

Is It Really That Hard To Operate?


This is a highly personal question, but let me try to give a "real-world" example of how I use the radio. I usually use the keypad to enter a frequency and then use the radio's front panel controls for the other functions. Once power is on (which can't be done via the keypad), the green LCD display shows the time in 24 hour format with seconds, the frequency to a resolution of 10 kHz, mode and a linear bargraph S-meter display. I should add here that the S-meter markings are printed on the panel below the LCD display in tiny type and are essentially illegible at a distance greater than 12 inches. From here I would typically choose the "Filter" menu to select the desired IF bandwidth. Then I could press the "Menu" key which returns the display to the S-meter, with the spin-wheel assigned the passband shift function and the general button used to carousel through the IF bandwidths. I would then typically use the "Mode" pushbuttons to go to Sync mode. I might then go back to the "Filter" menu, choose the "Tone" sub-menu and adjust the Bass/Treble through the spin-wheel and general button. Hitting the "Menu" button then goes back the base display and I could then press the "RF-IF" key to adjust the IF gain, AGC, attenuation or go to the VFO sub-menu. I found the operating system to be quite intuitive after just a little practice, but it is a matter of personal taste.

I didn't do much with the scanning system, but it appears to offer a lot of features. The AR7030 scans the memory channels in any range from two to the receiver's maximum of one hundred channels. The operator can set the delay time, hold (if the channel is

active), mute, etc. The '7030 cannot scan between two selected frequencies, unlike some other receivers. The radio can also be configured to switch between the two VFO's, with the same definable parameters as the memory scan. I found this to be very handy, as I could set a long delay time to actually listen to a program on one frequency and then have the radio briefly switch to the other VFO to check for activity on a particular frequency.

I also didn't do anything with the computer control facilities of the AR7030, as I didn't have any software to control it with. I am not aware of any domestic control software for the receiver. AOR UK informed me that a program named "Data Master" is available, but, like the optional filters, this appears to be more readily available in the U.K. than in the U.S.

Overall

I think that the AORAR7030 is a "state of the art" radio for any type of communications monitoring. It is an outstanding performer and can be configured for optimum reception of any type of signal, be it voice, music, data or Morse code. The price is very competitive, with a street price that is \$100 more than a Drake R-8A and about \$500 less than a Japan Radio NRD-535D. There is one potential hidden cost with the AR7030, however, and that is the filter gap between the stock 5.5 kHz and 2.2 kHz values. The Collins 4.0 kHz unit fills this gap nicely, but adds about \$80 to the cost of the radio. There are some lower cost Murata ceramic units available according to the info sheet from AOR UK, but they don't seem to be readily available in the U.S. This filter gap and the size of the headphone jack are the only things that I would change in the AR7030. There are plans to produce an audio notch filter/RF noise blanker board along with CPU upgrade to permit expanded memories with alphanumeric labeling. This should be available in early 1997. The U.S. AOR distributor is EDCO, 325 Mill St., Vienna, VA 22180; (703) 938-8105. AOR UK can be contacted by E-mail at: info@aor.co.uk and their Website can be found at: <http://www.demon.co.uk/aor/>. 

Adrian Peterson's Diary

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Azad Kashmir Radio

During the 1960's and 1970's, there was a great deal of confusion and speculation among DXers regarding the authenticity of the shortwave station identifying itself as "Azad Kashmir Radio." The station had been logged in the tropical bands in several countries of Asia, as well as in Australia, New Zealand, and occasionally in the United States and Europe. Identification announcements such as "Azad Kashmir Radio, Muzaffarabad," and "Azad Kashmir Radio, Trarkhel," had been heard.

A partial answer had been supplied by two men well known in the radio world: diplomat and DXer Gregg Calkin, and noted international radio monitor Victor Goonetilleke. Gregg visited the station in Muzaffarabad in 1975 while stationed in Pakistan, and Victor had made some astute monitoring observations from his location in Colombo, Sri Lanka. What was the status of Azad Kashmir Radio? Was there just one station, or two? How many transmitters were carrying the AKR programs? When was the station inaugurated? All of these questions needed answering.

The large verdant vale of Kashmir, located on the edge of the high Himalayas, had been fabled through the years in song and poem. This productive valley has been the prize of king and conqueror, and at the height of its power and prosperity it was an independent mountain kingdom. At the time of partition between India and Pakistan in 1947, Moslem Kashmir became a cause of dispute between the two neighboring powers, and a war erupted. At the time of ceasefire, India held the major portion of the territory, including the prized valley. Pakistan retained a narrow, mountainous strip along the western edge. This small and rugged territory was given a new name, Azad Kashmir, or Free Kashmir.

Boarding a country bus in Islamabad, the

capital city of Pakistan, for the arduous journey into mountainous Azad Kashmir, you soon enter the hilly areas, and, for many hours, the bus bumps over narrow, winding roads strung along the edges of steep gorges several thousand feet deep. In these localities it is the practice of drivers to pass each other slowly on the wrong side of the road so that correct judgment can be made regarding the rising cliff on one side and the falling ravine on the other.

On a sunny Asian afternoon, the bus arrives in Muzaffarabad, the tiny capital city of Azad Kashmir. It is a typical Himalayan town located in a picturesque area of the mountains near the confluence of two rivers. The town is built on the side of the hills, and the usual bazaar runs the length of the main town.

The radio station is clearly identified by a large sign, "Azad Kashmir Radio." It is located at the upper edge of the bazaar area, with a delightful view of the valleys and mountains and an overview of the town. The main building on the small AKR estate houses the studios and offices of "Azad Kashmir Radio, Muzaffarabad." In the main studio a music recording session is under way, with several local musicians sitting in groups on the carpeted floor in typical Asian style.

The second (and smaller) building, which is located at the back of the small property, contains two transmitters, a 1 kw. unit radiating in the 3 MHz shortwave band, and a mediumwave unit. The aerial system is supported on three masts, used for the low slung mediumwave and shortwave antennas.

At least part of the mystery is now solved. "Azad Kashmir Radio, Muzaffarabad" is indeed a legitimate radio broadcasting station, radiating local programs on a tropical band channel. The low power output ac-

counts for the fact that the station is not heard regularly at great distances.

But what about the station with the identification of Trarkhel? Let's board another country bus for the rugged return journey to Pakistan, this time traversing the southern route out of Azad Kashmir via Trarkhel. At the time of partition in 1948, Trarkhel became the temporary "capital city" of Azad Kashmir, but today it is no more than an unknown and unheralded little village. In Trarkhel, responses to inquiries about AKR suggest that little is known about the station (all mail addressed to the station is bundled up and forwarded to Rawalpindi). The reason is that AKR is not located in Trarkhel after all, but in Rawalpindi, Pakistan. (Surprisingly, reception from both stations, AKR Muzaffarabad and AKR Trarkhel, is particularly poor in Trarkhel.)

The studios and offices for AKR Trarkhel are located in a plain and unmarked building on a main thoroughfare running through the city of Rawalpindi. It is only a short walking distance from Rawalpindi's only regular radio station, Radio Pakistan Rawalpindi, and AKR Trarkhel functions almost as a department of Radio Pakistan. The programs of Azad Kashmir Radio Trarkhel are broadcast from a 10 kw. transmitter located at the large shortwave base operated by Radio Pakistan. This base, 15 miles out of town along the Grand Trunk Road going towards Lahore, is actually two bases side by side. Available information suggests that eight active transmitters, of 10, 100 and 250 kw., are located there. One of the original 10 kw. transmitters in the older of the two bases is the unit that has been in regular use for the programs of Azad Kashmir Radio Trarkhel, although a 100 kw. transmitter has also been used at various times.

Interestingly, the local village people near the transmitter base listen to Azad Kashmir Radio "Trarkhel" on their small transistor radios. Although the station purports to be located in Trarkhel, half a day's journey by bus across the mountains, it is in reality broadcasting *to* Trarkhel, not *from* Trarkhel.


Some years ago, AKR Muzaffarabad would take a regular off-air relay from AKR "Trarkhel"-Rawalpindi at selected times

during the broadcast day. However in recent times, programming from the two AKR stations has been completely separate and independent.

And so the answer to the mystery regarding AKR Radio: AKR Muzaffarabad is indeed a legitimate radio station broadcasting from studios and transmitters located in the capital city of this regional state. AKR Trarkhel is on the air from Rawalpindi in neighboring Pakistan.

Over the years there have actually been three different radio stations announcing as "Azad Kashmir Radio," although only two have been on the air at any one particular era. The third station—and the first and only radio station actually located in Trarkhel—was a mobile unit which began broadcasting on April 16, 1948. The studio was housed in one army truck, and the low powered tropical-band transmitter was located in another. Although it is not known how long this station was on the air, it was probably only a temporary facility in use for no more than a few months.

It is not known just when programming was transferred from the mobile units located in Trarkhel to the Rawalpindi station announcing as AKR Trarkhel. However, an FBIS listing shows two shortwave channels in use for AKR Trarkhel in 1949, so it is probable that the Rawalpindi facility of AKR came into operation at the end of 1948. A permanent facility for Azad Kashmir Radio was erected at Muzaffarabad and inaugurated on October 15, 1961. It radiates on shortwave from a 1 kw. transmitter in the 3 mHz band and a 150 kw. mediumwave unit on 792 kHz. Programming for this AKR station has always been produced in its own studios, with news and features taken by relay from Radio Pakistan. Programming for the two stations is in a typical Kashmiri style, with regional-type vocals and instrumentals, plus features and talks in the Kashmiri language, which is similar to Urdu. Relays of news and features are also taken off-air from Radio Pakistan, Rawalpindi. However, the two AKR stations do not relay programs from each other.

The rather catchy National Anthem of Azad Kashmir is used to open and close each transmission, and it is frequently used during programming. It was written by the same man who wrote the National Anthem of Pakistan. 

NASWA Awards

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Howdy and welcome to the Awards Column for February. Due to some space problems, my December column (with all its Christmas humor) was left out of the Journal in December and again in January, so it has been awhile since you have heard from me. Award granting has been slow, but things really picked up when a herniated mailman delivered Bill Matthews' huge package of award applications for processing. Among Bill's awards was a Master DX Centurion award, a major, major milestone in a DXer's career. Also this time, John Wilkins picked up a Senior Brazilian DXer award, only the third ever handed out. And also of note is Richard Gearing's DX Centurion. Do become part of the fun and get those award applications in to me!

March is a big month for SWLs and DXers with Shortwave Radio Week, the North American DX Championships and the Tenth (!!) Annual Winter SWL Fest. I have provided some material on these topics at the end of this impressive list of folks who will be showing their friends their new NASWA greens:

Bill Matthews

- Senior Ecclesiastic DXer
- ORTF DXer
- Master Radio Moscow DXer
- All American DXer
- Australian DXer
- Master China DXer
- All Germany DXer
- Arab World DXpert
- Emissora Nacional DXer
- Maple Leaf DXer
- Master Soviet Sphere DXer
- Master Time Station DXer

- All Continent QRP—5kw
- Master DX Centurion
- African Continental DXpert
- Asian Continental DXpert
- Master European DXer
- North American Continental DXpert
- Master Pacifica DXer
- South American Continental DXpert
- Pirate DXer
- Master British Commonwealth DXer

John Wilkins

- Senior Brazilian DXer

Gary Froemming

- Master Time Station DXer

Gary Neal

- International DXer
- All VOA
- European Senior DXer
- Ecclesiastic DXer

Robert Gearing III

- DX Centurion
- European Senior DXer
- Senior Ecclesiastic DXer
- All VOA

Just a note on this year's **North American DX Championship**—a fine way to increase your country totals and perhaps your NASWA Awards. Contest dates are Friday 7 March through Sunday 9 March and more details are found elsewhere in this edition of "The Journal." If you have never participated in the NADXC, why not see what it is all about this year?

Featured Award Of The Month

As has become the custom, rather than feature an award at this time of the year, I feature instead the Winter SWL Fest—this year, it is **The TENTH (!) Annual Winter SWL Fest**. With the demise of the Grove Fest, the Winter SWL Fest has become THE major event of the year. And this year marks a milestone, the TENTH year of festing. As the years pass, the fest becomes more the same each year, while at the same time becoming more different. There are the many familiar faces that you met last year, a new group to meet this year, forums, the hospitality room, the displays, the radios, the prizes—all there, and all presented in an atmosphere that encourages a laid-back, relaxed opportunity to enjoy radio. Although billed as a SWL Fest, it is truly an all-band occasion, with folks there and presenting forums from “DC to daylight.” The nonprofit fest is organized and presented each year by “The Gang of Three”—Brown, Cones and Fields—with a great deal of cooperation from a bunch of great folks. The program is now pretty much finished for the Tenth (!) Winter SWL Fest and I want to share it with you.

The Fest starts Friday 14 March, with registration at 0730 (although more and more folks seem to be getting there Wednesday and Thursday—the Hospitality room opens Thursday night). The first forum begins at 0900 with Bob Montgomery discussing “The Mystique of Longwave DXing.” At 1030, “Uncle Skip” Arey will present “Getting Started in Mediumwave and Shortwave Radio.” After lunch, a Forum on TV and FM DXing will be followed by that merry bunch of madcaps, the scanner scum, presenting “Scanning With The Scum.” At 1600, Eric Cottrell will answer that age-old question, “Why Would Anyone Want To Be A Utility DXer?” On Friday evening at 1900, a swap meet/equipment sale will be available for those interested in getting rid of something or in picking up fresh stuff from somebody else—this has become an increasingly popular event. Just bring your stuff along.

Saturday morning, 15 March, will open with Richard Cuff and John Figliozzi (“Mr. and Mrs. Hospitality”) presenting their very popular forum, “Easy Listening, followed by George Zeller and Andy Yoder presenting their equally popular “The Year in Pirate Radio” at 1030. The luncheon, included with full registration, starts at 1200, and at 1330, Risto Vahakainu, the new president of the EDXC, will present “DXing Paradise: DXing From Scandinavia.” At 1500, Joe Buch, Ben Hester and Chuck Rippel will formally close the forums with a presentation dealing with a number of the technical aspects of the hobby, “Technical Topics.” After a short rest, activities will resume with the opening of the cash bar at 1800. The banquet begins at 1900, and because this is the tenth anniversary of the fest, there will be no formal speaker this year. Instead, there will be a number of speakers who will reflect on “Ten Years of Winter SWL Festing.” Following the banquet, the prize draw will be held and some lucky participants will take home some great prizes donated by the various suppliers—a new receiver, some headphones, a carry bag, or the infamous Barto bag.

Saturday also features an all-day silent auction, with the proceeds going to an interdenominational African Relief Fund through Father John. Be sure to bring something to contribute to the silent auction and be ready to join in the fun.

The Fest has become an institution and one that you can easily join. Just fill out the registration form found elsewhere in *The Journal* and “come on down.” If you want to view pictures of last year’s fest, try these addresses: <http://www.trsc.com> or http://www.crosslink.net/~mfine/swl_fest.html. Updated information, as well as a registration form, can be found at http://www.trsc.com/swl_fest.html, Tom Sundstrum’s Web site. You may also link into these pages from the ANARC web page.

Hope to see you at the Fest!!!

THE 1997 NORTH AMERICAN DX CHAMPIONSHIPS (NADXC)
A Shortwave Listening Contest Sponsored by
The Association of North American Radio Clubs (ANARC)

PURPOSE

This contest is designed to promote the shortwave listening hobby and to provide those SWL's and DXer's interested in competing an opportunity to participate in a carefully run, challenging contest.

ELIGIBILITY

The 1997 DX Championship is open to all DXer's residing in North America [as defined by the country list of the North American Shortwave Association (NASWA)]. Members of the NADXC Administrative Committee are excluded from participation.

LISTENING PERIOD, FREQUENCIES, AND TIMES

The contest listening period will begin on Friday, 7 March 1997, at 1900 EST (0000 UTC) and end Sunday, 9 March 1997, at 2359 EST (0459 UTC). This contest coincides with the end of Shortwave Radio Week (which runs from 3-9 March).

PRIZES

Plaques will be awarded by ANARC to the top three finishers. All entrants will receive a participation certificate indicating that they competed in the 1997 North American DX Championships. The certificates for the top 20 will have their place of finish in the NADXC indicated on the certificate.

SCORING

Contestants are to log as many stations as possible from as many countries as possible within the prescribed listening parameters. The first station logged from each country= 1 point. The second station from each country= 3 points; each additional station from that country= 5 points. There are 10 BONUS countries that count 10 points each--rather than 1--the first time they are logged: Australia, PNG, Ghana, Namibia, Ecuador, Guatemala, Norway, Vatican City, Laos and India. For contest purposes, all clandestine stations and hobby pirate transmissions will be considered one "country." A station is a shortwave broadcaster whose transmissions are intended for reception by the general public. Each transmitter site of a broadcasting organization will count as a separate station. Different services of the same broadcast organization do not count as separate stations. Transmissions of a single broadcast organization on various frequencies may only be counted once. The use of multiple frequencies does not create as many new stations as frequencies used. For country counting and station counting purposes, the country list of the North American Shortwave Association (45 Wildflower Road, Levittown, Pa 19057) will be the sole criterion.

Participants are required to submit a running log to include country, station, frequency, time, date, SINPO, and the basis of station identification (i.e., spoken ID, interval signal, language, program, known//frequency checked, etc.).

Each contestant is required to total his own entry and provide a summary of the number of countries and stations claimed to support the point totals. The receiver(s) used in the contest must also be indicated. Logs will be judged on accuracy, completeness and neatness. If the judges cannot read a log, it will not be counted for scoring purposes. The decision of the judges is final.

FEES

An administrative fee of \$4.00 plus two \$0.32 stamps must be provided for each contest entry. All entries must be postmarked by Saturday, 15 March 1997, and sent to: Dr. Harold Cones, Two Whits Court, Newport News, VA 23606 USA

Contestants will be notified of the results in June, and a list of winners will be sent to each of the ANARC member clubs for publication.

Good luck from the 1997 NADXC Administrative Committee - Harold Cones, John Fisher, and Kris Field.

Listener's Notebook

Al Quaglieri
P.O. Box 888
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ANGOLA 3374.9 *Radio Nacional de Angola* 0222 continuous soft pop vocal music including Lionel Ritchie, no ann BOH, //7245 (weaker), fair. (27 Dec/Ziolkowski/Cumbre)

ANGUILLA *Caribbean Beacon*, a/k/a Dr. Gene Scott, generated a flurry of DX interest when it finally began operations on 6090 kHz (2200-1100) shortly after Christmas. Daytime freq from this site is 11775 Khz (1100-2200). Station has been on-and-off ever since. (various, incl. Hauser and nearly everyone at Cumbre) [Say bye-bye to Radio Esperanza... -AQ]

ARGENTINA 13361U *FM Aspen*, 102.3 Mhz 2106-2120, pop music, ID as "Seguimos con mas en FM Aspen 102.3", ads Autopistas del Sol. This is the FM station of Radio America in Buenos Aires. (6-Jan/Barrera-CHILE)

RAE's English hour at 0200 weeknights is often pre-empted for Spanish; such as two UT Thursdays in a row when I was checking for the DX program: Dec 26 at 0233 on 11709 there were ads in Spanish, and the week before a silly ball game. They obviously don't have much regard for their English-speaking audience (Hauser) [I've listened to their EE program several times lately, and it's a decidedly casual affair, cool music interspersed with mishmash of news items. Something tells me it's done solely by one or two guys, and if they're not there it doesn't happen. -AQ]

AUSTRALIA *HCJB* says "no firm plans" for HCJB Australia relay. To facilitate the goal of putting many of Asian languages on the air, HCJB World Radio has been researching various strategic international broadcasting sites, one of which is northwest Australia. HCJB has not negotiated with the Australian federal government for permission to build or operate an installation in Western Australia. (11-Jan/HCJB DX Party Line/WBDX/EDXP/Padula-AUS)

BELARUS On 5032 kHz at 0730-0815, the former military LSB utility transmitter near Minsk is back on the air here with a program in Russian, playing Ru and EE pop songs, like R. Roks did previously.

