

The **NASA** Journal

VOLUME XL NUMBER 1

JANUARY 2000



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NASWA Notes

Richard A. D'Angelo • 2216 Burkey Drive • Wyomissing, PA 19610 • rdangelo3@aol.com

Here we are at the beginning of a New Year. While there was much Y2K talk prior to December 31st, I discovered that all my prepared QSL cards that show "19_" for the year are not Y2K compliant. What's a DXer to do?


You may notice that this month's *Journal* looks a little different. It's ten years since our last redesign, "NASWA for the Nineties", and club desktop publishing guy **Ralph Brandi** has been working for the past few months to mark the anniversary with a new look. Ralph assures us that not only will the book look more modern, but the columns will seem better too, hi. You may see other minor changes to the look of the *Journal* as we shake out all the bugs in next few months, but the content remains the same bunch of informative articles you're used to.

The club's *Country List and Awards Program* booklet is still available from *The Company Store* (**Dan Cashin**, 1335 Harrington Rd., Havertown, PA 19083) or headquarters for just US\$2.00. Keep your country chasing statistics up-to-date with the club's latest edition of the hobby's best country list. Also, we need to keep Dr. DX busy with awards applications. The man just has too much free time and Mrs. DX is beginning to complain. Therefore, it is your responsibility to keep **Harold Cones** busy with an avalanche of awards applications. Get going!

Once again, we have information from member **Bob Padula** concerning the release of the hard-copy release of the *Australasian Shortwave Guide, Edition Number 8*. ASWG8 is

issued twice a year, in May and December and draws on the global resources supporting the weekly *Electronic DX Press* E-mailed shortwave newsletter. Edition #8 of ASWG is 24 pages, A4 format, professionally printed and saddle stitched, with over 1600 entries for B99 schedules for broadcasts: (a) in all languages targeted to Australia and the Pacific, and (b) broadcasts in English for Asia, the Far East, the Indian sub-continent, and Siberia. The cost is A\$10 for delivery to Australian addresses, or US\$10/A\$15 elsewhere (airmail). The charge covers necessary expenses in editorial research, printing, packaging and mailing, and ASWG is a not-for-profit project. ASWG is not available electronically. Payment and orders should be made to Bob Padula, 404 Mont Albert Road, Surrey Hills, Victoria 3127, Australia. Remittances from outside of Australia should be in cash (any currency, equivalent to US\$10/A\$15), or by check/postal order/GIRO/bank draft/bank check/cashier's check, to yield A\$15. Payment by 10 IRCs is also acceptable.

ANARC Chairman **Mark Meece** passes along the results of the latest Executive Board elections. Our own **Harold Cones** and Meece were re-elected to the board for another two-year term. **John Arthur** was elected for his first term. There were seven candidates running for the three slots. Eight of the twelve member clubs cast votes in the election.

That's it for this month. Enjoy this month's special holiday edition of the *Journal*; it's another good one. 

NASWA

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

Our Motto is - "Unity and Friendship"

Calendar Of Events

Jan'00 Contest. A.I.R. Contest 2000 "Attilio Leoni". The contest will start at 1700UTC on January 5th, 2000, and will end at midnight UTC on January 16th, 2000. Participation is open for all radio listeners, A.I.R. members and non-members alike. The listening list, with your participation fee, must be sent to this address: Bruno Pecolatto, A.I.R. Contest Manager, via Soana 13, I-10085 Pont Canavese (TO) Italy e-mail: <pecolatto@eponet.it> not later than February 26th, 2000 (date of postmark). Complete details in December's *NASWA Notes* column.

Jan 21 Meeting. Philadelphia Area NASWA Chapter. Kulpville Holiday Inn, Kulpville, PA at 7:30 PM. For more information contact Dan Cashin at 610-446-7831.

Jan 21 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 978-470-1971 or Internet: 74007.3434@compuserve.com. The URL for the BADX guys is <<http://www.anarc.org/naswa/badx/>>.

Feb 11 Meeting. The Tidewater SWL's meet at 6:30 PM. For more information plus meeting location contact Joe Buch at joseph.buch@dol.net

Feb 11 Meeting. The Cincinnati/Dayton Monitoring Exchange (MONIX) meet at the Lebanon Citizens National Bank on U.S. Route 42 in Mason at 7:00 PM. For more information contact Mark Meece at 513-743-8089 or e-mail at <mmeece@siscom.net>. For additional information about MONIX, check out their web site at <<http://www.siscom.net/~mmeece/monix.html>>

Mar 10-12, 2000 Convention. The 13th Annual Winter SWL Festival will be held at the Kulpville Holiday Inn (Exit 31 on the Northeast Extension of the Pennsylvania Turnpike) on 10-12 March 2000. Richard Cuff and John Figliozi co-chair the organizational committee.

Mar 11-13 Contest. 2000 North American DX Championships. For further information you can send a self-addressed stamped envelope to 2000 NADXC, c/o Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606. Rules will also be posted eventually at <<http://www.anarc.org/>>, and are published in this month's Awards column in the Journal.

Sep'00 Contest. AWR Contest. Number of different QSL stamps in the listener's collection. More details to follow.

Members are invited to submit items to be included in this calendar to Rich D'Angelo (Internet: rdangelo3@aol.com) or Ralph Brandi (Internet: ralph@brandi.org).

FRENDX: Twenty Five Years Ago....

Charlie Loudenboomer brightened up the new year with his resolutions for 1975. Among his 25 resolutions were to (1) start keeping a log, (2) get all the new HCJB QSL cards, and (3) accept that offer of a lecture tour on the design and use of logging sheets and bandspread calibration charts. The Shortwave Center featured Dan Henderson's "Travel Long-Distance With a Radio" which advised members to take a radio along on any trips. In Bob Zobot's QSL Report column, Ed Shaw and Gerry Dexter reported verifications from AFAN McMurdo on 6,012 kHz. Neal Perdue asked members for their assistance in filling out an antenna/accessories survey with the results slated for publication in a future edition of *Frendx*.

Musings

This column provides a forum where 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 solely those of the submitters. Please submit all Musings to Richard A. D'Angelo, 2216 Burkey Dr., Wyomissing, PA 19610 or via email: rdangelo3@aol.com.

Eric Swedberg <shipwrek@aracnet.com>, 1635 SE Main, Portland, Oregon, 97214, USA.

Help! I have found an old Heathkit "Q Multiplier" that has lost the terminals at the end of its two cables. Although one seems to be a standard RG-58U cable, the other has three conductors in it. Can anybody advise how these cables connect, and to what types of terminals? Perhaps a photocopy of a manual is lounging in someone's shack? Contact me at the above address. Thanks.

Marty Kane <Kaneshrink@aol.com>

I joined NASWA earlier this month. I hope I'm entitled to one dumb question. Presently I am stuck in an apt complex with absolutely no access to connections outside, not even a longwire. What do you think would be the best receiver for me under these conditions, (price not a problem)?

Thanks.

Gene Borowski, 139 Regan Ave., Staten Island, NY 10310

Along with NASWA I am also a member of the Canadian International DX Club. Recently, members were asked to participate in the club's second annual listener's survey. We were asked to submit our top 3 choices for 7 different shortwave related categories including favorite shortwave station.

As a longtime SWL/DXer I've never given any thought as to who is exactly my favorite station. At first all of the usual suspects came to mind (BBC, Radio Netherlands, etc.). After thinking it over for awhile I came to the conclusion that if I had to select a favorite station it would be none other than...Voice of Russia.

The more I thought about it the more comfortable I became with my most unusual selection. The Voice of Russia seems to be a broadcaster we SWLs take for granted and fail to give any recognition to. I feel they are vastly underrated and just as entertaining as any other shortwave broadcaster.

Disregard their news broadcasts (which seem of late to be backsliding towards old cold war era reporting) and all one has to do is look at their extensive program schedule to see that there is something for everyone's particular shortwave listening tastes.

If you enjoy music, VOR offers up no less than 5 programs ("Music At Your Request" and "Jazz Show" to name but two). They serve up everything from science ("Science and Engineering") to folklore ("Folkbox")...business ("Newmarket") to religion ("Christian Message from Moscow")...literature ("Audio Book Club") to language ("Russian by Radio"). VOR also airs several lifestyle and current affairs programs ("Focus on Asia", "Kaleidoscope", "This is Russia", et al.). I'm sure that long time Radio Moscow/VOR listeners will agree that Joe Adamov's "Moscow Mailbag" is somewhat different to say the least.

VOR is best heard here on the east coast between 0200-0400 UTC on 7180 // 7125 kHz via Moldova. Give them a listen.

I'm curious to know if anyone agrees with me. Whether you do or not drop me a line! I'll be glad to hear from you!

73, Gene

Welcome to the following new NASWA members

Bill Amann Jr., Circleville, OH
Elmer Bennett, Warren, MI
Quenton Bickel, Dolores, CO
Nan Bignall, Valles Mines, MO
Ronald Bookman, Lancaster, OH
Steven Colenso, Tracy, CA
Ralph Cook, Kennesaw, GA
William F. Crane, Chicago, IL
D. Deauville, Willits, CA
Bill Dohm, Knoxville, TN
Jason Dunavant, Knoxville, TN
Bobby Fay, Macon, GA
Vince Guinee, FPO, AP
Scott Harford, Quincy, MA
Wiley G. Harris, Lexington Park, MD
Brian Haughey, Staatsburg, NY
Snowton S. Hill, Lexington, NC
M. A. Hinz, Danville, IL
Mark Hoffman, Maryville, TN
Michael J. Howell, Bothwell, WA
Robert Hubbard, Canaan, ME
Patrick Huston, Portland, OR

Marty Kane, Altamonte Springs, FL
Keith McElroy, Oxnard, CA
John S. McGarrigle, L.E.H, NJ
Robert J. Melchiorre, Springfield, PA
Katherine M. Moore, Kansas City, MO
Scott A. Morton, Erie, PA
Douglas L. Painter, APO, AP
Robert J. Patterson Jr., Sumter, SC
Frank Platt, Hamden, CT
Gerhard S. Plessinger, Canton, OH
Hal Potter, Fallbrook, CA
D. E. Roberts, Soap Lake, WA
Ronald K. Rosset, Flanders, NY
Clifford Samuels, Detroit, MI
Dick R. Schmidt, Phoenix, AZ
Carl Shaner, Ridley Park, PA
Anthony Simmonds-Amari, Lakewood, NM
Ray Simonson, Gresham, OR
Jon Vanderstouwe, Ft. Smith, AR
Joseph Vargo, Livonia, MI
Wayne Weber, Missoula, MT

Membership Questions?

If you have any questions concerning your membership, renewals, change of address, etc please contact **Bill Oliver** by postal mail (45 Wildflower Road, Levittown, PA 19057) or e-mail (boliver@bboard.com).

Contribute!

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

Easy Listening

Richard D. Cuff • 327 Springhouse Road, Apt. 102 • Allentown, PA 18104 • rdcuff@sprintmail.com

(This month we bring you John Figliozi's *SWL Program Guide—Winter 1999–2000*; we hope to make this a regular twice-a-year feature in *The Journal* in addition to *Easy Listening*. Please send comments to John at 45 Algonquin Rd., Clifton Park, NY 12065-7703 or by e-mail to jfiglio1@nycap.rr.com. —ED.)

This is an initial attempt to provide readers of *The Journal* with a handy, concise guide to SW programming broadcast to North America. It is limited to stations easily received with a portable radio. There are two listings reflecting morning and evening listening periods across the continent. This feature is an evolving project; your critiques and suggestions are welcome.

(Days and times are in UTC; frequencies in kilohertz. All frequencies listed may not be in use for an entire broadcast period. *Abbreviations*: Days of week are self-explanatory, D=daily, exc.=except, incl.=including, usb=upper sideband. Some times approximate; information subject to change.)

Morning Listening Period (1100–1700 UT)

BBC World Service (Americas stream)
5965, 6195, 9515, 15220, 17840.

1100 *D* Newsdesk; 1130 *Su* In Praise of God, *M* Pick of the World, *Tu* Feature, *W* Sports International, *Th* Assignment, *F* Focus on Faith, *Sa* People and Politics; 1200 *D* World News; 1205 *Su* Global Business; *M–F* Outlook; *Sa* Wright Around the World; 1230 *Su* Letter from America; 1245 *Su–F* Sports Roundup; 1300 *D* Newshour; 1400 *D* World News; 1405 *Su* Talking Point, *M* Health Matters, *Tu* Discovery, *W* One Planet, *Th* The Works, *F* Science in Action, *Sa* Sportsworld [to 1800]; 1430 *M* Meridian Feature, *Tu* On Screen, *W* Meridian Live, *Th* Meridian Books, *F* Music Review; 1500 *D* World News; 1505 *Su–Th* Sports Roundup, *F* Football Extra,

Sa Sportsworld [cont'd]; 1515 *Su* Short Story, *M/F* Feature, *Tu/Th* Westway, *W* From Our Own Correspondent; 1530 *Su* Pick of the World, *M* Composer of the Month, *Tu* Everywoman, *W* Panel game/Quiz show, *Th* Greenfield Collection, *F* Feature; 1600 *Su* News Summary, *M–Sa* World News; 1601 *Su* Concert Hall, *Sa* Sportsworld [cont'd]; 1615 *Su* Performance, *M* Feature, *Tu* Steve Lamacq, *W* Jazzmatazz, *Th* Contemporary music feature, *F* John Peel; 1630 *Su* From Our Own Correspondent, *M* Farming World; 1645 *M–F* Insight (last *F* The New Europe); 1655 *Su* Spotlight.

[Special to Caribbean *M–F* 6195, 15220: 1105 Caribbean Report, 1110 Caribbean Sport, 1115 Caribbean Magazine, 1130 as above, 1205 World Business Report, 1210 Caribbean Report.]

China Radio International
7405, 9570

1300 *D* World News; 1310 *D* News about China; 1315 *Su* Cultural Information, *M–F* Press Clippings, *Sa* Asia-Pacific News; 1320 *M* Snap Shots, *M–F* Current Affairs, *Sa* China Scrapbook; 1325 *Su* Report from Developing Countries, *Sa* Chinese Folktales; 1330 *M* Open Windows, *Tu* Orient Arena, *W* Profile, *Th* Focus, *F* Life in China, *Sa* Cooking Show; 1340 *Su* Song of the Week, *M/W* Learn to Speak Chinese, *Tu* Voices from Other Lands, *Th* Cultural Spectrum, *F* Global Review, *Sa* Music From China; 1345 *Su* Listeners' Letterbox. [Ends at 1400.]

1400–1500, 1500–1600 (as 1300–1400).

HCJB
12005, 15115, 21455usb

1100 *Su* Morning Song, *M–F* Insight for Living, *Sa* Your Story Hour; 1128 *M–F* Money Minute; 1130 *Su* The Living Word, *M–F* Morning in the Mountains [to 1300] (including 1134 Bible Minute, 1142 Scriptural

Reading, **1148** *Beyond the Call*), *Sa We Kids*; **1200** *Su Hour of Decision*, *M-F Latin American/International News*, *Sa A Visit with Mrs. G*; **1205** *M-F Sports News*; **1206** *M-F Morning in the Mountains* [cont'd] (including **1206** *Insights*, **1224** *Mission Network News*); **1215** *Sa Adventure Pals*; **1225** *Su A Firm Foundation*; **1230** *Su Words to Live By*, *M-F Latin American/International News*, *Sa Adventures in Odyssey*; **1233** *M-F Morning in the Mountains* [cont'd] (including **1233** *Church Doctor*, **1245** *Guidelines for Living*, **1255** *The Gospel Truth*); **1300** *Su Weekend Magazine*, *M-F Precept*, *Sa Children's Bible Hour*; **1313** *M-F Getting the Message*; **1315** *M-F Proclaim*; **1330** *Su Mountain Meditations*, *M-F Leading the Way*, *Sa GodSeekers Central Station*; **1356** *M-F Bibles for the World*; **1358** *M-F Bible Minute*; **1400** *Su Simply Worship*, *M-F Turning Point*, *Sa Kid's Corner*; **1428** *M-F RBC Spot Radio*; **1430** *Su Moody Presents*, *M-F Living Way*, *Sa Alive!*; **1456** *M-F Beyond the Call*; **1458** *M-F Parent Talk Tip*; **1500** *Su Encounter*, *M-F Back to the Bible*; **1525** *M-F Joni and Friends*; **1530** *Su Back to God Hour*, *M-F Gateway to Joy*, *Sa Songtime Weekend*; **1544** *M-F Key Life*; **1557** *M-F Life Points*; **1600** *Su Message of Truth*, *M-F Haven*, *Sa Words of Hope*; **1626** *M-F Heart of the Matter*; **1627** *M-F Life Jewels*; **1628** *M-F Moments of Hope*. (Ends at 1630.)

Radio Australia

5995, 6020, 9580, 11650

1100 *D News*; **1105** *Su Jazz Notes*, *M-F Asia Pacific*, *Sa Book Reading*; **1115** *Sa Lingua Franca*; **1130** *Su In Conversation (Rural)*, *M-F Sport*, *Sa Fine Music Australia*; **1135** *M-F Life Matters*; **1200** *D News*; **1205** *Su Country Club* [to 1400], *M-Th Late Night Live*, *F Sound Quality*, *Sa Spirit of Things*; **1300** *D News*; **1305** *Su Country Club* [cont'd], *Sa Science Show*; **1315** *M-F The Planet* [to 1500]; **1400** *D News*; **1405** *Su Books and Writing*, *M-F The Planet* [cont'd], *Sa New Dimensions*; **1500** *D News*; **1505** *Su Encounter*, *M-F Asia Pacific*, *Sa Melisma* [to 1700]; **1530** *M Health Report*, *Tu Law Report*, *W Religion Report*, *Th Media Report*, *F Sports Factor*; **1555** *Su On This Day*; **1600** *D News*; **1605** *Su National Interest*, *M Music Deli*, *Tu Comfort Zone*, *W Verbatim*, *Th Hindsight*, *F Away!*, *Sa Melisma* [cont'd]; **1630** *W Earshot*.

Radio Austria International

13730, 17865

1330 *D Report from Austria*; **1335** *Su Week in Review*, *Sa Listeners' Letters*; **1345** *Su Profile of Austria*, *Sa Music From Austria*. (Ends at 1400.)

1600-1630 (as 1330-1400).

Radio Canada International

9640, 13650, 17710

1200 *M-F World Report*; **1205** *M-F Ontario Morning* [to 1400]; **1300** *M-F RCI News*, *Sa/Su World Report*; **1305** *M-F Ontario Morning* [cont'd]; **1309** *Su Quirks and Quarks*, *Sa The House*; **1400** *Su World Report*, *M-F RCI News*; **1405** *M-F This Morning*; **1411** *Su This Morning*, the *Sunday Edition* [to 1700]; **1500** *Su CBC News*; **1505** *Su This Morning*, the *Sunday Edition* [cont'd] (including documentary); **1600** *Su CBC News*; **1605** *Su This Morning*, the *Sunday Edition* [cont'd] (including "Talking Books"). (*Sa* off at 1400; *M-F* off at 1500; *Su* off at 1700.)

Radio Japan—NHK World

6120, 9505, 11730

1100 *D News*; **1110** *Su Hello from Tokyo*, *Sa Asia Weekly*; **1115** *M-F Asian Top News*; **1125** *M Music Reflections*, *Tu Let's Try Japanese*, *W Music Journey Around Japan*, *Th My Japan Diary*, *F Music Beat*. (Ends at 1200.)

1400 *D News*; **1410** *Su Asia Weekly*, *Sa Weekend Break*; **1415** *M-F 44 Minutes* (including **1417** *Guest Interview*, **1435** *Close-up*, **1445** *Tumbling Dice*); **1455** *M-F News Commentary*.

1500-1600 (as 1100-1200).

Radio Korea International

9650

1130 *D News*; **1140** *Su Multiwave Feedback*, *M-F News Commentary*, *Sa From Us to You*; **1145** *M Koreans at Work*, *Tu Cultural Promenade*, *W Reaching Forward*, *Th Tracing Korea*, *F Notes of Nostalgia*. (Ends at 1200.)

Radio Prague

21745

1400 D News; **1405 Su** A Letter from Prague, *M-F* Current Affairs, *Sa* The Arts; **1410 Su** From the Weeklies, *Sa* Saturday Music; **1415 Su** Readings from Czech Literature, *M* Spotlight, *W* History Czech, *F* Mailbox; **1420 Tu** Talking Point, *Th* Economic Report. (Ends at 1430.)

Radio Sweden

13800, 18960, 21810

1230 Su In Touch with Stockholm [1st]/Sounds Nordic [2nd/4th]/Weekend [3rd], *M-F* 60 Degrees North, *Sa* Spectrum [1st/3rd]/Sweden Today [2nd]/Feature [4th]; **1245 M** Sportskan, *Tu* Mediascan [1st/3rd], *W* Money Matters, *Th* Nordic Report [1st]/Greenscan [2nd]/Heartbeat [3rd]/Horizon [4th], *F* Nordic Week in Review. (Off at 1300.)

1430-1500 (as 1230-1300)

Evening Listening Period (2200-0800 UT)

BBC World Service (Americas stream)

5975, 6175, 9590

2200 D World News; **2215 D** Sports Roundup; **2230 Su** Panel game/Quiz show, *M* UK Top 20, *Tu* Jazzmatazz, *W* World of Music, *Th* Contemporary music feature, *F* John Peel, *Sa* Play of the Week; **2300 Su-F** World News; **2305 Su** Wright Around the World, *M-F* Outlook, *Sa* Steve Lamacq; **2345 M-F** Insight; **0000 D** The World Today; **0030 Su** People and Politics, *M* Everywoman, *Tu* Health Matters, *W* Discovery, *Th* One Planet, *F* The Works, *Sa* Science in Action; **0055 Tu-Sa** Visionaries; **0100 D** The World Today; **0130 Su** Music Review, *M* Meridian Feature, *Tu/F* Westway, *W* On Screen, *Th* Meridian Live, *Sa* Meridian Books; **0145 Tu** Record News, *F* Performance; **0200 D** The World Today; **0230 Su** Agenda, *M* Pick of the World, *Tu-Sa* Guide to 21st Century; **0300 D** The World Today; **0320 D** Sports Roundup; **0330 Su** World Business Review, *M* Global Business, *Tu-Sa* World Business Report; **0345 Su** Letter from

America, *Tu-Sa* Insight; **0400 D** The World Today; **0430 Su** Panel game/Quiz show, *M* Westway, *Tu/W/Sa* Feature, *Th* From Our Own Correspondent; *F* Farming World; **0445 Tu-Sa** Off the Shelf; **0500 D** The World Today; **0530 Su** Feature, *M* Jazzmatazz, *Tu* UK Top 20, *W* World of Music, *Th* Contemporary music feature, *F* John Peel, *Sa* Pick of the World; **0600 D** The World Today; **0630 Su** Play of the Week, *M* Everywoman, *Tu* On Screen, *W* Sports International, *Th* Assignment, *F* Short Story/Poems, *Sa* People and Politics; **0645 F** Science Extra; **0700 D** World News; **0715 Su** Letter from America, *M* Talking Point, *Tu-Sa* Outlook; **0730 Su** Agenda; **0755 M-F** Visionaries, *Sa* Spotlight.

China Radio International

9560, 9570, 9690, 9730

0100-0200, 0300-0400, 0400-0500, 0500-0600 (as 1400-1500)

Deutsche Welle

6040, 6045, 6100, 6120, 6145, 9535, 9640, 9670, 9700, 9790, 11750, 11795

0100 D News; **0105 Su** Weekend Review, *M* Religion and Society [exc. last wk], Mailbag North America [last wk], *Tu-Sa* Newslink; **0115 Su** Inside Europe, *M* Arts on the Air; **0130 Tu** Man and Environment, *W* Insight, *Th* Living in Germany, *F* Spotlight on Sport, *Sa* German by Radio. [Ends at 0145.]

0300-0345 (as 0100 exc. 0315 *Su* Spectrum).

0500-0545 (as 0100 exc. 0515 *Su* Marks and Markets, *M* Cool).

HCJB

9745, 21455usb

0000 Su Nite Brite Kids Club, *M* Firm Foundation, *Tu-Sa* Insight for Living; **0005 M** Hour of Decision; **0028 Tu-Sa** Money Minute; **0030 Su** Saludos Amigos, *M* Mountain Meditations, *Tu-Sa* New Beginning; **0056 Tu-Sa** Beyond the Call; **0057 Tu-Sa** Today's Father; **0100 D** Latin American/International News; **0110 Su** DX Partyline, *M* Musical Mailbag, *Tu-Sa* Studio 9; **0130 Tu** Inside HCJB, *W* El Mundo

Futuro, *Th* Ham Radio Today, *F* Woman to Woman, *Sa* Musica del Ecuador; **0200** *Su* Rock Solid, *M* Sunday Nite, *Tu* Let My People Think, *W* Book and Spade, *Th* Adventures in Odyssey, *F* Viewpoint, *Sa* Walkin' in the Sunshine; **0230** *Tu-Sa* Focus on the Family; **0256** *Tu-Sa* Parent Talk Tip; **0300** *Su* Alive!, *M* The Sower (religion), *Tu-Sa* Hope for the Heart; **0313** *Tu-Sa* Getting the Message; **0315** *M* The Word Today, *Tu-Sa* Rendezvous; **0330** *M/F* Radio Reading Room, *Tu* Unshackled, *W* CBF Presents, *Th* Living Word, *Sa* Inspirational Classics; **0345** *W* Wonderful Words of Life; **0400-0500** (as 0100-0200); **0500** *Su* Saludos Amigos, *M* Sunday Nite, *Tu* Simply Worship, *W* Book and Spade, *Th* Adventures in Odyssey, *F* Sounds of Joy, *Sa* Walkin' in the Sunshine; **0515** *W* Words for Women; **0530** *Su* Afterglow, *Tu-Sa* A New Beginning; **0556** *Tu-Sa* Beyond the Call; **0557** Today's Father; **0600** *Su* Alive!, *M* Mountain Meditations, *Tu* Chords of Love, *W* CCR Drama, *Th* CBF Presents, *F* Science, Scripture and Salvation, *Sa* Wonderful Words of Life; **0615** *Tu-Sa* Stories of Great Christians; **0630** *M* Message of Truth, *Tu-Sa* Nightsounds.