Also ads and ID: *Radio B* or *Radio Biek*. Nothing heard on former //5262 kHz. SINPO 45444. (1-Dec/Petersen-DEN/BCDX/Bueschel-FRG)

BHUTAN *BBS* Thimpu midday broadcast on Sunday observed in English on 6035 kHz at 0915-1000. Good signals in South Asia. Mon-Sat 5030 kHz at 0900-1400. (5-Jan/Weerakoon-CLN/UADX/BCDX/Bueschel-FRG)

BOLIVIA

3390.4 *Radio Emisora Camargo* 0020 music & M/W talk in Spanish, many mentions of workers but also a single mention of Cusco and Madrid. At 0101, talk by man and id "programa Radio (1 word) Camargo." Another song started as I tuned out. (8-Jan/Johnson/Cumbre)

4702.24 *R. Eco San Borja*, 2258, Caught nice clear English ID by W as: "?? Eco San Borja...from San Borja in Bezni, Bolivia. ?? 47 hundred kilohertz, 60 meters, ?? Eco San Borja, Eco ?? San Borja, S-A-N B-O-R-J-A, Correo Central, San Borja, Beni, ?? country Bolivia. And that is ?? of San Borja the radio station. This is San Borja, the international radio of Beni, Bolivia." Very surprised to hear an EE ID from this one. Quite good. (2-Jan/Valko/Cumbre)

5504.18 *Radio Emisora Dos de Febrero* (p) 0005 male announcer in Spanish, but plenty of Latin music as well. Seemed to be canned announcements with many mentions of the word Municipal between every song, but I never could catch an ID by the time they faded at 0021. (7-Jan/Johnson/Cumbre)

BRAZIL *Radiobras* external services:

0115-0215	Portuguese	11780
0415-0515	Portuguese	11765
0700-0800	Portuguese	9745
1000-1120	Spanish	9745
1200-1320	English	15445
1330-1450	Spanish	15445
1630-1750	Portuguese	15265
1800-1920	English	15265
1800-1920	Portuguese	17750

1920-2400	Portuguese	17750 Su	1025-1100	4460 5320 6840 7504 7935 9080 9290 11800
1930-2050	German	15265	1100-1400	3220 4460 5320 5880 6125 6750 6840 7504 7935 9080 9290 9800 12040
(BBCM)			1400-1735	3220 4460 5320 5880 6125 6750 6840 7504 7935 9080 9290 9800
BURKINA FASO	<i>Radio Burkina</i>	swapped daytime freqs from 9515 to new 7230 kHz. The head of the transmitting center, Marcel Teho, said that the change was being made after tests at Djapaga and Bobo Dioulasso had shown that 7230 kHz provided better reception. (BBCM)	1958-2300	3220 4460 5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 3220 4460 5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 12120
CHILE	Here's what's happening on shortwave from Chile:		2300-2330	4460 5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 12120
5824.9	<i>R. Triunfal Evangelica</i> , daily except Thu & Sun at 2100-0000. Station confirms with new full data QSL-card to Talagante address.		2330-2400	4460 5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 12120
6029.6	<i>Radio Santa Maria</i> , Mon-Fri 0900-0300 (-0300 Sat), Sat 0900-0300 (-0300 Sun), Sun 1000-0300 (-0300 Mon). The station relays news program from Radio Chilena (660 khz MW in Santiago) per sked: Mon-Sat 0900-1000, 2200-2230, Tue-Sun 0200-0230. Sun 1100-1130, 1600-1630. Mon 0200-0230.		CPBS Second Program , in Chinese:	
6080	<i>Radio Patagonia Chilena</i> , Mon-Sat 0930-0000, Sun 1000-0000. Station relays news programs from Radio Nacional de Chile (1140 MW in Santiago) at the following times: Mon-Sat on the hour and between 1600-1700. Sport program "Mas Deportes" daily at 1100-1200 and at 1700-1800.		0000-0030	4800 6890 7770 9064 9755 9775 10260 11610 11740
6090	<i>Radio Esperanza</i> , daily 24 hours in Spanish, except English ["Comfort and Cheer"] daily at 0630-0700, German only Sun at 1200-1230. (Barrera-CHILE)		0030-0100	4800 6890 7770 9064 9755 9775 11610 11630 11740
CHINA	<i>Central People's Broadcasting Station/China National Radio (CNR).</i>		0100-0200	4800 6890 9064 9755 9775 11610 11630 11740 15500
CPBS First Program , in Chinese:			0200-0230	6890 9064 11610 11740 15500
0000-0030	5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 11800 12120 15390		0230-0300	6890 9064 11610 15550
0030-0100	5320 5880 5915 5955 6125 6295 6750 6840 7504 7935 9080 9290 11800 12120 15390 15550		0300-0600	9064 11040 11610 15500
0100-0200	6840 7504 9080 9290 11800 12120 15390 15550		0600-0900	9064 11040 11610 15500 17700 Sa-Tu/Th
0200-0600	6840 7504 9290 11800 12120 15390 15550 17605		0900-0955	6890 7770 9064 11610 Sa-Tu/Th
0600-0855	17605 15550 15390 12120 11800 9290 7504 6840 We-Mo		0955-1030	4800 5163 6890 7770 9064 11610 11740
0855-0930	6840 7504 9290 11800 12120 15390 15550 17605		1030-1100	4800 5163 6890 7770 9064 9775 11610 11740
0930-0945	6840 7504 9080 9290 11800 12120 15390 15550		1100-1200	4800 5163 6890 7440 7516 7770 9064 9775 11610 11630 11740
0945-1000	5320 6840 7504 9080 9290 11800 12120 15390		1200-1330	4800 5163 6890 7440 7516 7770 9064 9775 10260 11610 11630 11740
1000-1024	4460 5320 6840 7504 9080 9290 11800 15390		1330-1600	4800 5163 6890 7440 7516 7770 9064 9775 11610 11630 11740
			2058-2230	4905 5163 6890 7516 7770 9064 10260 11610
			2230-2330	4800 4905 5163 6890 7516 7770 9064 9775 10260 11610 11630 11740
			2330-2400	4800 6890 7770 9064 9775 10260 11610 11740
			Broadcasts for National Minorities:	
			0000-0026	Tibetan 11630 11375 8566
			0030-0056	Uighur 11375 10260 8566 4735-Urumqi
			0100-0126	Kazakh 11375 10260 8566 4970-Urumqi
			0430-0456	Korean 9920 9775 8566
			0500-0526	Mongolian 9920 9775 8566
			0530-0556	Tibetan 15670 11630 11375
			0600-0626	Uighur 15670 11375 10260
			0630-0656	Kazakh 15670 11375 10260
			1000-1026	Korean 9920 9775 8566
			1030-1056	Tibetan 11630 11375 8566
			1100-1126	Uighur 11375 10260 8566
			1130-1156	Kazakh 11375 10260 8566
			1200-1226	Korean 9775 5420 4190

1230-1256 Mongolian 9775 6974-Hohhot 5420
4800 4190 1458-Hohhot
1300-1326 Tibetan 8566 6110 5995-Lhasa
4035-Lhasa
1330-1356 Uighur 10260 9390 8566 4735-
Urumqi 3990-Urumqi
1400-1426 Kazakh 10260 9390 8566 4970-
Urumqi 4330-Urumqi
1430-1456 Mongolian 10260 9390 8566 5060-
Urumqi 4980-Urumqi
2130-2156 Korean 9775 5420 4190
2200-2226 Mongolian 9775 5420 4800 4750-
Hohhot 4190

(BBCM)

Central People's Broadcasting Station (CPBS)

First Program in Chinese, Hakka and Amoy

0055-0615 15710 11935 11100
0955-0005 7620 6015 5125

Central People's Broadcasting Station (CPBS)

Second (Taiwan) Program, in Chinese

0000-0105 9170
0355-0605 15880 11000
0605-0930 15880 11000
0930-0955 6095 5090
0955-1100 11000 5090
1100-1805 6790 5090
2055-2300 6790 5090
2301-2400 9170 6790

Heilongjiang People's Broadcasting Station

0000-0600 Chinese 4840
0835-0840 Chinese 4840
0840-0940 Korean 4840
0940-1330 Chinese 4840
1330-1400 English 4840
1400-1440 Chinese 4840
2100-2400 Chinese 4840

2754h/t Found possible 2 x 1377 CC harmonic on 2754, first heard @1312 on 1/12. Check of 1377 shows only NHK 2nd Program mixing w/Russian co-channel. VOthe Strait is also listed here, but SW freq of 5125 was NOT // to 2754. There are also a couple of 1 kw Taiwanese stns listed on 1377, but my assumption is that it could be Qingdao, Shandong Province which operates at 10 kw & is the closest 1377 CC stn to my QTH. Programming has consisted of lite & CC mx and W tlk. I have been unable to catch an ID, but TPs and bugle fanfare are often heard at the Top of the Hour. Still audible when last checked on 1/19. (Famularo-JPN)

5030 UnID 2110 Unlisted PRC station with non-descript program of Chinese talk by woman and man plus orchestral music; "5+1" pips at 2200, but too much QRM to catch ID. Still audible 2225, though weaker and starting to mix with assumed Costa Rica. Nothing from China is listed in WRTH, PWBR or TBL, but I seem to recall that Yunnan PBS used this freq some years ago. (18-Jan/Hill)

7100 **CNR-1** 2213 Unlisted outlet with woman in Chinese // 7935 and 6840. Fair/good when ham data transmissions let up. (18Jan/Hill)

CHINA-TAIWAN Central Broadcasting Station—schedule as received by FAX Jan 13, translated from Chinese, and confirmed by listening.

Network 1-Mandarin

0100-0200 7250
0200-0355 7250 11970
0355-0955 3335 7105 11775 11970 15320
0955-1600 3335 7250 15320
1600-1900 3335 7250 15320
1900-2055 3335
2055-2200 3335 7250
2200-0100 7250

Network 2-Mandarin

0955-1900 6085 6180 7105 9630 11775
1600-2200 6040 9690

Network 3-Cantonese

0355-1555 6040 9690

Network 4-Mongolian

1000-1130 11905

Network 4-Tibetan

1140-1300 11905

Network 4-Uighur

1300-1500 11905

(15-Jan/van den Boogert/EDXP/Padula-AUS)

CLANDESTINE-AFRICA 12008.02, **Voice of Sudan**, 0419-0502, AR program w/tribal music, pgm in // to 8000.10 & 9025.30 khz with lot of mentions to "Sudania", at 0502 ID. (25-Dec/Barraera/Cumbre)

CLANDESTINE-ASIA Radio Free Asia, current schedule as of Dec 31, 1996:

1300-1400 Tibetan 7355 9440
1500-1600 Chinese 6240 7495 7530 9455
2300-2400 Chinese 6240 7495 7530 13800
2300-2400 Tibetan 7415 7550

(Aoki/Asian Broadcasting Institute/DXW/BCDX/Bueschel-FRG)

RFA now also from **KHBN**, Palau on 9910kHz 1500-1600 and 2300-2400. (German/EDXP/BCDX/Bueschel-FRG) This deal started just in time, since Armenia canceled contract to broadcast RFA as of Jan 1, as Kazakhstan had previously under pressure from China. Both say they are still willing to carry RFA to other Asian countries, per LA Times article via Mike Cooper (21-Jan/Hausser/World of Radio)

CLANDESTINE-MIDEAST Voice of the Iraqi People, Voice of Democracy and Progress, noted on 3910 from 1730-1830. Station announced sked 1730 and 0400 on 49 and 75 mb, but not heard on 49 mb.

Voice of the Islamic Movement in Iraqi Kurdistan was observed in Arabic from 1700-1800 on 4136, 4400 and 6305 kHz.

Voice of Mojahed, the radio station of the Mojahedin-e Khalq Organization (MKO), announced the following new schedule for its broadcasts, emanating from Iraq:

0300-0700 5450 5150 4650 4450 3850 3550
 0700-0900 6175
 1500-1700 6175
 1700-2100 5450 5150 4650 4450 3850 3550

(BBCM)

Voice of the People of Kurdistan observed in Arabic and Kurdish on or around 4100 kHz. Despite announcements, not traced on the 49 mb.

Voice of Iraqi Kurdistan is heard in Kurdish and Arabic on 4070 kHz from 1650-1930.

Voice of Rebellious Iraq is heard from 1300-1530 on 6080 kHz. (BBCM)

Voice of Southern Azerbaijan (Azeri: Bura Janubi Azerbaijan Sasi) is operated by the National and Independent Front of Southern Azerbaijan. Southern Azerbaijan is the Iranian province of Azarbayjan which borders the Republic of Azerbaijan. Programming is hostile to the Iranian government.

0615-0715 Azeri 11935
 1630-1730 Azeri 6055

(BBCM)

COLOMBIA

H2900 **R. Metropolitana**, Bucaramanga 2311 "Metropolitana, su estacion bonita, 1450 AM". (Bucaramanga is generally nicknamed "la ciudad bonita"). (29-Dec/Klemetz-COL)

H2905v **La Voz de la Provincia**, Guaranda (Sucre) 2215 Venezuelan technopop music. (5-Jan/Klemetz-COL)

H2966.2 **R. Cocorna'**, Cocorna' (Antioquia), is rock-steady on this channel, and has been for a couple of years now, as well as on H5932.4, but usually quite weak around local sunrise and sunset. Fundamental is unheard in Bogota, but audible for instance in the placid tourist spot of Villa de Leyva, near Tunja, some 100 miles north of the capital. (Klemetz-COL)

H3108/
 H3109.2 Two parish broadcasters, probably from the Antioquia region, 2330, with Catholic mass. I have visited a few parish broadcasters in Antioquia, viz. one in the town of Guarne where there was a small transmitter inside the Cathedral to relay mass in the morning, at noon and at dusk, on approx. 1555 kHz. (3-Jan/Klemetz-COL)

H3232.2 **La frecuencia musical FM**, Quimbaya (Quindio), 2150. (5-Jan/Klemetz-COL)

H3279 **Toquilla Estereo**, Aquitania (Boyaca), 2200, with full canned ID, "Desde Aquitania, Boyaca, trasmite Toquilla estereo, 1.640 kHz [= "uno punto seiscientos cuarenta"] amplitud modulada. Toquilla estereo, puerta abierta de los Llanos Orientales". This is a hitherto unlisted and unknown "community" broadcaster, i. e. a "pirata", in local terms, audible thanks to Ecuadorian La V. del Napo being off the air. (5-Jan/Klemetz-COL)

H4291 **R. Majagual**, Majagual (Sucre), 2300. (5-Jan/Klemetz-COL)

H4319.9 **R. Reloj**, Tulua', 1032 with locally produced esoteric progr. Steady carrier and quite readable in the "synchro" mode. (4-Jan/Klemetz-COL)

H4453.6v **Ecos de Pueblo Rico**, Pueblo Rico (Risaralda), 2245, "Exitos variados"; not bad. Is 3 times the fundamental. (4-Jan/KlemetzCOL)

H4530 **R. Estrella**, Armenia, 2240.—Also on H3020. (31-Dec/Klemetz-COL)

5873.7 **R. El Sol**, Villa Moreno (Narino), Colombia, 2129 with live coverage of the local "fiesta de los blancos y negros". (4-Jan/KlemetzCOL)

COSTA RICA According to a telephone interview with Juan Vega, Director of "88 Estereo," Perez Zeledon, Costa Rica, they are ready to go on SW from January 1997 on 6075 kHz, 1.5 kw, 1100-0500. QTH: Apartado 827-8000, Perez Zeledon, Costa Rica, FAX +506-771-5539. (29Dec/Hirahara-JPN/NU/BCDX/Bueschel-FRG)

CROATIA English news segments from *Croatian Radio*, Zagreb, have been monitored: 0706 M-F, 0803 S/S, 0903 M-F, [presumably daily:] 1303, 1903, 2303—and not 2203. frequency spans not checked, but see sked in Electronic DX Press for 5895, 5920, 7165, 9830, 11635, 11830, 13830 (Roe-UK/World of Radio/Hauser)

CUBA This *RHC* schedule has been compiled entirely from recent monitoring observations:

0000-0030	Quechua	15340
0000-0100	Spanish	11970 11875 11760 9550 9505 6180 6070 6000 5965
0100-0200	Spanish	11970 11875 11760 9550 9505 6180 6070 5965
0100-0500	English	9830-usb 9820 6000
0200-0230	Creole	6180
0200-0300	Spanish	11970 11875 11760 9550 9505 6070 5965
0230-0300	French	6180
0300-0500	Spanish	11760 9550 9505 6070 5965
0330-0400	French	6180

0500-0700	English	6000 [but heard here on usb9830 also]
1100-1200	Spanish	15340 11760 9550 6000
1200-1300	Spanish	15340 11760 9550 6180 6070
1300-1400	Spanish	11760 9550 6180 6070
1400-1500	Spanish	11760 6180 6070
2000-2100	Portuguese	11760
2000-2100	French	9620 9585-usb
2000-2100	Arabic	9820
2100-2200	English	9620 9585-usb
2100-2300	Spanish	11760 9830-usb 9820
2130-2200	Creole	6180
2200-2300	Portuguese	15340
2200-2300	English	6180
2300-2400	Portuguese	11970
2300-2400	Guarani	15340
2300-2400	French	6180

(31-Dec/BBCM/AGDX/BCDX/Bueschel-FRG)

RHC's little-known Esperanto broadcast was heard at 2200 on 9620 only, not 9585-usb, following English with poor modulation and ever-increasing co-channel from something in Indonesian (15-Dec/Hauser)

DENMARK English on the air from *Radio Denmark* is no more. However, Julian Isherwood's English program is available in RealAudio via WRN on <http://www.wrn.org/stations/cph.html>. (Koie/R. Denmark)

ECUADOR HCJB now using 9420 (ex-9765) for Czech/Slovak 0520-0600. (2-Jan/Lewis-EQA/HCJB/BCDX/Bueschel-FRG)

ERITREA 7085 Voice of the Broad Masses—sign on for this station seems to be at 0430 now instead at 0330. Nice signal at 0453. (28-Dec/Johnson GPSP XX/Cumbre)

On 10th January *Voice of the Broad Masses of Eritrea* announced the following new schedule for programs in the Tigrigna language: 0300-0400 Monday-Friday 0500-0600 Saturday-Sunday 0930-1030 daily 1200-1300 Saturday-Sunday 1700-1800 daily. (The above service are carried on 5000 and 7085 kHz.) (BBCM)

ETHIOPIA Voice of the Tigray Revolution supports the Ethiopian People's Revolutionary Democratic Front (EPDRF, the country's ruling party). Prior to the overthrow of the Mengistu regime by the EPRDF in May 1991 it operated as a clandestine station, sharing facilities with other pro-EPRDF radios. The station now broadcasts from Mekele, capital of Tigray region in northern Ethiopia. Transmitter power is 10 kW.

0330-0500	Tigrigna	7515 5500 Mo-Fr
0400-0800	Tigrigna	7515 5500 Sa-Su
1500-1600	Tigrigna	7515 5500

(BBCM)

6210.01 **R. Fana**, IS, 0329-0344 s/on w/ID as "Radio Fana", then Vn program in // to 6940.02 kHz. (23-Dec/Barrera/Cumbre)

FRANCE RFI frequency change: Polish 2200-2300 on new 3965 (ex 3970) kHz. (2-Jan/Ludwig-FRG/BCDX/Bueschel-FRG)

I heard yesterday in the "club des auditeurs" broadcast that **RFI** is planning to stop broadcasting on SW to Europe and North America. Apparently they believe everybody has a satellite dish or an Internet connection that allows continuous radio listening. They said they welcome letters from listeners, to better know where they are and if SW is really needed for them. Unfortunately I didn't write down the precise address for that poll. Did anybody do so? The best address I can come with is:

RFI—club des auditeurs Maison de la radio 116 avenue du president Kennedy 75016 Paris France

But you may also write to them on their Web server. The address is <http://www.rfi.fr>. Follow the links "Dialoguer avec nous" then "Questions, suggestions sur RFI", and "QUESTION". (Dujardin/rec.radio.shortwave) [Wouldn't emailing them just prove their point? -AQ]

Allouis non directional SW service to CeEUR on 6175 at 0500-2200 has ceased, seems off forever. Only AF outlet via Issoudun transmitter site from 1700-2200 100 kW 178 degr observed on 6175. And Allouis 3965 is not heard when it is scheduled to be on air at 0800, registered 1600-0900. But Polish 2200-2300 here. Also scheduled for 3965 AF relay at 2100-2200, and 3970 at 0400-0700. (6Jan/Green-UK/Bueschel/EDXP/Padula-AUS)

GEORGIA Latest schedules for *Georgian Radio, Abkhaz Radio*. Changes have been made to Georgian Radio's broadcasting schedule following transmitter upgrades.

0500-0600	Georgian	6080
0600-0630	Russian	11910
0630-0800	Georgian	6080
0800-0830	English	11910
0830-0900	German	11910
0930-1000	English	11910
1000-1030	Georgian	11910
1600-1700	Georgian	6080
1630-1700	English	6230
1700-1730	Georgian	6230
1730-1900	Georgian	6080
1800-1830	English	6080
1830-1900	German	6080
2030-2100	Russian	6080

Radio Abkhazia from Tbilisi in Russian 0430-0500 on and 5040 kHz, We/Fr, and in Georgian on Mo/Th.

Radio of the Republic of Abkhazia from Sukhumi in Abkhazian and Russian at 0430-0530 & 1500-1600 on 9495 kHz. We/Fr in Georgian. (BBCM)

GERMANY At 1000-1400 *Deutsche Welle* ceased using Jülich 6140 kHz for German service to NoEUR, 100 kW, 40 degrees. Scheduled 0600-1700 time span, and still print out in January schedule. Apparently in use 0600-1000 when sudden stop, 1400-1700 only. Frequency open now to hear CRI Beijing in Vietnamese til 1257, and from 1300 English. (8-Jan/Green-UK/BCDX/Bueschel-FRG)

HONDURAS 6075 kHz RF/NS *Galaxia*, Santa Barbara, 1505-1530+, t/in to Cam influenced salsa mx, Z-6 TCs. At 1510 long adstring w/ lots of phone numbers. Program host Ricardo Montamar. 1529 Finally clear ID as "Galaxia de Santa Barbara." Probably old La Voz del Junco transmitter. (27-Dec/Crawford/BCDX/Bueschel-FRG)

HONG KONG I got the following brief message from Miles Ashton at *BBC* Hong Kong, it sounds like the transmitter site will soon be just a memory! Richard Buckby "Spotted your note on the above whilst searching for info about it today. All of our antennas are down now. The two transmitters are nearly packed for shipping out but not sure where yet. Regards—Miles" (6-Jan/Buckby-IK/BCDX/Bueschel-FRG)

INDIA

3222.99 *AIR Shimla* 1537 English news, //3345, 3365, etc. (16-Jan/Schaay-HOL) 3390 *AIR* Gangtok, Sikkim. 1200 1600, usually extends programs on Sat to 1730. Mornings s/on *0045. (Weerakoon-CEY)

3944.85 *AIR Gorakhpur* 1530-1545* (presumed), generic *AIR* ID by W in EE at 1530, to the news from Delhi. Single tone sound at 1545, then gone. (4-Jan/Martin/Cumbre)

4790 *AIR ?* 0017 Open carrier with tone 0023 interval signal. 0024:30 choral. 0026 Man in Hindi "Yeh All India Radio (2 words). These words don't sound like any place name. Man mentions mediumwave and gives a couple of freqs. 0027 filler music, the same song every night... 0030 six time pips and news in Hindi. 0035 Same id and subcontinental music. *AIR* Itanagar is the only *AIR* station listed for 4790, but not at this time of day. (5-8-Jan/Johnson/Cumbre)

4840.00 *AIR Mumbai* 1535 great instrumental folk music, strong signal. (16-Jan/Schaay-HOL) 5050.00 *AIR* Aizawl 1507 Hindi folk songs, W announcement, 1515 pres news. (16-Jan/Schaay-HOL) Sign on has changed from listed 0025 to 0030. (15-Jan/Henderson/Cumbre)

INDONESIA The official schedule of *RRI-Bandung* is as follows; 3205: 2200-0300 and 0900-1700 10kW Gates transmitter, circa 1955 (YamadaJPN/Jembatan DX)

I was mulling over the report in the Jan 97 LN re: Indonesia to replace domestic SW with FM. Is it possible that 27 FM transmitters are going to cover all of Indonesia? If my geographical knowledge is correct, isn't Indonesia a vast country with mountainous areas throughout? Remember Zimbabwe, a much smaller nation by comparison who reintroduced SW because FM wasn't doing the job in mountainous regions. (Famularo-JPN) [They always have to learn these things the hard way. Very similar to some major SW broadcasters mistakenly assuming that SW is dead now that everyone has a satellite dish and an internet connection... -AQ]

IRAN IRIB Tehran changes: 1730-1930 in Bosnian, Albanian, Italian on 7145, 9610, and 9720 (ex 6005 and 7140). Bosnian at 2130-2230 9720 (ex 6005). English at additional new time 1100-1230 11875, 11930, 15260. Voice of Palestine Islamic Revolution in Arabic: 0400-0530 7115 and 9610 (ex 5995 and ex 9670). At 1930 on 7190. (19-Jan/WBDX/EDXP/Padula-AUS)

ITALY RAI International—Radio Roma In addition to facilities in Italy, RAI also transmits via the BBC relay stations at Ascension Island (A) and Kranji, Singapore (K).

0050-0110	English	11800 9675 6010
0050-0110	Spanish	11880 9575
0110-0125	French	11800 9675 6010
0110-0125	Portuguese	11880 9575
0130-0230	Italian	11880 11800 11765A 9675 9575 6110A
0230-0305	Italian	11880 11800 9675 9575 6010
0305-0325	Spanish	11880 11800 9675 9575 6010
0330-0350	Russian	9575 7270 5975
0350-0410	Ukrainian	9575 7270 5975
0415-0425	Italian	7275 5975
0415-0435	Amharic	11840 9670
0425-0440	English	7275 5975
0435-0510	Italian	11840 9670
0445-0505	Lithuanian	7270 5975
0510-0530	Somali	11840 9670
0510-0530	Romanian	7270 5975
0530-0600	Italian	6110
0535-0555	Russian	11800 9565
0535-0555	Arabic	11840 9675
0600-0700	Italian	21520 15240 6110
0700-1000	Italian	21520 15240 7235 6110
1000-1100	Italian	21520 15240 11925K 7235 6110
1100-1300	Italian	21520 15240 7235 6110
1335-1355	Albanian	7275 5990
1345-1455	Arabic	9670 7290 6035
1345-1700	Italian	21710 21535 21520 17780 Su
1400-1415	Slovenian	7275 5990
1400-1430	Italian	17780 15250
1415-1435	German	7275 5990

1435-1455	Croatian	7275 5990
1500-1520	Turkish	7275 5975
1500-1525	Italian	9670 7290 5990
1520-1540	Greek	7275 5975
1530-1555	French	9755 7290 5990
1540-1600	Bulgarian	7275 5975
1555-1625	Italian	9755 7290 5990
1605-1625	Russian	11905 9575
1630-1655	Arabic	15310 11905 9670
1630-1655	French	9710 7235
1700-1800	Italian	17870 15320A 15230 11840 9710 7235
1805-1825	German	9755 7240 5990
1815-1830	Czech	7110 6140
1830-1845	Slovak	7110 6140
1830-1905	Italian	11800 9675
1845-1905	Polish	7110 6140
1910-1930	Somali	15250 11840 9710
1910-1930	Serbian	7110 5990
1935-1955	Hungarian	7110 5990
1935-1955	English	7235 6030
2000-2020	Esperanto	7235 6015 Sa
2000-2020	Swedish	7235 6015 Mo/We/Fr
2000-2020	Danish	7235 6015 Su/Tu/Th
2000-2020	Russian	9565 6030
2025-2045	English	11840 9685 7105
2025-2045	Arabic	7270 6035
2050-2110	Portuguese	15250 11840 9710 7270 5975
2110-2130	Spanish	7270 5975
2115-2135	Romanian	7110 6015
2135-2155	Czech	7110 6015
2135-2155	Arabic	7290 5975
2155-2210	Slovak	7110 6015
2200-2225	English	11815 9565 6150
2210-2225	Polish	7110 6015
2230-0050	Italian	11880 11800 9675 9575 6010

(BBCM)

Adventist World Radio sked changes which were planned to come into effect in 1997 are as follows:

0100-0130	7315	Nepali from 5 Jan (ex EE)
0300-0330	5905	Somali from 2 Feb (ex EE)
0430-0500	11600	Malagasy from 12 Jan (ex FF)
1400-1430	9465	Nepali from 1 Jan (ex EE)
1600-1630	7315	Somali from 1 Jan (ex EE)
2130-2200	9835	Dyula from 9 Jan (ex FF)

Transmissions from Rimavska Sobota (Slovakia), excepting 9835=Jülich, Germany. (19-Jan/EDXP/Padula-AUS)

JORDAN I was puzzled to hear *Radio Jordan* on five freqs simultaneously around 0800 recently—15600 15435 15270 11835 and 11810, especially as they are supposed to have only three transmitters! I presume 15600 and 15270 kHz to be some sort of spurious radiations—15435+165 = 15600, 15435-165 = 15270. (30-Dec/Green-UK/BCDX/Bueschel-FRG)

KOREA-NORTH Radio Pyongyang/Korean Central Broadcasting Station (KCBS), entirely from monitoring observations, but missing Korean broadcasts to S. Korea and Japan:

0000-0050	Spanish	13650 11700
0000-0050	English	15130 13760 11335
0000-0050	French	15230 11845
0400-0450	English	17765 15230 15180
0400-0550	Japanese	11780 9650 9505 3250
0400-0550	Korean	9375 9345 7200
0500-0550	Korean	17765 15230 15180
0500-0550	Spanish	9975 6575
0600-0650	English	15230 15180
0600-0650	Chinese	17765 15340
0600-0750	Japanese	11780 9650 9505
0700-0750	Chinese	15230 15180
0700-0750	English	17765 15340
0800-0850	English	15230 15180
0800-0850	Korean	9505 7250
0900-0950	Russian	11740 11335 9375 9345 9315 7200
0900-0950	Spanish	9975 6575
0900-1050	Japanese	7580 6520 3250
1000-1050	Russian	11740 11335 9375 9345 9315 7200
1000-1050	Korean	9975 6575
1100-1150	English	11335 9975 6575
1100-1150	Chinese	9345 7230 7200
1100-1250	Japanese	7580 6520 6070 3250
1200-1250	Spanish	11335 9975 6575
1200-1250	Korean	9345 7200 6125 4780
1300-1350	Chinese	11735 9975
1300-1350	English	15230 11740 9640 9345
1300-1450	Japanese	7580 6520 6070 3250
1400-1450	French	11845 11735 9345
1400-1450	Korean	15230 9975 9640
1500-1550	Arabic	11905 9600 6520
1500-1550	English	13785 9975 9640 9325
1500-1550	Russian	9345 6575
1600-1650	Korean	11905 9600 6520
1600-1650	Russian	13785 9325
1600-1650	French	9975 9640 9345 6575
1700-1750	Arabic	11905 9600 6520
1700-1750	English	13785 9975 9640 9325
1700-1750	Korean	9345 6575
1800-1850	Arabic	11905 9600 6520
1800-1850	Korean	13785 9975 9640 9325
1800-1850	Spanish	9345 6575
1900-1950	Korean	11905 9600 6520
1900-1950	French	13785 9975 9640 9325
1900-1950	German	9345 6575
2000-2050	Arabic	11905 9600 6520
2000-2050	Spanish	13785 9325
2000-2050	English	9975 9640 9345 6575
2100-2150	German	13785 9325
2100-2150	French	9975 9345 6575
2100-2250	Japanese	11780 9650 7580 3250
2200-2250	Korean	15280 15130 13760 13650 11700
2300-2350	English	13650 11700
2300-2350	Spanish	15130 13760 11335

2300-2350 Korean 9345 7200
(BBCM)

LAOS Luang Prabang on v6975 kHz was observed around 0025 in Laotian relaying the Home service from Vientiane. (25-Dec/WeerakoonCLN/UADX/BCDX/Bueschel-FRG)

LIBYA 9700 kHz Jamahiriya Tripoli at 1814 Arabic mx, carillon, timepips x3, ID by man. //11850 (much weaker). Fair and degrading quickly. Trx to Bob Padula for the tip. (25-Dec/Nigro-URG/BCDX/Bueschel-FRG) 11850 kHz Vof the Great Homeland (new frequency) 1753-1915+ on Dec 25, good w/ tinny Big Ben-like chimes 1758, three time sounders 1759:20, "Sowt al-Watan min Arabiya Kabir," militant march mx and AR commentaries mentioning Iran and Iraq. (25-Dec/Krueger-FL/DXW/BCDX/Bueschel-FRG)

MALAYSIA Sked for the *Voice of Malaysia*, External Service, as given in WRTH97 does not reflect actual operations. The daily English service is currently heard from *0455-0825* on 6175 9750 and 15295, intended for Asia and Australia. This includes the opening segment announced as "The Voice of Islam".

RTVM-Kuala Lumpur, Domestic Services on SW—recent observed operations are:

- 4845 **Radio 6** (Tamil): *2100
- 5965 **Radio 1** (Malay): 24-hrs some days only; other days sked is variable. Evening service unheard in period 0900-1100 recently
- 6025 **Radio 5** (Chinese): 24-hrs
- 7295 **Radio 4** (En): 24-hrs

RTVM-Sarawak: There was a rationalization of freqs for this station some years ago, affecting daytime channels. At that stage, all 31mb operations were deleted, in favor of the 41 mb. Recent observations on 41mb:

- 7130 **Blue Network** (Bidayuh)—noted only for local daytime period, s/on believed to be 0300;
- 7145 **Yellow Network** (Malay)—not audible at all for local daytime or early evening broadcasts, and may have been discontinued for those periods; 7160 **Red Network** (Chinese and English)—observed 0300-0400 and from fade-in at 0930.
- 7270 **Green Network** (Iban)—audible from *0030-0600, and again from 0800-1100+. Some variation is noted for local Sunday transmissions. This outlet often provides excellent signals here in Melbourne during our daytime period, and the evening broadcast fades in as early as 0800. I suspect that a power increase or antenna adjustment has been made for this transmitter. (19-Jan/EDXP/Padula-AUS)

MALTA VOM, Voice of the Mediterranean, announced that from the first Sunday in February (2nd February) it would start a weekly broadcast in Japanese. Waffling between three time/frequency choices: 2300 on 9800, 0200 or 0700 on 15550. Also announced is a North American release called "Radio Melita" at "1100 hours Canadian and American local time" [whatever that is -AQ] on 7300 and 13600 kHz. If we assume that to be 1600 UTC, then the sked is 1600-1700 English, 1700-1800 Maltese, 1800-1830 French, and 1830-1900 German. [Who knows! -AQ] (BBCM)

MONGOLIA Per Mr. Batbayar Demchig of *Radio Ulaanbaatar*: Foreign service is using transmitter installations at Khonkhor, 25 kms east of Ulaanbaatar. Two SW transmitters, 1 @ 250 kW, 1 @ 50 kW. 250 kW unit can be fed into three curtain antennas in the following directions: 126 degr to EAS & PAC, 178 degr to AUS/NZL, 220 degr to SoAS. 50 kW unit is used for separate EUR antenna outlet at 279 degrees. In 1994 all reflectors on the AUS beam have been removed, so the antenna pattern is extended to both sides now, towards NoSiberia and Australia. Subsequent removing all reflectors of the 126 degr antenna would result in better EUR target coverage, this is under consideration now. SoAsia service via 220 degr antenna giving solid signals also in Ea & SoAF. EaAS target signals of 126 degr unit observed also in Argentina and Brazil. (BCDX/Bueschel-FRG)

MOZAMBIQUE 4906.6v, R. Interprovincial (pres.), 0335-0347, Afro Hi-life vcl mx (heavy on percussion). Strong signal but just too distorted to work with. (29-Dec/Valko/Cumbre)

NIGER Voix Du Sahel: Fabrizio Magrone has identified a possibly new regional transmitter from Zinder, Niger. Before 0700 s/off (if operators don't switch off abruptly) the French ID is: "Ici la Voix du Sahel, Radiodiffusion Television du Niger, Station Regionale de Zinder" then repeated in vernacular language. May be a new transmitter because it's stable on 5020 as opposed to evening broadcast on drifty 5021.5. Difference noted many times over the past several weeks. (Magrone-IT/Gatflash! #90/The Four Winds/Serra-IT) It's unlikely there is a second HF site at Zinder, as speculated by Italian DXer who notes 5020 drifts in the evening but not in the morning. More likely two separate transmitters are used in Niamey (21-Jan/Kenny-BBCM/World of Radio/Hauser)

NORTHERN MARIANAS ISLANDS KHBI Saipan /Monitor Radio sked...Weekday programs all in English; weekend programs in Czech, English, French, German, Portuguese, Russian and Spanish.

0000-0100 13840
0800-0900 15665

0900-1000 13840 9430
 1000-1100 13840 9430
 1100-1200 9430 9355
 1200-1300 9430 9355
 1300-1400 13840 9355
 1400-1500 9355
 1500-1600 9355
 1600-1700 13770(alt) 9385 9355
 1700-1800 13770(alt) 9385 9355
 1800-1900 9385 9355
 1900-2000 9385 9355
 2000-2100 13840
 2100-2200 13840
 2200-2300 13840
 2300-2400 13840(alt)

Weekday programs all in English; weekend programs in Czech, English, French, German, Portuguese, Russian and Spanish.

NORWAY *Democratic Voice of Burma* via NRK broadcasts in Burmese, Shan, Karen and Kayan from 1100-1130 on 15170 kHz. (BBCM) *Democratic Voice of Burma* in Burmese noted on new 9725 kHz (x11850) at 1430-1500 in Burmese. (5-Jan/Dasgupta-IND/BCDX/Bueschel-FRG)

Radio Norway has changed it frequency at 1400 from 11730 to 11725. (8-Jan/Grimdalen/Simpson/EDXP/Padula-AUS)

OMAN Due to QRM *BBC* via Masira Island is to use 7205 (x7105) kHz for their broadcast in Hindi 1700-1730 & Urdu 1730-1800 as fr 15th Jan 1997. (12-Jan/Dasgupta-IND/BCDX/Bueschel-FRG)

PAKISTAN 5055 1440-1530* *R. Pakistan*, Islamabad with External service. in Turki to Afghanistan on this rather new frequency. Much talk about Afghanistan and Kashmir, and military-type of mens choir chanting to local drums. Closed with mention of Afghanistan and National hymn. 34444 (31-Dec/Petersen-DSWCI)

4790.5 *Azad Kashmir R.* 0145-0220+, long talk by M in pres Urdu, with many ments of Muzaffarabad. Another ancr, with local vocals, to "Radio...Azad Kashmir...". 3 TP's at 0200, five second fanfare, then another ancr with "Pakistan (?)"... *Azad Kashmir*". Regional nx past 0220. Completely clear channel today. Very good at tune-in, fading fast after 0200. (11-Jan/Martin/Cumbre) *0000 s/ on with NA (11-Jan/Althaus/Passmann/Cumbre)

PALAU *Voice of Hope* broadcasting from Palau to N. China in English was heard from 1420-1530 on new 9985 kHz. (14-Jan/Frimmel) You can hear Palau as early as 11 UT on 9985 in English—and on 9965 in Vietnamese. (Koie-R. Denmark)

PAPUA NEW GUINEA Radio stations in Papua New Guinea started broadcasting 24 hours a day on

6th January. During the overnight period from 1400 to 1930 (when the stations previously closed) transmitters on mediumwave and shortwave—including those in the tropical bands—now remain on the air. (9-Jan/RN Media Network/BBCM)

PERU

- 3283.3 *R. Estacion Wari* 2314-2341 nx y seguimos apoyando a la liga deportiva de Ayacucho programa Sabados de Verano ID "En estacion Wari..." mx ID "Y siga disfrutando de sabados de verano en su primera edicion por Estacion Wari..." (4-Jan/Arrunategui-PRU)
- 4000.5 *R. San Juan* 1057 Man in Spanish, then romantic Andean vocal. At 1059, segued to another number, faded down for brief announcement that included "en Radio San Juan," then continued with song. Surprisingly nice signal amid steady barrage of QRN. (12Jan/Hill)
- 4190.7 *Radio Super* San Ignacio; 0255-0322* f on 08/01/97. Mx romantica, folklo re and several IDs. S/off with long closing anmt, but without NA. (8-Jan/Nozaki-JPN/Relampago DX)
- 4485.2 *R. Frecuencia VH*, Celendin 2346-0011 ID "Por Radio Frecuencia VH" nx atencion personal de servicio militar obligatorio de Celendin ID "Radio Frecuencia VH, la mejor del solido Norte del Peru..." (4-Jan/Arrunategui-PRU)
- 4612.8v *Radio Soledad*, Parcoy; 1800-1820 W. Iberoamerican pops. (7-Jan/Nozaki-JPN/Relampago DX)
- 4886.5 *R. Villa Rica* noted from 1052 at good level w/ wonderful Peruvian music. (6-Jan/Delibert/Cumbre)
- 4890.5 *R. Chota*, Chota, at 1120 ('97 WRTH says*1130) with Peruvian music and chatter by man with local mention. (1-Jan/ClarkCAN/Cumbre)
- 5019.9 *R. Horizonte*, Chachapoyas 0015-0050 mx ID "Seguimos con la buena musica en Horizontee..." mx chicha ID "Estamos saludando en Pomacocha a Lesli Davila desde Radio Horizonte..." (4-Jan/Arrunategui-PRU)
- 5039.2 *R. Libertad*, Junin 2350-0020 mx ID "Radio Libertad 1180, su mejor compania..." (17-Jan/Arrunategui-PRU)
- 5131 Unannounced SS gospel music, yes, even a few gospel selections in a huayno setting, 2355, to sudden s/off 0016.—R. Vision 2000 has been off for quite some time; this may have been a test transmission from this station or from a new one. (4-Jan/Klemetz-COL)
- 5139.8 *R. Amauta del Peru*, San Pablo, 0105. Good. This is a reactivation. (12-Jan/Klemetz-COL)