Radio Austria International
6015, 7325

0230 *D* Report from Austria; **0235** *Su* Listeners' Letters, *M* Week in Review; **0245** *Su* Music From Austria, *M* Profile of Austria. (Ends at 0300.)

0530-0600 and **0730-0800** (as 0230-0300.)

Radio Japan—NHK World

6110, 6120, 9505, 9835, 11705, 15230, 17825, 21670

0000-0100 (as 1100-1200); **0100-0200** (as 1400-1500, exc. *Su* **0110** Hello from Tokyo.); **0300-0400** (as 1100-1200, exc. *Sa* **0310** Weekend Break.); **0500-0600** (as 1400-1500, exc. **0510** *Su* Weekend Break, *Sa* Hello from Tokyo.); **0600-0700** (as 1100-1200.)

Radio Netherlands
6165, 9590, 9845

2330 *D* News; **2337** *Su* Wide Angle, *M-F* Newline, *Sa* Europe Unzipped; **2353** *Su* Sound Fountain, *M* EuroQuest, *Tu* A Good

Life, *W* Dutch Horizons, *Th* Research File, *F* Documentary, *Sa* Roughly Speaking; **0025** *Su* Insight, *M* The Week Ahead, *Tu-Sa* Press Review; **0030** *D* News; **0037** *Su* Europe Unzipped, *M* Sincerely Yours, *Tu-Sa* Newline; **0053** *Su* Sound Fountain, *M* Dutch Horizons, *Tu* Research File, *W* Music 52-15, *Th* Documentary, *F* Media Network, *Sa* A Good Life. [Off at 0125.]

0430-0525 (as 0030-0125.)

Radio Prague

5930, 6200, 7345, 9430, 9665

2230 *D* News; **2235** *Su* A Letter from Prague, *M-F* Current Affairs, *Sa* The Arts; **2240** *Su* From the Weeklies, *Sa* Saturday Music; **2245** *Su* Readings from Czech Literature, *M* Spotlight, *W* History Czech, *F* Mailbox; **2250** *Tu* Talking Point, *Th* Economic Report. (Ends at 2300.)

2330-0000 (as 2230-2300.)

0100 *D* News; **0105** *Su* The Arts, *M* A Letter from Prague, *Tu-Sa* Current Affairs; **0110** *Su* Saturday Music, *M* From the Weeklies; **0115** *M* Readings from Czech Literature, *Tu* Spotlight, *Th* History Czech, *Sa* Mailbox; **0120** *W* Talking Point, *F* Economic Report. [Ends at 0130.]

0200-0230, **0400-0430** (as 0100.)

Radio Sweden
9495

0230 *Su* Spectrum [1st/3rd]/Sweden Today [2nd]/Feature [4th], *M* In Touch with Stockholm [1st]/Sounds Nordic [2nd/4th]/Weekend [3rd], *Tu-Sa* 60 Degrees North; **0245** *Tu* Sportscan, *W* Mediascan [1st/3rd], *Th* Money Matters, *F* Nordic Report [1st]/Greenscan [2nd]/Heartbeat [3rd]/Horizon [4th], *Sa* Nordic Week in Review. (Off at 0300.)

0330-0400 (as 0230-0300.)

Radio Taipei International
5950, 9680

0200 *D* News; **0215** *Su* Great Wall Forum, *M*

Jade Bells and Bamboo Pipes, *Tu* People, *W* Stage and Screen, *Th* Journey into Chinese Culture, *F* Taipei Magazine, *Sa* Kaleidoscope; **0230** *Su* Food, Poetry and Others, *Tu* Trends, *W* Taiwan Today, *Th* Hot Spots, *F* East Meets West, *Sa* Reflections; **0245** *Su* Mailbag Time, *M-Sa* Let's Learn Chinese; **0300** *D* News; **0315** *Su* Instant Noodles, *M* News Link, *Tu* Taiwan Economic Journal, *W* Floating Air, *Th* Pages in History, *F* Miss Mook's Big Countdown, *Sa* Health and Fitness Beat; **0330** *Su* Mailbag Time, *M* Women in Taiwan, *Tu* Formosa Oldies, *Th* Life Unusual, *F* Carol's Cafe; **0345** *M-Sa* Let's Learn Chinese. [Ends at 0400.]

0700-0800 (as 0200-0300).

Radio Vlaanderen Internationaal

11980, 13670

2230 *Su* Tourism in Flanders, *M-F* News, *Sa* Music from Flanders; **2234** *Su* Radio World, *M-F* Press Review; **2237** *M-F* Belgium Today; **2243** *M* Focus on Europe, *Tu* Green Society, *W/F* Around the Arts, *Th* Economics; **2244** *Su* Brussels 1043; **2248** *M* Sports, *W* Around Town, *Th* International Report, *F* Tourism in Flanders; **2254** *Su-F* Soundbox. [Ends at 2300.]

0400 *Su* Music from Flanders, *M* Tourism in Flanders, *Tu-Sa* News; **0404** *M* Radio World, *Tu-Sa* Press Review; **0407** *Tu-Sa* Belgium Today; **0413** *Tu* Focus on Europe, *W* Green Society, *Th/Sa* Around the Arts, *F* Economics; **0414** *M* Brussels 1043; **0418** *Tu* Sports, *Th* Around Town, *F* International Report, *Sa* Tourism in Flanders; **0424** *M-Sa* Soundbox. [Ends at 0430.]

Spanish National Radio

6055

0000 *D* News; **0012** *Su* Window on Spain, *M* Visitors' Book; **0022** *Su* Radio Waves, *M* Intermezas; **0029** *Tu-Sa* Spanish Pop Music; **0032** *Tu-Sa* Press Review; **0035** *Su* Poporama, *M* Radio Club, *Tu* Entertainment in Spain, *W* Kaleidoscope, *Th* As Others See Us, *F* Euroforum, *Sa* Arts in Spain; **0047** *Tu-Sa* Spanish Language Course; **0056** *D* Program Info. [Ends at 0100.]

0100-0155, 0500-0555 (as 0000-0055.)

Swiss Radio International

9885, 9905

0100 *D* News; **0105** *D* World Radio Switzerland; **0115** *Su* Name Game [1st], Capital Letters [2nd/4th], Sounds Good [3rd/5th]; *M* Swiss Scene [exc. 2nd], Book Zone [2nd]. [Ends at 0130.]

0400-0430 (as 0100-0130); **0430** *D* Rendezvous with Switzerland (incl. *Tu* Tourism, *F* Arts and Culture); **0445** *M* Name Game [1st], Capital Letters [2nd/4th], Sounds Good [3rd/5th]. [Ends at 0500.]

Voice of Russia

5940, 7125, 7180, 12020, 13655, 15470

0200 *D* News; **0211** *M* Sunday Panorama, *Tu-Su* Commonwealth Update; **0224** *M* Russia in Personalities; **0230** *D* News in Brief; **0232** *Su* Moscow Yesterday and Today, *M* Timelines, *Tu* Folk Box, *W* Jazz Show, *Th* Russian Musical Highlights of the 20th Century, *F* Yours for the Asking, *Sa* Christian Message from Moscow; **0246** *F* Music At Your Request; **0254** *Th* Russia in Personalities; **0300** *D* News; **0311** *Su/M/Th* Moscow Mailbag, *Tu/F* Science and Engineering, *W/Sa* Newmarket; **0330** *D* News in Brief; **0332** *Su* Songs from Russia, *M* This is Russia, *Tu* Kaleidoscope, *W* Russian Musical Highlights of the 20th Century, *Th* Moscow Yesterday and Today, *F* Russian by Radio, *Sa* Audio Book Club; **0346** *Su* You Write to Moscow; **0354** *W* Russia in Personalities; **0400** *D* News; **0411** *M* Sunday Panorama; *Tu-Su* News and Views; **0424** *M* Russia in Personalities; **0430** *D* News in Brief; **0432** *Su* Christian Message from Moscow, *M* Audio Book Club, *Tu/Th/Sa* 20th Century Year after Year, *W/F* Alternative programs; **0500** *D* News; **0511** *Su/M* Program info, *Tu/F* Moscow Mailbag, *W/Sa* Science and Engineering, *Th* Newmarket; **0530** *D* News in Brief; **0532** *Su* Moscow Yesterday and Today, *M* Jazz Show, *Tu* Yours for the Asking, *W* Russian Musical Highlights of the 20th Century, *Th* Folk Box, *F* Audio Book Club, *Sa* Timelines; **0546** *Tu* Music At Your Request; **0554** *W* Russia in Personalities. [Ends at 0600.]



Listener's Library

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Well what books do we have for the end of the Millennia??? Let's take a look.

As most of you who have met me at Kulpville or other radio gatherings know, I have a tattoo of a Crystal Set schematic on my left shoulder. The inspiration for this particular piece of Body Art came from the pages of the newsletters of The Xtal Set Society. I have been a member of this organization for quite some time now. If you have any interest in building very basic receivers that can perform remarkably well (yes even in the short-wave frequencies) You may want to give these folks a look at their website www.midnightscience.com or e-mail them at xtalset@midnightscience.com. This is real "roots" radio that can be a lot of fun. The organization makes a point of publishing their collective newsletters periodically and these books are well worth the price. I have reviewed previous Xtal Set Society compilations in the past. I am sure you will find these as interesting and worth your time. In the last few years, The Xtal Set Society has included design and discussion of receiver circuits that go a bit beyond the most basic crystal set ideas but all remain well within the skill level of anyone who wants to try to build their own receivers. Let's take a look at two recent additions to their available publications.

Crystal Set Building and More Volumes 6 & 7 of the Xtal Set Society Newsletter

Edited by Rebecca Hewes

168 Pages

\$15.95 + \$2.50 S&H

ISBN 1-887736-09-3

Published by The Xtal Set Society

PO Box 3026St. Louis, MO 63130

This compilation of Volume 6&7 of the society's newsletters includes some of the most intriguing receiver designs I have seen

in a long time. Many of these circuits stretch the mind as you begin to discover some of the amazing ways radio signals can be detected. For example, included is a study of how you can use a propane torch as a detector!!! Or maybe your tastes run more toward carbon and steel detectors which were the basis of "Foxhole" radios that are nearly legend in many radio discussions. The book's articles are all well illustrated as it is always the intent of the society to have the published designs built by their membership. This collection begins with a very interesting study of how FM signals can be detected with a crystal set. The work in this area (by member Edward Richley) is downright scholarly. A number of the designs in the book are shortwave receivers. Anybody can log a SW station with a high dollar commercially produced general coverage receiver. Why not take a more sporting route to the Dxing hobby and try your hand at logging some rare ones with a homebrew receiver constructed with a minimum of parts. As I mentioned earlier, the society now includes designs that go a bit beyond basic crystal set circuits. This compilation includes a very nice design for a J-FET based Regenerative Shortwave receiver as well. Who wants to be the first in the club to show up on the Contributors Page with one of these rigs??? This edition also includes a number of TRF receiver designs that demonstrate very high performance with minimum parts count. A word of warning. This basic radio stuff is highly addictive. Don't be surprised if you find yourself forsaking your current commercial rig for something you can proudly say you made with your own hands.

Crystal Set Loopers; A 3 Tuber & More Volume 8 the Xtal Set Society Newsletter

Edited by Rebecca Hewes

168 Pages

\$15.95 + \$2.50 S&H

ISBN 1-887736-09-3
Published by The Xtal Set Society
PO Box 3026St. Louis, MO 63130

If you really want to try your hand at "back to basics" shortwave listening, this latest volume of the Xtal Set Society's newsletter contains a "must have" circuit design. The Shortwave Looper designed by Mark Karney N9JWF combines antenna and detector into a very interesting package. As mark himself puts it, this design "avoids the problem of matching the antenna to the tuned circuit since the antenna IS the tuned circuit!" Once you get done building this receiver you will not only have an excellent conversation pice but you will have a very healthy respect for circuit "Q".

Another design you may want to try is Leonard Jannese's AM/SW Frisbee Crystal Radio. This idea takes a classic crystal set design and packages it in a unique way to make a receiver that not only performs well but is also very attractive.

My favorite out of this collection is the reproduction of a 1920 era Stentite Wave Trap Crystal Set that was the "Cat's Meow" way back when.

This compilation includes an interesting theory and construction piece on an old radio component called the variometer. You are not likely to find a variometer inside your latest store bought receiver but there was a time when this was the way to go for tuned circuits.

This latest volume of the Xtal Set Society Newsletter show that there are still many intriguing ideas from radios past that can be a lot of fun even today.

Let's close out the century with a review from our own Rich D'Angelo. Rich checks in with a look at a recent offering that is geared toward any dedicated hobbyist who actually plans to travel to some of those countries we all enjoy listening to. Especially if you're not afraid to fly on December 31, 1999.

Air-Ways: The Insider's Guide to Air Travel
By Laura Quarantiello
Published by Limelight Books
ISBN: 0-936653-85-X
Reviewed by Richard A. D'Angelo


I received an interesting little book in the mail that although it isn't directly related to shortwave radio, I thought it might be of interest to radio enthusiasts. Why? Generally speaking, I have found that shortwave radio folks tend to do a lot more traveling than typical gentry. In fact, from my own observations, they tend to do quite a bit of international travel too. Consequently, I thought a book about travel tips from an "insider" to be of real value to the shortwave listener.

In recent years, Laura Quarantiello has been a prolific author of numerous titles in a wide array of subject matters. She has written the well-known "Cop Talk" in addition to books about being safe in strange cities, cyber crime, and, a personal favorite of mine, "The Root Beer Book." Clearly, Ms. Quarantiello has a broad knowledge of many subjects that is enhanced by her superb research attributes. *Air-Ways* adds to her portfolio of well-researched books that clearly communicate valuable information in an easy to read manner.

We have all received travel tips from Uncle Charlie or Aunt Sadie. You've heard them before about how to save money on flight arrangements, how to pack, when to travel, etc. Sure, some of those tips were good, and some may even be relevant today, but as with most advise from family and friends they were far from complete and could not address every situation. *Air-Ways* is a comprehensive guide to air travel; maybe the most comprehensive around because Laura Quarantiello brings a clear, concise writing style to the table that enhances the delivery of information. I'm sure Uncle Charlie never gave you advise on how to use your computer to make airfare arrangements nor did Aunt Sadie provide a complete listing of websites to assist in making your air travel

arrangements. Simply put, things have changed and the smart consumer has many tools at his or her disposal in making air travel arrangements these days. Air-Ways provides the tips handed down from "insiders" that can make your travel arrangements cheaper, more reliable and with less hassle than you have been accustomed to. It's worth a read and should provide many times more value than its modest cover price.

The book consists of nine chapters with several appendices. From choosing an airline to navigating the air-fare maze to using your computer to make reservations to trip preparations and travel comfort to dealing with the airport to emergencies situations, Air-Ways covers it all. Air travel has changed over the years and this book tilts the tables in favor of the consumer.

Air-Ways is a 144-page soft cover book packed with all the information you could ever need to negotiate the intriguing world of airplane travel. It costs US\$17.95 plus US\$4.50 shipping and handling in North America and US\$5.50 to the rest of the world and is available from Tiare Publications, P. O. Box 493, Lake Geneva, WI 53147, USA. You can order by telephone by calling 1-800-420-0579 or by FAX by calling 262-279-0299. You can visit Tiare on the worldwide web at www.tiare.com. They accept VISA, MasterCard and real money too. Check out Air-Ways and get a little more value out of your travel dollar than ever before. For those of you that don't know Limelight Books is a division of the Tiare Publications Group. This organization is run by longtime DXer and NASWAite Gerry Dexter. 

**WORLD OF RADIO AND CONTINENT OF MEDIA
SHORTWAVE-ONLY SCHEDULE AS OF DECEMBER 24, 1999**

Days and times strictly UT

Wed 1730 COM RFPI 25930-USB
Wed 2230 WOR WBCQ 7415 [ex-2200]
Thu 0130 COM RFPI 25930-USB 15049 6975 [Dec repeat default]
Thu 0930 COM RFPI 6975
Thu 2130 WOR WWCR 9475
Fri 1900 COM RFPI 25930-USB
Fri 1930 WOR RFPI 25930-USB
Sat 0300 COM RFPI 15049 6975
Sat 0330 WOR RFPI 15049 6975
Sat 1100 COM RFPI 6975
Sat 1130 WOR RFPI 6975
Sat 1230 WOR WWCR 15685
Sat 1730 COM RFPI 25930-USB
Sat 1800 WOR RFPI 25930-USB
Sat 2030 WOR WWCR 12160
Sun 0130 COM RFPI 25930-USB 15049 6975
Sun 0200 WOR RFPI 25930-USB 15049 6975
Sun 0330 WOR WWCR 5070
Sun 0730 WOR WWCR 5070
Sun 0930 COM RFPI 6975
Sun 1000 WOR RFPI 6975
Sun 2300 WOR RFPI 25930-USB 15049 6975
Mon 0131 WOR WWCR 3215
Mon 0601 WOR WWCR 3210
Mon 0700 WOR RFPI 6975
Mon 1500 WOR RFPI 25930-USB [December repeat default]
Tue 1330 WOR WWCR 15685
Tue 1900 WOR RFPI 25930-USB
Tue 2000 COM RFPI 25930-USB
Wed 0300 WOR RFPI 15049 6975
Wed 0400 COM RFPI 15049 6975
Wed 1100 WOR RFPI 6975
Wed 1200 COM RFPI 25930-USB 6975

For latest changes and full info see:
<http://www.angelfire.com/ok/worldofradio>
Best wishes, Glenn Hauser

Technical Topics

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Digital Short-wave Broadcasting The Quest Continues

Part 5

This column is the final installment of our look at the Thomcast Skywave 2000 system for digital broadcasting. We will look at the receiver, how Thomson simulates real world propagation paths, and the results of their tests.

Receiver Parameters

What is needed on the receiver side of the link is a small black box, bigger than a postage stamp, but smaller than a bread box, that can be added to receivers to enable digital reception. Is such a device possible? Sure, but here are some of the issues.

This component must permit demodulation of normal AM, suppressed carrier single sideband, and digital transmissions. It will integrate the detection and digital decoding functions including the integration of possible new data functions. Because we are talking consumer radios, the device must primarily be very low cost. For portable radios, the chip must have very low power consumption.

This device will integrate a 100 million operations per second digital signal processor, a microcontroller core, digital to analog converters and peripherals.

Can this all be done given the current state of the art of large scale integrated circuits? Probably. But there are other problems that will possibly prevent such a chip from being retrofitted into existing receivers.

The IF filters in today's analog radios are tailored for analog. Some filters will be too narrow to pass the digital part of the signal. Wide filters may still have phase delay problems.

Phase distortion problems occur when the signal components near the center of the filter passband travel slightly faster than the components out near the filter edges. Engineers call it group delay. Group delay is related to the slope of the phase shift as a function of frequency. A linear phase shift corresponds to a constant delay across the passband. Our beloved mechanical filters are notoriously bad when it comes to phase linearity. This doesn't matter much in analog applications but it can ruin digital signals.

Link Simulations

Both bench type simulations and on-air demonstrations have been performed at various broadcasting trade shows beginning with the 3rd Radio Symposium at Montreux in June 1996. Thomcast designed an end-to-end simulator to demonstrate performance. The simulator includes the real time digital signal processing systems (DSP) for the functions of the coder, decoder and modem. These are implemented on standard DSP PC boards.

In order to simulate the effects of propagation via the ionosphere, an HF channel simulator was also developed using a standard DSP board with 2 analog inputs and outputs. The propagation simulator uses digital sampling and filtering to create a maximum of three different paths. The average signal to noise ratio is continuously adjustable, as well as the frequency offset. Each path has a fixed amplitude component and a fluctuating component designed to mimic the probability distribution of actual ionospheric propagation. The average power and frequency offset of the components are adjustable.

As the ionosphere fluctuates, the path length changes inducing distortion. The effect is the same as would be noticed if the transmitter and receiver were moving rapidly toward each other one instant and receding the next. This apparent motion imparts a Doppler frequency shift to the received signals. The amount of the shift is a function of the frequency being transmitted so higher frequencies are shifted more than lower ones. That causes a phenomenon known as Doppler spreading. Two coherent carriers exactly 1 kHz apart at the transmitter will be slightly further apart or closer at the receiver. Phase coherency between the carriers will have a noise component caused by the Doppler spreading. The Doppler spread of the random component can also be modified in the simulator.

The maximum simulated differential delay of each path is 8 ms. Three narrow band jammers, with variable level and frequency can also be simulated.

A combined analog/digital low power exciter operating in the SW frequency band is used to transmit the test signal to a standard short wave consumer receiver dedicated to receive the analog program and a modified short wave consumer receiver dedicated to receive the digital program.

The demonstrator simulates real AM broadcast operating conditions and offers high flexibility in simulating transmission channel characteristics and modes. Modes include standard AM DSB, USB, LSB, and simulcast analog program material with USB or LSB and full digital transmission.

The RF bandwidth can be set from a nominal 9 kHz RF bandwidth fully compatible with ITU channel allotment and spacing to an extended 12 kHz RF bandwidth compatible with the audio bandwidth of modern transmitters. The extended RF bandwidth mode allows demonstration of audio quality and the possibilities for additional data services. This extended mode leads to digital stereo

audio at a usable bit rate of 32 kb/s and 10 kHz audio bandwidth in normal mode and a usable 24 kb/s in full back mode. Additional data services with a usable bit rate of 1250 b/s are also possible.

Test Results

Thomcast claims to have demonstrated a simulcast mode where an analog program was received by means of an existing SW consumer receiver without noticeable interference from a digital program. They also report having achieved a 10 kHz bandwidth stereo audio program at a 32 kb/s usable bit rate. Their additional data services have shown a 1250 b/s usable bit rate. Full implementation will require an expansion of the separation between channel centers of about 12 kHz. This change from the present 5 to 10 kHz increments will require ITU approval.

Several major shortwave broadcasters have installed Thomson exciters to conduct their own on-air tests.

Future tests will likely include investigations to improve source and channel coding, automatic elimination of interference and jamming signals, improved data compression techniques, and investigation of transmitter linearity requirements.

The Future is Almost Here

A tested and completely functional digital AM system design will be presented soon. This will enable work to start on obtaining formal standards recognition from the international standards bodies. Once the standard has been agreed to, manufacturing of digital broadcasting equipment will commence. The goal is to get the standardized system to market in 2001.

Thanks to Ludo Maes and his web site at <http://www.ping.be/tdp/digital.html> where you can also find information on other proposed digital shortwave systems. Until next time, stay tuned.



Equipment Reviews

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RF Systems P-3 Preselector

I jumped at the chance to review this unit when Fred Osterman of Universal Radio gave me the opportunity, having been alerted by a mention on Radio Nederland's website that the P-3 was on the way. Why all the excitement about another black box? Because the one fault of modern receivers is their lack of front-end selectivity.

Back in the old days before digital frequency synthesizers, most quality radios had a tunable radio frequency amplifier as the first stage after the antenna input. This amplifier was tuned either in conjunction with the main tuning or, in some radios, the stage was tuned with a separate "preselector" control. The main reason that this stage was required was to reduce the problem of "images"—signals that were twice the intermediate frequency away from the desired signal. With the advent of high (>30 MHz) first IFs, image rejection could be accomplished by a simple low pass filter at the front end of the receiver. Along with the switch to digital frequency synthesis and equipment minaturization, mechanical parts such as variable capacitors, wafer switches and slug-tuned inductors became expensive and difficult to obtain. As a result, the tuned front-ends of yore were replaced with fixed bandpass filters covering an octave or more, or no filtering at all.

The ultimate job of a radio receiver is to permit "single-signal" (did National Radio and James Millen have a trademark on this term?) reception of the desired station. This requires that the receiver reject interfering stations and noise, as well as providing adequate sensitivity to allow reception of weak signals. Most hobbyists think of selectivity as that provided by filters in the intermediate frequency stages of the radio.

These filters reject adjacent channel interference. There is also a need to reject signals which are far removed from the desired frequency, such as the local broadcaster down the street or WENW and other powerhouse SW broadcasters. The problems that such strong signals can cause when they enter the circuitry of receivers with poor front-end selectivity are spurious signals (signals appearing on frequencies they shouldn't), cross-modulation (an undesired signal appears to be mixed with the desired one), intermodulation (two or more signals mix to produce spurious signals), blocking (overall reduction of receiver sensitivity) and a general increase in the background noise level. A properly designed preselector can eliminate these problems.

What's an antenna tuner?

Many people confuse antenna tuners (also known as transmatches or matchboxes) with preselectors, although the two have completely different functions. An antenna tuner is designed to transform or match the characteristic impedance of the antenna and feedline to the impedance of the receiver's antenna input. An antenna tuner serves as a transformer to correct for impedance mismatch and allows for maximum signal transfer from the antenna to the receiver. Depending on the circuit design, an antenna tuner may function as a low-pass filter, but lacks the narrow selectivity afforded by a preselector. A preselector serves as a bandpass filter (a "window" which passes only a portion of the radio spectrum) for the radio's input. A good preselector can compensate for the deficiencies of the wideband front ends of modern receivers (or older receivers with no front end filtering). The marks of a good preselector are a narrow

bandwidth (i.e. a narrower window on the frequency spectrum), smooth tuning, minimal insertion loss and no added noise or distortion. High quality components are required for optimum preselector performance. A measure of the quality of tuned circuits is the "Q" factor—essentially the ratio of bandwidth to signal loss—the higher the number, the better.

There is a role for both antenna tuners and preselectors. Since most passive antennas present widely varying impedance over the radio spectrum, an antenna tuner can compensate for this and allow for maximum signal transfer to the receiver. This aspect of signal transfer is most important for transmitters, however. Filters, including preselectors, are designed to have a specific input and output impedance. So, when a preselector is used in a receive-only situation, there is at least a theoretical advantage to using an antenna tuner between the antenna feedline and the preselector to insure optimum preselector filtering. Most active antennas are designed to provide a constant 50 ohm output, so tuners are not necessary with them. Preselectors can be of benefit with active antennas since the antenna's wideband output can overload receivers, especially if their output gain is set too high.

The RF Systems Approach

To achieve the narrowest bandwidth practically and economically possible, RF Systems used high quality inductors using ferrite core material developed in a research program sponsored by the Dutch government. Using these cores for the coils of the P-3 has resulted in a preselector with very low loss (averaging 1.5 dB in the HF range, 4 dB in the MW band) and no spurious outputs, since there is no amplifier required to overcome insertion loss and the cores are highly resistant to saturation with strong signals.