- 5236.6 **R. Apurimac**, Abancay, 1130. This is about 1 kHz up from previous frequency. (6-Jan/Klemetz-COL)
- 5324.4 **R. Naylamp**, Lambayeque 0053-0102 mx marinera "Y ya son las 7 de la noche con 55 minutos en Radio Naylamp..." mx 0100 s/off (4-Jan/Arrunategui-PRU)
- 5470 **R. San Nicolas**, *1102, Instru. OA NA, canned echo pres. s/on anmmt w/def. ment of Peru. Low mod. prevented ID. Then on 28 Dec. at *1057-1120, on w/instru. OA NA, canned s/on ID anmmt w/onda corta and meterband given at 1100, into LA mx pgm hosted by M. Short anmmts w/TCs. As usual, strong enough lvl but weakly modulated making for tough copy. (27-Dec/Valko & 3-Jan/ Bolland/Cumbre)
- 5498.5 **R. Laja**, Chota, Cajamarca 2132-2209 ID "La buena musica se presenta por Radio Laja..." mx ID "A traves de estacion lider Radio Laja, desde Laja..." mx Slogan: "Radio Laja, desde el corazon de Laja, saliendo en todas las frecuencias, 1180KHz Onda Media y 5498kHz Onda Corta, las bellas frecuencias cubriendo los cielos del Peru profundo por los cuatros puntos cardinales, la onda roja y blanca que lleva para ti, peruanidad y servicio, Radio Laja haciendo honor al norte peruano, Radio Laja..." (11-Jan/Arrunategui-PRU)
- 5556.2 **R. Santa Fe**, Santa Cruz (Cajamarca), is a new station first noted Jan 12, 0043 with folklore progr "Raices del Peru". Poor signal, but speech audio is surprisingly crisp. Frequent announcements saying "R Santa Fe desde Santa Cruz"; no address info heard.—Listed on this freq is R. La Inmaculada, in the same town of Santa Cruz, but unheard since last August. I am not sure if this is a new operation or a mere shift of name. (12-Jan/Klemetz-COL)
- 5560.7 **R. El Sol**, Pucara' (Jaen), is a new station first noted Jan 6 @ 1130 with "musica vernacular", with canned ID's by a female voice. Announces 5560 kHz and an address along Av. Jaen in the "caluroso y acogedor distrito de Pucara'".—This is the 2nd SW broadcaster to surface in this oil town in northern Peru; previous one was R. Estacion Uno, still to be heard on 5955.1. (6-Jan/KlemetzCOL)
- 5619.2 **R. Ilucan**, Cutervo, Cajamarca 0142-0225 mx chicha ID "Ud. escucha Radio Ilucan..." programa saludos musicales mx Id "Desde el norte del Peru, Radio Ilucan, la mejor..." (4-Jan/Arrunategui-PRU)
- 5700.1 **R. San Ignacio**, San Ignacio, Cajamarca 0026-0138 programa Alborada Tropical mx advs Botica Mi Salud, jiron Mercado 405, San Ignacio. Renovadora de calzado el Diamante... en esta ciudad fronteriza de San Ignacio" (17-Jan/Arrunategui-PRU)
- 5767.12 **Radio Universal**, Moyobamba; According to anmt at s/on (1003) on 31/12/ 96, the station broadcasts at 1000-0100 daily. The nominal operative frequency was incorrectly announced as "6766 kHz en la banda internacional de los 49 metros" QTH: Jr. San Carlos s/n, Barrio Calvario, Moyobamba, Departamento de San Martin, Peru. (31-Dec/Nozaki-JPN/Relampago DX)
- 5926.56 **Radio Peru** is scheduled at 1100-0400 daily. (Nozaki-JPN/Relampago DX)
- 6203.7 **R. Cusco**, Cusco 0243-0306 mx folklorica programa ecos del Peru advs Pruebe Ron Kola, la mejor bebida actual ID "Desde la capital imperial, transmite para el Peru y Sudamerica Radio Cusco, la primera en comunicacion..." (11-Jan/Arrunategui-PRU)
- 6535.78 **R. Difusora Huancabamba**, 2307-2323, OA campo mx, M anncr w/many IDs, ments of Huancabamba, and a ment of internacional. Good signal w/occas. SSB. QRM. Reactivated or just not rpted lately?? (26-Dec/Valko/Cumbre)
- 6725.6 **R. Satellite**, Sta. Cruz, Cajamarca 0037-0105 program avisos y comunicados ID "Por favor acercarse a las oficinas de Radio Satellite para recoger el mensaje..." mx ID "En Radio Satellite son las 7 de la noche y 53 minutos..." (7-Jan/Arrunategui-PRU)
- 6895.3 **R. San Miguel de El Faique**, (distrito de) El Faique, (provincia de) Huancabamba, (departamento de) Piura, (region) Grau, Peru, is a new station, first noticed Dec 29, 1930-2256 s/off, announcing 1100-2300 schedule.—Dec 30, 1119, s/on with NA and "El Condor pasa". Initial canned ID contains their address info, Av. Piura something, but the number is impossible to understand due to exaggerated reverb level. Slogan: "la onda integradora de los pueblos del Peru". Progr preview included 1 h prgrs with names such as "Variedades de oro", "Estampas peruanas", "Anoranzas nortenas", "Impacto musical en el aire". At 1800-1900, newscast called "Informativo San Miguel".—Obviously using same transmitter as that of now extinct R. Sensation, Huancabamba; the signal is a bit weaker, though. (29Dec/Klemetz-COL)
- 7040.3 **R. Melodia**, San Ignacio 2336-0020 programa mision campesina mx Id "A traves de Radio Melodia" s/off 0015* (7Jan/Arrunategui-PRU)

- 7141.3 *R. Ayabaca*, Ayabaca, on a slightly readjusted freq. ex-7143v, 0037, with progr "Tropicalizando la noche". Slogan: "R Ayabaca, la radio que esta en el corazon de su pueblo". (8-Jan/Klemetz-COL)
- 9721.6 *R. Victoria*, Lima, on a slightly readjusted frequency. ex-9720.5. 2222, ending satellite downlink from Brazilian hq of "Dios es amor" church, in Sao Paulo. Good signal. (4-Jan/Klemetz-COL)

PHILIPPINES *Radio Veritas Asia* has introduced programs in Zomi-Chin, 1530-1555 Mon and Sat. These broadcasts are intended for the Manipur State of India and to the Chin State of Myanmar. RVA now broadcasts in 16 languages. (19-Jan/EDXP/Padula-AUS)

RUSSIA *Radio Odin*:

0330-1100	1525-Yekaterinburg
0430-1200	11750-Saransk
0430-1300	9605-Samara
1130-1400	9615-Yekaterinburg
1230-1800	6115-Saransk
1330-1530	5960-Samara
2300-0400	5960-Samara 6030-Saransk 9845-Yekaterinburg

Mayak

0000-0600	5950-Arkhangelsk
0100-0600	5945-Volgograd
0300-0500	6075-Saransk
0300-0600	5935-St. Petersburg
0530-1300	9575-Saransk
0630-1100	12060-Volgograd
0630-1300	11785-St. Petersburg
0630-1500	7310-Arkhangelsk
0730-1500	6020-Komsomolsk-Amur
1130-2100	6160-Volgograd
1330-2300	6035-St. Petersburg 6075-Saransk
1400-2200	6015-Kaliningrad
1530-1800	5990-Arkhangelsk
1830-2300	6020-Arkhangelsk
1900-2300	6020-Komsomolsk-Amur
2330-0700	9670-Komsomolsk-Amur

Regarding RUSSIA/CIS SW transmitter site registrations in ITU/HFCC lists: Konevo (KON) was used in official lists instead of St. Petersburg Popovka. Ashkhabad (ACH) instead of Dushanbe and Tashkent. Samara (SAM), Zhigulevsk (JIG) and Kazan (KAZ) are used instead of Samara. Novosibirsk (NVS), Kenga (KEN) and Krasnoyarsk (KRS) instead of Novosibirsk. Minsk (MNS) and Orsha (OR) instead of Minsk. Kingishepp (KGS) and sometimes Petrozavodsk (PZV) are used instead of St. Petersburg Popovka. Moscow (MSK), Ryazan (RIA), Serpukhov (SRP), Tver (TV), Tula (TUL), Kursk (KUR), and Nizhniy Novgorod (N.N.) are used in official lists for SW transmitter sites located in Moscow region, there are eight such sites in this region. Bishkek (BI) is

used instead of Dushanbe, Tashkent, and Almaty. NikolayevskAmur (N/A) and Blagoveshchensk (BLG) are used instead of Vladivostok, Khabarovsk, and Komsomolsk-Amur. Volgograd (VLG) is used to show that transmitters at Volgograd, Armavir, Samara, and Kishinev-Moldova. are used. (11-Dec/Rudnev-RUS/BCDX/Bueschel-FRG)

Adygey Radio announces itself as "Radio of the Adygey Republic from Maykop". (The Adygey Republic is located in southern Russia, to the northeast of the Black Sea). It broadcasts in the Bzadog (or Bzadugh) dialect of Adygey, one of the Circassian languages, as well as Arabic and Turkish. Sked Mo & Fr 1800-1900 on 6005 kHz. (BBCM)

Kabardino-Balkar Radio operates from the Kabardino-Balkar Republic in southern Russia, on the border with Georgia. Sked Su & We 1830-1900 on 6005 kHz. (BBCM)

Voice of Assyria (Kala Aturaya) in Assyrian, Russian, Arabic, Persian and English operates from 1600-1700 Saturdays only on 6130 and 6005 kHz. (BBCM)

Islamskaya Volna (formerly "Rukhi Miras," or "Spiritual Heritage"), transmits from 1600-1700 from Tu-Fr on 6130 and 6005 kHz. (BBCM)

Radio France International transmits in Chinese from Russian sites:

0930-2300	7420 9660	Irkutsk (Russia) & Yamata (Japan)
1200-1300	7140 7430	Yamata (Japan) & Novosibirsk (Russia)
2200-2300	7135 5945	Ussuriysk and Novosibirsk (Russia)

(BBCM)

SEYCHELLES *FEBA Radio* noted a new service to India at 0800-0900 on 15540 kHz. Thurs 0800-0815 Oriya, 0815-0900 Hindi; Fris 0800-0900 English; Sats 0800-0845 Telugu, 0845-0900 Kannada; Suns 0800-0830 Tamil, 0830-0900 Malayalam. in Tamil & Malayalam. (5-Jan/DasguptaIND/BCDX/Bueschel-FRG)

SLOVAKIA Peter Lee of *AWR* in England answers my question about whether they are still on 6055 at 2130 including Wavescan on Sundays. The transmission was dropped because of poor reception in Britain—skipping over, and co-channel from Russia; and no plans to replace it since an even lower frequency would be required. He suggests Wavescan listeners tune to KSDA instead of Suns at 1030 on 9530 when it is currently very well heard (Hauser/W.O.R.)

SOMALIA Pro-Aydid *Radio Mogadishu, Voice of the Masses of the Somali Republic* (Somali: Reed-iyo Moqdisho, Codka Shacabka ee Jamhuriyadda Soomaaliya) is not to be confused with the pro-Mu-

hammad *Radio Mogadishu, Voice of the Somali Republic, or Radio Mogadishu, Voice of Somali Pacification* [got that straight?... -AQ]. The former operates on 6890 (or 6870) per this sked:

0300-0500 Somali
0900-2100 Somali, except for:
1300-1305 News (English)
1315-1320 News (Arabic)
1330-1335 News (Amharic)
1345-1350 News (Swahili)
2000-2005 News (English)
2015-2020 News (Arabic)
2030-2035 News (Amharic)
2045-2050 News (Swahili)

(BBCM)

Radio Mogadishu, Voice of the Somali Republic (Somali: Reediyo Moqdisho, Codka Jamhuuriyadaa Soomaaliya) operates on this sked:

0400-0500 Somali 6822-v
1000-1130 Somali 6822-v
1600-1800 Somali 6822-v

(BBCM)

6735v kHz, *R. Mogadishu, V. of Somali Pacification* (Presumed) at 1510 past 1630 in Somali. Modest signals but subject to UTE QRM. (12-Jan/Werakoon-CLN/UADX/BCDX/Bueschel-FRG) This one's sked:

0300-0500 Somali 6732-v
0930-1200 Somali 6732-v
1500-1900 Somali* 6732-v

*Includes 5 minutes of English news at 1830. (BBCM)

SOUTH AFRICA I had to make a change to *Radio Sonder Grense's* daytime [0700-1655] frequency this week, from 7185 to 7270. A jammer suddenly put in an appearance in the late afternoons, and was causing a lot of damage. Eastern stations propagate very well here in the afternoons, so I suspect it may be coming from that direction. I was wondering if it may be China jamming one of the Radio Free Asia frequencies. I've tried to identify the station on 7185 now that RSG no longer uses that frequency, but I've had no success. (16-Jan/OttoSENTECH/Miller/EDXP/Padula-AUS)

The Investment Channel, which was to begin broadcasts via Meyerton on 15/1, has had trouble installing its audio link between NA and SAF. Looks like the problem will be solved by the end of the month. (16-Jan/RN Media Network/Ogrizek/EDXP/The Four Winds/Serra-IT) Sked, all in English:

0200-0300 6195 7175
0300-0325 7175 9775
0330-0355 9775 11985
0400-0530 11985 15225
0530-0555 11985
0600-0625 9675 11985 15225
0630-0730 9675 15225 17735

0730-0755 15225 17735
0800-0930 17735 21745
0930-1230 11985 17735 21745
1230-1600 17735 21745
1600-1730 17735
1800-1900 9675 17735
1900-2000 9675 15420 17890
2000-2025 7270 15420 17890
2030-2055 7270 17890
2100-2155 15420 17890

(Kathy Otto/SENTECH web site)

SRI LANKA On 7125 kHz *DW Trincomalee, NF* ex11765 kHz, *2000-2200*, to Australia, 11 MHz unreliable at this hour. (29-Dec/PadulaAUS/EDXP/BCDX/Bueschel-FRG) VOA now swap transmitter site in the evening. 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. (19-Dec/DasguptaIND/BCDX/Bueschel-FRG) SLBC is now on 11905 (ex 11895) at 0025-0430 & 1510-1700. (21-Dec/das Gupta-IND/EDXP #35)

TAJIKISTAN On 4975 kHz at 0150-0240, *Tajik T, Yangi-Yul* is now using this frequency for its own Foreign service, obviously replacing 7245 kHz. Heard with several ID's and IS and program in Dari until 0200, followed by Farsi. 4635 kHz was of course not in parallel as it carries dom service. (1-Jan/Petersen-DEN/BCDX/Bueschel-FRG)

THAILAND *BBC Nakhon Sawan* Thailand relay started full operation on Jan 1st, 1997 with beaming of programs to South Asia. Monitored sked as follows:

5975 1500-1830 WS Eng
5990 1630-1700 Bengali
6085 1400-1500 Hindi
6095 1500-1545 Urdu
6140 1515-1615 Sinhala/Tamil
7225 1330-1410 Bengali
7235 1700-1800 Hindi/Urdu
11685 0800-0830 Bengali
11750 0800-1400 WS Eng
15310 0100-0300 WS Eng (is it from SNG or OMA?)
15380 0030-0200 Bengali/Hindi/Urdu
15380 0200-0300 Pashtu/Persian
15405 0230-0245 Eng by Radio
15405 0800-0830 Bengali

(5-Jan/Dasgupta-IND/BCDX/Bueschel-FRG)

VOA Udorn Thani noted in Tibetan at 0000-0100 on 7255 (x7175) kHz. (5-Jan/Dasgupta-IND/BCDX/Bueschel-FRG)

Radio Thailand noted in English on a new channel 11890 kHz at 0300-0330 mixed with NHK R. Japan to SoAS from Ekala, Sri Lanka on the same spot. BBC Thailand after initial snag restored full operation on 9th Jan and is now using 15310 kHz from

Thailand from SNG at 0000-0300. (12-Jan/Dasgupta-IND/BCDX/Bueschel-FRG)

TUNISIA RTT in Arabic 5 kHz down on 7470 kHz, noted at 2000. [and v7286.5 kHz from 1500-2400 too] (2-Jan/Stengel-FRG/BCDX/Bueschel-FRG)

RTT Tunis in Arabic actually 17735.1 kHz (x17498), and not Baghdad! At 0800 in //with 11730 & v15450.4 kHz, at night on 7475.1 and 7286.5 kHz. (3-Jan/Green-UK/BCDX/Bueschel-FRG)

TURKEY TRT sked:

0000-0500	Turkish	15385 15350 9560 9460
		6120 5980
0400-0500	English	17705 7100
0500-0800	Turkish	21715 15350 15145 11955
		11925 9560 9460 9445
		7300 6040
0800-1000	Turkish	21715 15385 15145 13670
		11955 11925 9460 9445
0830-0930	Azeri	11835 9765
0930-1030	Persian	11715 9630
1000-1100	Turkish	15350 11955 9560 9460
		9445
1000-1200	Arabic	13710 9675
1030-1130	Romanian	7110
1030-1130	Serbo-Croat	9505
1100-1400	Turkish	15350 11955 11910 9560
		9460 9445
1130-1230	Greek	7150 7110
1200-1300	Chinese	13710
1230-1330	Hungarian	7110
1230-1330	Albanian	7165
1300-1400	Urdu	11900
1330-1430	English	9630 9445
1400-1500	Russian	9675
1400-1500	Persian	9710
1400-1600	Turkish	15350 13670L 11955
		11910 9560 9460
1430-1530	German	9445
1500-1600	Azeri	6050
1500-1700	Arabic	7130 6120
1530-1630	Greek	6010
1600-1700	Turkish	15350 11955 9560 9460
		9445 5980
1630-1730	Hungarian	7240
1700-1800	Bulgarian	5960
1700-2300	Turkish	15385 9560 9460 9445
		7110 6120 5980
1730-1800	Macedonian	5970
1800-1900	Russian	6135
1830-1930	German	6035 5970
1900-2000	Serbo-croat	6135
1930-2030	English	6000 6035
2030-2130	French	7270 7255 7240
2300-2400	Turkish	15385 9460 9445 6120
		5980
2300-2400	English	9655 9560 7280 6135L

(BBCM & updates from Bueschel-FRG)

UKRAINE Radio Ukraine International reshuffled External broadcast schedule:

5905	1700-0200	WEu/CEu
5915	2200-0500	UK/NAM Eastcoast
5940	1600-0200	WEu/CEu
5985	0900-1500	EEu/As/Ural
6010	2000-0400	WEu/CEu
6020	0600-0500	Eu
6080	1800-0400	Eu/As/Ural
7115	1600-0100	WEu/CEu
7150	2200-0500	UK/NAM Eastcoast
7160	1700-0400	EEu/As/Ural
7180	0100-0600	UK/NAM Eastcoast
7205	2000-0700	WEu/CEu
7290	0000-0800	WEu/CEu
7320	0000-0800	WEu/CEu
7380	2200-2400	As/INS/AUS
7420	0900-1600	EEu/As/Ural
9560	0900-1700	WEu/CEu
9600	0300-0800	WEu/CEu
9610	0600-1600	EEu/As/Ural
11705	0600-1800	NEu
11720	0500-1400	WEu/CEu
11780	0500-1500	EEu/As/Ural
12050	1100-2100	UK/NAM Eastcoast
13720	0500-1400	WEu/CEu
15520	1000-1700	WEu/CEu
17680	0600-1300	WEu/CEu
21540	1500-2100	WAF/SAM

On 5915 & 7150 special NoAm program (0100-0200 + 0400-0500 English, remaining Ukrainian culture progr. (1-Jan/RUI Kiev DX progr/Ludwig-FRG/BCDX/Bueschel-FRG)

UNITED ARAB EMIRATES On 6015 kHz, *V of the UAE*, Abu Dhabi, at 2022. New freq with Arabic talk till 2024 ID, "Idha'at ul-imarāt al-arabiyah t-ul-mutahidah min abu zabiy"; fair mixing with another station and//9770 kHz. Also there at 1735 next day. (22-Dec/Hill/BCDX/Bueschel-FRG)

Abu Dhabi's English service observed at 1030 on 13665 (ex 13675), 15395, 17630, 21605; 1330 same freqs; 1600 13665. (29Dec/RVI/van Oudheusden/EDXP/Padula-AUS)

UNITED KINGDOM On 3 January, the **BBC** announced the winning bidders for the newly-privatized World Service transmission business: Merlin Communications International, a management and employee buy-out team from the World Service's program Delivery Service. A contract for the sale of the World Service business will be signed as soon as practicable; proceeds from that sale revert to the government. (BBCM)

USA WHRI Angel 1

0000-1000	English/Spanish	7315
1000-1300	English/Spanish	9495
1300-1800	English/Spanish	15105
1800-0000	English/Spanish	9495

Angel 2

0200-0300 English 5760 Su
 0300-1000 English 5760
 1000-1500 English 6040
 1500-2200 English 13760
 2200-0300 English 5745 Mo-Sa

KWHR Hawaii

0000-0500 English 17510
 0500-1600 English 9930
 1600-1800 English 6120
 1800-2000 English 13625
 2000-2200 English 11815
 2200-2400 English 17510

(BBCM)

Almost daily checks of 15715, 11740, 11950 have failed to show **WINB** reactivated yet as of Jan 19. If they don't get it on by Feb, new rules say their license will be forfeit (21-Jan/Hauser)

WSHB, Cypress Creek, SC/Monitor Radio sked. Weekday programs all in English; weekend programs in Czech, English, French, German, Portuguese, Russian and Spanish.