RF Systems was also meticulous in other design aspects of the P-3. A high quality air spaced variable capacitor is used and is tuned

with a 1:3 reduction drive. Tuning is smooth and precise, which is not only nice, but also necessary due to the narrow bandwidth of the preselector. The coils are enclosed in shielded modules which are subsequently filled with inert foam to provide mechanical and thermal stability. The top three ranges (4 to 32 MHz) have an additional high pass filter placed prior to the preselector circuit for additional attenuation of undesired signals. Protection against voltage spikes for both the P-3 and the connected receiver are provided by a static leak path and a gas discharge surge arrestor.

The P-3 is such a
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designed unit, that
I wish
I could report that it
magically made weak signals
crystal-clear—unfortunately
the effects are
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than that.

The P-3 has a rated frequency coverage of 30 kHz to 32 MHz. The longwave range of 30 to 450 kHz is not tunable, but is filtered by a low-pass filter which provides 40 dB of attenuation of signals above 450 kHz. The tunable ranges are: 0.45 to 1.6, 1.6 to 4.0, 4.0 to 8.0, 8.0 to 17 and 17 to 32 MHz. The average insertion loss from 1.6 to 32 MHz is 1.5 dB, with a specified maximum of 3 dB. Over the range of 0.1 to 1.6 MHz, the average loss is 4 dB, with a maximum of 7 dB. The specified average 3 dB bandwidths are 15 kHz for the range of 0.45 to 1.6 MHz, 50 kHz for 1.6 to 4.0 MHz, 200 kHz for 4.0 to 8.0 MHz, 700 kHz for 8.0 to 17.0 MHz and 3 MHz for the upper range 17 to 32 MHz. There

are no values specified for -20 dB or -30 dB bandwidths, but a frequency plot included in the manual shows good selectivity down to -20 dB. The second order intercept point is specified as +80 dBm and the third order point is listed as +40dBm.

RF Systems has deliberately failed to include a preamplifier circuit in the P-3. Other preselectors add a preamp in order to overcome the insertion loss of the tuned circuitry, such a preamp can suffer the same risks of overload and spurious signal generation as the receiver itself. The RF Systems philosophy was to minimize insertion loss and avoid the need for a preamp and its potential problems.

The P-3 is housed in the same type of enclosure that seems to be standard for RF Systems products, a black enclosure with silver front and rear panels measuring 160 × 150 × 60 mm (W×D×H). SO-239 coaxial connectors are provided for the antenna and receiver connections. There is also a binding post for an earth ground connection which is required for the lightning protection to work. The front panel contains a "Pass—Selective" switch to put the P-3 in and out of the circuit, a six position range switch and the 1¼ inch diameter tuning knob. No power connection is required, as the unit is completely passive. The current price from Universal Radio is \$219 95, plus shipping.

Operation

The F-3 is simply a joy to use, as the tuning is smooth and precise and the signal peak is sharp and unambiguous. Although in the majority of cases, the preselector will be adjusted to provide the maximum signal level for the desired station, there are times when better reception can be obtained by off-tuning the preselector to reduce the overall level of interference and improve the signal-to-noise ratio. The instruction manual details how to use the preselector in this fashion.

The P-3 is such a well-built and designed unit, that I wish I could report that it magically made weak signals crystal-clear—

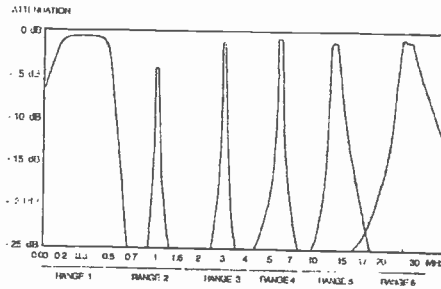
unfortunately the effects are more subtle than that. With the P-3 in the antenna line, I was able to peak the tuned signal easily and there was almost no noticeable insertion loss for shortwave signals. I could detect a slight reduction in the underlying noise with the P-3 in use and it did help make signals more readable in the lower shortwave ranges—I noticed less effect above 10 MHz. My results may be explained by the overall lower signal strengths here in the West. I tried the P-3 with an AOR 7030+ and a Lowe HF-225E, both of which are designed with front-ends that are resistant to overload. I also used the P-3 with a Kenwood R-1000, an older generation receiver which can be prone to overload, but my results were similar to those with the more modern receivers.

Effects most pronounced on MW

I did notice a definite difference on MW, however. Here using the P-3 reduced the underlying "babble" of those several stations that can be heard under the desired signal. Switching in the P-3 made them virtually inaudible and made the desired signal more intelligible. I was concerned that what I was hearing was just due to the signal attenuation from the inherent insertion loss of the preselector, but comparison of the audio with the preselector switched in versus switching in the receiver's built-in 20 dB attenuator indicated that the effect was due to enhanced front-end selectivity, rather than signal attenuation alone. I noticed a similar, but less pronounced effect on 49 meter band signals. My last test receiver was a Radio Shack DX-160—a single conversion solid-state dinosaur from the 1970's. Here the P-3 made a definite improvement in reducing images from the 49 meter powerhouses that tended to appear 910 kHz below the actual frequency.

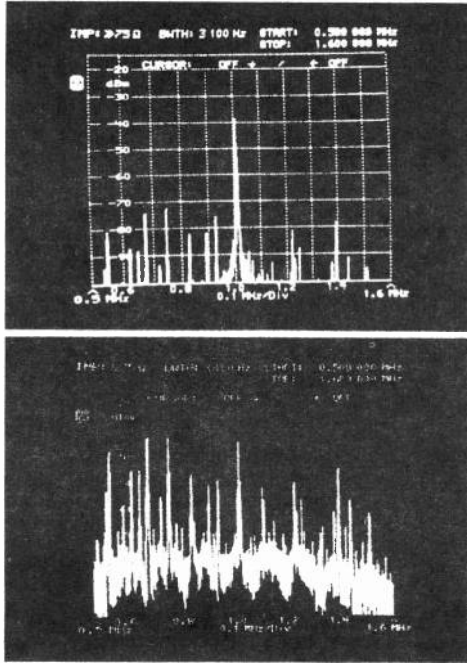
More information can be obtained from Universal Radio—6830 Americana Pkwy, Reynoldsburg, OH 43068; (800) 431-3939 (orders) and (614) 866-4267 (information). Universal's catalog webpage on the P-3 can be found at: <http://www.universal-radio.com/catalog/preamps/3790.html>.

The following graph shows selectivity curves for the P-3 tuned to the mid-point of each range:



RESPONSE CURVES P-3 PRESELECTOR
 The response curves in the upper traces 2 to 6 are for approximately midband. The curves center is about over the range with a small overlap into the adjacent ranges. The bandwidth is wider at higher frequencies and smaller at lower frequencies within the same range. See specifications for the 5 dB bandwidth in each range. A 10 dB selective voltage response with 40 dB rejection and less bandwidth, with respect to the peaks shown. Note the significant change in slope 1 or signal strength on a section 6 dB attenuation results. 1.5 dB per octave and 10 dB per octave for comparison and also 20 dB attenuation 10 dB per octave cause 40 dB rejection with section 2. 10 dB per octave and 10 dB per octave for comparison products.

The top photo of a spectrum analyzer screen shows a sweep of the mediumwave band with the P-3 tuned to 1008 kHz. The bottom photo shows the spectrum analyzer response with the P-3 switched out. Notice that the desired signal has been reduced in amplitude by about 5 dB, but the undesired signals have been reduced by about 40 dB; also look at what happens to the low level noise in the upper trace—it disappears.



Howdy and welcome to the first Awards Column of the Millennium (or is it the last Awards Column of the last Millennium? Or is it *really* the Millennium?). By the time you read this you will know what effects Y2K had on the masses—hope if anything did happen, it did not happen to you. Did you listen in as the Millennium moved around the world? What a neat hobby that allows us to do something like that.

Award activity has been pretty minimal, but here is the list of those hardy souls who have stuck with it and now have the right to display the latest NASWA greens to their friends and neighbors:

Gene Borowski

Round-the-Clock Continental DXer

Paul Buer

70 endorsement: Senior Ecclesiastic DXer

40 Endorsement: All American DXer

B. Cooley

DX Centurion

Asian Continental DXer

European Senior DXer

DXer de Pacifica

Richard Davis

Senior Ecclesiastic DXer

All American DXer

George Glotzbach

Ecclesiastic DXer

Senior Ecclesiastic DXer

Worldwide DXer

All American DXer

Ellen Jordan

Senior European DXer

Antarctic DXer

Jeff Molander

DX Centurion

DXer de Pacifica

Asian Continental DXer

Antarctic DXer

All VOA DXer

18 endorsement: All VOA

110 endorsement: DX Centurion

Gary Neal

South American Continental DXer

25 kW endorsement: QRP

4C endorsement: Senior Ecclesiastic DXer

25 endorsement: Pirate DXer

15 endorsement: All VOA

Sheryl Paszkiewicz

Peruvian DXer

John Sgrulletta

15 endorsement: All Indian DXer

Edward Tilbury

Master Subcontinental DXer

Master PNG DXer

John Wilkins

Senior Tropical Band DXer

Stuff

There are several things I want to bring to your attention for March. First, The North American DX Championships (NADXC) will take place this 10–12 March. This year's contest requires the reception of a list of basic stations as a gateway to the contest. It looks like a good contest and you oughtta taken a shot at it—there will be plaques for the first three finishers and certificates all around. Look for detailed information in this issue of the Journal.

Also in March (10–11) is the gathering of the faithful in historic and beautiful downtown Colmar, PA for the 13th (!!) Annual Winter SWL Fest. Bob, Kris and I have handed the Fest off to NASWA and this will be the first year the Fest will be a club sponsored event. Look for plenty of fellowship, hospitality and opportunities to “just talk radio” at this all band gathering. I look forward to the Fest each year as an opportunity to visit my radio friends, bend my elbow, tell a few lies and relax a bit. The Hospitality Room opens Thursday afternoon and Friday and Saturday will be filled with a variety of educational forums. Saturday night features the banquet and the prize draw. As for Pancho's famous appearance, I expect our hero will ride yet one more time to give you the opportunity to get one of those really spiffy Voice of Pancho Villa QSL cards for you collection (if one were to know). Hope to see you there!

Keep listening and keep those cards and letters coming in, folks.



The 2000 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 SWLs and DXers interested in competing an opportunity to participate in a carefully run, challenging contest.

Eligibility

The 2000 DX Championship is open to all DXers 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, 10 March 2000**, at 1900 EST (0000 UTC) and end **Sunday, 12 March 2000**, at 2359 EST (0459 UTC).

Plaques and Certificates

Plaques will be awarded by ANARC to the top three finishers. All entrants will receive a participation certificate indicating that they competed in the 2000 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: Angola, PNG, Botswana, Iceland, Ecuador, Guatemala, Indonesia, Vatican City, Pakistan 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 legible 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 four \$0.32 stamps must be provided for each contest entry. All entries must be postmarked by Thursday, 1 April 2000, 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 2000 NADXC Administrative Committee—Harold Cones, John Fisher, and Kris Field.

Listener's Notebook

Al Quaglieri • P.O. Box 888 • Albany, NY 12201-0888 • FAX: (518) 453-0864 • al@alcue.com

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AFGHANISTAN The morning programs of *Radio Voice of Shari'ah* which start at present at 0130 will start as from the first of Ramadan at 0200. The evening programs of *Radio Voice of Shari'ah*, which start at present at 1230, will start from the first of Ramadan at 1100. All times UT. (BBCM/World of Radio/Hauser-OK)

Afghan anti-Taliban *Takhar Radio* was heard on 7000 on 25th Nov 0250-0330. *Takhar Radio* was formerly heard on 7070 and 7085, 1230-1330, but has been unheard since Apr 1999. When it was traced at 0250 on 25th Nov, a religious progr in Dari was in progress. Sked is 0230-0330 daily in Dari, Pashto and Uzbek. (BBCM)

ALBANIA *Radio Tirana* External Service

0000-0300	Albanian	6090 7270
0130-0200	English	6115 7160
0300-0600	Albanian	6090 7270
0330-0400	English	6115 7160
0800-1100	Albanian	7110
1500-1800	Albanian	5985 7270
1545-1600	Greek	6175 7125
1645-1700	French	7210 9520
1745-1800	English	7210 9755
1830-1900	German	7185 9530
1900-1930	Italian	6110 7240
1930-1945	Turkish	6135 7260
2130-2300	Albanian	7295 9750
2215-2230	Serbian	6135 7110
2230-2300	English	7130 9540

(BBCM)

ALGERIA *RTAlgeria* announces the following schedule:

1600-1700	English	11715 15160
1700-1800	Spanish	11715 15160
2000-2100	English	11715

(2-Dec/Mezin-RUS/BC-DX/Bueschel-GER)

ARGENTINA *RAE, Radiodifusion Argentina al Exterior:*

0000-0200	Portuguese	11710
0200-0300	English	11710
0300-0400	French	11710
0900-1200	Spanish	6060 15345
1000-1200	Japanese	11710
1200-1400	Spanish	11710
1800-1900	English	15345
1900-2000	Italian	11710 15345
2000-2100	French	11710 15345
2100-2200	German	15345

2200-2300	Spanish	9690 15345
2300-2400	Spanish	9690 15345

All transmission Mondays to Fridays. The most important local soccer matches as well as those of the National Soccer Team are broadcast in live during the whole week over frequencies 6060 and 15345. (12-Dec/Slaen-ARG/EDXP/Padula-AUS)

ARMENIA 6240 *Trans World Radio*, 0017 Sat Dec 4, English program of Christmas carols, relig talk, holiday reminiscences. Progr name sounded like "Memcare by Radio," and ancd as being on "Fri & Sat evening" [but didn't give times] on 864 & "49 mb," repeated at 0015 on Sat & Sun on same 864/49 m. Gave address as mcbt@twr.org, MemCare by Radio, P.O.Box 141, A-1235 Vienna, Austria (5-Dec/Berg-MA/NU/BC-DX/Bueschel-GER) Broadcast is for moral support of missionaries working in Central Asia. Current sked is:

0015-0045	6240 Sa/Su
1720-1750	7375 Fr/Sa

(TWR/BC-DX/Bueschel-GER) Transmitted via Armenia. (Bueschel-GER)

AUSTRIA *Radio Austria International*

0000-0005	German	7325 9870 13730
0005-0030	Esperanto	7325 9870 13730 Mo
0005-0030	German	7325 9870 13730 Tu-Su
0030-0100	French	7325
0030-0100	Spanish	9870 13730
0100-0130	German	7325 9870 13730
0130-0200	Spanish	7325 9870 13730
0200-0230	German	7325 9870 13730
0230-0300	English	7325
0230-0300	Spanish	9870 13730
0300-0330	German	9870 13730
0330-0400	Spanish	9870 13730
0400-0405	German	6155 13730
0405-0430	Esperanto	6155 13730 Mo
0405-0430	German	6155 13730 Tu-Su
0430-0500	German	6155 13730
0500-0530	German	6015c 6155 13730 15410 17870
0530-0600	English	6015c 6155 13730 15410 17870
0600-0630	German	6015c 13730 15410 17870
0630-0700	English	6015c
0630-0700	German	13730 15410 17870
0700-0703	German	6155 13730 15410 17870
0703-0730	Arabic	6155 13730 15410 17870 Su
0703-0730	German	6155 13730 15410 17870 Mo-Sa

0730-0800	Arabic	15410 17870 Su
0730-0800	French	6155 13730 15410-(not Su) 17870-(not Su)
0800-0830	German	6155 13730 21650 21765
0830-0900	English	21650 21765 Sa
0830-0900	German	6155 13730 Sa
0830-0900	German	6155 13730 21650 21765 Su-Fr
0900-0905	German	6155 13730 21650 21765
0905-0930	Esperanto	6155 13730 21650 21675 Su
0905-0930	German	6155 13730 21650 21675 Mo-Sa
0930-1000	English	21650 21765
0930-1000	German	6155 13730
1000-1100	German	6155 13730 21650 21765
1100-1230	German	6155 13730
1230-1300	French	6155 13730
1300-1330	German	6155 13730
1330-1400	English	6155 13730
1400-1405	German	6155 13730
1405-1430	Esperanto	6155 13730 Su
1405-1430	German	6155 13730 Mo-Sa
1430-1500	Spanish	6155 13730
1500-1700	German	6155 9655 13710 13730
1600-1630	English	17865c
1630-1700	Spanish	17865c
1700-1705	German	6155 9655 13710 13730
1705-1730	Esperanto	6155 9655 13710 13730 Su
1705-1730	German	6155 9655 13710 13730 Mo-Sa
1730-1800	English	5945 6155 9655 13710 13730
1800-1830	German	5945 6155 9655 13730
1830-1900	French	5945 6155 9655 13730
1900-2030	German	5945 6155 13730
2030-2100	French	5945 6155 13730
2100-2103	German	5945 6155 13730
2103-2130	Arabic	5945 13730 Su
2103-2130	German	5945-(not Su) 6155 13730-(not Su)
2125-2100	Arabic	13730 Fr
2130-2200	German	5945 Su
2130-2200	Spanish	5945-(not Su) 6155 13730-(not Fri)
2200-2230	German	5945 6155 13730
2230-2300	English	5945 6155 13730
2300-2359	German	6155 9870 13730

BANGLADESH 4879.21, *Bangladesh Betar*, 1155 talk between man and woman, "Bangladesh..." (not "...Betar"), then flute theme, 5+1 pips, and more talk. (11-Dec/Novello-NC)

BOLIVIA 4471.8 *Radio Movima*, Santa Ana de Yacuma. 2320-2325. Saludos y mensajes para pequeñas poblaciones rurales y pobladores de zonas aisladas del Beni. (4-Dec/Slaen-ARG/Conexion Digital)

4552.4 *Radiodifusora Tropico*, Trinidad. 2327-2335.04 de diciembre. Musica internacional. Anuncio a 2330 y reporte de la hora: "...de la tarde en Tropico..." (4-Dec/Slaen-ARG/Conexion Digital)

4649.2 *Radio Santa Ana*, Santa Ana de Yacuma. 2339-2346. Musica melodica y luego unas extranas piezas musicales (tal vez musica folklorica o indigena del Departamento del Beni?). Datos de la hora. 24232 (4-Dec/Slaen-ARG/Conexion Digital)

4766.4 *Radio Constelacion* new station 2020, ID as "Radio Constelacion, Guanay, es musical, es noticia, es cultura. Constelacion, es su mejor sintonia." 2110 ad for "Karaoke Century," they have a program relay from "R. Constelacion en 100.5 MHz, frecuencia Modulada." Transmission off abruptly at 2130. Sked is irregular. (19-Dec/Fontenelle-BOL/Cumbre DX)

4796.5 *Radio Mallku*, Uyuni, 2300-2307, Spanish, advertisement, news, clear ID, blocked by utility QRM at 2307. (9-Dec/Schnitzer-GER/DX Camp-Bavaria/Conexion Digital/Eramo-ARG)

4875.35 *Radio La Cruz del Sur*, La Paz, 2350 with W DJ, huaynos, acoustic guitar mx, plenty of IDs. Nice signal on an excellent Andean night. (24-Nov/Novello-NC)

4926.1 *Radio San Miguel*, Riberalta, 0225-0302 mx ID "Por Radio San Miguel..." mx LA a las 0300 s/off toca el himno Nacional (3-Dec/Arrunategui-PRU)

5952.6 *Radio Pio XII*, 0135-0140, Spanish, sports, soccer. (11-Dec/Schnitzer-GER/DX Camp-Bavaria/Conexion Digital/Eramo-ARG)

BRAZIL *Radio Trans Mundial (RTM)*, Sao Paulo. Effective December 24, RTM will change the frequency of its daily broadcasts from 11705 to 11735 kHz. The schedule from December 24 on will be the following: 5965, 9530 and 11735 kHz, at 0700-0100 UT, in Portuguese. RTM/Brazil's programs are also broadcast from TWR Bonaire, 800 kHz, daily at 0700-0900 and 2300-000 [sic; 0000?] UT. (Grimm + Dias/Radio TransMundial/World of Radio/Hauser-OK)

CANADA *Radio Canada International* In addition to its own transmitters at Sackville (Canada), RCI uses relay facilities overseas. These frequencies are marked with a suffix as follows: c=Chita (Russia), i=Irkutsk (Russia); k=Kimjae (South Korea); s=Sines (Portugal); u=Rampisham/Skelton/Woofferton (UK); v=Vienna (Moosbrunn/Austria); w=Wertachtal (Germany); x=Xian (China); y=Yamata (Japan); z=Singapore. Unmarked frequencies are from Sackville.

0000-0030	English	6040 9535 11865 Tu-Sa
0000-0100	English	5960 9755 Su/Mo
0000-0100	Spanish	6040 9535 11865 Su/Mo
0030-0100	Spanish	6040 9535 11865 Tu-Sa
0100-0200	French-RCI	5960 9535-(to 0130 Tu) 9755 11865-(to 0130 Tu)
0130-0200	Spanish	9535 11865 Tu-Sa
0200-0300	English-RCI	6155 9535 9755 9780 11865
0300-0330	English-RCI	6155 9755 9780 Tu-Sa
0300-0330	French-RCI	6025u 9505v
0300-0400	English-CBC	6155 9755 9780 Su/Mo

0330-0400 French-RCI 6155 9755 9780 Tu-Sa
 0330-0400 Arabic 6025s 9505v 9615w
 0400-0430 English-RCI 9505v 9535s (not Sa/Su)
 9645u 9690v (not Sa/Su)
 11795w (not Sa/Su)
 0430-0500 French-RCI 9690v 11795w Mo-Fr
 0430-0500 Arabic 7200w 9505s 11830w
 0600-0630 English-RCI 5960 6045 6150u 9670
 9780u 11710u (not Sa/Su)
 11905u 15325u (not Sa/Su)
 0630-0700 French-RCI 5960 6045 6150u 9670
 9780u 11710u (not Sa/Su)
 11905u 15325w (not Sa/Su)
 1200-1230 English-RCI 6150y 11730y
 1200-1300 English-CBC 9640 13650 17710 Mo-Fr
 1230-1300 French-RCI 6150y 11730y
 1300-1325 Mandarin 6150k 7260y 11955y
 1300-1400 English-CBC 9640 13650 17710
 1300-1400 French-SRC 11855 15425
 1330-1400 English-RCI 6150x 9535x
 1400-1500 English-CBC 9640 13650 17710 Mo-Fr
 1400-1700 French-SRC 17795u Su
 1400-1700 English-CBC 9640 13655 17710 Su
 1430-1455 Mandarin 6150k 7235y 9560y
 1430-1500 English-RCI 11980u 17820u
 1500-1600 French-SRC 11935u 17820u
 1500-1600 English-CBC 6185y
 1600-1700 Russian 9555u 11935u 13650u
 17820- (not Su)
 1630-1700 English-RCI 6140x 7150x
 1700-1800 Ukrainian 9555u 11935u 13650u
 15325 17820
 1800-1900 Russian 7235u 11915u 15325
 17820
 1900-2000 Ukrainian 7235u 9805u 15325 17820
 2000-2100 French-RCI 5995u 7235u 9770 9805u
 11730 11945 13650u
 13690 15325 17820
 2100-2200 English-RCI 5995u 7235u 9770 9805u
 11945 13650 13690 15325
 17820
 2130-2200 French-RCI 9670u 11755 11890u
 17875 Mo-Fr
 2200-2230 English-CBC 5995 7235u 9805u 11705y
 13690 15325
 2200-2300 Russian 7385i 9680k
 2230-2300 English-CBC 5995 7235u 9805u 13690
 15325
 2230-2300 French-RCI 5960 9755 11705y
 2300-2325 Mandarin 7360c 13735z
 2300-2330 English-CBC 5960 6040 9535 9755
 11865
 2330-2359 English-CBC 5960 6040 9535 9755
 11865 Sa/Su
 2330-2359 English-CBC 5960 9755 Mo-Fr
 2330-2359 Spanish 6040 9535 11865 Mo-Fr
 (BBCM + Westenhaver-PO)

CAMBODIA v11940.34 *National Voice of Cambodia* *2357-0014, OC popped on at exactly 2357:00.

Program started at 0001:30 with usual local SE Asian flute mx and s-on announcement in English by woman as: "This is the National Voice of Cambodia, this is the National Voice of Cambodia broadcasting from Phnom Penh, ? ? of Cambodia... everyday... on the freq of... and 11-9-40 kHz, in the? ? 31(??) and 25 mbs." Into Asian Pop-like mx. Poor to fair and very choppy. (13-Dec/Valco-USA/BC-DX/Bueschel-GER)

CHINA From Nov 20, changes of *CRI* Beijing: 5970(x6950) and Urumqui 7225(x9695). 1800-1957.

English to EUR: 2000-2100 5965 9535, 2100-2130 7150, 2100-2200 5965 9535, 2200-2300 7170RUS. (26-Nov/Meyer-GER/BC-DX/Bueschel-GER)

CLANDESTINE—ASIA *Voice of Tibet* was set up by the Oslo-based Worldview International Foundation in collaboration with the Norwegian Tibet Committee and other human rights groups. It commenced broadcasting on 14th May 1996. The broadcasts are aimed at Tibetan people both in Tibet and in neighboring countries. In an interview, the editor-in-chief described the service as a "voice of the voiceless people."

Voice of Tibet programs are produced in Oslo and Dharamasala (India) and were originally transmitted via FEBA Radio facilities in the Seychelles; however it now broadcasts via hired transmitter facilities in Central Asia.

0100-0145 Tibetan 9920-Dushanbe-TJK
 1215-1300 Tibetan 9910 (9920?)-Almaty-KAZ
 15650-Dushanbe-TJK
 2315-0000 Tibetan 9920-Almaty-KAZ

(BBCM + Chakroborty-IND/EDXP/Padula-AUS + Bueschel-GER)

CLANDESTINE—MIDEAST *Radio International* was first heard in late 1998 and early 1999 via the US shortwave station WWCR in Nashville Tennessee, which hires airtime to a number of political and religious groups. The current broadcasts, believed to be via a transmitter in Central Asia, were first heard in November 1999.