0000-0100 9430 7535
 0100-0200 9430 7535
 0200-0300 7535 5850
 0300-0400 7535 5850
 0400-0500 9840 7535
 0500-0600 9840(alt) 7535
 0600-0700 9840(alt) 7535
 0700-0800 9840(alt) 7535
 0800-0900 11550 9840(alt) 7535
 0900-1000 9840(alt) 7535 7395
 1000-1100 7395 6095
 1100-1200 7395 6095
 1200-1300 9455 6095
 1300-1400 9455 6095
 1600-1700 18930
 1700-1800 18930
 1800-1900 18930 17510(alt) 15665(alt) 11550
 9370(alt)
 1900-2000 17510 15665(alt) 11550 9370(alt)
 2000-2100 15665(alt) 13770(alt) 9355(alt) 7510
 5835
 2100-2200 15665(alt) 13770(alt) 9355(alt) 7510
 5835
 2200-2300 13770 7510
 2300-2400 13770 7510

(BBCM)

VIETNAM

4685 UNID +1130 1500 signing off relaying Hanoi HS, seems to have drifted from 4705 kHz. (4-Jan/WeerakoonCLN/UADX/BCDX/Bueschel-FRG)

4795.4v **Son La BC Station** at 1207, tentatively this with typical mountain-tribe instrumentals and vocals, some a-cappella and others accompanied by native flutes. Occasional announcements by man, too brief to determine language. Signal took a sharp nosedive around 1225 and was only a feeble het by 1230. If Son La (which has been recently reported here), likely Hmong broadcast as sked 1200-1230 per TBL. Weak and very noisy reception. (11-Jan/Hill/DXW/BCDX/Bueschel-FRG)

4959.7v **VO Vietnam** 2220-2235, with Home service in Vietnamese, mostly news read by a woman. (5-Jan/PetersenDEN/DXW/BCDX/Bueschel-FRG)

ZAIRE v7203.72 kHz, **ORTZ-Lubumbashi**, at 0518, assume reactivated for the New Year, since I have not heard them recently. Local hillife and excited talk by a man. Best in USB mode, since this was QRM'ed on the lowside (7202.63) by an unID with time pips. (1Jan/Sharp/DXW/BCDX/Bueschel-FRG)

Radio Candip based in Bunia in eastern Zaire was heard at 1100 on 26 December on 5066 kHz. The station played Zairean music interspersed with announcements in Swahili, French, Lingala and other vernacular languages, with the station identification: "This is Radio Candip broadcasting from Bunia." The station appeared to be under the control of the Zairean rebel movement, the Alliance of Democratic Forces for the Liberation of Congo-Zaire, led by Laurent Kabila. It broadcast calls to those members of the Zairean armed forces wishing to surrender to do so. (BBCM)

DR. GENE SCOTT'S UNIVERSITY NETWORK If you simply must know what kind of wackiness Dr. Gene Scott is up to (or just love bad music) 24 hours a day, here's his consolidated broadcast schedule:

0000-0100 English 13740K 9960L 6090A 5935W
 1610A 690A
 0100-0300 English 21670R 9960L 9815K 6280L
 6090A 5935W 5810K 1610A
 690A
 0300-0700 English 13645K 12065N 9960L
 9815K 6280L 6155Z 6090A
 5935W 5810K 1610A 1377Z
 690A
 0700-1000 English 17600S 12050N 11840R
 9815K 6090A 5935W 5810K
 1610A 690A
 1000-1400 English 12050N 11775A 9860S
 9815K 5935W 5810K 1610A
 690A
 1400-1600 English 15725K 13845W 13815K
 11775A 9860S 1610A 690A
 1600-2200 English 15725K 13845W 13815K
 11775A 1610A 690A

2200-2400 English 15725K 13845W 13815K
9960L 6280L 6090A 1610A
690A

A=Anguilla K=KAIJ K=Krasnodar L=Lebanon
N=Novosibirsk R=Russia S=Samara W=WWCR
Z=Swaziland (BBCM)

UNIDENTIFIED TRANSMITTING OBJECTS

3910.2 UNID 0106 Seemingly old '40s romantic dance numbers and short announcements by man between each selection. Followed past 0130, but hopelessly weak and QRM'd by hams. (12-Jan/Hill) {12-Jan was a Sunday, and Sunday's when Reflections Europe via Ireland roosts on/near 3910. Incidentally, that's also where I hang out as NN2U, so I was likely part of the QRM! - AQJ}

5029.28 1328 fade-in, light music, speaker, light song, maybe BBS Thimpu? Lost, but heard again with fragments of music and talk at recheck 1407, drifted to 5029.68 kHz. Still too weak to pick up relevant program details. Still there at 1500. (31-Dec/Schaay-HOL)

6221.13 East Asian??, 2145-2230, Slow ballads w/ vcls in lang., 2153-2158 tlk by M and W in what sounded like RS in front of audience. Live mx over ToH w/Asian-like wind instrument. Almost Nepalese-style mx at 2206 recheck, W annrcr again at 2216. Went right over BoH w/Indian-like mx. Pretty decent at 2230. Still in at 2255, but gone at 2259 recheck. Best on 130 degree Beverage. Not hrd since. Anyone know what this is??? (2-Jan/Valko/Cumbre)
7120v UNID 1200 Station I reported on 7120.2 Dec. 22 heard again Dec. 29 with "5+1" pips, but too much QRN to catch ID. Then, on Jan. 1, adjusted to exactly 7120 as noted around 1220 mixing with VOA. Gradfather-clock chimes at 1230. Most likely PRC, but who? (Hill) Gradfather-clock chimes at 1230. Most likely PRC, but who? (Hill)

SW



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English Schedules

Tom Sundstrom

PO Box 2275

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Fax 609-859-3226

trs@trsc.com

Prepared January 22.

Canada. Belated thanks to Nick Terrence of NY for faxing newspaper clippings of the December CBC staff cuts. The story, with the RCI debacle, was widely covered in depth by almost every media show on the air.

Japan. NHK recently adopted "NHK World" as the name for its international broadcasting activities, including its overseas service. There is a spiffy new logo.



Jordan. R Jordon, 11690, has moved the sign-on time up an hour to 11 UT. The schedule is expanded to 11-1730 UT. In January, the added hour is a bit tough to hear as sunrise here is not until 1220. We note the signal starts to gain strength by 1140 UT.

Kenya. Before the advantage leaves east coast North America listeners as the sun moves north, take a listen for Nairobi. Here the KBC has been readable prior to sign-off at 2110 on 4935, and we caught an exceptional opening on January 3. There is 5 minutes of news following the time pips at 2100 UT.

USA. WRMI has expanded its hours of broadcasting and moved AWR Wavescan around it a bit. The 15-minute show now

airs at 1500 UT Th and Fr, 2330 Sa, 1345 Su and 0200 Mo. All broadcasts are on 9955. The approval for the second antenna to beam north to Canada is still pending, and reception remains difficult at times due to the jamming.

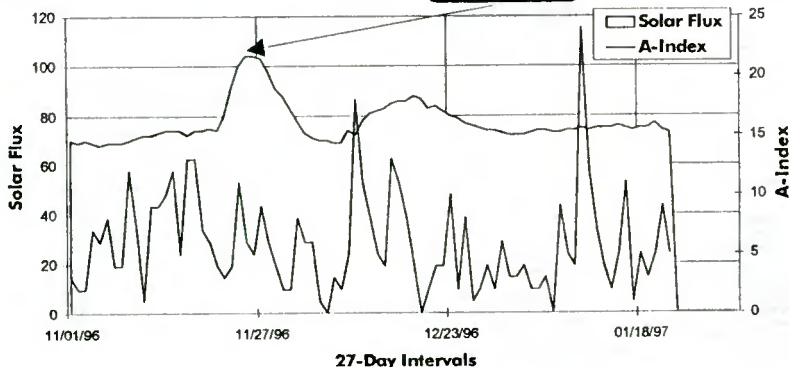
The second and third broadcasts of Kiwi Radio from New Zealand via WRMI will be on February 22 and March 29, 1997 at 1000-1030 UTC on 9955 kHz. We received this information too late to publicize the first airing on January 25. These broadcasts feature a variety of types of music from New Zealand, including Maori. Kiwi Radio will issue its own QSL cards for reports on these transmissions via WRMI. (via Jeff White of WRMI)



Internet "stuff". Look for the 15th edition of the Radio Netherlands "Receiver Shopping List" to be posted by early February. It covers portables and tabletops, including a sneak preview of the new "low-cost" entry level Japan Radio Company MRD-345 receiver that surfaced last December. The URL is <<http://www.mw.nl/en/pub/>>.

Winter SWL Festival program update and registration form:
<http://www.trsc.com/swl_fest.htm>

SOLAR FLUX & A-INDEX: Nov '96-JAN '97



<http://www.trsc.com>

QSL Report

Sam Barto
47 Prospect Place
Bristol, CT 06010

Radio Kudrat Nigeria
(Formerly Radio Democracy)

Dear Christopher Lobdel

This is just a short note to let you know that we really appreciate your writing to us to let us know that you have been tuning in to our station. We are extremely delighted to know that our broadcasts have gone far beyond our intended target, which is Nigeria and West Africa.

For some of you whom have requested to know the transmitter location, we apologise that for now this can not yet be revealed for political and security reasons.

Radio Kudrat Nigeria would also like to point out that the QSL cards you are now receiving are temporary, as soon as we are satisfied we shall have properly printed QSL's with the station seal and stamp. These shall be sent in to you as soon as they are ready, for you to add to your collection.

Best Regards

Keyode Fayomi

Director of Communications, MALICON

Confirmed Date 2. Sep 1996 Time 21.50 - 21.30

Frequency 6.200 kHz

Power N/A

Signature [Signature] Official Seal 03310 000101
NIGERIA

Radio Kudrat Nigeria
PO Box 9961 (Lagos) RE-1, LTD. Tel: (01) 266 8991 Fax: 01 266 8971

ALBANIA: Radio Tirana 7160 p/d "Woman in Costume" cd. in 3 mo. (Maroti-NY). 6190 same cd. in 113 ds. (Brown-IL).

ANDAMAN ISLANDS: All India Radio 4760 via **Port Blair** f/d "Gaja-Lakshmi" cd. from New Delhi in 8 mo. for 2 IRCs. My rpt. was sent direct to the site. It only took about 5 yrs. of reports!

ARMENIA: Voice of Armenia (Tilbury-AK). 9965 f/d orange "50th Anniversary" folder w/ personal ltr. and postcard in 4 mo. (Maroti-NY).

ASIATIC RUSSIA: Voice of Malta 17570 via **Khabarovsk** "Valletta" cd. in 2 mo. (Padula-AUST). 15550 via **Irkutsk** same cd. in 2 mo. (Padula).

AUSTRALIA: 2AM 1620 **Australian Tourist** * **Station - Sydney** QSL sheet from the station as the first correct report from Canada in 21 ds. for \$1.00. v/s John Wright. (Kusalik-ALB).

BELGIUM: Radio Vlaanderen International 13645 "Studio" cd. in 3 mo. (Padula). 13800 "RVI Presenters" cd. in 3 mo. (Padula). 7240 "Astra Satellite" cd.

in 3 mo. (Padula). **Belgium Radio and Television**

9920 f/d "Adoration of the Magi" cd. in 66 ds.

BRASIL: Radiodifusora de Roraima 4875 (Brown). 2 n/d ltrs. in 69 ds. after a f/up rpt. in PT w/ ms. v/s Francisco Geraldo Franca, Director Geral. This is my 20th State QSLed. (Wilkins-CO).

BULGARIA: Radio Bulgaria 7105 and 5860 "Nessebar" cd. in 3 mo. (Padula-AUST).

CANADA: Radio Canada International

6040 f/d "50th Anniversary" cd. in 21 ds. for a SP rpt. v/s

Bill Westenhaber. (Weissborn). 6150 w/ relay of

Canadian Forces Network

in 22 ds. (Weissborn). **Radio**

Japan 6110 via **Sackville** f/d

"Swans at Izunuma" cd. in 25 ds.

Also rcvd. postcard and newsletter.

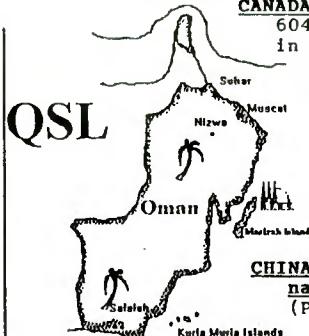
v/s H. Kawamoto. (Weissborn-TX). same w/ "Late Autumn" cd. in 19 ds. (Brown-IL). 5960 f/d cd. in 1 mo. w/ schedule and calendar. (Weissborn).

CHINA, PEOPLES REP. OF: China Radio International 9365 "Oin Dynasty Statues" cd. in 3 mo. (Padula). **Radio Canada International** 6150 via

Xian f/d cd. in 15 ds. w/ schedule and sticker

COSTA RICA: Radio Universidad (Weissborn-TX).

de Costa Rica 6105 f/d "Map/Logo" cd. in 39 ds. for a SP rpt. and \$1.00. v/s Marco Gonzales (TI3AGM). Also rcvd. sticker and bookmark. (Wilkins-CO). **Radio For Peace International** 6205 "Building" cd. in 4 mo. v/s James L.



Dear Masao

Thank you for your Reception Report of our Transmission detailed as follows.

Date: 28th Sept 1996
Time (UTC): 1005 to 1035
Frequency: 15.310kHz

I have checked your Reception Report against our Transmission Schedule and have the pleasure of confirming it as correct.

The Eastern relay station consists of two sites 11Km apart on the island of Masirah. The North site has two 750KW Medium wave transmitters, on 7020kHz and 8413kHz. The South site has four 100KW Short wave transmitters. It is the smallest of the World Service transmitting sites. Pictured above is the Short-wave site.

Your report will be included in our file of confirmed reports.
BBC On Air Magazine has full details of all BBC World Service Programmes and Frequencies

High Adventure



Latham, Station Manager.
(Padula). United Nations Radio 6205 via RPFI cd. in 4 mo. (Padula).
CUBA: Radio Habana 9820 f/d "Lenin High School" cd. in 131 ds. (Brown-IL).
CZECH REP: Radio Prague 7345 f/d "St. Nicholas cathedral" cd. in 92 ds.

QSL COLUMN DEADLINES: I usually start typing the QSL Column between the 12th and 15th of each month. If I receive your report during the typing period and I'm already typing reports for Mali and Malagasy (letter M) anything before that such as Korea or Ecuador (letters K and E) will either be at the end of the Column (space providing) or in the next month's QSL Column. Don't fear, I didn't lose your report. It will be in eventually.....Sam.

(Brown-IL). 11640 "River Scene" cd. in 2 mo. (Padula). 11600 "Praha Baroque" cd. in 3 mo. (Padula). Adventist World Radio 15620 f/d "25th Anniversary" cd. w/ ltr. in 45 ds. (Atchley).

ECUADOR: HCJB 9745 f/d "Quito Hotel" cd. in 28 ds. (Brown-IL). f/d "National Radio Club" cd. in 10 ds. for SASE to the NRC addr. v/s Ken Chatterton. (Weissborn). f/d cd. in 53 ds.
* for ms. (Dacus-ARK). Radio El Buen Pastor 4815 ltr. w/ prepared cd., pennant and paper logo in 5 wks. for a taped rpt. and ms. v/s Segundo Poma, Director and Juana Guaman, Secretaria. (Lazarus-LA).

ETHIOPIA: Radio Ethiopia 9560 f/d blue cd. w/ "Seasons Greetings" cd. and sticker in 21 ds.

* (Atchley-CA). Voice of the Revolution of Tigray 7515 f/d 3 page ltr. w/ 2 prepared cds. (signed and stamped) in 34 ds. via registered mail. v/s Fre Tesfamichael, Director. (Kusalik-ALB).

EUROPEAN RUSSIA: Voice of Malta 9765 (Samara?) cd. in 2 mo. w/o site.

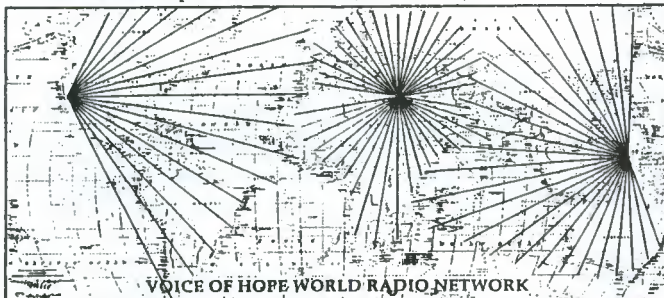
* (Padula). IBRA Radio 12015 and 12020 (Moscow?) "Hong Kong Embroidery" cd. w/ site as "Russia" in 3 mo. v/s Gosta Akerlund, Director. (Padula-AUST).

FRANCE: Radio France International 13625 via Issoudin f/d "Alliss" cd. in 32 ds. (Brown-IL). 3980 "Opera Bastille" cd. in 1 mo. (Padula).


China Radio International 7160 "Wulao Mountains" cd. in 5 mo. (Padula). 7250 "Tian An Men" cd. in 6 mo. (Padula).
GHANA: Ghana Broadcasting Corporation 4915 f/d "Golden Jubilee" (u) cd. in 43 ds. for 2 IRCs. (Brown-IL).

GREECE: VOA Kavala 11825 "Greenville" cd. in 2 mo. (Padula).

GUATEMALA: Radio Buenas Nuevas 4800 p/d cd. in 37 ds. for a SP rpt. and \$1.00. (Atchley). Radio Cultura 3300 f/d "Quetzal Bird" cd. in 62 ds. for an EG rpt. and \$1.00. (Brown-IL).




VOICE OF HOPE WORLD RADIO NETWORK



NRC since 1933

QSL



To: Henry Weissborn

This will verify your reception of the National Radio Club program NBC Reports on date 12/8/76 UTC on 0146 MHz over radio HCJB Quito, Ecuador

Thanks for your report.

HONG KONG: BBC East Asia Relay Station 15280 f/d cd. of "Great Buddha" in 2 mo. direct from the site for \$1.00. v/s Miles Ashton. (Tilbury-AK).

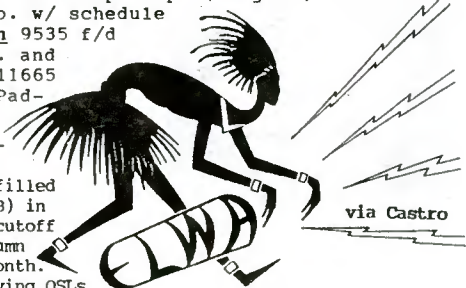
HUNGARY: Radio Budapest 5920 "Parliament in



Sunset" cd. in 4 mo. (Padula).
6140 "Castle District" cd. in
3 mo. (Padula).
ICELAND: **INBS** 13860 f/d "Amazing
Blue Lagoon" cd. in 3 wks.
(Maroti-NY).
INDIA: **All India Radio** 4850 via
Kohima f/d "Suraj-Bhawan" cd.
in 3 mo. after a f/up rpt. to
the site for 2 IRCs. (Tilbury)
IRAN: **VOIRI** 9022 f/d "Ayatollah"
cd. in 3 mo. (Maroti-NY).
IRELAND: **Radio Telefis Eireann**
13820 cd. in 45 ds. for 1 IRC
(Vaghjee-MAUR).
ISRAEL: **Kol Israel** 11605 f/d cd.
in 13 ds. for 1 IRC. (Weiss-
born).

ITALY: **RAI** 11800 f/d "Bernini" cd. in 74 ds. (Brown-IL).
7260 "Sculpture" cd. in 1 mo. (Vaghjee). 11750 same in 4 mo. (Padula).
11840 "Lorenzo Painting" cd. in 4 mo. (Padula). 9670, 9695 and 7110
* p/d cd. in 2 mo. (Padula). **Radio Breakdown** 3985 via **IRRS** f/d postcard
w/ long personal ltr. in 3 wks. for a taped rpt. (Berg-MA).
JAPAN: **NSB** 6055 "Horse" cd. in 1 mo. w/ schedule
for 1 IRC. (Vaghjee). **Radio Japan** 9535 f/d
"Autumn Scenery" cd. w/ newsltr. and
schedule in 3 wks. (Maroti-NY). 11665
"Tokyo Building" cd. in 2 wks. (Pad-
ula). 9570 f/d "Kanman Bridge"
cd. in 2 mo. (Padula-AUST).

NOTES: **Greg Myers** in Richmond, VA wishes
everyone a very merry holiday season filled
with great QSLs. **Philip Atchley** (K06BB) in
Merced, CA asks about the QSL Column cutoff
date. Actually I start typing the Column
around the 12th to the 15th of each month.
If space permits I will get late arriving QSLs
printed at the end of the Column...Sam. **Terry**
Adelwerth of 50 Railroad Avenue, Center Moriches, NY 11934 is looking for a correct
address for NBC at Papua New Guinea. He says that the address in the WRTH is not
correct. Can anyone help Terry?...Sam.



Z. P. 5 y Z. P. A. 5

RADIO ENCARNACION

Encarnación
República del Paraguay

KAZAKHSTAN: **Radio Nederland** 7305 f/d "Antenna"
cd. in 1 mo. (Atchley-CA).

KOREA, REP. OF: **Radio Korea** 9870 f/d "Kang shin Jai, Novelist" cd. in
120 ds. w/ schedule and leaflets. (Vaghjee).

KUWAIT: **Radio Kuwait** 11990 via **Kabd** f/d folder cd. w/ schedule and nice
sticker in 3½ mo. (Dacus).

LAOS: **Lao National Radio** 6130 f/d ltr. in 51 ds. for \$1.00. This was my
9th f/up on this station. v/s Ms. Malivarn Simanithone, Deputy Head
of the English Section. (Wilkins-CO).

LESOTHO: **BBC** 3255 ltr. in
65 ds. w/ stickers. (Vag-
hjee-MAUR).

LITHUANIA: **Radio Vilnius**
6120 via **Julich** f/d cd.
w/ schedule in 39 ds.
(Dacus)...I should of
placed this under FRG.

MOLUCCA ISLANDS: **RRI Ternate**
3345 f/d yellow cd. in 60
ds. for an EG rpt. and
\$1.00. v/s Latief Kama-
rudin, Kepala Stasiun.
(Atchley-CA).

MONACO: **Trans World Radio**

JORDAN: **Radio Jordan** 11970 f/d cd. in
60 ds. v/s Jawad Zada, Director. (At-
chley-CA).

JAVA: **RRI Yogyakarta** 5059 f/d cd. in 21
ds. for \$1.00. (Atchley).

Q S L

Certificado de Sintonía

RADIO ESPERANZA, CE-609, Onda corta (SW) Banda de 49 m. en 6.090 KHz. de la
ciudad de Temuco, en la República de Chile, certifica que
el Sr. **Fidro M. C. de Castro** de BRASIL
HA SINTONIZADO NUESTRA EMISORA, Radio Esperanza, el día 15. Jun. 1996
a las (Hora UTC) 23.22-23.45. (Hora de Chile) y que su
Informe de Sintonía es correcto y se ajusta a lo transmitido el día y hora indicados.

RADIO ESPERANZA, de Temuco, Chile, le agradece el informe de sintonía y le
saluda fraternalmente en Cristo.

Eleanor H. Jara
Firma y Sello Oficial





RADIO "GRIGOTA"

SOCIEDAD COLECTIVA
C.F. 14 90 P.C. Incahuasi Mochale - C.F. 74 1340 E.C. 223 Mts. C. Inca - C.F. 70 4825 Lt. 60 Mts. O. Curo
BARROSA 133 - TELER 2 1833 Y 2 3147 - CASERIA 703

Santa Cruz, 28 de **Marzo** de 1.978 9
BOLIVIA

Sr:
Pedro M. Coelho de Castro
Av. Godoy Neto 243
12600 Lorenza SP
Brasil

Estimado amigo:

Comunicamos a Ud. haber recibido su carta fecha el 22 de Marzo, 1978 9 la misma que nos alegra saber que nuestra emisora se escucha en ese lejano país, ya que según su reporte que nos envía es correcto. Nos es grato dar respuesta y hacerle conoer algo de lo que a nuestra emisora respecta.

NOTES: Maryanne Kehoe of Atlanta, GA wishes everyone Season's Greetings and sent along a Radio Korea International sticker. Thanks. We'll use it in a future QSL Column.
Eric Falkenhan feels that 96-97 is going to be a great DX season for the tropical bands and on mediumwave. I think so too!...Sam.

7115 f/d green "Programme Distribution via Satellites" cd. w/ sked. and paper pennant in 3 wks. for \$1.00.(Maroti).

NEW ZEALAND: ZLXA Radio Reading Services 3935 f/d cd. in 3 wks. for 2 IRCs. v/s Brian Stokoe. (Tilbury). f/d yellow cd. w/ personal ltr. in 21 ds.(Atchley-CA).
NIGERIA: FRCN - Kaduna 6090 p/d ltr. in 3 mo. v/s Ahmed U. Abdullahi, Tech. Officer.(Padula).
NORWAY: Radio Norway International 11840 "Fish Farming" cd. in 2 mo.

(Padula). 9495 f/d cd. in 1 mo.(Padula-AUST).

PERU: Radio Satellite 6725 f/d "Logo" cd. w/ personal ltr. in 7 wks. for a SP rpt. and \$1.00. Postcard was rcvd. v/s Sabino Llamo Chavez.(Maro-PORTUGAL: Radio Portugal 9781 "Map" cd. w/ sticker and schedule ti-NY in 1 mo.(Vaghjee-MAUR).

RADIO FOR THE PRINT DISABLED



2XA 1602 kHz
ZLXA, 3935 kHz
ZLXA, 5960 kHz
ZLXA, 7290 kHz
Simulcasting Day & Night

Turning
Print
into
Sound



N.Z Radio For The Print Disabled Inc

QSL To: Radio M. C. de Castro
We are pleased to confirm your Reception Report.
You have heard ZLXA
on 3935 at 2039-2102 UTC 08/2
Dated APRIL 16 1978

National Studios & Office

First Floor, Levin Shopping Mall
P.O. Box 360
Levin 5500
NEW ZEALAND

Phone (06) 368-2229
Community FAX (06) 368-0151

QSL Manager: [Signature]

SAO TOME: VOA 4950 f/d cd. in 6 wks.(Krepp). 9780 f/d "Rafting on the Poudre River" cd. in 18 ds. for ms.(Wilkins-CO). 6080 same f/d cd. in 20 ds.(Weissborn-TX).

SEYCHELLES: FEBE 9455 cd. in 3 mo.(Padula). BBC 6135 f/d ltr. in 45 ds. v/s Nigel Bird, Resident Engineer. (Atchley-CA).

SLOVAKIA: Radio Slovakia International 5930 f/d "Map" cd. in 5 mo.(Maroti-NY). 7300 f/d "Scenic Waterfall and Mountain Pass" cd. in 94 ds. for 1 IRC.(Brown-IL). Adventist World Radio 11655 "25th Anniversary" cd. in 4 mo.(Padula). 7225 "Special Edition" cd. in 3 mo.(Padula).

11600 f/d cd. in 3 mo. (Padula). 7215 same cd. in 3 mo.(Padula).

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

SOUTH AFRICA: Radio Neder-land 11655 via Meyerton f/d cd. in 40 ds. for 1 IRC.(Neal-TX). Channel Africa 7225 "Johannesburg Transmitting Station" cd. in 4 mo.(Padula). Radio Oranje 3230 "Sentech" cd. in 2 mo. (Padula-AUSTRALIA).

ZIMBABWE BROADCASTING CORPORATION

QSL


TO NAME
MR. MC. DE CASTRO
ADDRESS
Av. Godoy Neto 243 Lorenza 1224

YOUR QSL CONFIRMED
DATE 23/01/78
FREQ 3306 kHz
SERVICE RADIO 2

SPECIAL OFFER: Your QSL Editor is offering foreign postage stamps to use as enclosures with your reception reports. We are offering 600 for \$5.00; 1300 for \$10.00 or 2000 for \$15.00. With each \$5.00 order we will include absolutely free 300 US stamps, mostly commemoratives. That's a total of 900 stamps for \$5.00; 1900 for \$10.00 or 2900 for \$15.00. Please include \$2.00 or \$3.00 for postage. It sure would help. We have had several repeat orders from some prominent DXers - even 3 or 4 times. Be sure to get your orders in as soon as possible.....Sam.

iraqi
Radio License
Ham, CB, Broadcast, & Whatever

Issued to: _____



As the holder of this license, you have the right, under force of arms, to invade all radio bands, seize them, hold frequencies hostage, and ignore any and all international agreements, ethics and protocols.

Be my guest! Run any power, try any mode, use the best equipment you can steal. May the fleas of 1,000 Iraqis infest the armpits of all who complain!

Sadamm Shams

Sadamm Shams,
Thief of Baghdad &
Used Camel Auctions

* **South Africa Radio League** 3215 via **Meyer-ton** f/d "Tygerberg Transmitting Station" cd. in 6 mo. (Padula).

SPANISH MOROCCO: VOA Brieck 17895 f/d "River Rafting in Colorado" cd. in 24 ds. (Dacus).

SWAZILAND: Swaziland Commercial Radio 6155

ltr. in 15 ds for 1 IRC. (Vaghjee).

Trans World Radio 6115 cd. in 3 wks. (Padula).

SWEDEN: Radio Sweden International 7290 f/d "King Carl XVI Gustaf" cd. in 23 ds. (Brown-IL). 7170 "Gotland" cd. in 1 mo. (Padula) 9430 f/d "Stockholm" cd. in 1 mo. (Padula). 7155 f/d "Malmo" cd. in 4 mo. (Padula-AUST).

SWITZERLAND: Swiss Radio International 9905 f/d "Solothurn - Inn of the Red Tower" cd. in 1 mo. (Brown-IL). 9870 f/d "Landenburg" cd. in 3 mo. (Padula).

SYRIA: Broadcasting and Television Service of Syria 13610 "Map" cd. w/ newspaper in 75 ds. (Vaghjee).

THAILAND: Radio Thailand 15370 f/d "Thai Doll" cd. in 6 wks. v/s Amporn Samosorn. (Maroti-NY). 15115 via **Udorn** f/d "Earthenware Crafts" cd. in 2 wks. (Padula). 9680 "Thai Stamps" cd. in 2 mo. (Padula). 7210 "Thai Doll" cd. in 4 wks. (Padula).

TAIWAN: Voice of Asia 7445 f/d cd. w/ stickers in 42 ds. (Barrera-ARG).

TANZANIA: Radio Tanzania 5050 f/d cd. in 2 mo. after 4 f/up rpts for \$1.00 v/s B. Kapinga. (Krepp).

TURKEY: Voice of Turkey 9635 "Museum of Anatolian Civilizations" cd. in 6 wks. (Padula). 7115 "South Eastern Anatolia" cd. in 6 wks. (Padula).

UKRAINE: Radio Ukraine International 5905 cd. in 2 mo. (Padula). 7375 cd. in 2 mo. (Padula). 7150 "Logo" cd. in 98 ds. (Brown-IL). **Voice of Russia** 9955 via **Lvov** f/d "Kremlin" cd. in 4 mo. (Pad-USA: **WOCR1** 3210 p/d "World Christ- ulan Radio" cd. in 7 ds. for SASE. (Weissborn). **WENN** 13695 f/d cd. in 2 mo (Padula). **WSHB** 7510 "Transmitter" cd. in 1 mo. (Padula). **KTBN** 15590 "Antenna" cd. in 17 ds. for ms. (Weissborn-TX). **KVOH** 17775 f/d "World Map" cd. in 206 ds. for a SP rpt. Sticker and ltr. was rcvd. (Weissborn). 9975 same cd. in 104 ds. for ms. (Brown-IL).

Voice of America 6135 no site cd. of "The Bill of Rights" in 1 mo. (Vaghjee). **Rock It Radio** 9955 via **WRMI** f/d

Radio

FIDES

via Iazaras

RECUERDO DE INAUGURACION RADIO ALLMICHIC

4830 KHZ
60 m

ONDA CORTA JULIO 15/95

I O J K L M N O P Q R S T U V W X Y Z

BOBACOM

QSL
Verification Card
Turkish Police Radio

Dear listener,
Your report of reception of Turkish Police Radio (on 7370KHz) on 28 November 1993 from 05.25 to 06.15 GMT is correct. Thank you very much for your interest.

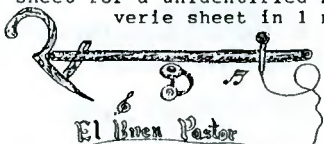
Sincerely,
[Signature]
Director of Broadcast TV Department
General Directorate of Security
ANKARA/TURKEY

RADIO MOÇAMBIQUE	
Cable Postal (P. O. Box) 194	
MAPUTO MOÇAMBIQUE	
Tenemos a prazer de confirmar We have pleasure to confirm a informação de escuta de 19 8 96 pour report on reception of 19 8 96	
na frequência de	6115 KHz
Potência do Emisor: Transmitter power:	25 KW
Operador:	Enx 380 Nacional
Remetido:	Beau Bassin Mauritius INDIAN OCEAN

yellow cd. w/ info. sheets in 2 wks. (Berg-MA). VOA Delano 9455 f/d "Jack R. Poppele Transmitting Station" cd. in 3 wks. for a taped rpt. v/s Perry G. Pitts, Station Manager. Addr: Poppele Transmitting Station, VOA, 11015 Melcher Rd., Delano, CA 93215....Guess this one QSLs direct. (Berg-MA).

USA (Pirates): Radio EuroGeeK 6955 via WREC f/d cd. in 44 ds. for ms. (Kohlbrener-PA). 11902.5 f/d cd. in 1 mo. for \$1.00.

(Maroti-NY). Up Against the Wall Radio 6955 xerox paper copy QSL in 159 ds. for \$1.00. Also rcvd. a floppy disk which I haven't loaded up yet. (McCarthy-GA). WRRN 6955 f/d sheet w/ Mafia Application in 32 ds. for 3 ms. (Wilkins-CO). WGLR 6955 f/d QSL sheet in 21 ds. for 3 ms. via Wellsville addr. (now closed). (Wilkins-CO). WLIS We Love Interval Signals 6955 f/d sheet via a log in ACE in 6 wks. (Kusalik). KCHZ 6954 f/d orange "Halloween" sheet in 3 wks. for ms. (Kusalik). WJFK 6955 sheet for a unidentified ACE logging. (Kusalik). Totally Boqus Radio 3 verie sheet in 1 mo. v/s Sal Amoniac. (Kusalik). Alan Masyqa Project 6955 f/d sheet in 1 mo. for ms. (Kohlbrener). Mystery Radio 6955 f/d #5 QSL cd. series of "The World" in 40 ds. for ms. (Kusalik). Radio Halloween 6970 f/d sheet in 21 ds. (Kusalik). WRV and WRVC 6955 n/d sheet in 1 mo. for a rpt. to Box 1, Belfast, NY 14711. (Field-MI). NAPRS 6955 via Radio Mirage 6955 f/d sheet in 1 mo. for



El Buen Pastor

via Lazarus

Hempiendo la barrera para la
unidad de nuestro pueblo...

4815 KHz onda corta

Saraguro - Iqta - Ecuador

3 ms. (Dybka-TN). Radio Nine 6955 f/d sheet in 32 ds. for ms. (Kusalik).

UZBEKISTAN: Radio Tashkent 4850 Home Service f/d cd. in 2 mo. (Padula). 6230 same in 2 mo. (Padula).

VATICAN: Radio Vatican 7305 f/d "Transmitting Center" cd. in 76 ds. (Brown-IL). 9825 f/d "Antenna Towers" cd. in 3 mo. from their RS dept. (Padula). 15570 f/d "St. Peters Square" cd. in 1 mo. (Padula).

VIETNAM: Voice of Vietnam 15010 f/d "World Map" cd. w/ sticker and paper pennant in 7 wks. for \$1.00. (Maroti-NY).

Additional QSLs

ALASKA: KNLS cd. in 95 ds. w/ ltr. and leaflets. (Vaghjee).

ANTARCTIC: LRA36 Radio Nacional Arcangel San Gabriel 15476 2 f/d cds. w/ penguin logo in 100 ds. (Barrera-ARG).

BOSNIA-HERZEGOVINA: Radio Bosnia-Herzegovina 7105 n/d ltr. in 2 mo. after a f/up rpt. and \$1.00. v/s Nermin Poczic. (Myers-VA).

Hope everyone has enjoyed this month's QSL Column.....Sam.

Sam



Thank you for your report on the reception of our transmission from the MEYERION short wave station

DATE: 30/09/96

TIME: 11:00GAT 14:55 - 15:00

FREQUENCY 7155KHZ

MASAO HOSOYA

1-1-19, SENGEN-CHO

HIGASHI-KIRIYATE-SHI

TOKYO 203

Contributors' Page

Fred S. Kohlbrener
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
Julianna BICKUS, Herndon, VA
Charles BOLLAND, Lake Worth, FL
Brian BOULDEN, Fairfield, CA
Erik BUENEMAN, Hazelwood, MO
David CLARK, Thornhill, ONTARIO
Rich A. D'ANGELO, Wyomissing, PA
Ralph FAMULARO, Hyogo-ken, JAPAN
John FISHER, Calgary, ALBERTA
Bob FRASER, Cohasset, MA
Bill FLYNN, Cave Junction, OR
Bob HILL, Holliston, MA
Ron HOWARD, Carmel, CA
Hans JOHNSON, Englewood, CO
Marv KAMINSKY, Flanders, NY
Fred KOHLBRENNER, Philadelphia, PA
Ben KREPP, Chamberlain, ME
William McGUIRE, Cheverly, MD
Jim MOATS, Ravenna, OH
Mark MOHRMANN, Coventry, NY
Kevin MURRAY, Holliston, MA
Gary NEAL, Sugarland, TX
Ed NEWBURY, Kimball, NE
Denis PASQUALE, New Brighton, PA
Sheryl PASZKIEWICZ, Manitowoc, WI
Barry PETERS, Doylestown, PA
Robert PIETRASZEK, Turner Falls, MA
Stephen PITTS, Minnetonka, MN
Karl RACENIS, Livonia, MI
Bob RAYMOND, Nashua, NH
Chuck RIPPEL, Cornland, VA
Betsy ROBINSON, Clinton, TN
Mike RYAN, Bangkok, THAILAND
Giovanni SERRA, Anzio, ITALY
Kate SULLIVAN, Boston, MA
Mahendra VAGHJEE, Rose Hill, MAURITIUS
Henry WEISSBORN, Houston, TX
Joel WHITAKER, Fanwood, NJ
Andrew YODER, Mont Alto, PA
AOR AR-7030 100' LW
NRD-525 32m dipole
R8 165' LW
R8 Eavesdropper
NRD-535D NRD-525 LW dipole
Sangean ATS-909 MFJ-956 LW
ATS-803A homebrew antenna
R8A ANC-4 Carolina Beam
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
Sony 2010/whip 120' dipole RW Loop
NRD-535D Dymek vertical
R8 2-500' LW's
NRD-535D random LW
R8 NRD-525 ANC-4 FL-3 AD-Sloper
R8-A 2010 60m dipole 500' beverage
DX-380
DX-440 48' indoor dipole
NRD-535D 440' V beam @ 180 degrees
R8 AOR 7030 Beverage and loop antennas
Grundig YB-400
WJ-1000 R8 60'Sloper 20' loop
Sony 2010 beverage antennas
R8 NRD-525 60' LW Eavesdropper
NRD-525 NIR-12 DA100D beverage
Sony 2010 Eavesdropper
NRD-535D FRG-7 Eavesdropper RW Loop
Drake SW-8 190' LW
IC-745 40meter 1/2 wave vertical
R390A R8A R1051H SP-600 51S-1 LW's
Sony 2010 Indoor antenna
NRD-525 AD Sloper
Sony 2010 indoor antenna
Lowe Europa 225 100' LW
Grundig YB500 Drake SW-1 30' LW
Sangean ATS-808 Sony ICF-6500W
R5000 1000'LW

Nice turnout this month with 41 members sending in contributions. Anyone needing log or QSL reporting forms can get them for an SASE to the address above.



Tropical Band Loggings

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

2310 AUSTRALIA VLSA 12/28 1300 EG mx & ads (Froe-AZ)
2340 CHINA Fujian 12/28 1330 CH tik & mx (Froe-AZ)
2410t PAPAUA R Enga 12/31 1358 New Year anmt, ment PNG, NA (Race)
2415t CHINA Wenzhou 12/28 1200 CH mx, tik (Froe-AZ)
2700h USA WBLT 12/28 1127 ad, wx, ID 2x1350 (Mohr-VT)
2822.2v UNID 12/16 1053 kids singing, ID-musicas? en LV de Bol? anthem
wildly moving abt to 2829 in min (Mohr-VT)
2850 N KOREA CBCS 12/25 2015 KK tik, poor at 1 pm in Alberta (Fish)
12/28 1230 KK tik, weak (Froe-AZ)
3139.9h DOM REP R Amanacer 12/6 0230 rel mx, ID 2x1570 //6025 (Alex-PA)
3200.4h ARGENTINA R Armonia 12/6 0600 tangos, ID (Berg-MA)
3210 USA WWCW 12/11 0807 tik show (Buen-MO) 11/10 0127 Grace in
Action pgm (Sull) Tnx! 12/28 0624 Grace Hour (Weis-TX)
3231.9 SUMATRA RRI Bukittinggi 1/4 2225 AR like vcl, anmts (Clar-ON)
3264.8 SUMATRA RRI Bengkulu 1/3 2235 tlks by M (Clar-ON)
3280 ECUADOR LV del Napo 12/25 0139 mx, ID, good (Berg-MA)
3289.9 NAMIBIA NBC 12/20 1720 tik, lite mx (Famu-JP)
3306 ZIMBABWE ZBC 12/25 0130 tik, Afr mx, phone tik (Berg-MA)
12/26 0315 Afr pops, balafon mx, anmts (Ripp-VA) 1/2 0334
native mx, poss EG ID (Buen-MO)
3320 N KOREA PBS 12/24 2202 KK tik, poor (Fish-AB)
3340.5 PERU Ondas del Huallaga 1/12 0340 echo tik, mx, ID (Clar-ON)
3345 INDIA AIR Jaipur 12/29 0210 mx to 0215* and on 4910 few min
later, 0230 chimes, TP (John-CO)
3356 BOTSWANA RB 10/22 2009 Afr pops, oldies, ID (Zard-DEN)
3365 INDIA AIR 10/22 1534 EG nx, ID (Zard-DEN)
3366 GHANA GBC 12/30 2310 FR US pops not //4915 (Race) 1/8 0635
pop mx, EG tik (Buen-MO) 12/14 2200 EG ID, nx, mx (Robi-TN)
3390.4 BOLIVIA Emis Camargo 1/7 0034 mx, one anmt. 1/8 0101 ID (John)
3395.1 SUMATRA RRI Tanjungkarang 1/3 2220 mx, sig tune (Clar-ON)
3559.9 N KOREA RP 12/29 1438 lite mx, FR ID, f-g (Famu-JP)
3885 CLAND unid 12/29 1510 Kurdish? tik, ME mx, jammed (Famu-JP)
3905 IRIAN JAYA RRI Merauke 1/4 2049 anmts, IN pops (Murr-MA)
3910.2 UNID 1/12 0106 40s mx, anmts (Hill-MA)
3945 VANUATU RV 1/1 1058 FR pops, anmt, brass anthem (Clar-ON)
3955 ENGLAND BBC 12/11 0802 nx, ID EG (Buen-MO)
3955 SOUTH AFRICA Channel Afr 1/2 0325 IS, ID in lang (Buen-MO)
3985 ITALY Kiwi R via IRRS 12/22 2335, Graham Barclay, pops, ID
Napier addr. IT 2400 & 3rd Man Theme (Berg-MA) 12/21 2301
R Sparks ID, contest info (Berg-MA) Europirates via SW R
Switz 12/7 Jugend R, R Natalie (Berg-MA)
4000 UNID 2251 12/23 chants, weak, Bafoussam? (Barr-ARG)
4000.1 SULAWESI RRI Kendari 1/4 2149 pops, tik, flutes (Murr-MA)
4000.5 PERU R San Juan 1/12 1057 tik, romantic mx, ID (Hill-MA)
4003.2 SUMATRA RRI Padang 1/3 2220 mx but poor (Clar-ON)
4070 CLAND Vo Iraqi Kurd 12/23 0405 AR or KK ID, tlks (Barr-ARG)
4035 TIBET Lhasa 12/14 1330 TB tlks //others + 6110 (Ryan-THAI)
12/28 0407 mx, ID, nx (John-CO) 12/22 0347 tik, ME mx, Koran
tent (Alex-PA)
4105 CLAND Vo Peop Kurd? 12/22 0347 tik, ME mx //6290 (Alex-PA)
4110 CLAND Vo Peop Kurd 12/28 0348 mx, ID, 0411 AR (John-CO)
4190 CLAND Vo Iran Kurd 12/28 0330 KK vcls, ID (John-CO)
4449.9 BOLIVIA R Frontera 12/31 0953 TC, tik, mx, ID (Mohr-VT)
4450.2 BOLIVIA R Frontera 12/26 1012 Xmas mass, SSB QRM (Yode-PA)
4460.8 PERU R Norandina 12/15 0130 tik, mx, rel mx (Alex-PA)
4471.8 BOLIVIA R Movima 12/26 0952 tlks, LA mx (Yode-PA) 1/4 1013
comunicados, bird sounds, TC, ID, mx (Mohr-VT)
4485.2 PERU LV de Celendin 12/15 0130 tik, ballads, organ (Alex-PA)
4552.4 BOLIVIA R Tropico 12/8 2240 EZL booming in (Hill-MA) 1/4