Radio International appears to broadcast in support of Ali Javadi publisher of 'Porsesh' ('Question') journal. Address: Radio International, BM Box 1499, London WC1N 3XX, United Kingdom Tel: + 44-771-461-1099

1730-1800 Persian 7520

(BBCM) Direction-finding points to Grigoriopol as transmitting site. (Ludwig-GER)

Voice of Kurdistan Toilers is a new clandestine heard since Nov 28 on 4250, in Iraqi Kurdish at 1600-1630, Arabic 1630-1700, and repeated from 0400 (BBCM/World of Radio/Hauser-OK)

Voice of the People of Kurdistan is on 4060 from 0345 until 0700. They sign on a little before 0345 and sign off around 0706. They are also on

4060 at least from 1545 to 1745. Languages are Arabic, and very likely Kurdish and Farsi. I think, each language, one hour. For me, the signals are strong, observed 16, 17, 18 and 19 November. (Crystal-ISR/World of Radio/Hauser-OK)

Voice of the Struggle of Iranian Kordestan (Kurdish: "Aira Dangi Khabati Kurdistani Iran") has been observed intermittently since 1988. Programs are hostile to the Iranian government. Frequencies are subject to variation. Frequencies used in the past include: 7435, 7000, 5080 and 4185 kHz. Current schedule:

1600-1700 Kurdish 4290

(BBCM)

CONGO—DEMOCRATIC REPUBLIC 5066 //

3390 **Radio Candip** 1600-1630 African mx and ID at 1620 in French by M as "Vous etre a ecoute de la Radio Scolaire et development Candip" and continued with "transmitting in 70 and 90 mb" probably the same thing by woman in AF lang and then went off. Hard to hear on 3390. (15-Dec/Vaghjee-MAU/BC-DX/Bueschel-GER)

CONGO—REPUBLIC 5984.98 RTV Congolaise

0428 1-kHz warmup tone, followed by short (and weird) interval signal at 0430, musical intro theme and beautiful ID mentioning Brazzaville. Into nice Afropop music 0432, with frequent "Radio Congo" IDs between songs. They usually sign on well before 0430, don't they? (27-Nov/Stewart/Cumbre DX)

COSTA RICA 25930U Radio for Peace International,

Ciudad Colon 1538 feature on WTO conference in Seattle in UN Radio broadcast. Requesting reception reports at 1550. (6-Dec/Schaay-HOL)

INDIA 3390 AIR, Gangtok 1157

Tentatively this one with odd monotonous vocal; man spoke at 1159 till 1201, when into mournful singing reminiscent of Gregorian chant. Brief announcement at 1205, short musical interlude and back to talk. Weak, fady, starting to slide around 1210 with the arrival of sunrise here and almost out by 1215. Quite a surprise, as very little else was coming through on 90M at the time, and conditions in general seemed mediocre at best. (19-Dec/Hill-MA)

INDONESIA 3344.77 RRI Ternate. 1957-2001

Interval signal, Opening announcement then RRI ID. Not heard local ID. Fair. (3-Dec/Takeno-JPN/Jembatan DX/Yamada-JPN)

3905 **RRI Merauke.** 1210- & 2000- Powerful signal from Merauke and Pt.Moresby 4890kHz proved that provincial stations could have been audible—if those had been on the air. (3-6-Dec/Maakeski DX-pedition/Lehtinen-FIN/Jembatan DX/Yamada-JPN)

3960.3 **RRI Palu.** Opening music with opening announcement by M at 1856 then M talk. At 1900 M talk and music program instead of Jakarta news. Covered with North Korea on 3960 at 1945. Poor.

This is the Ramadan schedule. (11-Dec/Yamada-JPN/Jembatan DX)

3976.1 **RRI Pontianak.** Fair Nov 24th with SCI at 2159 to news at 2200 but down quickly. Fair during news 2205 Dec 4th. (24-Nov + 4-Dec/Ward-CAN/Jembatan DX/Yamada-JPN)

4753.3 **RRI Ujung Pandang/Makassar.** At season's best with Middle East flavored music 2127 Dec 4th to local IS 2129:30 and woman (distorted) voice over 2130. Drums 2131 and? local news or feature daily. (4-Dec/Ward-CAN/Jembatan DX/Yamada-JPN)

4875 **RRI Sorong.** 2110-, Warta Berita Daerah 2130. Second station that was remarkably better with Rascal. (5-Dec/Maakeski DX-pedition/Lehtinen-FIN/Jembatan DX/Yamada-JPN)

4925.0 **RRI Jambi.** Local pops at 1610. IS at 1629 then local news as "Warta Berita Daerah." The ending music of local news was new style "Bagimu Negri" with chorus. Reading of Holy Koran at 1637. Closing announcement with Love Ambon then signed off at 1647. (4-Dec/Yamada-JPN/Jembatan DX)

5040.0 **RRI Pekanbaru.** Telephone conversations

and local pops at 2012. ID at 2031 as "Radio Republik Indonesia Pekanbaru" also "Harian Ramadan...Radio Republik Indonesia Stasiun Pekanbaru." This is the special schedule for Ramadan. (10-Dec/Yamada-JPN/Jembatan DX)

6070.94 **RRI Jayapura.** English pops at 1654.

SCI at 1658 then Jakarta news relay. Switched to 6069.8kHz at 2000. This frequency (slightly up from 6069.8kHz) is for local all night schedule in Ramadan season. Poor. (10-Dec/Yamada-JPN/Jembatan DX)

IRAN Voice of the Islamic Republic of Iran External Service

0000-0030	French	6135 7260 9022
0000-0030	Mandarin	7130 7215 9675
0030-0130	Bengali	0765 6005 6185 11840
0030-0130	Spanish	6020 6175 9650
0030-0130	English	6065 6135 9022
0100-0230	Tajik	7180
0130-0230	Urdu	6005 6190 11880
0130-0230	Spanish	6020 6135 6175 9650
0230-0300	Uzbek	7180
0230-0300	Hindi	11840 13635
0230-0330	Spanish	6065
0230-0330	Pashto	6005 6190 11880
0300-0330	Armenian	7295
0300-0430	Dari	7180
0330-0430	Swahili	13630 15125 15595 17570
0330-0530	Azeri	6010
0430-0600	Turkish	11705 15365
0530-0630	Bosnian	15235 15510 17585
0530-0630	Spanish	15260 17785
0530-0630	Hausa	17600 21470 21810
0630-0730	French	15260 21470 21770

0630-0730 Italian 9022 15084 17560 17605
 0630-0730 Albanian 15235 17585
 0730-0830 German 15084 21770
 0930-1000 Armenian 9615 11700 15260 17570
 1000-1100 Swahili 11700 15560 17570
 1100-1230 English 13710 15395 15585
 17665 21470
 1200-1300 Italian 15085 15115 17605
 1230-1330 Malay 13760 15200 15585
 17555
 1230-1330 Pashto 7180 9585 9790 11870
 1300-1330 Japanese 7180 9885
 1330-1430 Mandarin 9665 9880 11685 11885
 15200
 1330-1430 Urdu 5995 7115 7145 7270
 9525 9585 9790 11775
 1330-1500 Dari 0720 7180
 1400-1500 Russian 9575 9735 11930 11960
 1430-1530 Bengali 5995 7250 9775 11875
 1430-1500 Urdu 7115 7145 9525 9585
 9790 11775
 1500-1530 Kazakh 0702 7200 9585 9755
 11745
 1500-1530 Hindi 7145 9525 9885 11775
 1500-1600 Uzbek 5955
 1530-1600 Italian 15084 15115
 1530-1630 Russian 7165 7200 7230 9585
 9755 9880 11745
 1530-1630 English 7245 9885 11775
 1600-1730 Tajik 5955
 1600-1730 Turkish 7260 9022 9545
 1630-1730 Pashto 6035 6175 7140 7190
 9525
 1630-1730 Urdu 7270
 1630-1730 Armenian 6140 6185 7230
 1630-1830 Azeri 1323 1404 7165
 1730-1830 Russian 6035 7115 7205 7300
 1730-1830 Bosnian 6020 7295 9545 9610
 1730-1830 German 6160 7190 9022 11765
 1730-1830 Swahili 9590 11570
 1830-1930 Albanian 6020 7295 9545 9610
 1830-1930 French 6020 7190 9022 9535
 11765
 1930-2000 Italian 6020 7295 9545
 1930-2030 Russian 6045 7175 7305 9740
 1930-2030 English 1404 7190 9022 11765
 1930-2030 Hausa 9855 11715
 2030-2130 Albanian 6020 7235 9610
 2030-2130 Spanish 9022 11765
 2130-2230 Bosnian 6020 7235 9022 9515
 2130-2230 English 11740 13745
 2230-2330 Hausa 7235 9022
 2330-2359 Mandarin 7130 7215 9675
 2330-2359 French 6135 7260 9022

(BBCM)

IRELAND *Telefis Eireann (RTE)* external service is transmitted through Merlin Communications via hired shortwave transmitters in Sackville Canada=c, Ascension Island=a, Singapore=s and

United Kingdom=u
 0130-0200 English 6155-u
 1000-1030 English 11740-s
 1800-1830 English 15315-u
 1830-1900 English 13640-c 21630-a
 (BBCM)

ISRAEL *Voice of Israel—Kol Israel - now "Israel Radio International"*

0000-0400 Hebrew-b 7545 9385 11585
 0400-0430 Hebrew-b 7545 9385 11585
 0400-2215 Arabic-d 5915 9815
 0430-0500 Hebrew-b 7545 9385 11590
 0500-0515 English 9435 11605 17715
 0500-0600 Hebrew-b 7545 11590 15615
 0600-0615 French 11605 15640
 0600-1700 Hebrew-b 15615 17545
 0630-1300 Arabic-d 5915 9815 15480
 1100-1130 French 15650 17535
 1130-1135 English 15650 17535
 1300-1315 Bukharian 15640 17535
 1315-1330 Georgian 15640 17535
 1330-1500 Arabic-d 5915 9815 15480
 1500-1530 English 15650 17535
 1500-1600 Persian 13850 15640 17705 Fr-Su
 1500-1625 Persian 13850 15640 17705 Su-Th
 1600-1625 Span./Ladino 15640 17535 17705 Sa
 1600-2215 Arabic-d 5915 9815 15480
 1630-1655 French 11605 15650 17535
 1700-1900 Hebrew-b 11590 15615 17545
 1700-1725 Yiddish 9435 11605 15640 15650
 1725-1735 Moghrabi 15650
 1725-1745 Romanian 9435 11605 15640
 1735-1745 Spanish 15650
 1745-1800 Ladino 15650
 1745-1800 Hungarian 9435 11605 15640
 1800-1825 Yiddish 9435 11605 15640
 1830-2000 Russian 9435 11605
 1900-1945 Hebrew-b 9385 11585 15650
 1945-2000 Hebrew-b 9385 11585 13800
 2000-2025 English 7510 9435 11605 15640
 15650
 2000-2100 Hebrew-b 9385 11585 13800
 2030-2045 French 7510 9435 11605 15640
 15650
 2045-2100 Spanish 7510 9435 11605 15640
 15650
 2100-2200 Hebrew-b 9385 11585 13800 15640
 2200-2215 Hebrew-b 11585 13800 15640
 2215-2300 Hebrew-b 11585 13800
 2300-0000 Hebrew-b 7545 9393 9545 11585

(BBCM + OBSERVER-BUL/Ivanov/BC-DX/Buescheler + Oren-ISR/SW DXR/Hauser-OK)

KENYA 4915 *KBC* is back on that frequency and the reception is so strong that Ghana was not audible at 2000 (2-Dec/Vaghjee-MAU/World of Radio/Hauser-OK)

KOREA (NORTH) Monitored schedule for *Radio Pyongyang*:

0000-0057	English	11710 13760 15180
0000-0057	French	11735 15230 17735
0100-0157	English	11735 15230 17735
0100-0157	French	11845 13650
0100-0157	Spanish	11710 13760 15180
0200-0257	English	11845 13650
0700-0757	Russian	13760 15245
0800-0857	Korean/ Rus	6575 9975 13760 15245
0900-0957	Russian	13760 15245
1000-1050	Korean	7145 9345
1100-1157	???	13650
1200-1257	English	9640 9850 9975 11335 13650
1200-1257	French	11710 13760
1300-1357	French	9640 9975
1300-1350	Korean	7145 9345
1400-1450	Korean	9640 9850 9975 11335 13650
1500-1557	Arabic	6520 9600 9975
1500-1557	English	6575 9335 11710 13760
1500-1557	Russian	7505 9325
1600-1657	German	7505 9325
1600-1657	English	6520 9600 9975
1600-1657	French	6575 9335 11710 13760
1700-1750	Korean	6575 9335 11710 13760
1700-1757	Korean/ Rus	6520 9600 9975
1700-1757	Russian	7505 9325
1800-1857	Arabic	6520 9600 9975
1800-1857	German	7505 9325
1800-1857	Spanish	6575 9335 11710 13760
1900-1957	German	7505 9325
1900-1957	English	6575 9335 11710 13760
1900-1957	French	6520 9600 9975
2000-2050	Korean	6520 6575 7505 9325 9335 9600 9975
2000-2050	Korean	6520 9600 9975
2100-2157	Spanish	6575 7505 9335
2100-2157	Japanese	6520 7580
2200-2257	French	6575 7505 9335
2200-2257	Japanese	6520 7580
2300-2350	Korean	7145 9345 9975 11735

(8-Dec/Piontek-GER/Volk-GER/BC-DX/Bueschel-GER)

KOREA (SOUTH) *Radio Korea International* schedule, with some broadcasts relayed via Radio Canada International's facilities at Sackville (marked "c") and BBC/Merlin transmitters in the UK (marked "u")

0000-0100	Japanese	11810
0000-0100	Korean	5975 15575
0100-0200	Korean	7275 11725
0100-0200	Spanish	11810 15575
0200-0300	English	7275 11725 11810 15575
0300-0400	Korean	7275 11725 11810 15575
0700-0800	Korean	7550 9535u 9570
0800-0900	Japanese	5975 7275 9640
0800-0900	English	9570 13670

0900-1000	Korean	5975 7275 7550 9570 13670
1000-1100	Korean	5975 7275 9570 13670
1000-1030	Spanish	7550 9580 11715c
1030-1100	Spanish	7550 9580
1100-1130	Korean	6145c 9580 9640 9650c
1100-1200	Russian	5975 6135 7275
1130-1200	English	9650c
1130-1230	Mandarin	6055
1200-1300	Indonesian	9570 9640 13670
1200-1300	Japanese	5975 6135
1200-1300	Korean	7285
1300-1400	English	9570 9640 13670
1300-1400	Mandarin	5975 6135 7285
1400-1500	Indonesian	9570 13670
1400-1500	Japanese	5975 7275
1500-1600	Russian	9515
1600-1700	Arabic	7275 7550
1600-1700	English	5975 9515 9870
1600-1700	Spanish	6150
1700-1800	French	7275 9515 9870
1700-1900	Korean	5975 7550 15575
1800-1900	German	6480 7275
1800-1900	Spanish	9515 9870
1900-2000	Arabic	6480 7550 9515 15575
1900-2000	English	5975 7275
1900-2000	French	9870
1900-2000	Russian	7105u
2000-2100	German	3980u 7550 15575
2000-2100	Russian	5975
2000-2100	Spanish	6480 7275 9870
2100-2200	French	3980u
2100-2200	Arabic	9870
2100-2130	English	6480 15575
2100-2200	Korean	5975 9640
2130-2200	English	15575
2200-2230	English	3980u
2200-2300	Mandarin	5975 7275 9640
2300-2359	Indonesian	7275 9640
2300-2359	Korean	5975 15575

MOLDOVA *Radio Moldova International*, using transmitters in Galbeni, Romania

0300-0325	Spanish	9590
0330-0400	Romanian	7500
0400-0425	Russian	7520
0430-0455	English	7500
1200-1225	Spanish	15315
1230-1300	Romanian	11580
1300-1325	English	11580
1900-1925	Russian	6135
2000-2025	French	7520
2030-2055	Spanish	7520
2100-2125	French	7520
2200-2225	Spanish	7520
2230-2255	English	7520

(BBCM)

MOZAMBIQUE 6110.7 *Radio Emissora Nacional Maputo*, 1915-1925, Portuguese talk and song. Heterodyne noted. 3210 was off that evening, but

heard on other days. (29-Nov/Petersen-SWZ/BC-DX/Bueschel-GER)

NEW ZEALAND Radio New Zealand International, from 9-January:

0606-1005 17690
1105-1505 6105 occasional sport
1505-1650 6145 occasional sport
1650-0605 17675 Mo-Fr
1850-0605 17675 Sa-Su

(Sainsbury-RNZI)

NORTHERN MARIANAS ISLANDS KFBS — Far East Broadcasting Company

0800-0830 Banjar 15380
0830-0900 Gorontalo 15380
0900-0930 Makasar 15380
0930-1000 Bugis 15380
0955-1600 Mandarin 11870
1000-1030 Sundanese 15380
1030-1100 Javanese 15380
1100-1130 Mongolian 11650
1100-1230 Indonesian 15380
1130-1400 Russian 11650
1230-1300 Malay 15380
1300-1400 Vietnamese 9670
1400-1430 Koho 9670 Su
1400-1430 Hmong 9670 We
1400-1430 Vietnamese 12160 Mo/Tu/Th/Fr/Sa
1400-1430 Russian 9465
1430-1530 Burmese 9670
1500-1530 Russian 9465 Sa-Th
1530-1545 Russian 9465 Tu
1530-1545 Uzbek 9465 Th
1530-1545 Kyrgyz 9465 Fr/Sa
1530-1545 Ukrainian 9465 We
1530-1600 Tatar 9465 Tu
1530-1600 Ukrainian 9465 Mo
1530-1600 Udmurt 9465 Su
1545-1600 German 9465 Tu/We
1545-1600 Osetin 9465 Th
1545-1600 Kazakh 9465 Fr/Sa
1600-1615 Uygur 9495
1600-1630 Russian 9465 Su-Fr
1600-1630 Ukrainian 9465 Sa
1615-1630 Osetin 9495 Mo
1615-1630 Kazakh 9495 Tu/We
1615-1630 Kyrgyz 9495 Th/Fr
1615-1630 Uzbek 9495 Sa/Su
1630-1830 Russian 9465
1830-1845 Ukrainian 9465 Mo/We/Fr
1830-1845 Russian 9465 Su/Tu/Th/Sa
1845-1900 Russian 9465 Mo/Th
1845-1900 German 9465 Fr
1845-1900 Ukrainian 9465 Mo/Tu/We/Sa

(BBCM)

OMAN 15355 *Radio Sultanate of Oman*, Arabic *0200-0300 & 0400-0500*, with English at 0300-0400. The English program appears to be daily, and seems to consist of three parts: *The Holy Quran*, a news bulletin, and *Good Morning, Oman*. IDs as "This

is Radio Sultanate of Oman, English FM." (28-Nov/Jones-PRG/NU/BC-DX/Bueschel-GER)

PAKISTAN Updated *Radio Pakistan* External Services sked (Home Services remain per last month's LN)

0045-0115 Tamil 9740 11930 15455K
0100-0215 Urdu WS 15485 17895
0115-0200 Bangla 9740 11930 15455K
0200-0230 Assami 9740 11930 15455K
0230-0300 Hindi 9740 11930 15455K
0330-0400 Gujrati 15325 17835
0500-0700 Urdu 15175 17835 21460
0800-1104 Urdu/English 17835 21455
0900-0930 Indonesian 15430 17510K
1030-1100 Tamil 11995 15625 17660
1100-1200 Hindi 11995 15625 17660
1200-1230 Bangla 11995 15625 17660
1200-1230 Chinese 11895 15465
1300-1345 Persian 11935 15625
1330-1530 Urdu 11570.11 15100.21
17509.47K
1430-1500 Turki 6075 7260
1515-1545 Russian 7307.05v 9329.98v
11570.11 15100.21
17509.47K 15335 17720
1700-1730 Turkish 9419.97v 11645?
1700-1900 Urdu 9394.92v 11570.14
1800-1845 Arabic 9329.98v 11645
1800-1900 Urdu 9430.06 Islamabad program
1930-2000 French 9394.91v 11570.12v

K= Karachi 50 kW, others Islamabad 100/250 kW. (updates by Green-UK. Vaghjee-MAU, Bueschel-GER)

PERU 4515.7 UNID, 1047-1136 mx huaynos, es musica de la sierra norte del Peru, mucho QRM ID "A traves de... en los 4515 KHz, en nuestra programacion hoy sabado 4 de Diciembre, saludos a nuestros amigos de Celendin." (4-Dec/Arrunategui-PRU) *Radio Amistad* (ex-4575), 2358-0050 Dec. 4 Vernacular music; at 0000 announced frequency as 4515, and would be transmitting without interruption starting today, with schedule on SW 0900-1100, 2300-0400. (4-Dec/Rodriguez R-COL/World of Radio/Hauser-OK) canned ID 0101 and 0201 by M: "Desde... distrito de San Juan de Lurigancho, el mas grande del Peru y Latinoamerica, transmite Radio Amistad, 1340 kHz, amplitud modulada, la nueva imagen musical y potencia andina, de Lurigancho para todo el Peru" (trnx Henrik Klemetz for filling in the gaps in my transcription). (7-Dec/Novello-NC)

4746.5 *Radio Huanta 2000*, Ayacucho, 2325-2342 advs centro naturalista el pescador, px en quechua sobre control familiar advs La Camara de Productores de Huanta ID "Esta es Radio Huanta 2000, 4755 kHz en Onda Corta, 1160 kHz Onda Media, la esmeralda de los Andes." (4-Dec/Arrunategui-PRU)

4840.0 *Radio Andahuaylas*, Andahuaylas; 1058-1145 ID "Desde el paraiso terrenal, trasmite Radio Andahuaylas" mx, W ID "Llamar a esta emisio-

ra, *Radio Andahuaylas...* advs Pirotecnica Virgen del Carmen, lo mejor en juegos artificiales mxf huayno px El diario de la mañana mx ID "*Por Radio Andahuaylas,*" un saludo a todos los locutores por su día y muy pronto Radio Andahuaylas en onda media. (8-Dec/Arrunategui-PRU)

4855.57 *Radio La Hora*, Cusco, 2305 ad string including one for Christmas concert, ID in passing from man launching into long commentary. (24-Nov/Novello-NC)

4886.8 *Radio Virgen del Carmen*, Huancavelica; 1150-1220 mxf huayno ID "*Esta en sintonia de Radio Virgen del Carmen, en 105 MHz FM y 4885 kHz onda corta, Radio RVC, voz y sentimiento de Huancavelica...*" advs Cerveza Cristal, orgullosa de ser peruana. Casa de productos naturales Kiwicha, consume maca con kiwicha ID "*Son las 7 de la mañana y 10 minutos en su Radio RVC...*" (8-Dec/Arrunategui-PRU)

4955.0 *Radio Madre de Dios*, Madre de Dios; 2315-2351 px infantil ID "*Hasta el otro domingo y sigan disfrutando a traves de Madre de Dios*" mx en dialecto ID "*Continuamos con RMD.*" (5-Dec/Arrunategui-PRU)

4955.0 *Radio Cultural Amauta*, Ayacucho; 2218-2318 hasta las 2300 el programa fue en quechua, luego dan una parte de español y quechua mxf huayno ID "*Por esta radio Cultural Amauta que me brinda todas las facilidades...*" (18-Dec/Arrunategui-PRU)

4975.1 *Radio Del Pacifico*, Lima, 0305-0330 ID "*Por Radio del Pacifico...*" mx religiosa px un momento de oracion, vigilia de oracion. (3-Dec/Arrunategui-PRU)

5025.0 *Radio Quillabamba*, 1055-1140 advs Cerveza Cristal, Bodega San Martin de la ciudad de Quillabamba. ID "*El departamento de prensa de Comunicacion social de Radio Quillabamba, presenta el informativo Estelar...*" (17-Dec/Arrunategui-PRU)

5039.2 *Radio Libertad*, Junin, 2347-0015 mxf huayno ID "*Radio Libertad de Junin*" advs Grifo San Antonio, a la salida a la Oroya Slogan: "*1180 kHz Onda Media, 5440KHz Onda Corta, Radio Libertad de Junin, su siempre nueva radio...*" px Estacion Tropical sobre mx chicha. (4-Dec/Arrunategui-PRU)

5523.0 *Radio Sudamerica*, Cutervo, Cajamarca; 1105-1136 ID "*Tu radio Sudamerica, en los 1060 y su banda internacional, amigos muy buenos dias, aqui iniciamos nuestra gigante programacion de su Radio Sudamerica, como estan amigos de todo el territorio nacional...*" mx gigante. (16-Dec/Arrunategui-PRU) 1105-1118 weak signal with first class folklore programming. (4-Dec/TIN-JPN/Relampago DX)

5637.3 *Radio Peru*, San Ignacio, 0141-0145, 25 de noviembre. Programa musical(huaynos) en español. ID "*a traves de Radio Peru*" (25-Nov/Eramo-ARG/Conexion Digital)

5645.9 *Radio Coremarca* (p), Bambamarca, 2340-2345, Spanish, man talking, seemed to be sports, extremely weak signal. (11-Dec/Schnitzer-GER/DX Camp-Bavaria/Conexion Digital/Eramo-ARG)

5678.0 *Radio Ilucan*, Cajamarca; 2235-2310 mxLA romantica ID "*Somos Radio Ilucan, Ud. esta escuchando Radio Ilucan*" mx ID "*Ilucan. mayor sintonia*" mx "*Somos Ilucan, tu alegria*" advs Cerveza Cristal, la mejor y es peruana...Slogan: "*Hoy sabado alas 8 de la noche en el aniversario de Radio Ilucan estaremos bailando por Tropic Club, con un nuevo sonido digital de su Radio Ilucan...somos Radio Ilucan, la de mayor sintonia...*" (11-Dec/Arrunategui-PRU)

5860.0 *Radio Nuevo Cajamarca*, Nuevo Cajamarca; 0140-0216 mxf ID "*Ud. esta escuchando Radio Cajamarca, mx s/off (0215) "Radio Nueva Cajamarca, finalizo su programacion el dia de hoy esperando que haya sido de su agrado, damos punto final a nuestra trasmision, tengan un feliz sueno y un alegre despertar, muy buenas noches,*" tocan himno nacional. (9-Dec/Arrunategui-PRU)

6115.0 *Radio Union*, Lima; 2154-2230 advs champana noche buena program Sencillamente Sentimental mx pasillo por Juan Eguren mx ID "*Desde Radio Union, este programa lo efectuamos de lunes a sabdo de 5 a 6 de la tarde...*" advs restaurante Sol de Pachacamac, donde se sirve la tradicional pachamanca de 5 sabores, frente a la bodega Santa Elena...// en 880 kHz. (11-Dec/Arrunategui-PRU)

6249.8 *Radio La Voz* (p) 1019-1040 Mx vernacular with Perlita del Chavin in the program *Amanecer Andino*. "*seguimos con el huayno querido, huayno peruano...*" no ID heard, M announcer in Spanish and Quechua, Adv. Servicio Agropecuario San Jose. (6-Dec/Rodriguez R-COL/World of Radio/Hauser-OK)

6522.04 *Radio Ondas del Rio Marañon*, Aramango, La Libertad, 0054 reactivated here with typical Andean programming of huaynos, comunicados, ads, and numerous IDs to informal signoff at 0107. Plagued by utes and fishing boat traffic, but pretty good signal. Thanks to Henrik Klemetz for confirming my transcription of the ID. (30-Nov/Novello-NC) [ex-Radio Impacto-AQ]

6674 *Radio Super Nueva Sensacion*, Huancabamba, 0120-0133, programa musical en español. ID "*la hora exacta ocho con treinta y dos minutos en Radio Super Nueva Sensacion*" (8-Dec/Eramo-ARG/Conexion Digital)

6797.7 *Radio Ondas del Rio Mayo*, Nueva Cajamarca, 0022-0030, Programa esoterico y musical en español. ID "...nuestra emisora amiga Ondas del Rio Mayo" (7-Dec/Eramo-ARG/Conexion Digital) 2250 fast-talking ancr, a few IDs as *La Voz de la Libertate*, 2302 ID as *Radio Onda del RioMayo* (10-Dec/Liangas-GRC)

6895.5 *Radio San Miguel el Faique*, Pampa Alegre, 0033-0039, programa musical en español;

ID "...de Radio San Miguel El Faique..." (7-Dec/Eramo-ARG/Conexion Digital)

7003.5 *La Voz de las Huarinjas*, 0208-0215, Programa musical (huaynos). ID "nueve de la noche con doce minutos en *La Voz de las Huarinjas*" (23-Nov/Eramo-ARG/Conexion Digital)

Radio Libertad, Trujillo, has been closed Dec 9 by an official of the Ministry of Transport and Communications as an unlicensed clandestine. The station maintains that it has been licensed since Nov 1951 (BBCM/World of Radio/Hauser-OK)

PHILIPPINES In order to avoid interference from adjacent channel *Radio Veritas Asia* has changed some of their evening channels to SoAS. 9520 1330-1355 Sinhala (x9660). 9670 1400-1425 Beng (x9680). 9675 1330-1355 Hindi (x9680). (26-Nov/Dasgupta-IND/BC-DX/Bueschel-GER)

FEBC Radio International

0000-0015	Vietnamese	9860
0000-0030	Shan	15520
0000-0115	Burmese	15465
0000-0200	English	15175
0030-0045	Shan-chinese	15520
0100-0115	Karen	15465 Th-Sa
0100-0115	Palauung	15465 Su-We
0115-0130	Maru	15465 Mo-We
0115-0130	Lushai	15465 Su
0115-0130	Atsi	15465 Th-Sa
0130-0145	Meithei	15465 Mo-Fr
0130-0145	Kuki	15465 Sa/Su
0145-0200	Naga-ao	15465 Sa/Su
0200-0215	Lushai	15465 Sa
0500-0900	Mandarin	15450
0800-0830	Sasak	12005
0830-0900	Javanese	12005 Mo/Tu/Th/Sa
0830-0900	Sundanese	12005 Mo/We/Fr
0900-1000	Indonesian	12005
0900-1600	Mandarin	9405
0915-0945	Komerling	15095 Mo/We/Fr
0915-0945	Ogan	15095 Su/Tu/Th/Sa
0930-1100	English	11710
0945-1015	Batak	15095
1000-1030	Minangkabau	12005
1000-1030	Amoy dialect	9415
1015-1045	Malay	15095
1030-1045	Mien	12095
1030-1100	Swatow	9415
1045-1100	Khmu	12095
1045-1115	Sundanese	15095
1100-1130	Hmong	12095
1100-1230	Cantonese	9415
1115-1130	Nung	9795 Mo
1115-1130	Katu	9795 Tu
1115-1130	Eastern cham	9795 We
1115-1130	Muong	9795 Th
1115-1130	Stieng	9795 Sa/Su
1115-1145	Bahnar	9795 Fr
1130-1145	Bru	9795 Tu
1130-1145	Chru	9795 We

1130-1145	Jeh	9795 Th
1130-1145	Black tai	9795 Mo/Sa
1130-1145	Mon	15095
1130-1200	Chrau	9795 Su
1130-1200	Lao	12095
1145-1200	Tho	9795 Tu
1145-1200	Roglai	9795 We
1145-1200	Rengao	9795 Th
1145-1200	Sedang	9795 Fr
1145-1200	White tai	9795 Mo/Sa
1145-1200	Karen-sgaw	15095
1200-1215	Rawang	15095
1200-1300	Cambodian	12095
1200-1300	Vietnamese	9795
1215-1230	Lisu	15095
1230-1300	Zhuang	1458
1230-1330	Burmese	15095
1230-1600	Mandarin	9415
1300-1315	Koho	9795 Mo
1300-1330	Koho	9795 Su/Th
1300-1330	Hre	9795 Tu
1300-1330	Jarai	9795 Fr
1300-1330	Rade	9795 We/Sa
1300-1500	English	11995
1315-1330	Mnong	9795 Mo
1330-1345	Naga-makware	15095
1330-1345	Jingpo	9795
1345-1400	Chin-daa	15095
1345-1400	Mien	9795
1400-1415	Chin-asho	15095 Su-We
1400-1415	Chin-khumi	15095 Th-Sa
1415-1430	Lushai	15095 Su
1415-1430	Chin-haka	15095 Mo-We
1415-1430	Chin-tidim	15095 Th-Sa
1500-1600	Mandarin	9420
2200-2359	Mandarin	9405
2230-2300	Lao	9795
2230-2315	Cambodian	9860
2230-2330	Indonesian	9780
2300-2315	Akha	11650 Sa/Su
2300-2330	Hmong	9805 Su-We/Fr
2315-2330	Lahu	11650
2315-2359	Vietnamese	9860
2330-2345	Wa	11650
2330-2359	Burmese	15465
2345-2359	Shan	15520

(BBCM)

POLAND Radio Polonia

1100-1130	Slovak	6015 7285 Mo
1100-1130	Czech	6015 7285 Tu-Su
1130-1200	Polish	6015 7285
1200-1230	Polish	7270 7285
1200-1230	Russian	7305 9540
1230-1300	Belarusian	6050 7285
1230-1300	German	6095 9525
1300-1400	English	6095 7270 9525 11820
1400-1430	Lithuanian	6035 6095
1400-1430	Russian	7285 9525
1430-1530	Belarusian	5995 6035
1500-1530	German	6095 7285

1530-1600	Russian	6095 7275	0500-0600	Romanian	7175 9530
1530-1600	Ukrainian	5995 6035 7285	0530-0600	Ukrainian	6085
1600-1630	Lithuanian	6035 7180	0600-0615	Romanian	7105 9510 11775 15105
1600-1630	Ukrainian	6095 7205	0600-0630	Hungarian	5985
1630-1700	Ukrainian	6095 7180	0600-0700	English	9530 11830
1630-1730	Polish	6035 7285	0615-0628	French	7105 9510 11775 15105
1700-1730	Slovak	6095 7215 Su	0628-0641	German	7105 9510 11775 15105
1700-1730	Czech	6095 7215 Mo-Sa	0641-0656	English	7105 9510 11775 15105
1730-1800	Belarusian	6165 7285	0700-0800	Arabic	15250 15270 15380 17720 17775
1730-1800	Ukrainian	6035 7180	0700-0800	English	17720 21480
1800-1900	English	6000 7285	1100-1200	French	11940 15245 15380 17790 17815 17900
1800-1900	Belarusian	6035 7180	1100-1300	Romanian	9665 15390 17775
1900-1930	German	6035	1200-1300	German	11940 15245 17745
1900-1930	Esperanto	7225 7285	1300-1400	English	11940 15335 15390 17805
1900-1930	Russian	6000 7180	1300-1400	Russian	11735 11810 15250
2000-2030	Russian	6035 6095 7215 7270	1400-1430	Italian	15405
2000-2030	Esperanto	6095 7205	1400-1500	Arabic	11830 15250 15380 17790
2030-2130	English	6035 6095 7285 9525	1430-1500	Mandarin	9730 11740
2130-2200	Belarusian	6085 7285	1430-1500	Persian	15180 17720
2130-2200	Ukrainian	6095 7270	1500-1530	Italian	15405
2200-2300	Polish	6035 6095 7270	1500-1600	French	9690 11775 17790 21480

R. Racja: Confirming their daily sked as 0600-0700 on 6035, 1100-1200 on 6180 and 1900-2000 on 6165 (all in Belarusian).

"Racja" means "reason" in Belarusian. This is a Belarusian-language station based at Bialystok. Its broadcasts are aimed at the Belarusians in POL as well as BLR. The Belarusian Union of the Polish Rep is majority shareholder in the Racja company. (BBCM)

There has been some confusion about the naming of the station, the BBCM interpretation is partly incorrect. Radio Racja is the Polish name of the stn, since it was registered under Polish broadcasting law. The Belarusian name is Radyyo Ratsyya. (Bernd Trutenau-LTU, Dec 15/BC-DX/Bueschel-GER)

PORTUGAL New sked on **RDP - Radio Portugal** to East Timor from Nov 26:

0900-1000	Portuguese	17725
1100-1200	Portuguese	17725
1000-1100	Tetum	17725 11550-Taiwan
2100-2200	Portuguese	15175
2300-2400	Portuguese	15175
2200-2300	Tetum	15175 11550-Taiwan

(6-Dec/OBSERVER-BUL/Ivanov/BC-DX/Bueschel-GER)

ROMANIA *Radio Romania International*

0000-0100	Spanish	9665 11810 15250 17745
0000-0200	Romanian	9510 11940
0100-0200	Portuguese	15250 17745
0200-0300	English	9510 9570 9690 11740 11830 11940
0300-0400	Spanish	9570 11830
0330-0400	Mandarin	9530 11740
0400-0500	English	9570 11830 15335 17735
0500-0530	Bulgarian	5955
0500-0600	French	5990 9590

0500-0600	Romanian	7175 9530
0530-0600	Ukrainian	6085
0600-0615	Romanian	7105 9510 11775 15105
0600-0630	Hungarian	5985
0600-0700	English	9530 11830
0615-0628	French	7105 9510 11775 15105
0628-0641	German	7105 9510 11775 15105
0641-0656	English	7105 9510 11775 15105
0700-0800	Arabic	15250 15270 15380 17720 17775
0700-0800	English	17720 21480
1100-1200	French	11940 15245 15380 17790 17815 17900
1100-1300	Romanian	9665 15390 17775
1200-1300	German	11940 15245 17745
1300-1400	English	11940 15335 15390 17805
1300-1400	Russian	11735 11810 15250
1400-1430	Italian	15405
1400-1500	Arabic	11830 15250 15380 17790
1430-1500	Mandarin	9730 11740
1430-1500	Persian	15180 17720
1500-1530	Italian	15405
1500-1600	French	9690 11775 17790 21480
1500-1600	Russian	11735 15365
1530-1600	Turkish	11810
1600-1630	Ukrainian	9645
1600-1700	German	9690 11940 15390
1600-1700	Romanian	15270 17735
1630-1700	Bulgarian	7235
1700-1730	Serbian	9585
1700-1800	English	9625 11740 11940 15365
1700-1900	Romanian	7195 9690
1730-1800	Greek	9635
1800-1830	Aromana	11790
1800-1900	Spanish	9625 15390 17745
1830-1900	Turkish	9580
1900-1930	Serbian	9510
1900-2000	German	5955 7195 9690
1900-2000	Russian	5965 7155 9550
1930-2000	Greek	9635
2000-2030	Italian	7245
2000-2030	Persian	9750 11740
2000-2100	French	7195 9690 11940
2030-2100	Aromana	11790
2030-2100	Hungarian	6030 7165
2100-2200	English	5955 7195 7215 9690
2100-2200	Romanian	7175 9665
2200-2300	Portuguese	9665 11790 15335 15380
2200-2300	Spanish	9665 11810 11970
2300-2359	English	7195 9570 9690 11940
2300-2359	Romanian	15365 17745

(BBCM)

RUSSIA Final *Radio Rossii* schedule:

5895	1630-2200	ARM
5910	0200-0500	MSK
5910	1530-2200	MSK
6045	1930-2200	MSK
6060	1530-2200	MSK
6110	0200-0600	MSK
6115	0200-0500	MSK

6125 0200-0500 SAM
 6125 1430-2200 SAM
 7220 2200-1800 EKB
 7250 0530-1500 MSK
 7290 2000-2300 IRK
 7350 1730-2200 MSK
 7365 0200-0500 ARM
 7380 0200-0500 MSK
 7440 0730-1600 IRK
 9700 2330-0700 IRK
 9720 0630-1500 MSK
 9860 0530-0800 MSK
 11990 0530-1400 SAM
 12005 0930-1600 ARM
 12060 0530-0800 MSK
 12060 1530-1900 MSK
 12065 0530-0900 ARM
 13705 0830-1700 MSK
 17600 0830-1500 MSK

ARM=Armavir EKB=Yekaterinburg IRK=Irkutsk
 MSK=Moscow SAM=Samara (Rudnev-RUS)

Here is a full version of our current shortwave
 schedule. K=Kaliningrad S=St. P. Popovka RCS=Radio
 Chechnya Svobodnaya

5905K 1530-2100 Radio Rossii
 5920S 0400-0530 VOR Serbian
 5920K 1600-1800 VOR German
 5920K 1800-1900 VOR Russian
 5920K 1900-2000 VOR English
 5935S 0300-0600 RCS
 5950K 1600-2000 VOR German
 5975S 1800-1845 VOR Hungarian
 5975S 1845-1930 VOR Czech
 5975S 1930-2000 VOR Slovak
 6205S 2000-2200 VOR (Kosovo)
 6205S 2200-2330 VOR Serbian
 7130S 1600-1700 CRI Arabic
 7130S 1700-1800 VOR Arabic
 7130S 1800-1830 CRI Farsi
 7130S 1830-2000 VOR Arabic
 7290S 1830-2100 VOR French
 7305S 1830-2100 RCS
 7310S 0000-0100 VOR Polish
 7310S 0100-0200 VOR Spanish
 7310S 0200-0300 VOR Spanish
 7320S 1600-1630 VOR Albanian
 7335S 0300-0700 RCS
 7340S 1430-2100 RCS
 7355S 1500-1800 RCS
 7370S 1600-1630 VOR Albanian
 7370S 1630-1800 VOR Serbian
 7370S 1800-1900 VOR Italian
 7370S 1900-2100 VOR French
 9450E 0300-0700 Radio Rossii
 9840S 1600-1700 VOR Persian
 9840S 1700-1800 VOR Arabic
 9865S 1700-2000 VOR Arabic
 9890S 0100-0200 VOR Spanish
 9890S 0200-0400 VOR Russian
 9890S 1800-2200 VOR English
 11635S 0630-1430 RCS

12010K 1000-1100 VOR German
 12010K 1000-1100 VOR German
 15355K 0730-1500 Radio Rossii
 15605S 0730-1400 RCS

(26-Nov/Timofeyev-RUS/BC-DX/Bueschel-GER)

Radio Chechnya Svobodnaya (Radio Free Chechnya) began broadcasting in November 1999. It takes a strongly pro-Moscow line, hostile to the Chechen separatists. Frequencies are subject to change.

0300-0500 Russian 5925M 5935SP 7335SP
 0500-0530 Russian 5925M 5935SP
 0530-0600 Russian 5925M 5935SP 15515SP
 0600-0630 Russian 7335SP 9470M 15515SP
 0630-0700 Russian 7335SP 9470M 11635SP
 15515SP 17665SP
 0700-0730 Russian 9470M 11635SP 15515SP
 17665SP
 0730-1100 Russian 9470M 11635SP 15515SP
 17665SP
 1100-1130 Russian 9470M 11635SP 17665SP
 1130-1400 Russian 9470M 11635SP 15605SP
 17665SP
 1400-1430 Russian 17665SP
 1430-1500 Russian 7340SP 7445M
 1500-1530 Russian 7340SP 7445M
 1530-1800 Russian 7340SP 7355SP 7445M
 1800-1830 Russian 7340SP 7445M
 1830-2100 Russian 7305SP 7340SP 7445M

M=Moscow SP=St. Petersburg (Rudnev-RUS)

CRR-3 (Samara)

5925 0000-0100 DW
 5935 2000-2100 IBRA
 5935 1600-1800 VOR
 5935 1800-1850 DW
 5935 1900-2000 VOR
 5945 1600-2000 DW
 5965 1800-2200 VOR
 6000 1700-2000 VOR
 6000 2000-2100 DW
 6125 0200-0500 Radio Rossii
 6125 1730-0100 Radio Rossii
 7215 1700-2000 VOR
 7215 2030-2230 CRI
 7315 1400-1800 VOR
 7320 1800-1900 VOR
 7320 2000-2200 VOR
 7330 1700-2000 VOR
 7390 0000-0300 VOR
 7400 1600-2300 Radio Marija
 7420 1700-2000 VOR
 9470 1500-1800 VOR
 9480 1300-1600 VOR
 9815 1600-1800 VOR
 9905 1600-2200 VOR
 11915 0900-1000 Radio Tatarstan
 11990 0530-1400 Radio Rossii
 12010 0600-0900 Radio Marija
 12045 1300-1500 VOR
 15105 0500-0600 Radio Tatarstan

15105	0700-0800	Radio Tatarstan	9470	0000-0300	VOR
15480	1300-1500	VOR	9470	0630-1400	"Chechnya Svobodnaya"
15535	1300-1600	VOR	9470	1830-2100	VOR
15540	1000-1100	VOR	9480	1600-2100	VOR
17590	0800-1200	WUN	9490	1700-1900	VOR
17795	1230-1600	WUN	9720	0630-1500	Radio Rossii
21780	1000-1050	DW	9840	1800-2000	VOR

(2-Dec/Rudnev-RUS/RUS-DX/BC-DX/Bueschel-GER)

7210 *Radio Rossii Khabarovsk* was reactivated recently, 2000-1600, incl *Radiostantsiya Tikhii Okean* at 0815-0900. 7490usb at 0815-0900 is // transmitter

Khabarovsk //freqs 17675, 12045 and 7175. Followed by *VoRUS*, 1000-1100 in Korean. (2-Dec/Brazhnikov-RUS/RUS-DX/BC-DX/Bueschel-GER)

One more change in our current schedule: 6060 from Nov 30 are in use instead of 5905 at 1530-2200 via Kaliningrad. By the way, this is a *Radio Rossii* relay—not *Radio Chechnya Svobodnaya*—as I reported earlier.

Other *Radio Rossii* relays via Kaliningrad: 0300-0700 9450, 0730-1500 15355. (3-Dec/Timofeyev-RUS/BC-DX/Bueschel-GER)

New names of GPR:-

CRR = Centre for Broadcasting and Radiocommunication

TCRR = Regional Centre for Broadcasting and Radiocommunication

RC = Broadcasting Centre

5835	2030-2125	Radio Nederland
5910	0200-0500	Radio Rossii
5910	1530-2200	Radio Rossii
5925	0300-0600	"Chechnya Svobodnaya"
6030	1600-2100	VOR
6045	1930-2200	Radio Rossii
6060	1530-2200	Radio Rossii
6110	0200-0600	Radio Rossii
6115	0200-0500	Radio Rossii
6130	1700-2100	VOR
7170	2200-2300	CRI
7200	1830-1930	CRI
7205	1800-2200	VOR
7250	0530-1500	Radio Rossii
7340	1700-2200	VOR
7350	0100-0300	VOR
7350	1730-2200	Radio Rossii
7380	0200-0500	Radio Rossii
7390	1600-2000	VOR
7390	1700-1800	BBC
7390	2000-2130	VOVietnam
7425	2000-2100	IBRA Radio
7440	0000-0300	VOR
7440	1800-2000	VOVietnam
7440	2000-2200	VO Mediterranean
7445	1430-2100	"Chechnya Svobodnaya"
9450	0000-0300	VOR
9450	2000-2100	IBRA Radio
9450	2100-2200	VOR

9860	0530-0800	Radio Rossii
11655	1300-1600	VOR
12055	1200-1600	DW
12055	1600-1800	VOR
12060	0530-0800	Radio Rossii
12060	1530-1900	Radio Rossii
13705	0830-1700	Radio Rossii
15470	1200-1300	VOR
17600	0830-1500	Radio Rossii

TCRR-4 (Krasnodarskiy kray)

5895	1630-2200	Radio Rossii
5905	0300-0400	VOVietnam
5915	0100-0200	VOR
5925	1600-2000	VOR
5940	0100-0300	VOVietnam
5940	0300-0400	VOR
5940	1800-2200	VOR
5965	1800-1850	DW
6005	1500-2000	VOR
6185	0100-0300	VOR
7300	1600-2200	VOR
7360	1700-2100	VOR
7365	0200-0500	Radio Rossii
9745	1700-2000	VOR
9810	0000-0300	VOR
12005	0930-1600	Radio Rossii
12015	1300-1600	DW
12065	0530-0900	Radio Rossii
15460	1300-1500	VOR
21800	0900-0930	DW

Ekaterinburg Radiocentre

7220	2200-1800	Radio Rossii
7310	1800-2100	VOR
7380	1600-2100	VOR
9450	1600-2000	VOR
9676	1700-1900	VOR

(Rudnev-RUS/Rus-DX/Klepov-RUS)

TCRR-6 (Vladivostok)

4010	1000-1500	VOR
5905	1100-1300	VOR
7170	1300-1500	VOR
7205	1200-1500	VOR
7315	2200-2300	RFI
7400	1000-1200	VOR
11695	1000-1100	BBC
12075	2300-2400	RFI
15600	0000-0100	DW
17660	0200-0600	VOR

CRR-8 (Komsomolsk-na-Amure + Khabarovsk)

6145	1100-1500	VOR
6205	2200-2245	Radio Vatikana
7135	2190-1945	Tikhii Okean

7155 1200-1500 VOR
 7175 1900-1945 Tikhiiy Okean
 7210 2000-1600 Radio Rossii + Tikhiiy Okean
 7490 0815-0900 Tikhiiy Okean
 9450 1100-1500 VOR
 9885 1900-1945 Tikhiiy Okean
 9895 0815-0900 Tikhiiy Okean
 9905 0830-1000 VOR
 12010 0200-0600 VOR
 12045 0815-0900 Tikhiiy Okean
 13800 0200-0400 VOR
 13820 1030-1125 RNW
 15460 0600-1000 VOR
 15470 0200-0600 VOR
 15470 0630-1000 VOR
 15525 0600-0800 VOR
 17570 2330-0025 RNW
 17570 0500-0600 VOMediterranean

CRR-10 (Irkutsk)

7135 1200-1500 VOR
 7290 2000-2300 Radio Rossii
 7355 1000-1400 VOR
 7365 2200-2300 VOA
 7385 2200-2300 RCI
 7395 2000-2200 DW
 7420 1130-1600 TWR
 7440 0730-1600 Radio Rossii
 9700 2330-0700 Radio Rossii
 9810 0930-1030 RFI
 9825 0030-0200 TWR
 9900 1000-1400 DW
 9900 1900-1945 Tikhiiy Okean
 10344u 0815-0900 Tikhiiy Okean
 12015 1100-1300 RFI
 12025 2300-0100 RFI
 12055 1000-1100 VOR
 12055 0900-0945 DW
 12065 0930-1125 RNW
 17570 0600-0800 VOR
 17570 0815-0900 Tikhiiy Okean
 21750 0130-0215 Tikhiiy Okean
 21790 0600-0900 VOR

CRR-11 (Novosibirsk)

5925 2200-2400 DW
 6205 1400-1500 VOR
 7305 1000-1200 VOR
 7305 1230-1300 DW
 7305 1330-1355 DW
 7315 1000-1400 DW
 7375 2200-2400 DW
 7390 1000-1050 DW
 7390 1300-1500 VOA
 7400 1330-1600 VOR
 7430 2200-2300 RFI
 7430 1200-1300 RFI
 9480 1100-1200 VOR
 15490 1000-1400 DW

TCRR-12 (Chita)

7330 2200-2300 BBC
 7330 1300-1530 BBC

7360 2300-2330 RCI
 9470 1200-1300 VOR
 9775 1500-2000 VOR
 17580 0600-0900 VOR

Petropavlovsk-Kamchatskiy Radio Centre

5895 1000-1050 DW
 5895 1200-1300 China Radio (Religious broadcasting)
 5895 1330-1355 DW
 5930 1330-1425 RNW
 5940 1000-1300 VOR
 5940 1315-1345 Radio Vaticana
 7260 0930-1125 RNW
 7340 1000-1400 DW
 7355 2000-2100 px Kamchatka Rybatskaya
 7375 1330-1425 RNW
 9865 1200-1230 RVI
 12020 0200-0600 VOR
 12045 0000-0100 DW
 12065 2130-2200 VOA
 12065 2000-2100 px Kamchatka Rybatskaya
 13665 0200-0400 VOR
 13665 0400-0500 VOV
 15525 0200-0400 VOR
 15595 0200-0600 VOR
 17595 0200-0600 VOR

(Rudnev-RUS/Rus-DX/Klepov-RUS)

Amurskaya oblast, *Amurskoe Radio* (broadcasting in Russian) was heard on Dec 3, 1999 at 1058 on 6060 (44443). Addr: GTRK "Amur," per.Internatsionalnyj, 15. Blagoveschensk, 67500Amurskaya obl., Russia. (13-Dec/Kovalenko-RUS/MIDXB/RUS-DX/BC-DX/Bueschel-GER)

Voice of Russia B99 schedule, transmitters outside Russia, relays in CIS/GERMANY/CHINA