1033 anmt, Andean mx, ID (Mohr-VT) 12/25 0305 CP mx, tlk
 poor (Boll-FL)

4600 BOLIVIA Perla del Acre 12/5 0915 SP pops, anmts (Mohr-VT)

4649 BOLIVIA R Santa Ana 1/5 0045 romantic mx, anmts (Flynn-OR)
 11/20 0053 ID, mx, saludos (Arru-PERU)

4679.8h ARGENTINA R Castanares 12/24 0259 ID, cumbias 3x1560 (Barr-ARG)

4712.3 VIETNAM 1st Pgm 12/20 1300 tlk, flute/string //5924 (Famu-JP)

4725 MYANMAR VoM 12/11 1420 tlks, seemed 3-lang ID, fair (Flynn-OR)
 12/24 1219 As mx, tlks (Yode-PA) 1/3 1140 tlk, mx (Boll-FL)

4735 CHINA Xinjiang PBS 12/25 1125 lang tlk, Oriental mx (Boll-FL)

4740 TAJIKISTAN VoR 1/11 1235 Tchaikovsky, EG tlk (Hill-MA)

4747.4 PERU R Huanta 2000 12/15 0053* SP tlk, NA, tent (Alex-PA)
 12/24 1055 cmtry, poor (Boll-FL)

4750 CAMEROON CRTV 12/12 0539 FR tlk (Newb-NE) Did you mean 4850?

4750 SAO TOME VOA 12/13 0530 discussion (Boll-FL)

4753 SULAWESI RRI U-P 1/4 2200 nx, ID (Clar-ON) 1/4 2128 pops
 anmts, exotic mx, ment U-P (Murr-MA)

4759.8 CHINA Yunnan PBS 12/21 2150 instls, TP, ID, march (Hill-MA)

4760 ANDAMAN AIR Pt Blair 1/1 1225 SC mx, tlks, Hindi nx (Clar-ON)
 tent 12/31 EG tlk, nx? SC mx, poor (Race)

4760 CHINA Yunnan 1/4 1200 CH tlk, mx (Froe-AZ)

4770 NIGERIA RN 1/7 0558 native mx, TCs, Channel 2 ID, nx (Buen-MO)
 12/26 2215 EG EZL mx, FC, ID (Bick-VA) Good to hear from you
 12/12 0545 EG tlk, sports event (Newb-NE)

4774.9 PERU R Tarma 1/3 1040 huaynos, tlk (Boll-FL)

4775 BRAZIL R Liberal 12/24 0930 anmts, ID, fading (Pete-PA)

4775 INDIA AIR Imphal 12/27 1200 icl ID, rel mx (Howa-CA)

4775 PERU R Tarma 12/24 1057 ID, good (Yode-PA)

4775 SWAZILAND TWR 12/25 0420 EG Xmas mx, GG pgm (Newb-NE)

4777.1 JAVA RRI Jakarta 12/22 1158 SCI, anmts (Hill-MA) 1/1 1159
 SCI on LSB but weak (Clar-ON) 12/24 1600 IN tlk (Fish-AB)

4777.7 BOLIVIA R Andes 12/25 *0938 mx, ID, Xmas greet (Berg-MA)
 12/24 0940 anmts (Pete-PA)

4779.8 GUATEMALA R Coatan 12/26 0203* anmts, pops, ID (Alex-PA)

4780 ECUADOR R Oriental 12/24 1050 TC & clar ID (Pete-PA) 12/21
 1018 SP tlk, ID, HC mx, good (Alex-PA) 12/15 1100 ID, trad
 mx, tlk (Robi-TN)

4790 PERU R Atlantida 12/24 1003 TC, ID, Andean mx (Pete-PA)

4790 INDIA AIR site? 1/5 0017 IS, ID w/word that doesn't sound
 like place name, FC, mx, Hindi nx (John-CO)

4795.4 VIETNAM Son La BS 1/11 1207 icl mx, flutes, lang (Hill-MA)

4799.9 GUATEMALA R Buenas Nuevas 12/26 0025 folk mx, greet, Silent
 Nite, ID (Bick-VA)

4800 CHINA CNR 12/21 2207 Minority svc MG tlks //4190, 5420 (Hill)
 12/31 1456 CH IS, Western mx (Boul-CA) Hi Brian 1/4 1300
 CH tlk, East & West mx (Froe-AZ)

4805 BRAZIL Rdf Amazonas 1005 nx, ID, booming in (Pete-PA)

4810 ARMENIA Yerevan 12/22 2006 AR tlk, ment Yerevan //4990 (Hill)

4815 BURKINA FASO RTV 12/15 0002* FR mx, drums, ID, NA (Flynn-OR)
 1/8 0649 soul mx, hilife, ID & nx in FR (Buen-MO) 12/26
 2240 tent w/FR pol tlk, ment Rwanda, Afr (Bick-VA)

4825 BRAZIL R Cancao Nova 12/20 0515 pop mx, PT (Newb-NE) 12/25
 0813 ballads, tlk //9675 (Famu-JP)

4826.2 PERU R Sicuani 12/21 1010 anmt, TC, huaynos, ID (Mohr-VT)

4830t CHINA Huayi BC 12/14 1526 CH tlk, some mx, fair (Flynn-OR)

4835 MALI RTM 12/31 2210 lang tlk, strong (Pete-PA)

4840 PERU R Andahuaylas 12/24 1057 cmtry, ment Lima (Boll-FL)

4845 GUATEMALA R Kekchi 1/1 1229 prayer, ID (Pete-PA) 12/15 1130
 ID, Little Drummer Boy (Robi-TN)

4850 CAMEROON Yaounde 1/3 2300 FR tlk, strong (Clar-ON) 12/13
 2035 EG interview, ID, FR 2110 Afr pops (Alex-PA) 12/6 0500
 FR nx, EG 0517, ID, EG msg, nx, mx (Berg-MA) 1/6 2045 int,
 ID, nx, mx (Piet-MA) Glad you wrote in 12/13 2120 FR hilife
 ment Yaounde (Famu-JP)

4860 RUSSIA R Rossii 12/23 2000 ID, RS tlk //4820 (Ryan-THAI)

4870 BENIN ORTB 1/6 2247 soul mx, FR tlk, NA 2300* (Buen-MO)
 12/26 2300* FR tlk, Afr pops, NA (Alex-PA)

4870 ECUADOR LV del Upano 12/11 1135 SP tlks (Newb-NE)

4874.4 IRIAN JAYA RRI Sorong 12/14 1203 nx, NA, Xmas mx (Murr-MA)

4875t BRAZIL Rdf Roraima 12/10 0324 rel pgm, pops (Flynn-OR) 12/8
 0430* class mx, PT anmts, NA (Newb-NE)

4883 CHINA CRI 12/31 1444 CH mx, anmts, 1456* (Boul-CA) 1/4 1500
 IS RS nx pgm (Froe-AZ)
 4885 BRAZIL R Clube Para 0355 12/9 mx, ID (Kami-NJ)
 4886.6 PERU R Villa Rica 12/24 1104 cmtry, ID (Boll-FL)
 4890 GABON RFI 12/12 0553 FR tlks (Newb-NE)
 4890 PAPUA NBC 12/25 1215 Xmas mx on late in PD; EG anmts (Ripp-VA)
 1/4 1153 Western pops, ID 1200* (Pete-PA Tnx! pres 1/7 1330
 TC, pop mx, still on 1500 (Howa-CA) 1/4 1325 TC & goodnite
 pop mx (Clar-ON) 12/24 1508 pops, reggae etc. IDs (Fish-AB)
 1/4 2040 TC, mx, tnx Hill (Murr-MA) 1/4 1250 pops, nx (Ripp)
 1/4 1440 phone nos for intl listeners to call in, IDs for
 Karai FM and Kalang FM (John-CO) 12/31 1317 TC, call in (Race)
 12/11 1140 EG tlk, CW QRM (Newb-NE)
 4890.5 PERU R Chota 1/1 1120 OA mx, anmts, PNG off (Clar-ON) 12/25
 1100 huaynos, cmtry (Boll-FL)
 4890.5 VIETNAM Hanoi HS 12/24 1115 cmtry, mx, thresh sig (Boll-FL)
 4895 INDIA AIR Kurseong 12/28 1230 SC mx, TP, ID, nx (Mohr-VT)
 4900 CHINA Haixia 2 12/14 1125 CH tlks, string mx (Pete-PA)
 4904.5 CHAD RNT 12/13 0550 FR discuss (Boll-FL)
 4904.8 PERU R La Oroya 12/8 1030 anmts, ID, folk mx (Alex-PA)
 4905.5 COLOMBIA Ecos del Orinoco 11/2 0051 ID, poor (Tab-FR)
 4910 GUINEA RTV 1/5 1500 FR ID, drums (Froe-AZ)
 4910 INDIA AIR Jaipur 12/12 1258 tlk, SC mx (Murr-MA)
 4910 ZAMBIA ZNBC 1/7 0305 choral, calypso mx, ID in lang (Buen-MO)
 12/25 0405 lang Joy to the World, drums, Deck the Halls (Newb)
 12/9 0350 mx, ment Zambia, ID (Kami-NJ)
 4914.6 PERU R Cora 1/1 1100 buenos dias jingle, ID (Race)
 4915t BRAZIL R Anhanguera 12/24 0820 tlk, ads, mx, poss ID (Famu-JP)
 4915 CHINA Guangxi PBS 12/21 1133 CH tlks, het (Newb-NE) 1/4 1330
 CH tlk & mx (Froe-AZ)
 4915 GHANA GBC 1/8 0620 mx, ID in lang (Buen-MO) 12/28 2240
 lang, mx, EG ID (Newb-NE)
 4919 ECUADOR R Quito 1/1 0500 salsa mx, TP (Newb-NE) 12/30 0300
 ID, nx, ads (Froe-AZ) 0228 ID, anmts (Mola-IT)
 4920 INDIA AIR Madras 1/3 1459 SC mx, fair (Fish-AB) 1/4 1220
 EG SC mx, nx, ID (Mohr-VT)
 4920 RUSSIA VoR 12/23 1726 already in, EG pgm, worse at 1810 (Hill)
 4926.5 SUMATRA RRI Jambi 1/3 1050 cmtry (Boll-FL)
 4930 HONDURAS R Intl 12/21 1115 ID, addr, good (Pete-PA) 12/26
 0040 merengue, TC, ID, greet (Bick-VA) 12/11 1148 ID, anmts
 mx promos (Newb-NE) 12/30 0230 ID, salsas (Froe-AZ)
 4935 KENYA KBC 1/1 2000 pops, EG anmts, ID (Ripp-VA)
 4945 BOLIVIA R Illimani 12/6 0140 echo anmts, ads, mx (Alex-PA)
 4955 COLOMBIA RN 12/30 0215 ID, ballads (Froe-AZ)
 4960 ECUADOR R Federacion 1/2 *1055 anthem, songs, ID (Mohr-VT)
 12/26 0007* mx, tlk, anthem, good (Alex-PA)
 4960nf SAO TOME VOA 12/25 *0259 IS, Daybk Afr, nx, wx (Alex-PA)
 4960 UNID 12/26 1125 Jew's harp mx, chants, good (Pete-PA)
 4965.9 PERU R San Miguel 12/8 1020 anmts, ID, OA mx (Alex-PA)
 4969.1 PERU R Imagen 12/24 1002 echo tlk, guitar mx (Yode-PA)
 12/25 1117 long speech (Boll-FL)
 4970 INDIA AIR Shillong? 1/4 0018 IS, SC mx, fade (John-CO) 12/22
 1230 full ID & FC, Music for You pgm (Howa-CA)
 4980 VENEZUELA Ecos del Torbes 1/1 0400 New Year ctdwn (Newb-NE)
 12/30 0200 ID, nx, mx (Froe-AZ) 12/24 0910 ID, Xmas greet
 pop & trop mx (Weis-TX)
 4985 BRAZIL R Brasil Central 12/13 0601 IDs, cmtry (Boll-FL)
 12/30 0145 ID, tlk, 0157* w/no anmt or NA (Froe-AZ)
 4990.9 PERU R Ancash 12/30 0100 ID, nx (Froe-AZ)
 4990.9 SURINAM R Apintie 1/12 0355 MOR mx, anthem (Clar-ON)
 4991.2 PERU R Ancash 1/05 0403 quite strong after Apintie s/off
 huaynos & other mx (Ripp-VA)
 4991.2 SURINAM 1/5 0403* NA & mx, mix w/Ancash (Ripp-VA)
 4995.6 PERU R Andina 12/24 1028 ID (Pete-PA) 1/3 1058 canned ads,
 live cmts (Boll-FL)
 5000 USA WWV 1/1 0700 TC (Newb-NE)
 5003.7 RIO MUNI RN Bata 12/13 0605 mx, SP tlk (Boll-FL)
 5004.9 BOLIVIA R Libertad 12/29 0200 ID, anthem, nx (Froe-AZ)
 5005p SARAWAK RTM Sibul 1/5 2210 tlk, fading, maybe //4895 (Clar-ON)
 5009.6 MADAGASCAR RM 12/7 *0257 xylo IS, NA, tlk, rel mx (Alex-PA)
 12/24 1648 mx, ID, Xmas mx (Famu-JP) 1/5 1530 FR ID, tlk

abt Afr affairs (Froe-AZ)
 5010 INDIA AIR Thiru. 12/16 0042 lang tkl, SC mx (Flyn-OR) 12/29
 0215 HD tkl, mx (Froe-AZ)
 5015 BRAZIL R Brasil Tropical 12/29 0230 ID, samba (Froe-AZ)
 5015 RUSSIA R Tikhyy Okean 12/6 1915 IDs, folk mx //7195 (Ryan)
 5020 NIGER LV du Sahel 1/7 0518 hlilife mx, poss FR ID (Buen-MO)
 5020 SOL ISL SIBC 1/1 1045 promos, TC, mx, ID, great sig (Clar-ON)
 12/31 1345 New Year greet EG (Race)
 5021 NIGER LV du Sahel 12/20 0505 FR chant, tkl, mx (Newb-NE)
 5025 CUBA R Havana 12/28 0500 EG IS, ID nx //9820. On 12/29 back
 to Rebelde pgm (Alex-PA) 12/8 0438 basketball? (Newb-NE)
 12/29 0030 tkl, ID, mx (Froe-AZ)
 5026 UGANDA RU 1/2 2100 lcl mx, NA 2102* w/o anmt (Clar-ON)
 5027 PAKISTAN R Pakistan 12/23 0300 mx, anmts, EG ID, nx (Barr-ARG)
 5029.9p SARAWAK RTM Kuching 1/5 2215 mx, weak (Clar-ON)
 5030 BHUTAN BBS 12/28 1315 lcl TC, EG nx, wx, anmt, folk mx (Howa)
 5030 COSTA RICA AWR 12/29 0047 rel pgm (Froe-AZ)
 5034 CENT AFR REP RTC 12/30 0600 FR ID, mx (Froe-AZ)
 5035 BRAZIL R Aparecida 12/29 0300 ID, nx (Froe-AZ)
 5036.2 UNID 12/22 1205 tonal lang, orch mx, Hanoi prob (Hill-MA)
 5040 INDO RRI 1/5 1400 nx & ads (Froe-AZ)
 5040 UZBEKISTAN Tashkent 11/16 0110 EG pgm, ID (Lian-GRE)
 5040.1 ECUADOR LV del Upano 12/8 1047 rel pgm, ID (Alex-PA)
 5045 BRAZIL R Cult Para 12/29 0330 ID, ads (Froe-AZ)
 5047 TOGO R Lome 12/30 0500 FR ID, NA, tkl (Froe-AZ)
 5050 TANZANIA RT 1/5 0350 EG ID, drums, nx, Ecuador off (Clar-ON)
 5050.4 ECUADOR R Jesus 11/2 0243 mx, TC (Tabe-FR)
 5050.4 PERU R Municipal 12/29 0345 ID, salsa, reggae (Froe-AZ)
 5055 FRENCH GUIANA RFO 12/29 0100 ID, nx (Froe-AZ)
 5060 UZBEKISTAN Tashkent 12/14 *1200 chimes, ID, EG nx (Pete-PA)
 5070 USA WWCW 12/11 1158 Bro. Stair, ID (Newb-NE)
 5076.7 COLOMBIA Caracol 12/29 0120 IDs, ads, tkl (Froe-AZ)
 5085 USA WGTG 1/2 0345 rel tkl show (Buen-MO)
 5090 CHINA CNR 1/4 1400 CH tkl, mx (Froe-AZ)
 5100 LIBERIA R Liberia 12/26 0052 EG ID, Can't Hurry Love (Bick-VA)
 5125 CHINA CNR 1/4 1430 CH mx, RTTY QRM (Froe-AZ)
 5236.7 PERU R Apurimac 12/24 1039 OA mx, anmts, faint (Yode-PA)
 1/3 1100 mx, tkl (Boll-FL)
 5275 TAIWAN WYFR 1/5 1430 CH rel pgm (Froe-AZ)
 5385.2p PERU R Huarmaca 12/15 0130 OA folk mx, anmts, weak (Alex-PA)
 5471.7 PERU R San Nicolas 1/3 1110 tkl, poor (Boll-FL)
 5504.2p BOLIVIA R 2 de feb 1/7 0005 LA mx, anmts, ment Municipal (John)
 5619.2 PERU R Ilucan 12/15 0205 rel tkl, ads, huaynos, ID (Boll-FL)
 1/3 1115 huaynos, interviews, rel (Boll-FL)
 5645.9 PERU LV de San Antonio 12/15 0219 mx, ID, NA (Boll-FL)
 5770 NICARAGUA R Miskut 12/25 0003* Xmas mx, ID, NA (Alex-PA)
 5824.7 CHILE R Triunfal Ev 12/23 2245 rel, ID, FC (Barr-ARG)
 5860 BULGARIA RB 11/29 2115 GK nx, IS, into Serb (Riga-IL)
 5890 BULGARIA RB 12/28 0410 BG mx //7230, weak (Alex-PA)
 5890 GERMANY R Vilnius Relay 13/31 0031 EG nx (Race) 12/9 0030
 EG to NA nx, folk mx, feature (Flyn-OR) 11/20 0030 EG nx
 abt Belarus (Pasq-PA) 12/1 0030 EG pgm, mailbag (Alex-PA)
 *5890 HONDURAS HRMI 12/17 2330 Vilnius QRM to 0100, IDs, Bible pgm
 addr Apdo. 20583, Comayaguella. EG ID mx on to 0500* (Berg-MA)
 12/29 *1211 Bible verses, IDs, addr (Kohl-PA) Radio MI IDs
 1/14 1242 rel pgm, TC (Weis-TX)

This column reads like a frequency directory! Hope you enjoy it; you
 made it possible. Loggings of Pedro A. and of Euro listeners via
 Giovanni's Four Winds publication, a very nice one indeed.
 Next deadline February 14.

International Band Loggings

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

- 5910 BELGIUM R Vlaanderen Int in EG 2202, nx, "Brussels Calling", ID, F-g (Bueneman MO 1/6)
5910nf GERMANY West Coast R Ireland relay in EG 0100, special live Christmas pgm, nx, wx, E-mail & phone greetings from USA, Irish folk mx, political cmntry (Weissborn TX, Pasquale PA 12/25)
- 5920 CROATIA Croatian R in CR 1356, lite mx, 3 tones 1400, celeste IS, ID, nx (Famularo JP 12/29)
59266 PERU R Peru San Ignacio in SP 1050, ID's, huaynos mx, cmntry, f (Bolland 1/4)
5930 SLOVAKIA RSI in FR 0200, jazz, Slovenska song, listeners' write-in, IS (Sullivan 11/10)
5930 CZECH REPUBLIC R Prague in SP 2300, nx, ID, DX pgm (Serra ITALY, McGuire MD 12/13)
5940 RUSSIA V of Vietnam relay Armavir in EG 0210, cmntry on US-Viet relations (Pasquale PA 12/21)
5945 FRANCE RFI Issoudun in FR 2251, Ella Fitzgerald song, big bands, IS, ID (Newbury NE 12/28)
59501 GUYANA V of Guyana Georgetown in EG 0705-0840+, sports hi-lites, lcl mx, Hindi chants, ads, ID, TC's, mixing w/VOFC via WYFR relay, clear after 0800, repl 3290? (Alexander PA 12/1)
5970 SAO TOME VOA relay in EG 0555, tlk re Xmas traditions, ID, fqys, target (Serra ITALY 12/12)
5973 MYANMAR Mayawadi BCS in lang 1120, SEA mx & tlk, heavy splatter 5975 (Famularo JP 12/8)
59799 BRAZIL R Guarua in PT 0750, Lat Am ballads, rooster crow, TC, hymn, prayer (Famularo 12/20)
5985 BELGIUM R Vlaanderen Int in EG 0749, sports scores/standings, //9925, 9940 (Famularo JP 12/24)
6000 GERMANY D Welle Wertachtal in EG 2309, ID, Burmese student demonstrations (Famularo 12/8)
6000 CUBA RHC in EG 0200, ID, DX show, tmx for US hurricane aid (Robinson TN 12/17, Sullivan)
6010 ITALY RAI Rome in EG 0057, rpt on world trade meeting in Singapore, //9675 (Fraser MA 12/9)
6015nf GERMANY West Coast R Ireland relay in EG 1500, tlk, folk mx, site ID, fqys & pgm sked, mail bag, QTH in Ireland, xmsn this fqy only on Thursdays 1500 (Serra ITALY 12/12)
- 6015nf UNITED ARAB EMIRATES R of the UAE in AR 2022, tlk, ID, QRM, //9770 (Hill MA 12/22)
6020 MADAGASCAR R Nederlands relay in EG 1900, "Wide Angle" feature, ID, f (Fraser MA 12/8)
6030 BRAZIL R Globo in PT 0830, fast-talking DJ, LAm mx, //118052 (Famularo JP 12/23)
6045 INDIA AIR Delhi in Urdu? 1738-1930*, sub-cont vocals, low audio, p, //4860 (Hill MA 12/23)
6055 SPAIN REE in EG 0035, press review, g (Fraser MA) in EG 0509, cmntry re NATO (Newbury NE)
6060 BRAZIL R Universo in PT 0826, OM preaching, TP's, no sign of Argentina (Famularo JP 12/18)
6070 CANADA CFRX Toronto in EG 1414, year end nx review, MW relay of CFRB, p (Fisher 1/4)
6070 FRENCH GUIANA R Japan relay in JP 0809, nx & features, mixing w/CFRX (Bueneman 12/11)
6070 PAKISTAN PBCC Islamabad in EG 1548, tlk re 1997 Pak econ, QRM Thailand (Famularo 12/25)
60801 CHILE R Patagonia Chilena in SP 1126, cmntry re University futbol teams, ads, f (GIB 12/24)
6085 OMAN R Oman Thamarit in AR 0308, bulletin, ID "...fi idhaat Oman.", nx (GIB 12/24)
6085 CANADA D Welle relay in EG 0105, rpt on bomb attacks in Corsica (McGuire MD 12/29) in EG 0323, "Arts in the Air" re Star Trek, lang lesson "German, Why Not?" (Whitaker NJ 1/5)
6090 BRAZIL R Bandeirantes in PT 0145, tlk, lcl ballads, pops, //9645, 11925 (Alexander PA 11/24)
6090nf ANGUILLA Caribbean Beacon in EG *0400-0745+, Dr Gene Scott's station is on the air "until Jesus comes back", "University Network", tlk re new xmtr, cmnt re "battle with Satan to get on the air", req calls, web site, R Esperanza underneath, //5935 (Berg MA, Bueneman MO 1/8, Racenis 1/1, Kohlbrener PA 12/29, Pitts MN 12/27) ED: Berg rpts xmtr just shy of 75 kw.
- 6095 PERU R Nacional del Peru in SP 0054, ID at 0058, wiped out by Vatican s/on 0100 (Yoder 12/25)
6120 PORTUGAL D Welle relay in EG 0518, call for human rights center in Bonn (Newbury NE 12/4)
6155 ASCENSION IS BBC relay in FR 0520, cmntry, ID in EG, rooster crow, f (Famularo JP 12/9)
6160 CANADA CKZU Vancouver in EG 0850, blues pgm, QTH, ID, 500 watt xmtr (Famularo JP 12/8)
6165 ZAMBIA ZNBC Lusaka Radio 2 in Vern *0244-0330+, distinctive Fish Eagle IS, instrum NA 0250, tlk in Vern, folk mx, vy weak under R Nederland (Alexander PA 12/13-15)
- 6165 NETHERLAND ANTILLES RN relay in EG 0430, "Newslines", media pgm, ID (Whitaker NJ 12/9)
61881 PERU R Oriente in SP 1117, kid's choir repeating same song, TC's between songs (Yoder 12/24)
6200 SWEDEN R Sweden in EG 0235, national & cultural nx, ment European Union (McGuire MD 1/8)
62037 PERU R Cuzco in SP 1019, Andean nx, lot os ID's, heavy QRM RFP1 splatter (Mohr VT 12/7)
6210 ETHIOPIA R Fana Addis Ababa in Vern *0329-0344, IS, ID at s/on, //6940 (GIB 12/23)
6230 MONACO TWR in GM *0927, IS, mx, into GM pgming 0931, g (Berg MA 1/1)
62502 NO KOREA R Pyongyang in KR 0922*, continuous KR folk mx, abrupt off (Alexander PA 11/16)
62503 EQUATORIAL GUINEA R Nac Malabo in SP 2000-2201*, nacmths, ezl vcls, AF folk mx & pops, some classical mx, s/off with NA (Alexander PA 11/22, Clark ONT 1/2)
- 62801 LEBANON V of Hope in EG 1637, interviews, promos, QTH, ID, pop song (Serra ITALY 11/18)
62993 HONDURAS Sani R(p) in SP 0051, ezl mx, disco, rock, no ID hrd, vy weak sig (Yoder 12/27)
65202 NO KOREA R Pyongyang(p) in JP? 0940, lcl fok mx, weak sig, //7580 (Alexander PA 11/16)
6575 NO KOREA R Pyongyang in EG 1144, pgm sked, "Dear Listeners", ID, NA (Newbury NE 12/18)
67256 PERU R Satellite Santa Cruz in SP 0105-0325*, OA folk mx, ID's, echo ancmts, messages, NA* (Alexander PA 12/15, GIB 12/23, Bolland 12/15)
- 6933 CHINA China R Int Beijing in PL 2009, CH folk mx, beam to Europe, g (Fisher 12/25)

6940nf ETHIOPIA R Fana in lang *0327, IS, ID, tlk, exotic vcls, p, //6210 (Alexander PA 11/30)

7085 ERITREA VO Broad Masses s/on for this stn seems to be 0430 now, g at 0453 (Johnson CO 12/28)

7105 UZBEKISTAN R Tashkent in EG *0100, chime IS, ID, NA, lite instr mx, slow ME type chants, vy little tlk, weak sig covered by VOA s/on at 0300, //7285 (Alexander PA 11/30, Hill MA 1/5)

7100 ETHIOPIA R Ethiopia in lang *0329, IS, anmts, tlk, exotic mx, p, //5990 (Alexander PA 11/22)

7120 CHAD RN Tchadienne in FR 1456, lcl chants & drums, ID, more lcl mx, f (Famularo JP 12/8)

7115 BOSNIA R Yugoslavia relay in EG 0100, ID, fqys, nx bulletins (Moats OH 12/25)

7125 ITALY IRRS Milan in EG 0826, UN Radio "Periscope", ID, sked, QTH (Kohlbrener PA 12/27) in EG 0830 with relay of Rock-It-Radio, US oldies R&R, het from 0850, weak (Alexander PA 11/23)

71256 GUINEA RTVG Conarky in FR 0635, lcl mx, anmts, ID7, fanfare, nx per sked (Clark ONT 1/8)

7135 ROMANIA RRI Bucharest in EG 2100, ID, nx re village landside, trad mx (Robinson TN 12/18)

71423nf PERU R Ayabaca in SP 0245-0313*, anmts, LA mx, OA mx, ID, NA, f (Alexander PA 12/26)

7150 UKRAINE RUI in EG 0100 & 0400, nx, trad mx, ID (Weissborn TX 12/28, Pasquale PA 12/24)

7150 INDIA AIR Impal in HD 0925-0945*, YL solo vcl, male chorus, anmts (Famularo JP 12/24)

7155 SWEDEN R Sweden in EG 1338, description of Nobel Prize ceremonies, ID (Famularo JP 12/10)

7160 MONACO TWR in GM *1430, IS, relig mx, //6230 both channels w/co-chan QRM (Famularo 12/8)

7195 ROMANIA RRI Bucharest in EG 1915, "Society Today", tlk on human rights, g (Fraser MA 12/11)

7200 YUGOSLAVIA RTVS Belgrade Dom Svc in lang 0800, gongs, ID, Euro pops (Alexander PA 12/8)

72102 BENIN ORTB Cotonou in FR 2235-2300*, Afro pop rx, s/off with NA (Alexander PA 11/30)

7215 SOUTH AFRICA TWR relay in EG 0330, IS, ID, "The Haven" gospel readings, f (Moats OH 1/1)

7240 NETHERLANDS RN Flevo in DT *0630, IS, ID, fqys, pips, world nx, f-p (Famularo JP 12/26)

7250 SINGAPORE RCS Kranji in Malay 0850, ads w/some EG, listener call-in, mx (Famularo JP 12/21)

7250 INDIA AIR Panaji in Nepali? 0120-0141, anmts w/gong, world nx, vg (Flynn OR 12/9)

7255 NIGERIA VON in EG 0645, Afro pops, vcls in Hausa, no ID (Alexander PA, Bueneman MO)

7265 GERMANY Sudwestfunk Rohrdorf in GM 0742, mix of US/Euro pops, ID (Bueneman MO 12/11)

7265 RWANDA DeutWelle relay in EG 0405, rpt of attack in Israel, ID, QRN, p (McGuire MD 12/15)

7270 ALBANIA R Tirana in AL 0247 & 2300, natl & regional nx, songs (McGuire MD12/30, Sullivan)

7270 SEYCHELLES FEBA in Tulu? *1500, IS, ID, S Asian mx, mixing w/RAI (Famularo JP 12/30)

72829v MALI RTVM Bamako in FR 0820, Afro pops, tlk, to 72839 @ 0825, //9635 (Alexander PA 12/21)

7306 ITALY R Europe in IT 0608-0710, brief anmts-some EG, pop vcls, upbeat format w/sfx, ID 0640, some QRM from 7300 after 0630, p after RFI* 0659 (Berg MA 12/22) ED: only 500 watts. Wow!

7465 ISRAEL Kol Israel in EG 1915, interview w/Rabbi over relig uses of Sabbath, g (Fraser MA 12/8)

7735nf ICELAND NBS Reykjavik in IC 1900-1930*, tlk, s/ off w/signature jingle, //9725 (Alexander PA)

80001nf SUDAN V of Sudan in AR? 0412, AR mx, tlk, f, //90253 (Alexander PA) in AR 1651, interview with ment of Sudan & Algeria, chant, tlk, //90253 (Serra ITALY 11/18)

81001sb ARGENTINA R Rivadavia in SP 0240-0400, ID, echo anmts, ads, jingles, mx (Alexander PA 11/8)

9022 IRAN VOIRI Tehran in EG 0040, ID, fqys, ment birthday of Shiite Imam, p (Pasquale PA 12/25)

9200 SUDAN R Omdurman in EG/AR 1820-1903, ID as "the English Service of Radio Omdurman", AR chant, relig cmntry, insto AR 1900, NA (Serra ITALY, Mohrmann VT 1/1, Kaminsky NJ 12/24)

9390 ISRAEL Kol Israel in EG 1505, nx, wx rpt, feature re theater in Israel, ID, interview (Serra ITALY)

9415 ECUADOR HCJB Quito in GM 0430, relig cmntry, Xmas carol in GM (Weissborn TX 12/23)

9435 ISRAEL Kol Israel in FR 2030, ID, nx re elections & Jerusalem, mx, exc (Robinson TN 12/18)

9475 GUAM KTWR TWR in Kazakh 1529, IS, anmt, ID, strings mx, sermon (Serra ITALY 12/12)

9485 BULGARIA R Bulgaria in EG 0500, ID, econ review, Xmas songs (McGuire MD, Weissborn TX)

9515 CANADA BBC relay in EG 1505, Carols from King's College, Cambridge (Newbury NE 12/24)

9535 JAPAN R Japan in EG 1422, tlk re JP consumption tax, 1996 review, //11705 (Boulden CA 12/30)

9535nf THAILAND R Thailand in FR *2000, gongs, into FR pgming after EG ID (Alexander PA 12/13)

9580 GABON Africa #1 in FR 0703, nx, cmntry, ID, fair until R Australia 0730* (Bueneman MO 1/8)

9610 TAIWAN VOFC Taipei in FR 2100*, CH fine songs, anmt, fty, ID, QTH (Serra ITALY 11/18) in EG 1228, tlk, ID, QTH, duet mx, mailbag, Q&A time, into CH? 1248 (Kohlbrener PA 12/15)

9630 TURKEY V of Turkey in EG 1402-1426*, YL hosting TK mx pgm, QTH, ID, IS (Famularo 12/30)

96354 IRAN VOIRI Tehran in EG *1530, IS, ID, Qur'an recitations, f-p (Famularo JP 12/18)

9650 INDIA AIR Bangalore in EG 1803, nx, Fujimori rejects MRTA demands, f-p (Famularo JP 12/20)

9655 TURKEY V of Turkey in EG 2301, press review, Greek government meeting on future of Cyprus (Fraser MA 12/11) US experiment on effect of lunar condx on SW reception (Weissborn TX 12/28)

9655 AUSTRIA RAI in EG 1530, ID, tlk re Austrian politicians, Xmas greeting (Famularo JP 12/24)

9690 SPAIN China R Int relay in EG 0300, ID, world nx, wx rpt (McGuire MD 1/5, Moats OH 12/25)

9700 NEW ZEALAND RNZI in EG 1200, rpt on quietest New Year's eve ever (Newbury NE 12/31)

9725 COSTA RICA TIAWR in EG 2322, "Your Story Hour", "Kaleidoscope" (Weissborn TX 1/1)

9730 FRENCH GUIANA China R Int relay in EG 0400, ID, rpt on Russia & UN (McGuire MD 12/14)

9735 PARAGUAY R Nacional in SP 2218, interview, soccer skeds, ID, exc (Bickus VA 12/27)

9740 SINGAPORE BBC relay in EG 1600, Queen's annual Xmas message, g (Newbury NE 12/25)

9745 ECUADOR HCJB Quito in EG 0239, "Classical Favorites", (Moats OH 12/24) in EG 0410, "Studio Nine", "Call of the Andes" repeat pgm from 1987, Ecuadorian Xmas foods (Weissborn TX 12/24)

- 9750 ANGOLA VORGAN in PT 0449-0540+, cock crow/guitar IS, "A Voz do Galo Negro" ID, NA, NA, Afr choral mx, PT pops/Afr hi-life mx, weak sig under VOA until 0500 (Alexander PA 11/9)
- 97798 YEMEN Rep of Yemen R in EG 1800, nx, US pop mx, NA, into AR 1900, f (Alexander PA 12/7)
- 9805 FRANCE RFI Issoudun in EG 1201, nx, bomb threat in France re Hebron tlks (Famularo JP 12/14)
- 9810nf NEW ZEALAND RNZI in EG 1752, IS, ID, pips, Pacific/sports nx, QRM (Serra ITALY 12/23)
- 9810nf THAILAND RT in EG 1235, nx, Bangkok to improve garbage collection, //9655 (Pasquale 12/28)
- 9820 CUBA RHC in EG 0515, cmntry re Cuba's AIDS containment policy, nx (Weissborn TX 12/29)
- 9830 NETHERLANDS ANTILLES RN relay in EG 0847, tlk on S Africa, ID, mx (Bueneaman MO 1/8)
- 9835nf GERMANY Adventist World R relay in EG 2030, ID, relig mx & tlk, //9465 (Pietraszek MA 1/8)
- 9840 HUNGARY R Budapest in EG 0226, cmntry re end of pgm on birth control (Sullivan) in EG 2000 cmntry on Hungary's support of UN's new Sec Gen nominee. f) Pasquale PA 12/13)
- 9855 KUWAIT R Kuwait in AR 1915, AR mx, ID "Idat Tou Dawluti Kuwait" //9880 (Kohlbrenner PA)
- 9885 SWITZERLAND SRI in IT 0500, natl & world nx, g (McGuire MD 12/13) in EG 2010, rpt on Switzerland to join Partnership for Peace Program, //13635, vg (Fraser MA 12/11)
- 9895 MADAGASCAR R Netherlands relay in EG 1531, nx on Israeli-Palestine accord (Weissborn 12/26)
- 9905 FRENCH GUIANA Swiss R Int relay in EG 0100, rpts on Serbia & Rwanda, ID (McGuire 12/16)
- 9940 BELGIUM R Vlaanderen Int in DT 1944, futbol match, interview, ad, nx, ID (Kohlbrenner PA)
- 9965 ARMENIA V of Armenia in SP 2200, nx, folk mx, station's purpose, ID's, g (Bickus VA 12/27)
- 11402 ICELAND Reykjavik in IC 1450-1507*, tlk, quick chimes at 1507 & off, //13860, does not match current published sked. Also in IC 1935-2009, tlks, chimes 1939, //13860 (Alexander 11/28)
- 11550 NO MARIANAS KHBI Saipan Monitor R Int in EG 1811, many world nx items (Weissborn TX)
- 11605 ISRAEL Kol Israel in EG 1500, nx re Israeli-Palestine problems, Xmas in Bethlehem (Weissborn)
- 11690nf JORDAN R Jordan in EG 1555-1730*, EG pop mx pgm, ID's, nx 1700, wx rpt, British 60's rock mx, ex-11970 fty (Alexander PA 11/9, Racenis 12/31, McGuire MD 1/10)
- 11705 SRI LANKA VOA relay in EG 0230-0300*, agricultural tlk, features (Kohlbrenner PA) only 35 kw!
- 11750 ASCENSION IS BBC relay in EG *2000, "Newshour", book review (Whitaker NJ 1/5) BBC relay in Singapore signs off at 1800. There is a two hour gap until the Ascension relay comes on at 2000.
- 11775nf ANGUILLA Caribbean Beacon in EG 1045, Dr GeneScott preaching and berating people in his congregation for leaving during his sermon to go to the bathroom! (Berg MA 1/1)
- 11780 BRAZIL R Nac da Amazonia in PT 1010, tropical mx, Macarena, tlk, ads, g (Bueneaman MO 1/8)
- 117904 IRAN VOIRI in Malay 1312, into Urdu 1330, //11875, dual path echo (Hill MA 1/11)
- 11795 ANTIGUA Deut Welle relay in GM 2300, New Year's eve countdown, nx (Newbury NE 12/31)
- 11810 RWANDA Deut Welle relay in EG 1900, ID, "Newline Cologne", //15135, g (Moats OH 12/30)
- 11815 BRAZIL R Brasil Central in PT 0713, ad string, phone #'s, DJ & songs, f-p (Famularo JP 12/23)
- 11840 NORWAY RNI in EG 1610, rpt on smuggling of Polish gypsies into Norway, g (Fraser MA 12/8)
- 11885 INDONESIA RRI in IN 2145-2210*, tlk, pop mx, SCI IS 2157, pips, nx 2200, f (Alexander 12/21)
- 11990 KUWAIT R Kuwait in EG 2038, ID, rock/pop mx, "Again & Again" (Bickus VA, Kaminsky NJ)
- 13580 CZECH REPUBLIC R Prague in EG 1359, IS, multi-lingual ID, nx, rpt on President Havel's wedding, press review, g (Moats OH 1/6)
- 13710nf INDIA AIR Ext Svce in EG 1332, nx include early morning power failure in New Delhi, targeted to SE Asia, f-p (Famularo JP 12/20) Listed 13732. Perhaps power failure screwed up fty setting?
- 15120nf PHILIPPINES R Pilipinas in EG 0254, interview re educ & technology, //15270 (Famularo 12/18)
- 15140 ECUADOR HCJB Quito in SP 2132, Xmas mx- SP versions, relig cmntry, ID (Weissborn TX)
- 15175 GREECE V of Greece in EG 1436, ID, New Year's greeting, mx, sked, //11645 (Moats OH 1/1)
- 152052 ALGERIA R Algiers Int in EG 1400-1500, new time for EG pgm repl 1600 best, nx, cmntry, US & Algerian pop mx, ID's, QTH, QRM from VOA, //15160 (Alexander PA 12/13)
- 15240 SWEDEN R Sweden in EG 1430, rpts on the "Jullbord" Xmas table (5 courses!), Stockholm's pgm to help the homeless, other cmntry re Xmas festivities & decorations there (Weissborn TX 12/25)
- 15240 SOUTH AFRICA Channel Africa in EG 1600, nx, pop mx, ID's, "Today's Dreams & Tomorrow's Realities" pgm for teens (Raymond 1/4, Pasquale PA 1/3, Boulden CA 12/27, Serra ITALY 12/12)
- 152445 ZAIRE LV du Zaire in FR/Vern 1745-1923*, tlk, brief breaks of Afro pops, ID 1811, abrupt s/off (Alexander PA 11/28) in FR 0510, Afro mx, ID, information (Kohlbrenner PA 12/13)
- 15265 BRAZIL RadioBras in EG 1757, IS, ID, EG sked, QTH, pgm preview, lcl mx/nx (Moats OH 1/2)
- 15420 SEYCHELLES BBC relay in EG 0615, sports round-up, "Network Africa", ID (Famularo JP 12/19)
- 15420 SOUTH AFRICA BBC relay in EG 1757, sports resume, rpts on Peru hostages, f-p (Moats 12/30)
- 15605 NORWAY RNI in EG 1300, ID, Nobel Peace Prize for '96, 2 get gold medal (Robinson TN 12/15)

ADDENDUM

It's getting tougher all the time to distinguish between Clandestine and conventional SW stations so I ended up with 2 loggings out of sequence. Tomorrow we'll get organized but don't bet on it!

- 7115 IRAN V of the Islamic Revolution in AR 0506, nx w/focus on Iraq, into band mx 0515 (not Iraqi anthem), cmntry directed to Iraqi army, ID, slogan, s/off 0530, no jamming (Johnson CO 12/28)
- 8000 ERITREA V of Sudan in AR 0541, unjammed speech to Sudanese people, nice vcls, Sudanese nx 0553, mx & ID at 0559 s/off, strong sig, //90253 (Johnson CO 12/28)

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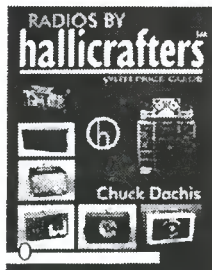
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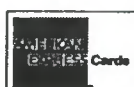


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The Journal of the
North American Shortwave Association

ISSN 0160-1989

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