4940 1400-1700 Yangi-Yul, TJK
 4965 1400-1700 Yangi-Yul, TJK
 4975 1400-1700 Yangi-Yul, TJK
 7125 0100-0600 Grigoriopol Maiac, MDA
 7180 0100-0600 Grigoriopol Maiac, MDA
 7570 0100-0300 Orzu, TJK
 9945 0200-0300 Orzu, TJK
 9965 0000-0300 Yerevan Gavar(xKamo), ARM
 9975 1600-2000 Orzu, TJK
 11500 1300-1400 Orzu, TJK
 11500 1500-1600 Xian, CHN
 11510 1700-2000 Yerevan Gavar(xKamo), ARM
 17495 0700-1000 Orzu, TJK

(1-Dec/Rudnev-RUS)

SEYCHELLES FEBA Radio

0030-0100 Hindi 7350
 0045-0100 Bangla 9480 Su-We
 0100-0115 Marathi 9480 Su-We
 0115-0145 Telugu 7350 Su-We
 0115-0200 Telugu 7350 Th-Sa
 0200-0215 Urdu 11640
 0200-0215 Siraiiki 9480 Fr-Su
 0200-0215 Hindko 9480 Mo/Tu

0215-0230	Sindhi	9480
0215-0230	Punjabi	11640 Sa/We
0230-0245	Baluchi	9480 We/Fr/Sa/Su
0230-0245	Pashto	11640
0230-0245	Brahui	9480 Mo
0245-0300	Dari	11640
0245-0300	Azeri	11600 Fr-Su
0300-0315	Hazaragi	15555 Fr
0300-0330	Persian	11600
0315-0345	Swahili	11885 Fr
0315-0400	Swahili	11885 Sa-Th
0345-0430	Arabic	15530
0400-0415	Portuguese	9455 Th
0400-0430	Portuguese	9455 Fr-We
0430-0500	Dari	11640 F
0500-0600	Tagalog	15555 Su
0530-0600	Sinhala	15555 F
0815-0830	Malayalam	15460 Su
0815-0900	Hindi	15460 Th
0815-0900	English	15460 F
0815-0900	Telugu	15460 Sa
0830-0845	Badaga	15460 Su
0845-0900	Tamil	15460 Su
0915-0930	French	15430
1000-1100	Tagalog	15535 Fr
1100-1300	Arabic	15535
1145-1200	Tsangla	15445 Sa/Su
1200-1230	Tibetan	15445
1230-1245	Sadani	15445 Th
1230-1245	Mundari	15445 Su-Tu
1230-1245	Bhojpuri	15445 We/Fr/Sa
1245-1300	Marathi	15445 Su
1245-1300	Punjabi	15445 Tu-Th
1245-1300	Marwari	15445 Fr
1245-1300	Bhili	15445 Sa
1300-1315	Kui	15445 Su/Tu
1300-1315	Oriya	15445 Mo/Tu/Th
1300-1330	Malayalam	11640
1315-1330	Gujarati	15445 Sa-Th
1315-1345	Gujarati	15445 Fr
1315-1345	Magahi	15445 Su
1330-1340	Nepali	15445 Su/Mo
1330-1345	Chattisgarhi	15445 Fr/Sa
1330-1345	Tamil	11640
1330-1400	Sinhala	9810
1345-1400	Badaga	11640 Su/Mo
1400-1415	Urdu	11600 Su-Th
1400-1445	Urdu	9810
1400-1500	Hindi	11600 Fr-Sa
1415-1445	Bangla	15445
1415-1500	Hindi	11600 Su-Th
1445-1500	Urdu	9810 Su
1445-1500	Hindko	9810 We-Sa
1445-1500	Kannada	15445 Su
1445-1500	Tulu	15445 Sa
1445-1500	Konkani	15445 Fr
1500-1515	Kannada	15445 Mo-Sa
1500-1600	English	11600
1530-1540	Dinka	11885 Fr-Mo
1530-1545	Nuer	11885
1545-1615	Makonde	11885 Sa

1600-1615	Hazaragi	9810
1600-1615	Makonde	11885
1600-1615	Tigrignya	11640 Mo-We
1600-1630	Amharic	11640 Fr-Su
1615-1630	Guragena	11640 Mo-We
1615-1630	Dari	9810 Fr/Su
1615-1645	Dari	9810 Mo-Th/Sa
1615-1700	Swahili	11885
1630-1700	English	11605 Su
1630-1700	Dhivehi	11605 Fr
1630-1700	Amharic	11640
1700-1730	Oromo	11640 Su
1700-1730	Somali	9485 11885
1730-1745	Somali	11885
1830-1900	Malayalam	11600 Fr
1835-1850	French	9500 Tu/We
1835-1905	French	9500 Th-Mo

SOMALIA Updating my previous item about a possible new Somali station, I can now report that they are planning to start regular transmissions on Dec 1 or 2. They have an antenna for operating on a freq around 7130, 9600 or 11745 kcs ± 50 kHz. More precise freq info I have includes 7120, 7130 and 9640.

It is rather difficult to get the information because it seemingly is a clandestine station and they do not want to give any details in advance. I do not have the name of the station, but an ex-employee of the former government broadcaster *Radio Mogadishu* is involved in this. Their amplifier can put out 1.5 kW, and advance test transmissions are possible. Maybe they are operating from a neighboring country rather than from inside Somalia. (29-Nov/KuhlGER/NU/BC-DX/Bueschel-GER)

SRI LANKA B99 Iranawila schedule

7175	0000-0100	Kazakh (RL)
9620	1300-1400	Uzbek (RL)
9645	1400-1800	English (VOA)
9720	1230-1300	Vietnamese (VOA)
9720	1330-1500	Khmer (VOA)
9750	0030-0100	Hindi (VOA)
9750	0100-0130	Urdu (VOA)
9750	0130-0200	Pashto (VOA)
9750	0200-0230	Dari (VOA)
9780	1500-1600	Vietnamese (VOA)
9890	1230-1330	Vietnamese (VOA)
11775	0100-0200	Kirghiz (RL)
11835	1900-2000	Azeri (RL)
11895	1600-1700	Bangla (VOA)
11960	1900-2000	Turkmen (VOA)
13735	1130-1230	Burmese (VOA)
15115	1700-1800	Uzbek (RL)
15115	1800-1900	Turkmen (RL)
15150	0200-0400	Uzbek (RL)
15195	1600-1700	Hindi (VOA)
15215	1400-1500	Turkmen (RL)
15340	1500-1600	English (VOA)
15410	1700-1900	Persian (VOA)
15525	1330-1430	Urdu (VOA)
17605	0300-0430	Persian (VOA)

17640 1515-1600 Dari (VOA)
 17640 1830-2030 Hindi (VOA)
 17660 1200-1300 Kazakh (RL)
 17820 1200-1300 English (VOA)
 17875 1430-1515 Pashto (VOA)
 21470 0400-0600 Arabic (VOA)
 21485 0430-0730 Persian (RL)
 21510 1700-1800 English (VOA)
 21635 1600-1700 English (VOA)
 21665 1300-1400 English (VOA)
 21840 1400-1500 English (VOA)

Addr: Iranawila Relay Station, Marconi Communication System Inc., Sri Lanka office, P.O. Box 14, Negombo, Sri Lanka. (18-Dec/Cornachioni-ARG/Cnexion Dig/BC-DX/Bueschel-GER)

SUDAN 6965 has been noted here with good reception at 1430-1610v; no religious program has been heard but mainly talk in Arabic on neighboring countries—Somalia, Eritrea, Ethiopia and Uganda and Arabic songs of European Style went off Dec 10 at 1600 and on Dec 11 at 1611 after News and ID as *Ida...Sudani* (22-Dec/Vaghjee-MAU/World of Radio/Hauser-OK)

Mahendra was kind enough to send along a RA file of this one. He's right, it is an anti-Sudanese clandestine. It's *Voice of Freedom and Renewal*, which is reportedly based in Eritrea. Heard in Arabic with military action reports and news headlines. Sudanese government referred to a 'terrorist regime' and IDs as *Sowt al-hurriyah wa al-tajdid*. Did hear one new slogan after an ID, *Sowt al-Sudan al-jadid*, Voice of the new Sudan. The backer of this station recently reported that they were operating a bit "below" their announced frequency of 7000 kHz. This one has been heard as far as East Coast North America, so check out 6965 at 0400. (Johnson/Cumbre DX Special)

SWITZERLAND *Swiss Radio International* using DTK Wertachtal (not Jülich as previous) for 6165 from 1830-2030. (SRI + Ludwig-GER)

TAJIKISTAN 7520 1730-1800 Thanks to a tip of Noel Green in Blackpool-UK, I heard today the "title new" *Radio Antena [Inter?]Nacionale Dushanbe-TJK* from 1730 to at least 1800 UTC. Language is definitely Persian, and freq announcement, transmitter came on air approx. 1722, and then the usual CIS transmitter 800 Hz tone opening procedure til 1729.

On the sound file the ID sounded like "...Ye Radio Ante National, Dushanbe" just before went off at 1758, also telephone number an e-mail addr given. (25-Nov/Vaghjee-MAU/BC-DX/Bueschel-GER)

UNITED ARAB EMIRATES Final operational sked for *UAE Radio Abu Dhabi*, Oct 31 to Mar 26, all programs in Arabic:
 0200-0400 6180 11770 21630 21735
 0400-0600 11945 21630 21735

0600-0700 15310 21630 21735
 0700-0900 15310 21630 21735
 0900-1000 15310 17760 21630 21735
 1000-1300 15255 15310 17760 21735
 1300-1600 9605 15255 15315
 1600-1800 9605 13755 15255
 1800-2000 9605 11710 13755
 2000-2200 9605 11710 17760
 (15-Dec/EDXP/Padula-AUS/BC-DX/Bueschel-GER)

UAE Radio Dubai appears to have diminished English times, especially news to only a few minutes. The 1330 broadcast on 13675 Wed Dec 8 ended the news already at 1334 for feature *The Arabs in History* until back into Arabic at 1347; also on// 21605 (Hauser-OK)

UNITED STATES OF AMERICA WYFR - Family Radio Some broadcasts are relayed from the facilities of Radio Taipei International in Taiwan and from Skelton, United Kingdom -(uk).

0000-0100 Portuguese 9890 11720 11885
 0000-0100 English 13695
 0000-0100 Hindi 15165-Taiwan
 0000-0100 French 15400
 0000-0100 Spanish 5985 9705 11895 15170
 15215 17845
 0100-0200 Spanish 5985 9605 9705 9985
 11895 15215
 0100-0200 English 15165-Taiwan
 0100-0200 Portuguese 11885
 0100-0500 English 6065 9505
 0200-0300 Spanish 5985 9705 9985 11895
 0300-0400 German 9985
 0300-0400 Russian 7355
 0300-0500 Spanish 5985 9705 11895
 0400-0500 English 9985
 0400-0500 German 5850 11550
 0400-0500 Russian 9355
 0400-0500 Portuguese 11580
 0500-0600 Arabic 9985 11580
 0500-0600 English 9355 11550
 0500-0600 Spanish 9705 11855
 0500-0600 German 5850 7355
 0500-0700 English 5985
 0600-0700 English 7355
 0600-0700 French 5850 9985 11580
 0600-0700 Italian 7520 11580
 0700-0800 English 7355 7520 9985
 0700-0800 Italian 5850
 0800-0900 Portuguese 6175 9605
 0800-1000 Spanish 6105 9550
 0900-1000 Portuguese 6175 9575 9605 9680
 1000-1100 Spanish 6085 6105 9555 9575
 1000-1100 English 5950
 1000-1100 French 9680 11740
 1100-1200 English 5850 7355 11830
 1100-1200 Spanish 6085 9575 9605 11725
 11740
 1100-1300 French 13695
 1102-1200 Mandarin 6300-Taiwan 9280-Taiwan

1200-1300	English	11740 11830 11970 13695	0300-0700	Mandarin	15260 15665 17495 17525 17590 17615
1200-1300	Spanish	6085 9575 9605 11725 11740	0600-0700	Tibetan	17515 17540 17720
1200-1300	Mandarin	6300-Taiwan 9280- Taiwan	1100-1200	Lao	9355 9860 13750 13790 15695
1300-1400	English	11740 11830 11970 13695	1100-1300	Tibetan	7470 9365 11540
1300-1400	Spanish	6085 11725 15130 15335	1200-1300	Cambodian	9355 9930 11575 13750 13790 15695
1300-1500	Mandarin	6300- Taiwan 9280- Taiwan	1300-1400	Tibetan	7470 9365 11540 15385
1302-1502	English	11550-Taiwan	1400-1500	Cantonese	9445 9920 11760 15260
1400-1500	English	11740 11830 17760	1400-1500	Vietnamese	9365 9455 9930 13685 15470 15660
1400-1500	Spanish	15130	1500-1600	Burmese	9360 9400 11540 15215
1500-1600	English	11830 17760	1500-1600	Mandarin	7540 9910 11765 11945 13735
1500-1602	Mandarin	6300-Taiwan 9280- Taiwan	1500-1600	Tibetan	7470 7495 9920
1502-1602	Hindi	11550-Taiwan	1530-1630	Korean	5855 7475 9445
1505-1705	Russian	9955-Taiwan	1600-1630	Uyгур	7515 7530
1600-1700	Arabic	21745	1600-1630	Mandarin	7540 9910 11850 11945 13625 13735
1600-1700	English	11830 15215 15695 17510 17760 21525	1630-1700	Mandarin	7540 9455 9910 11850 11945 13625 13735
1700-1800	Arabic	21525	1700-1800	Mandarin	7540 9455 9910 11850 11945 13690 13735
1700-1800	English	15695 17510	1800-1900	Mandarin	7455 7540 9355 11790 13690 13735 13820
1700-1800	German	21745	1900-2000	Mandarin	7455 7540 9355 9775 9875 11740 11790 13690
1700-1800	Russian	17760 21725	2000-2100	Mandarin	7455 9455 9550 9775 9875 9885 11740
1800-1900	Arabic	13720-uk	2100-2130	Cantonese	9570 11675 11740
1800-1900	English	15695	2100-2200	Mandarin	7540 9550 9775 9845
1800-1900	French	17760 21525 21725	2130-2200	Cantonese	9570 11675 11740 12065
1800-1900	Italian	15565	2200-2300	Cantonese	9570 9845 11675 11740
1900-2000	English	5760	2200-2300	Korean	7460 9455 11905
1900-2000	German	15565 17510	2230-2330	Cambodian	7520 7530 9930
1900-2000	Portuguese	21525	2300-2359	Mandarin	7540 9905 13640 13800 17590
2000-2100	English	5760 7355 15565 21525	2300-2359	Tibetan	7415 7470 7550 9875
2000-2100	French	5810	2330-2359	Vietnamese	7515 9390 9930 11580 13665 13720
2100-2200	English	5760 7355 15565 21525			
2100-2200	Italian	11665			
2100-2359	Mandarin	6300-Taiwan 9280- Taiwan			
2200-2300	English	11580 15565 21525			
2200-2300	Portuguese	15130			
2200-2300	Spanish	5985 7355 11855			
2200-2359	English	11740			
2300-2359	French	6085 15400			
2300-2359	Portuguese	11885			
2300-2359	Spanish	5985 11855 15170 15215 17845			

(BBCM)

Radio Free Asia uses International Broadcasting Bureau (IBB) transmitters in Holzkirchen (Germany) and Saipan/Tinian (Mariana Islands); and relays in Almaty (Kazakstan), Dushanbe (Tajikistan), Hawaii (KWHR), Palau (KHBN), Ulaanbaatar (Mongolia) and Yerevan (Armenia)

0000-0030	Vietnamese	7515 9390 9930 11580 13665 13720
0000-0100	Lao	7550 9395 13830 15205
0030-0130	Burmese	11535 11570 13710 15155
0100-0130	Uyгур	7485 9365 15405 17590
0100-0300	Tibetan	7560 9570 15225 15695 17730

(BBCM)

VATICAN CITY Vatican Radio

0030-0100	Portuguese	7305 9605
0040-0100	Hindi	7335 9650 12055
0100-0120	Tamil	7335 9650 12055
0100-0230	Spanish	7305 9605 11910
0120-0140	Malayalam	7335 9650 12055
0140-0200	English	7335 9650 12055
0230-0250	French	7305 9605
0240-0310	French	9660
0250-0315	English	7305 9605
0310-0330	Armenian	7345 9645
0310-0340	English	9660
0315-0400	Spanish	7305 9605
0330-0345	Albanian	4005
0330-0400	Russian	6185 7345 9645
0340-0405	Swahili	9660 11625
0345-0400	Slovene	4005
0400-0415	Croatian	4005

0400-0420	Ukrainian	6185 7345	1300-1400	Italian	5883v 9645 11740
0405-0430	Amharic	9660 11625			15595 21850
0415-0430	Czech	4005 5883v	1315-1345	Japanese	5940 11625 17515
0420-0440	Belarusian	6185 7345	1330-1400	Russian	15595
0430-0500	French	9660 11625	1345-1405	English	15500 17515
0430-0535	Slovak	4005 5883v	1400-1415	Spanish	9645 11740
0440-0500	Lithuanian	6185 7345	1405-1450	Vietnamese	13765 15500 17515
0445-0500	Hungarian	4005 5883v	1415-1430	Portuguese	9645 11740
0500-0520	Polish	4005 5883v 7250	1430-1500	Italian	9645 11740
0500-0520	Latvian	6185 7345	1450-1510	Hindi	9865 13765 15500
0500-0530	Arabic	9645 11715	1500-1515	German	5883 7250 9645
0500-0530	English	9660 11625 15570	1510-1530	Tamil	9865 13765 15500
0520-0540	Romanian	6185 7345	1515-1530	Polish	5883 7250 9645
0520-0540	German	4005 5883v 7250	1530-1550	Malayalam	9865 13765 15500
0530-0600	Portuguese	11625 13765 15570	1530-1600	Italian	5883 7250 9645 Fr
0540-0600	Bulgarian	6185 7345	1530-1600	Multilingual	5883 7250 (Music) 9645 Sa-Th
0540-0600	French	4005 5883v 7250			
0600-0605	Swedish	7345 9645	1550-1610	English	9865 13765 15500 Su- Fr
0600-0620	English	4005 5883v 7250			
0600-0630	French	11625 13765 15570	1550-1630	English	9865 13765 15500 Sa
0605-0610	Danish	7345 9645	1600-1630	Latin	5883v 7250 9645
0610-0615	Finnish	7345 9645	1610-1630	Swahili	15570 17515 Su-Fr
0615-0620	Estonian	7345 9645	1620-1635	Somali	15570 17515 Sa
0620-0630	Italian	4005 5883v 6185 7250	1630-1700	Arabic	11625 15595
0630-0700	English	11625 13765 15570	1630-1700	Italian	5883v 7250 9645
0630-0700	Latin	4005 5883v 6185 7250 9645 11740 15595	1635-1700	Amharic	15570 17515
			1650-1710	Armenian	11715 15185 17630
0700-0715	Italian	4005 5883 6185 7250 9645 11740 15595 Mo- Fr	1700-1715	French	4005 5883v 7250 9645 15595
0710-0745	Romanian	7250 9645 Su	1700-1730	French	15570 17515
0715-0730	French	4005 5883 6185 7250 9645 11740 15595 Mo- Fr	1710-1740	Russian	6205 9585 11715 15185
			1715-1730	English	4005 5883v 7250 9645 15595
0715-0845	Ukrainian	9770 11740 Su	1730-1745	Albanian	4005 5883v 7250
0730-0745	English	4005 5883 6185 7250 9645 11740 15595 Mo- Fr	1730-1800	English	13765 15570 17515
			1740-1800	Ukrainian	7365 9585
0745-0800	Arabic	5883v 7250 9645 15595 Mo-Fr	1745-1800	Slovene	4005 5883v 7250
			1800-1815	Croatian	4005 5883v 7250
			1800-1820	Belarusian	7365 9585
0830-0930	Italian	7250 Su	1800-1900	Portuguese	13765 15570 17515
0930-1000	Russian	11740 15595 17515 Su	1815-1830	Hungarian	4005 5883v 7250
1000-1030	Italian	5883v We	1820-1840	Lithuanian	7365 9585
1000-1130	Portuguese	21850 Mo-Fr	1830-1845	Czech	4005 5883v 7250
1100-1130	Latin	5883v 9645 11740 15595 21850 Su	1840-1900	Latvian	7365 9585
			1845-1900	Slovak	4005 5883v 7250
1100-1140	Italian	5883 9645 11740 15595 21850 Mo-Fr	1900-1920	Romanian	6185 7365
			1900-1920	Polish	4005 5883v 7250
1130-1150	French	11740 Sa	1900-1940	Spanish	9660 11625 Sa
1130-1200	Italian	5883v Su	1920-1940	Bulgarian	6185 7365
1130-1200	English	15595 17515 Fr	1920-1940	German	4005 5883v 7250
1130-1300	Spanish	21850 Mo-Fr	1940-1950	Swedish	7250 9645
1140-1220	French	5883 9645 11740 15595 21850 Mo-Fr	1940-2000	Latin	4005 5883v 6185 9645 9660 11625 13765 7250 9645
1150-1300	Spanish	11740 Sa	1950-2000	Danish	7250 9645
1220-1300	English	5883 9645 11740 15595 21850 Mo-Fr	2000-2010	Finnish	7250 9645
			2000-2020	Italian	4005 5883v
1230-1315	Mandarin	6020 15500 17515 21620 Sa	2000-2020	Albanian	7250 9645
			2000-2030	English	9660 11625 13765
1230-1315	Mandarin	6020 15500 17515 21620 Su-Fr	2010-2020	Estonian	7250 9645
			2020-2030	Esperanto	4005 5883v Su

2020-2100	Esperanto	7250 9645 We/Th
2030-2050	French	4005 5883v 7250
2030-2100	French	9660 11625 13765
2050-2110	English	4005 5883v 7250
2100-2120	Russian	7305 9585
2110-2130	Spanish	4005 5883v 7250
2130-2145	Portuguese	4005 5883v 7250
2130-2200	Japanese	7310 9585 11830
2145-2200	Arabic	4005 5883v 7250
2200-2245	Mandarin	6205 7305 9600
2200-2310	Italian	4005 5883v
2245-2315	English	7305 9600 11830
2315-2359	Vietnamese	7305 9600

(BBCM)

Vietnam Voice of Vietnam Certain frequencies are relayed from transmitters in Russia (-r).

0000-0030	Cambodian	7285
0000-0100	Vietnamese	7145 9730
0030-0100	Lao	7285
0100-0130	English	5940-r
0130-0230	Vietnamese	5940-r
0230-0300	English	5940-r
0300-0330	Spanish	7260 9830-r
0330-0400	English	7260-r
0400-0500	Vietnamese	13665-r
0830-0930	Mandarin	9840 12020
0930-1000	Indonesian	9840 12020
1000-1030	English	9840 12020
1030-1100	Indonesian	9840 12020
1100-1130	English	7285
1100-1130	Spanish	7145 9730
1130-1200	Russian	7145 9730
1130-1200	Thai	7285
1200-1230	Cambodian	7285
1200-1230	Japanese	9840 12020
1230-1300	English	9840 12020
1230-1300	Lao	7285
1300-1330	Russian	7285
1300-1330	French	7145 9730
1330-1400	Cambodian	7285
1330-1400	English	7145 9730
1400-1430	Japanese	9840 12020
1400-1430	Lao	7285
1430-1500	Cantonese	7285
1430-1500	Indonesian	9840 12020
1500-1530	Mandarin	7285
1500-1530	Thai	9840 12020
1530-1600	Cantonese	9840 12020
1630-1700	Russian	7145 9730
1700-1730	Russian	9840 12020
1700-1800	Vietnamese	7145 9730
1800-1830	English	7145 7440 9730
1830-1900	French	9730 12070-r
1830-1930	Vietnamese	7440-r
1900-1930	English	7145 9730
1930-2000	French	7145 7440 9730
2000-2030	Russian	7390
2000-2030	Spanish	7145 9730
2030-2100	English	7145 9730
2030-2130	Vietnamese	7390

2100-2130	French	7145 9730
2130-2200	Japanese	9840 12020
2200-2230	Mandarin	9840 12020
2230-2300	Cantonese	9840 12020
2300-2330	Thai	9840 12020
2330-2359	English	7145 12020-v

(BBCM)

ALL OVER THE DAMNED PLACE Consolidated *Adventist World Radio (AWR)* sked, including broadcasts from transmitters at Agat-a (Guam), Jülich-j (Germany), Forli-f (Italy), Rimavska Sobota-r (Slovakia), Meyerton-m (RSA), Talatay/Volondry-v (Madagascar) and Tbilisi-tb (Georgia) Broadcasts from different transmitter sites are not usually in parallel

0000-0030	Chin	17835a
0000-0100	Vietnamese	11775a
0000-0200	Mandarin	17880a
0030-0100	Karen	17835a
0200-0400	Mandarin	21770a Sa/Su
0230-0300	French	3215v
0300-0330	English	9835m
0300-0330	Malagasy	3215v
0300-0330	Urdu	9465r
0330-0400	Somali	12080m
0330-0400	Persian	9465r
0400-0430	Swahili	12080m
0400-0500	Bulgarian	5840j
0430-0500	Afar	12080m
0500-0530	English	5960m 6010m
0500-0700	Arabic	11610r
0630-0700	French	7260f
0700-0800	Arabic	7260f 12080j
0800-0900	Arabic	12080j
0800-0900	Italian	7230j/f
0900-0930	French	12080j
0900-0930	German	7230f
0930-1000	English	7230f
1000-1030	Cantonese	11980a
1000-1030	Russian	11795a
1000-1100	Arabic	17610f
1000-1100	Mandarin	13720a
1030-1100	English	11660a
1030-1100	Shanghai dialect	11980amo-Fr
1030-1100	Uyghur	11980a Sa/Su
1030-1100	English	11660a 11795a
1030-1200	Hakka	11980a
1100-1130	Indonesian	13720a
1100-1130	Minnan	11980a
1100-1200	Mandarin	11660a 15725a
1100-1200	Italian	7230f
1130-1200	Javanese	13720a
1200-1200	Korean	9730a
1200-1230	German	7230f
1200-1230	Tagalog	15225a
1200-1300	Mandarin	15725a
1200-1300	Vietnamese	11920a
1230-1300	English	7230f 15225a
1300-1330	Bengali	15225a

1300-1330	French	11700f
1300-1330	Japanese	11755a
1300-1400	Mandarin	11980a 15725a
1330-1400	English	11755a 15225a
1330-1430	Arabic	11700f
1400-1430	German	7230r
1400-1430	Sinhala	9385a
1400-1500	Burmese	11625a
1400-1500	Mandarin	15225a 15725a
1430-1500	English	9385a
1500-1530	Nepali	11625a
1500-1530	Malayalam	15195a
1500-1530	Tamil	15225a
1500-1530	Telugu	9370a
1530-1600	Hindi	11625a
1530-1600	Kannada	15225a
1530-1600	Marathi	9370a
1530-1600	Punjabi	15195a
1530-1600	French	3215v
1600-1630	Malagasy	3215v
1600-1630	Urdu	9420r
1600-1700	English	9355a
1600-1700	Vietnamese	11625a
1600-1800	Arabic	9385a 11550a
1630-1700	Persian	9420r
1630-1700	Somali	15620m
1700-1730	Persian	9455a
1700-1730	Swahili	12130m
1700-1730	Tagalog	7560a
1700-1730	German	7235r
1700-1800	Bulgarian	5890j
1730-1800	Tagalog	11560a
1730-1800	English	7455a 7560a 12130m
1800-1830	English	5960m 6100m
1800-1900	Romanian	5840j
1800-1900	Armenian	9475j Su/Tu/Th
1800-1900	Georgian	0810th Mo/Wc/Fr
1800-2000	Arabic	9445r
1930-2000	Hausa	9745m
2000-2030	French	9640j 9745m
2000-2100	Korean	9370a 9515a
2030-2100	English	9640j 9745m
2100-2130	Japanese	9495a 11985a
2100-2200	Mandarin	11720a 11970a
2100-2300	Arabic	5890j
2130-2200	Dyula	9640j
2130-2200	English	9495a 11985a
2200-2230	Indonesian	15225a
2200-2300	Mandarin	11970a 15610a
2200-2350	Vietnamese	11775a
2230-2300	Javanese	15225a
2300-2330	Cantonese	17835a
2300-2330	French	5890j
2300-2350	Mandarin	17880a
2330-2350	Shanghai dial.	17835a mo-Fr
2330-2350	Uyghur	17835a Sa/Su

UNIDENTIFIED 3285.8 UnID 2058 This one I reported last week is still here. On Nov. 30, heard with about 15 seconds of fast native drums just before

2100, then man in English. Runs past 2300, but the signal is very weak and goes downhill rapidly after 2200 or so. Mahendra Vaghjee suggests that it may be Namibia, which apparently is having transmitter problems. (30-Nov/Hill-MA) 3285.7 UnID 2221 This one was missing for a week or two but has returned just slightly lower in freq (previously 3285.8). Noted in passing with pop vocal; still far too weak to spend serious time on. Namibia has been suggested as a possibility, but there were signals on both 3270 and 3290 at this time. (21-Dec/Hill-MA)

4000.2 UnID 2108 Woman in Farsi, then into Middle Eastern plucked-string music at 2113, soon joined by M vocalist. Talk by man at 2120. Weak and choppy, with splatter from DW on low side. NOT an Indo! 4-Dec/Hill-MA)

4875 *Radio Khara* located somewhere in the Caucasus, presumed in Georgia is back on the air with its regular schedule. 1700-1730 Mons and Thurs, repeat 0500-0530 Tues & Fris. In unid lang, presumed Adzarian or Osetian, but at 10 min with short rx in Azeri. Observed Nov 22-30. (Paniview-BUL/BC-DX/Bueschel-GER) 4855 *Radio Khara?* 1506 with news in Russian, abrupt stop on 1507 (5-Dec/Liangas-GRC)

4910 UnID 2203 Various kinds of Middle Eastern vocals and woman declaiming in Farsi, starting many sentences with what sounded like "Ha-YOM ba-RO-ye..." Cut off at 2227, back on when checked 0032 and ran past 0130, but gone when rechecked 0156. Again that afternoon at 2053 and still there past 0300. Fair level at times, peaking around 0200, but hard to copy through constant QRN crashes. Heard Nov. 28, 29, 30, but not since. (30-Nov/Hill-MA)

DEAR PAISAN This from Glenn Hauser's *World of Radio*:

"THIS DAY'S ITALIAN—AMERICAN LESSON. This will come as a great surprise to those who have never bothered to learn the first thing about Italian phonetics, which is quite regular and logical once you know the system, unlike English. With the exception of stress not always being as obvious as it is in Spanish, you can pronounce anything in real Italian even without actually speaking or understanding the language. Anglicization of names is inevitable, but I believe that two well-known American SW/DX persons do not object to their Italian names being pronounced correctly although they do not make an issue of it. The trigraph -gli- has no G sound in it, hard or soft! But an LY sound, close to the Castilian LL. So there really should be no hard G pronounced in Quaglieri or Figliozzi. Try to say: kwa-LYEHR-ee, fee-LYOH-tsee. Repeat and repeat. (Guglielmo Glenn Hauser)"

[Ha ha ha! You are wrong, Glenn. Anyone with a semibrain could tell you in a sesquisecond that "Quaglieri" is actually pronounced "EE-yan Mick-FAR-land." Repeat and rinse.]



QSL Report

Sam Barto • 47 Prospect Place • Bristol, CT 06010



HCJB

**SIRVIENDO A DIOS
AL ECUADOR
Y AL MUNDO**

LA VOZ de los ANDES

Casilla 691

Quito Ecuador

Your Editor hopes that everyone had a very joyous Holiday Season and your stocking was packed with those elusive QSLs...Sam.

ALGERIA: Radiodiffusion Television Algerienne 15160 f/d cd. in 117 ds. w/ report forms and schedule. I heard this station while I was in Prague. (Glotzbach-NM). f/d "Nomad" cd. in 81 ds. w/ schedule and report forms. (Borokowski-NY).

ANTARCTICA: LRA36 Radio Nacional Arcangel San Gabriel 15476 f/d cd. in 84 ds. for an EG/SP rpt. and \$2.00. v/s Fernando R. Garcia Pinasco. (Raymond-NH).

ARGENTINA: Radiodifusion Argentina Al Exterior 11710 personal ltr. in EG in 170 ds. w/ schedule and report forms. I sent them an IRC along w/

VERIFICATION SIGNERS:

Star Club Radio

11470 via **SWRS** Addr:

use the Wuppertal address. **Con Frecuen-**

cia Radio 7306 via **Radio**

Europe Ruben G. Margenet, QSL Manager. Addr: Casilla Correo 950, 2000 Rosario, Argentina.

Radio Bermuda Dreieck 3985 and 7120 Addr:

use the Wuppertal address. **KUOI Radio** 11470

Addr: Student Union Building, Moscow, Idaho

83844-4272. **WPOE Radio** 11470 Addr: Box 11522

Huntsville, AL 35814. **WLIQ Radio** 11470 via

SWRS Addr: Box 109, Blue Ridge Summit, PA

17214....via PLAY DX,....Sam.

RADIO HORIZONTE
770 KHZ A.M.

II ANIVERSARIO
"EXPRESION POPULAR"
31 OCT. 1992 - 1994.

XII ANIVERSARIO
"TRINOS DE LA VOZ PERUANA"
31 OCT. 1982 - 1994

31 - 10 - 1994

CHICLAYO - PERU

a photo of my residence in Santa Fe, NM. (Glotz-

ARMENIA: Voice of America 12025 via **Kamo** bach).

* f/d "Canyonland National Park" cd. in 176 ds. (Davis-NM)...Who would of thought 10 years ago that VOA would be relayed by former Soviet sites?...Sam.

Working Till Jesus Comes

The Romans Map To Heaven

Romans 3:23- "For all have sinned, and come short of the glory of God;"

Romans 6:23- "For the wages of sin is death; but the gift of God is eternal life through Jesus Christ our Lord."

Romans 8:9- "But God commendeth his love toward us, in that, while we were yet sinners, Christ died for us."

Romans 10:9,10- "That if thou shalt confess with thy mouth the Lord Jesus, and shalt believe in thine heart that God hath raised him from the dead, thou shalt be saved. For with the heart man believeth unto righteousness, and with the mouth confession is made unto salvation."

Romans 10:13- "For whosoever shall call upon the name of the Lord shall be saved."

WTJC



via Clearcast

WORLDWIDE

FBN

A Beacon

of Hope To a

Lost and

Dying World

Thanks for your reception report which was found to be correct.

DATE: 10/14/99

TIME: 1530-1600 UTC

STATION: WTJC

FREQUENCY: 9370

K2S

SIGNED: A. Rebar

CAPITAL RADIO

CAPITAL RADIO TRANSMITTERS PROPRIETARY LTD

INCORPORATED IN THE REPUBLIC OF TANZANIA AT 23 ALEXANDER ROAD, UMTATA, TANZANIA

PLEASE REPLY TO

P.O. BOX 806
UMTATA
TANZANIA

DATE 15.12.1985

Dear Mr Mc Lennock Jr

QSL VERIFICATION:-

We wish to thank you for your report dated 15 Jan 1985 and are glad to verify your reception of our programmes on the following frequency:-
KHz on the Medium Wave Band/ 3730 KHz in the 75 Metre Band.

We hope you will continue to receive and enjoy our programmes and we appreciate your comments.

station sticker and schedule. (Humenyk-ONT). 8400 f/d "St. Nedelya Square" cd. in 50 ds. w/ sticker and schedule for 1 IRC. (Brouillette-IL).
CHILE: Voz Cristiana 11690 f/d cd. w/ schedule and a questionnaire in SP in 261 ds. (Glottzbach-NM).

VERIFICATION SIGNERS: Radio

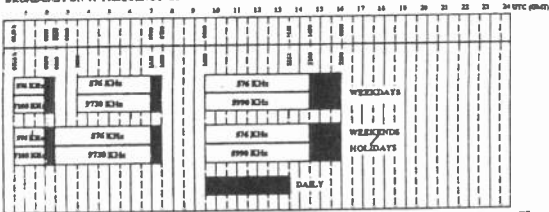
Metropolis 11470 via **SWRS** Box 220 342, D-42373 Wuppertal, Germany. **Radio Borderhunter** 3919 and 7480. Addr: Box 44, B-2387 Baarle Hertzog, Belgium. **Radio Zamba** 6890 via **Radio Cochiquaz** Luciano Gonzales. Addr Casilla 159, Santiago 14, Chile. **Crazy Wave Radio** 21450 Addr: Box 5, NL-8100 AA Raalte, Netherlands. **Partial India Radio** 6955

Box 146, Stoneham, MA 02180 (Harold Krishna is the v/s but I don't believe you'll get anywhere by using it). **Play DX Music Radio** 21450 via **SWRS** Dario Monferini. Addr: Via Davanzati 8, 20158 Milano, Italy **Radio Natalie** 11470 via **SWRS** Valentin Jersov. Addr: Box 3260, EE-10505, Tallinn, Estonia. **Radio Northsee International** 6212 Mike Anderson. Addr: Ostra Porten 29, SE-44254, Ytterby, Sweden.....

Myanma Television and Radio Department, Pyay Road, Yangon, Union of Myanmar

RADIO MYANMAR VERIFICATION CARD

DEAR MR. STEVE G. MARTIN
THIS IS TO VERIFY YOUR REPORT DATED 7.4.1984... ON OUR... ENGLISH... LANGUAGE BROADCAST ON A FREQUENCY OF... 5990... KHz. THANKS FOR TUNING-IN.



○ MYANMAR LANGUAGE
● ENGLISH LANGUAGE

● NATIONAL LANGUAGE
● SET 1 MYANMAR STANDARD TIME

KO KO HTWAT
DIRECTOR (RAD):
M.T.R.D.

မြန်မာ့အသံနှင့် ရုပ်မြင်သံကြား

AUSTRIA: Radio Austria International 9870 via **Moosbrunn** f/d "100th Anniversary of the Death of Johann Strauss" cd. in 19 ds. (Humenyk-ONT).

BANGLADESH: Bangladesh Betar External Service 15520 f/d cd. in 109 ds. w/ personal ltr. and schedule. I heard this station while in Berlin, Germany. (Glottzbach-NM).

BRASIL: Radio Anhanquera 4915 p/d ltr. in 36 wks. for a PT rpt., tape and \$1.00. (Klinck-NY). **Radio Inconfidencia** 6010 p/d ltr. w/ prepared cd, in 6 wks. for a PT rpt. Also rcvd. tourist booklets and postcards (Klinck-NY). **Radio Gaucha** 11915 f/d folder cd. in 3 wks. for a PT rpt. and ms. (Myers).

BULGARIA: Radio Bulgaria 15700 via **Plovdiv** f/d "Plovdiv Roman Theatre" cd. in 95 ds. w/

Mr. CARL M. LENO
Mrs. CARL M. LENO It is our pleasure to confirm your reception report
DATED 12-9-85 ON 9.475 MHz
17.54 U.T.C. WUTC is dedicated to the Glory of God. Transmitter(s) # 1
1a/mw 50 KW WDSSE.
Antenna(s) 900' 70' Rhombic □ TAGI
Your Reception Report is of Great Value To Us. We Look Forward Receiving Additional Reports and Your Continued Support.
73s
Roseanne Prantz Program Director David L. Prantz Chief Engineer
WITH GLORY TO GOD

AFTRR 3/27/86
OUR NEW
FR&Q
9.370 MHz
FRI, SAT, SUN

COSTA RICA: Adventist

World Radio 9725 3 different QSLs in 4 mo. w/ personal ltr. v/s Shella B. Oliver, Secretary who says that AWR is not leaving Costa Rica but it will now be a production center for programs on satellite. (Field-MI).



Radio Jordan
P.O. Box: 909 Amman



Kevin K Trummel
Box 5605 APO NY
NY 09059 U.S.A.

Date 2 February 1986

We have the pleasure to confirm your reception report dated 28 Sep 1985 on the frequency of 19120 KHz, at 0242-0814 GMT. The programme details mentioned in your report have been checked and found correct. Thank you for listening to our transmission, and best regards from Radio Jordan in Amman.



Faithfully,
[Signature]
Director

CZECH REPUBLIC: Radio Prague
15545 "Philips Antique Radio" cd. in 17 ds. for 2 IRCs. Also rcvd. schedule and stickers. (Brouillette)

ECUADOR: Radio El Buen Pastor
4815 n/d ltr. w/ station pennant, sticker in 4 mo. for a SP rpt., \$1.00 and ms. v/s Juana Guaman. (Myers-VA). **HCJB** f/d "D Series of 1999" cd. w/ photo of Jorge Zambrano. Jorge and his wife were recent guests at our home in Hillsdale, MI. (Field-MI).

EGYPT: Radio Cairo 9745 f/d cd. w/ f/up rpt. (Glotzbach-NM).

ENGLAND: Radio Canada International 15150 via **Skelton** f/d "1985 International Youth Year" cd. in 17 ds. for 1 IRC. Also rcvd. station pennant and sticker. (Brouillette-IL).

GABON: Radio Japan 15355 via **Moyabi** f/d "Letaka" cd. in 41 ds. w/ schedule and report forms. v/s M. Yoshioka. (Humenyk-ONT).

GERMANY: Universal Life w/ a new name on the QSL as **Radio Santeo** rcvd. 7 * QSLs for receptions on 7

VERIFICATION SIGNERS: Radio

Republik Indonesia 4000 via **Kendari** Mr. Muniruddin Amin.

Radio Republik Indonesia 3264.6 via **Gorontalo** Drs. Mvh. Asaad, Chief of radio.

Addr: Jalan Janderal Sudirman 30, Gorontalo 96128.

Voice of America 17640 via **Iranawila** J. Watson. Addr:

Marconi Communications System Inc., P.O. Box 14, Negombo, Sri Lanka. **Radio Thailand** 9535 Amporn Samosorn.

Addr: World Service, Public Relations Department, Royal Thai Government House, 236 Vibhavadi Rangsit Road, Din Daeng, Bangkok 10320, Thailand. **HCJB** 11760 via **Skelton** v/s Ludmila, Secretary for the Russian Service. Addr: Mission Lebensquelle, PF-1203, DE-32678 Barntrup, Germany. **Canadian Forces Network** 15430 via **Skelton** Bill Westenhaven, Radio Canada International, Box 6000, Montreal H3C 3A8, Canada.

.....via PLAY DX.....Sam.

RADIO VANUATU

Q. S. L.

FORMERLY RADIO NEW HEBRIDES
ANCIENNEMENT RADIO NOUVELLES HEBRIDES



Head of slit Gong (Tam Tam) from Ambrym Island; used in village to village communications and in custom ceremonies.

To Tom ROBERTSON
of NEW ALBANY USA.
I AM PLEASED TO VERIFY YOUR RECEPTION OF THIS STATION
AT G.M.T. 0855 DATE 13-3-86
0915
ON 1125, 3945, 7280 KHz
Page.
FOR RADIO VANUATU
P.O. Box 49,
PORT VILA
VANUATU (NEW HEBRIDES).

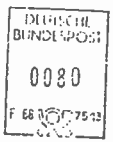
Wir bestätigen dankend Ihren Empfangsbericht
We acknowledge your reception report
vom 7.2.1986
dated 7.2.1986
Einfach abbuchen
on our broadcast
1986-2-07-86

MW	900 MHz	-	200 m	-	100 MW RB Elm
KW	6100 MHz	-	4847 m	-	30 MW SFB RB Elm
MW	85.8 MHz	-	Kan. 33	-	100 MW RB Elm
MW	89.3 MHz	-	Kan. 9	-	25 MW RB Elm
MW	96.3 MHz	-	Kan. 4	-	100 MW RB Zent
MW	92.1 MHz	-	Kan. 17	-	25 MW RB Zent
MW	96.7 MHz	-	Kan. 32	-	50 MW RB Dord
MW	89.4 MHz	-	Kan. 28	-	25 MW RB Dord
MW	101.2 MHz	-	Kan. 47	-	20 MW RB Vier
MW	100.8 MHz	-	Kan. 46	-	25 MW RB Vier

and hope that you will always have good reception
Empfang unserer Sendungen
of our programmes.



Mit freundlichen Grüßen
With best regards
RADIO BREMEN
HENRICH-HERTZ-STRASSE 13
D-2800 BREMEN 33



DRUCKSACHE
Mr.
Jerry Klink
43 Lein Road
West Seneca, NY 14224

different days in 3 wks. after a report was sent to the CT address. Also rcvd. personal ltr., literature and a station calendar. v/s Janette Wood. (Field MI). **Adventist World Radio** 9490 via **Julich** f/d cd. w/ site This was for an Arabic transmission w/ EG ID and QTH for Cyprus. It was sent to the Cyprus addr. and then forwarded by AWR to Forli, IT. (Lawrenson-RI).



DIRECTORATE GENERAL,
ALL INDIA RADIO,
A.V. BHAWAN, SANSAD MARG,
NEW DELHI-110001, INDIA.

No 3/1/99 EIM/1275 Dated. 7-9-99

Dear Sir/Madam,

We gratefully acknowledge and confirm your Reception Report.

Date 6-2-99 Frequency 4950 kHz

Time 1531 UTC Station SRINAGAR.

Yours Faithfully,

Director (Freq. Assignments)
Dir. General All India Radio
A.K. BHATTACHARJEE

O.I.G.S.

ON INDIA GOVT. SERVICE

आर्कियोलॉजिकल सर्वेय ऑफ इंडिया



MR. JEFF. MOLANDER

6808 STORIA WAY

ELK GROVE, CA. 95758

U.S.A.

GUATAMALA: Radio Buenas

Nuevas 4800 cd. w/ station history in SP in 40 ds. (Glotzbach).

GUYANE: Voice of America 3290 via **Voice of Guyane** big VOA cd. which confirmed the reception (Field-MI).

HOLLAND: Radio Nederland

13700 via **Flevo** f/d "Oat Field in the Naardereng" cd. in 6 wks. (Myers-VA).

INDIA: All India Radio

4800 via **Hyderabad** f/d "Vasana" cd. via Delhi in 3 mo. for a taped

rpt. and ms. My rpt. was sent direct to the station. (Myers-VA). f/d "DeVijol Gaurisagar" cd. in 2 mo. for a taped rpt. and ms. v/s A. K.

VERIFICATION SIGNERS: Radio Romania International

5990 Addr: 60-62 Berthelot Street, Bucharest 70747. **Radio Gardarika** 7330 Mikhail Timofeyev. Addr: Ul. Smolnova 3, 193311 Saint Petersburg, Russia..... also GRP2 Technical Department, Ul. Akademika Pavlova 13/A, Saint Petersburg 197376 c/o v/s.

China Radio - True

Light Station 9450 Richard E. Adams, Director. Addr: 21 Chang Chun Rd., 7th Floor, Taipei, Taiwan 10413 (pre earthquake). **Deutsche Welle** 11975 Horst Schotz, Transmission Management. Addr: DW DE-50588 Colonia.

GTRK Murman 5930 D. Perederi, Chairman.

Radio Khabarovsk

7210 Addr: RTV Center, Ul. Lenina 71,

Khabarovsk 680013, Russia. **Radio Maryja** 7400 via **Samara** Frater Jaciek Cydzik. **Radio Polonia** 7270 Addr: Al. Niepodleglosci 77/85, PL-00-977 Warszawa, Poland.....via PLAY DX.....Sam.



DIRECTORATE GENERAL,
ALL INDIA RADIO,
A.V. BHAWAN, SANSAD MARG,
NEW DELHI-110001, INDIA.

No 3/1/99 EIM/1275 Dated. 17-8-99

Dear Sir/Madam,

We gratefully acknowledge and confirm your Reception Report

Date 23-11-98 Frequency 4760 kHz

Time 1512 UTC Station PORT BLAIR

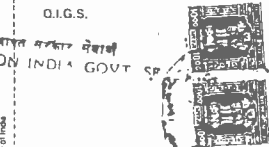
Yours Faithfully,

Director (Freq. Assignments)
Dir. General All India Radio
A.K. BHATTACHARJEE

O.I.G.S.

ON INDIA GOVT. SERVICE

आर्कियोलॉजिकल सर्वेय ऑफ इंडिया



MR. JEFF. MOLANDER

6808 STORIA WAY

ELK GROVE, CA. 95758

USA

Khabarovsk 680013, Russia. **Radio Maryja** 7400 via **Samara** Frater Jaciek Cydzik. **Radio Polonia** 7270 Addr: Al. Niepodleglosci 77/85, PL-00-977 Warszawa, Poland.....via PLAY DX.....Sam.

* Bhatnagar. My 16th Indian State QSLed. (Sgrulletta-NY). 4840 via **Mumbai** f/d "Jami Mosque" cd. via Delhi in 3 1/2 mo. for ms. My rpt. was sent direct to the site. (Myers-VA).

IRAN: Islamic Republic of Iran Broadcasting Station 15430 f/d cd. w/ magazines in 168 ds. (Glotzbach-NM).

ISRAEL: Galei Zahal 6898

f/d "Microphone Head Announcer" cd. in 24 ds. (Humenyk-ONT).

ITALY: Voice of the Mediterranean 7175 f/d cd.

from the Malta address w/ the wrong freq. Stickers were rcvd. (Field-MI).

JAPAN: Radio Japan 11705

via **Sackville** f/d cd. w/ sticker, schedule, pennant in 41 ds. for 1 IRC. (Griffin-VA). Should be under Canada.



DIRECTORATE GENERAL,
ALL INDIA RADIO,
A.V. BHAWAN, SANSAD MARG,
NEW DELHI-110001, INDIA.

No 3/1/99 EIM/1184 Dated. 1-8-99

Dear Sir/Madam,

We gratefully acknowledge and confirm your Reception Report.

Date 26-12-98 Frequency 11620 kHz

Time 22-22 UTC Station BANGALORE

Yours Faithfully,

Director (Freq. Assignments)
Dir. General All India Radio
A.K. BHATTACHARJEE

O.I.G.S.

ON INDIA GOVT. SERVICE

आर्कियोलॉजिकल सर्वेय ऑफ इंडिया



MR. JEFF. MOLANDER

6808 STORIA WAY

ELK GROVE, CA. 95758

USA



BSF

中華民國標準頻時廣播電台

Frequency: 5MHz, 15MHz

Date 16 Sept. 1993

No.: 1249

KOREA, REPUBLIC:

Radio Korea International 11715 f/d "Confucian Mass at the Chong-Myo Shrine" cd. in 61 ds. w/ schedule, nesltr. and rpt. forms. (Griffin-VA).

MALI: China Radio Inter-

Dear Mr. D'Angalo :

This is to verify that your reception report on 15 MHz from 10:55 to 11:12 GMT on 2nd Sept., 1993 corresponded with our station log of the same day. Thank you for your interest. Further reports are welcome.

national 7170 via **Bamako** f/d "Stone Forest in Yunnan" cd. in 29 ds. (Humenyk-ONT). 5990 f/d "Hall of Prayer for a Good Harvest" cd. in 29 ds. w/ schedule and postcards. (Humenyk-ONT).

MAURITANIA: Radio Mauritaine 4845 p/d cd. in 55 ds. for a FR rpt. and * \$1.00. The report was sent to B.P. 200, Nouakchott via registered mail. (Raymond-NH).

MEXICO: XERMX Radio Mexico International 9705 f/d cd. in 85 ds. for an EG rpt. and \$1.00. v/s Mario Rizo. Also rcvd. schedule, postcards, station sticker and a very nice ltr. from the v/s. (Raymond-NH).

VERIFICATION SIGNERS: Radio Aparecida 5035 and 6135 Ana Cristina Carvalho, Secretaria for the Director. Addr: Avenida Getulio Vargas 185, 12570-000, Aparecida, SP, Brasil. **Radio Inconfidencia** 6010 Eugenio Silva, Director. Addr: Av. Raja Gabaglia 1666, Bairro Luxemburgo, 30350-540 Belo Horizonte. **Radio Voz Do Coracao Inaculado** 4885 Father Pedro M. Morlando, Director. Addr: C.P. 354, CEP 75001-970 Anapolis, Goiana, Brasil. **WUNH Radio** 6955 via **WREC Relay Service** Box 28413, Providence, RI 02908. **Radio Europe** 7306 Alex Bertini. Addr: Box 12, IT-20096 Pictello, Italy. **Shortwave Relay Service** 3905 and 7590 and 11470 Box 220 343, D-42373 Wuppertal, Germany. **Europe 41** 7480 same as **SWRS** above. **Textures Radio** 11470 via **SWRS** Addr: Tybblegatan 88/A-101, SE-70219 Orebro, Sweden. **BBMS** 11470 via **SWRS**

Pam and Gary Stevens, Addr: 55d Chester rd., London N19 5DF, England.via PLAY DX...Sam.



Radio Miskit frecuencia 5770

Transmitiendo en Onda Corta en la Banda 4B m. Puerto Cabezas

17 de Agosto de 1993.



Sr. Jerry Klinck
43 Lein Road
West Seneca, NY 14224
U. S. A.

Estimado Sr. Klinck:

En primer lugar le pido disculpas por la gran demora en responder le su amable carta fechada en el mes de Febrero de 1993. Estoy seguro que siempre esperando recibir la contestación.

Su reporte de sintonía de la fecha 15 de Febrero de 1993 a las 6:14 P.M. a 6:40 P.M. hora de Nicaragua en los 5,770 KHz. coincide exactamente con nuestra transmisión de aquel entonces y realmente usted escuchó nuestra Emisora Radio Miskit que transmite desde la ciudad de Puerto Cabezas en la Región Atlántica de Nicaragua en los 5,770 KHz en onda corta banda de los 4B metros.

Le agradecemos de gran manera por su valioso informe. Esperamos que en los próximos meses cuando instalamos tres módulos nuevos a nuestro transmisor de onda corta puedan captar con más claridad y tengamos una fluida comunicación.

Continuación detalle los datos del transmisor:

Potencia : 1 Kw.
Marca : ITI Mackay de fabricación Norteamericana.
Antena : Mire Dipolo T-Box Hi-Gain Model 1903 con 40 pie de alambre instalado horizontalmente.
Indicativo : 5770.
Frecuencia : 5,770.KHz.

Por ahora estamos operando con 500 watts de potencia.

El 3 L certificado de sintonía le envié debidamente firmado y con el sello oficial.

Esperando mantener siempre este contacto me despido de usted con muestras de hermandad y de agradecimiento.

Atentamente,
Evaristo Mercado Pérez
Director Radio Miskit



NOTA: Hemos vuelto a operar desde el 4 de Noviembre de 1993.

Desde San Jose Internacional, Edificio Radio Miskit, Puerto Cabezas, Región Autónoma del Atlántico Norte.

MOLDOVA: Radio Moldova International 7500 f/d "Chufner Church" cd. (Lawrenson-RI)...You are correct. This is a relay from Romania...Sam.

Voice of Russia 7125 f/d "Peoples Friendship Fountain" cd. in 42 ds. w/ schedule. v/s Elena Osipova. (Borokowski-NY).

MOROCCO: Voice o America 15410 f/d cd. in 1 mo. (Lawrenson-RI).

NEW ZEALAND: Radio New Zealand International 17675 f/d "Native Flora" cd. in 15 ds. w/ schedule. (Humenyk). "Stamps of New Zealand" cd. in 16 ds. w/ personal note in 16 ds. This is my 2000 QSL: (Humenyk-ONT).

PHILIPPINES: Voice of America 9760 via **Poro** f/d

"Mount Rushmore National Memorial" cd. in 87 ds. w/ VOA Guide. (Humenyk). 9760 f/d cd. in 1 mo. (Lawrenson-RI).

PORTUGAL: Deutsche Welle 13720 and 13790 via **Sines** f/d "Bradenburger Gate and Potsdamer Place" cd. in 137 ds. v/s Horst Scholz, Transmission Management. (Humenyk-ONT). **Radio Diffusao Portugal** 17600 f/d "Mundo Dito Oil Painting" cd. in 39 ds. w/ personal ltr. and station schedule. (Humenyk).

RUSSIA: Voice of Vietnam 7250 cd. w/o site in 2 mo. w/ pennant & schedule. Monitoring Times lists the site as **Krasnodar**. (Field-MI).

RWANDA: Deutsche Welle 15135 via **Kigali** f/d "Transmitter Site" cd. in 124 ds. (Borokowski-NY). f/d "Brandenburg Gate" cd. in 196 ds. (Stewart MO). 15275 f/d cd. in 179 ds. for an E-mail rpt. (Neal-TX).

FEDERAL RADIO CORPORATION OF NIGERIA, KADUNA
7, Hospital Road,
P. O. Box 259 Kaduna — Nigeria

Telegram: BROADCASTS KADUNA
Reference

For 212/84 — 212788 242778
Times 21184/A 21119
Date 17/2/99

Jeff Molander
8805 Stavia Way
Elk Grove, CA 95758
USA
Dear Sir/Madam

RECEPTION REPORT:

Thank you very much for your reception Report on 4.77 MHz
date December 11, 1998

Your report correspond with our Log Book

We transmit on the following Short-wave and Medium Wave frequencies -

1	English Service	4 77mhz	66m	sw
		9 57mhz	31m	sw
		11 07kHZ	27m	mw
2	Hausa Service (Local Service)	6 09mhz	49m	sw
		594kHZ	506m	mw

Thank you for your patronage

Yours faithfully,

R.B. Jaffo
Engr R B Jaffo
Asst. Director Tech. Service
Studios, Links & O.B

Banda Aceh Parmono Prawira, Technical Director....
.....via PLAY DX.....Sam.

SAUDI ARABIA: Broadcasting Service of the Kingdom of Saudi Arabia 11965 and 11780 f/d cds. in 1 mo. v/s Sulaiman Samnan. (Lawrenson-RI).

SEYCHELLES: IBRA Radio 15445 via **Far East Broadcasting Company** f/d cd.

* in 3 mo. New IBRA addr:
Box 4033, SE-141 04,
Huddinge, Sweden. (Field).

SINGAPORE: Radio Nederlands
6120 via **Kranji** f/d cd.
in 25 ds. (Humenyk-ONT).

SOUTH AFRICA: Adventist World Radio 5960 via **Meyerton** cd. in 3 wks. w/ personal ltr. from Erika Gysen-Ruf, Listeners Mail Dept. Also rcvd. schedule, world time indicator and rpt. forms. (Field-MI). **Radio France International** 7135 via **Meyerton** I was finally able to convince Kathy

Battle Prague broadcasts daily in Czech and Slovak, Arabic, English, French, German, Italian, Portuguese, Russian and Spanish. Transmissions are beamed for listeners in Europe, Africa, North and South America, South and East Asia, Australia and New Zealand.

RADIO PEHAHA
1988 PRAGUE 2, CZECHOSLOVAKIA

DEAR RADIO FRIEND,
Thank you for your communication reporting reception of our transmission

Date Dec 16 1990
at _____
time 02:59 GMT

We have checked your data with our log, and tell pleasure to register our programme heard on

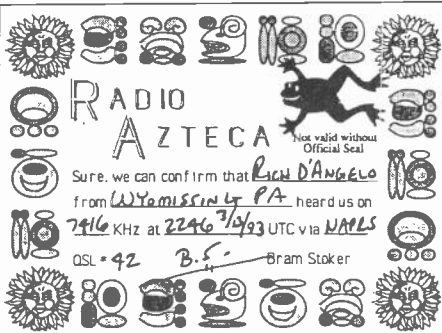
7345
signature

YDVAATELSTVI PEHAHA

transmitter:
Litomyšl

Ch. Rigas

Om 30728/A
3-60 788
1804
MC Kše 1. -



Otto that I heard RFI from their facilities and not the 7135 from Paris. (Field-MI).

SPAIN: China Radio International 9690 via **Noblejas** f/d "Hall of Prayer for Good Harvest" cd. w/ schedule in 32 ds. (Humenyk).
Radio Exterior de Espana 21700 via **Noblejas** f/d ltr. w/ report forms and schedule in 36 ds. (Humenyk-ONT).

SRI LANKA: Voice of America 7140 via **Iranawila** f/d "Cape Neddick Light" cd. in 23 ds. (Neal-TX).

SWEDEN: Radio Sweden International 15240, 17895 and 21810 f/d "The Royal Warship Vasa, Lost in 1628, Raised in 1961" cd. in 17 ds. (Humenyk).

SYRIA: Radio Damascus 12085 f/d cd. w/ newspaper, sticker and schedule in 98 ds. via registered mail. I heard this station from Torgau, Germany. (Glotzbach-NM).

THAILAND: Voice of America 7275 via **Udorn** f/d "Yosemite National Park" cd. in 41 ds. (Neal).
BBC 17615 f/d "Station Site" cd. in 2 1/2 mo.

after a f/up rpt. v/s Ms. Jaruwan. (Myers-VA). 11955 f/d cd. in 177 ds. (Borokowski-NY).

TINIAN ISLAND: Radio Free Asia 9860 f/d personal ltr. w/ site indicated * in 265 ds. for SASE (used). v/s Dan Ferguson. (Sgrulletta-NY).

USA: WHRA 17650 f/d "Logo w/ Globe and Clouds" cd. in 113 ds. w/ report forms and station schedule. v/s Loren Holycross, WHRA Engineering. (Humenyk). **WTJC** 9370 f/d cd. in 13 ds. for SASE (Neal-TX). f/d cd. w/ schedule in 1 mo. v/s A. Robinson. (Field-MI). **WWBS** 11900 8x11 inch

RADIO POLONIA



Mr. George L. Glotzbach
5 Herrada Court
Santa Fe
New Mexico
U.S.A. 87505

Dear Mr. Glotzbach,

Thank you very much for your reception report which tallied with our station log and here is a QSL card in verification.

Much thanks for that beautiful and interesting "American Indians" photograph.

"Dziękuję" - that's the Polish language "Thank you" for possible addition to your multi-national list on your Reception Report. Cheers.

I am also enclosing a copy of our current broadcast schedule.

Looking forward to hearing from you again.

I remain,

Yours sincerely,

Rafal Kiepuszewski, Editor
ENGLISH SERVICE.

certificate in 6 wks. on my 2nd try. Also rcvd. a personal ltr. (Name?) **WREC** 1670 p/d ltr. in 14 ds. for 2 ms. (Neal-TX). **KCIJ** 1630 **Iowa City, IA** ltr. w/ 2 stickers in 1 mo. v/s Brooke Bickford, News Anchor. (Field-MI).

WTDY 1670 via **Madison, WI** ltr. w/ stickers on my second try. v/s Roy Simmons III, Engineer. Addr: P.O. Box 2058, Madison, WI 53701-2058 (Field-MI).

WHLY 1620 via **South Bend, IN** f/d ltr. in 1 mo. v/s Laura E. Dobszlau. (Field-MI).

The Caribbean BEACON

LISTENER VERIFICATION REPORT

DATE: 4-1-1999

TIME: 04:49 - 04:58 UTC

COMMENTS: Thank you for your reception report. We are pleased to verify your reception of WADSWORTH. BK: 49 - 05:11 UTC hours, with a power of 100W, on the Caribbean Beacon.
SIGNED: Best Regards, Davis M. M. M.



\$1.00

TO:

Jeff Molander
6808 Stovia Way
Elk Grove, CA 95753
U.S.A

NOTES: Paul Brouillette notes that he finds his QSL ratio increases if he only reports to the easier to verify international broadcasters. Excellent observation! Hi!...Sam. All kidding aside, I've noticed the same also. I wonder what the future holds? Stations are much more interested in program content than the request for a QSL...Sam.

Jerry Klinck of East Aurora, NY says his new "Passport" book has just arrived along with the new Domestic Bands Survey. He hopes everyone had a safe, healthy and joyous Holiday Season..Sam.



QTH
9411

BASE ANTARTICA ESPERANZA
TERRITORIO ANTARTICO ARGENTINO
REPUBLICA ARGENTINA

UBICACION GEOGRAFICA

Latitud 63° 24' SUR
Longitud 56° 59' OESTE

LRA 36, via Molander

RADIO NACIONAL

"ARCANGEL SAN GABRIEL"



USA (Pirates): USA Free Radio Station 6955 via **Radio Blandengue** f/d cd. in 330 ds. for \$1.00. My report was sent to the Merlin drop and the QSL arrived from Santiago (Neal-TX). **KIPM** 6955 f/d sheet #66 w/ a personal ltr. in 27 ds. for 3 ms. (returned)(Neal-TX). f/d 8x11 incn very impressive postar-type cd. in 24 ds. I used the Lula drop but the postmark was from CA. (Sgrulletta-NY). **Radio Bob Communications Network** 6950 f/d oversized cd. #319 in 13 ds. Report was sent to the Lula drop. (Sgrulletta-NY).

UZBEKISTAN: Radio Nederlands 12075 via **Tashkent** f/d "Oat Field in the Naardereng" cd. in 23 ds. (Humenyk-ONT).

VATICAN CITY: Radio Vatican 17510 via **Santa Maria Di Galeria** f/d "Six

Radio New Zealand

THE SHORTWAVE DIVISION OF THE N.Z. BROADCASTING SERVICE

MR. MARK ALEXANDER HUYENIK

Thank you for your report on the transmission from ZLW 21.15.1975 on 7.315.2.4.455.5.5.5. We are pleased to verify your reception information.

...James Shelley.....Director

ZL2 on 9.54 mo/s in 31 metre band
ZL3 on 11.78 mo/s in 25 metre band
ZL4 on 15.28 mo/s in 19 metre band

NOTES: Richard Lawrenson hopes everyone has a great DX season and a joyous Holiday. The QSLs are slow in returning but he still has hopes for Radio Saint Helena. **Jim Meats** sent me a copy of the B99 Radio Free Asia schedule complete w/ sites. He notes that RFA no longer transmits from KNLS or from Delano... Thank you... Sam.

Have a great
2000!

Sam

PAKISTAN BROADCASTING CORPORATION
Frequency Management Cell
National Broadcasting House
Constitution Avenue, Islamabad
Pakistan



Thank you for your report on our _____

Home

Service from 1230 to 1515

GMT on 4290 KHz.

If you require any further information on any of our programmes, you are free to call us.

PST = GMT + 5Hrs



Yours Sincerely,

Official QSL

Mr. Jeff A. Mohrhardt
6808 Starling Way
Elk Grove, CA
USA

Popes Behind the Microphone" cd. in 49 ds. (Humenyk-ONT).

VENEZUELA: Radio Tachira

4830 p/d ltr. was received with the help of a Venezuelan DXer, Winter Monges. (Myers).

WEST BERLIN: Deutschland

* **Radio Berlin** 6005 f/d cd. in 45 ds. for a GM rpt. and \$1.00. (Raymond-NH).



DEPARTEMEN PERBERANGKAIAN RI
DIREKTORAT JENDERAL RADIO - TELEVISI - FILM
RADIO REPUBLIK INDONESIA
STASIUN REGIONAL I MANADO

JALAN RADIO NO 1 MANADO 95121

Telepon : 63392, Fax 63492

Kotak Pos 1110

Nomor

Lamp.

Hal

Yth. Mr. Richard A.D'angelo

Saya baru dua tahun lima bulan menjadi Kepala Stasiun RRI Manado. Sangat saya sudah pernah juga membalas surat anda, tapi rupanya tidak sampai anda terima. Hal itu memang perlu diselesaikan, dan saya tidak dapat menghitung-hitung atau memperkirakan dimana surat itu tersangkut.

Apapun yang pernah anda tuliskan sebagai hasil penerimaan siaran Stasiun kami, setelah kami check adalah benar. Untuk semua perhatian anda, tidak lupa mengucapkan banyak terimakasih. Tolong juga sampaikan salam hangat kami kepada keluarga anda, terutama isteri anda Susan.

Sebagai orang Indonesia, saya juga bangga atas bahasa Indonesia anda yang baik. Lalu tidak keberatan, saya juga ingin lebih tau tentang profesi anda. Terimakasih.



Net Notes

Tom Sundstrom • P.O. Box 2275 • Vincentown, NJ 08088-2275 • Fax: 609-859-3226 • trs@trsc.com
http://www.trsc.com

Happy New Year! Well, Y2K is history. The world did not turn into a pumpkin and the doomsayers are back in their caves.

Shopping for a new receiver? The 18th edition of the **Radio Netherlands Receiver Shopping List** is now on line at www.rnw.nl/realradio/. It includes a review of the FreePlay Global Shortwave clock-spring radio that began shipping in early December.

Dave Zantow has added more content to his tabletop-oriented **Dave's Radio Receiver Page**. There is lots of space devoted to the AOR AR-7030 flavors and the NRD-545, among other items. Some comments are a bit brutal, but we do admire him for calling the kettle black. Interesting reading, and we recommend those shopping to have a read at www.ticon.net/~davez/.

Sudan National Radio Corporation now has a Web site, with audio. The construction of the pages should be wrapped up by now. You would think www.sudanradio.net would be somewhere else than in Massachusetts, but the trace route

program does not lie.

WRTH 2000. In December, the editor posted the following message. We have not yet seen the new edition, so we cannot comment.

"Due to last minute technical difficulties, it was not possible to publish the data regarding National Shortwave broadcasts this year.

"However, following requests from our readers, I have decided to post the list on our web site.

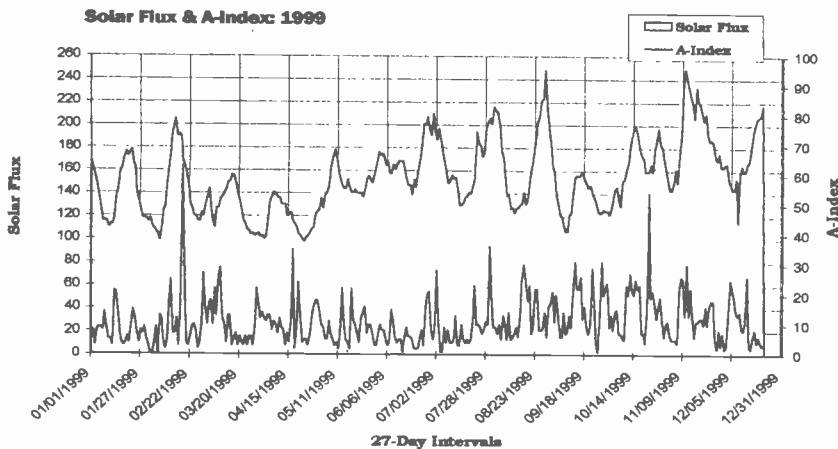
"Please go to www.wrth.com to download a copy of the 'WRTH National Shortwave Supplement'.

"David Bobbett, Editor, WRTH"

As of late December the file still had not been posted; questions are flying around the rec.radio.shortwave newsgroup.

Software notes. For Windows, we really like the search engine tool **Copernic**. There are three flavors, from the free edition to the Pro edition. The latter adds new automated functionality that is quite spectacular. Read the details in the "Musings" section of our Web site or dial up www.copernic.com.

Think Winterfest!



Contributors' Page

Fred S. Kohlbrenner • 2641 S. Shields St. • Philadelphia, PA 19142 • fkoehl@ix.netcom.com

DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER , Mechanicsburg, PA	R8B AOR AR-7030 100' LW
Ralph BRANDI , Tinton Falls, NJ	R8 PR150 250' LW
Paul BROUILLETTE , Geneva, IL	R8 60' LW
Rich A. D'ANGELO , Wyomissing, PA	R8 HF150 FL-3 AD Sloper LW
Nicolas ERAMO , Buenos Aires, ARGENTINA	Sony 2010 ICF-7600 7600G LW's
Marlin FIELD , Hillsdale, MI	NRD-535D Eavesdropper LW
Jeff FINDLATER , Los Angeles, CA	
Bob FRASER , Cohasset, MA	Sony ICF-2003 ICF-SW100S 2m LW
Gary FROEMMING , Glendale, AZ	TS440 3 element beam
George GLOTZBACH , Santa Fe, NM	Grundig G-2000A 23' LW
Hugh O. GRIFFIN, Jr. , Portsmouth, VA	
Bob HILL , Littleton, MA	Sony 2010 120' dipole at 35'
Ron HOWARD , Monterey, CA	NRD-535D 60' LW
Mark HUMENYK , Weston ONTARIO	Magnavox D-2935 AN-60 DX-SWL sloper
Terry KELLY , Santa Rosa, CA	
Jerry KLINCK , Wales, NY	R8 HQ-180AX 80' LW 60m dipole
Fred KOHLBRENNER , Philadelphia, PA	R8 NRD-525 Datong FL-3 ANC-4 Sloper
Harold LEVISON , Philadelphia, PA	R8 R70 YB400
Jerry LINEBACK , Scranton, KS	Icom 746 beverage antennas
Jack LINONIS , West Middlesex, PA	DX-375 DX160A NCX-20 65' LW Sloper
William McGUIRE , Cheverly, MD	DX-380
Bob MONTGOMERY , Levittown, PA	R388 DX Pro active antenna
Gary NEAL , Sugarland, TX	Grundig YB-400
Don NELSON , Beaverton, OR	HF1000A NRD-545 Collins 2050 R7A 70' LW
Ed NEWBURY , Kimball, NE	WJ-1000 R8 60' Sloper 20' loop
Scott NEWMAN , Indianapolis, IN	Sony 2010 Eavesdropper 42' dipole
Jay NOVELLO , Wake Forrest, NC	R8A LW's
Takayuki Inoue NOZAKI , Tokyo, JAPAN	NRD515 NRD535 FRG7000
Denis PASQUALE , New Brighton, PA	DX-440 with a 10 meter long wire
Al QUAGLIERI , Albany, NY	
Bob RAYMOND , Nashua, NH	R8B 20m ⁵ / ₈ wave vertical
Chris RIGAS , Wood Dale, IL	R-2000 Sony 2010 AD Sloper LW
Chuck RIPPEL , Cornland, VA	WJ-HF1000A R8B R390A/SE-3 51S-1 LW's
Giovanni SERRA , Rome, ITALY	NRD-525 AD Sloper
Bill SMITH , Mineola, TX	NRD-535D R8B 51J4 R390A Beverages
Randy STEWART , Springfield, MO	FRG-100 w/Collins filters
Fred TRESCHER , Philadelphia, PA	Sony 2010 FRG-7700
George UHLER , Brookings, OR	DX440 23' LW Grove Tun-3
Jennifer WEINBRUM , Denver, CO	AOR-7030
Gerald WITHAM , Keaau, HI	R8 ANC-4 135' LW

Several members attended DXpeditions in November and December. Andre Fredette attended the St. George Conservation Area DX Camp, and Rich D'Angelo, Bob Montgomery, and I were out at French Creek State Park in PA. Special thanks to Jeff Molander for sending another large packet of QSL illustrations for Sam Barto's column. George Glotzbach also sent in a nice newspaper article written about his varied hobby interests. Best holiday wishes to all!

Tropical Band Loggings

Sheryl Paszkiewicz • 314 Riverview Drive, Apt 16 • Manitowoc, WI 54220 • spasz@dataplusnet.com

- 2310 **AUSTRALIA CAAMA R** 11/29 1131 EG talk, poor (Line-KS) 12/16 1307 Aussie pops (Smit-TX)
- 2325 **AUSTRALIA CAAMA R** same as above (Line-KS)
- 2340 **CHINA Fujian PBS** 12/16 1303 CH talk w/mx bridges (Smit-TX)
- 2410 **NEW GUINEA R Enga** 11/29 1119 lang talk (Line-KS)
- 2485 **AUSTRALIA CAAMA R** same as 2325 (Line-KS) 12/11 1130 ID & ABC nx (Ripp-VA)
- 2850 **N KOREA KCBS** 11/29 1134 KK vocals (Line-KS) 12/16 1320 nonstop class KK mx (Smit-TX)
- 3140t **MADAGASCAR RTV Malagasy** 12/18 0302 poss FR, no //3288 (Smit-TX)
- 3205 **NEW GUINEA R Sandaun** 11/20 0824 PD anncr & mx (Nels-OR) 11/29 1119 local vocals, lang talk (Line-KS)
- 3210 **COSTA RICA REE** Relay 12/2 0242 SP pgm, ID at s/off (Nels-OR)
- 3215 **MADAGASCAR AWR** in FR 11/13 1620 talk, class mx, EG ID to 1630* (With-HI)
- 3215 **SULAWESI RRI Manado** 11/29 1131 IN pop vocals (Line-KS)
- 3220 **NEW GUINEA R Morobe** 11/20 0821 C&W mx, PNG style (Nels-OR) 11/29 1118 lang talk (Line-KS)
- 3250 **HONDURAS R Luz y Vida** 12/2 0245 lively mx pgm, 0301 ID (Nels) 11/28 0356* Evangelistic Faith Mission pgm, anncr Don Moore w/ ID, requested rpts (Kohl-PA) 12/18 0354 signing off (Smit-TX)
- 3250 **PERU R Comas** 12/18 1145 swing mx (Smit-TX)
- 3255 **S AFRICA BBC** Relay 11/28 0313 BBC cmtry (Nels-OR) 12/18 0315 EG nx (Smit-TX)
- 3265 **SULAWESI RRI Gorontalo** 11.29 1130 IN pop vocals (Line-KS)
- 3270 **NAMIBIA NBC** 11/24 0245 EG poor //3290 (Newb-NE) 11/28 0317 pop mx pgm (Nels-OR)
- 3280 **CHINA Vo Fujiang** 12/16 1335 CH talk by YL (Smit-TX)
- 3285 **UNID** 11/27 2126 high pitched poss sermon, fast drums, 3+1 TP, 40s style vocals, ancmts, no clue as to lang. Madagascar here instead of 5009? (Hill-MA) Mahendra suggests this is Namibia off freq (Hill-MA)
- 3289.9 **ECUADOR R Centro** 11/21 0810 SP anmts, mx, ID, echo (Alex-PA)
- 3290 **NAMIBIA NBC** 12/18 0321 AK talk, EG 0402 (Smit-TX)
- 3310 **BOLIVIA R Mosoj Chaski** 12/16 0044 YL anncr, ID, poss nx & then mx 0108 (Smit-TX)
- 3315 **ADMIRALTY ISL R Manus** 11/20 0811 PD talk, C&W mx (Nels-OR) 11/24 1149 lang talk (Line-KS)
- 3320 **S AFRICA R Sonder Grense** 11/28 0315 AK class mx (Nels-OR) 12/18 0328 AK talk, chorus, ID 0330 (Smit-TX)
- 3325 **NEW BRITAIN R North Solomons** Relay 11/20 0837 C&W mx (Nels-OR)
- 3335 **NEW GUINEA R E Sepik** 11/24 1148 local pops (Line-KS)
- 3335 **TAIWAN CBS pres** 12/1 1233 vocals, W in CH (Smit-TX) 12/4 1236 CH W (Line-KS)
- 3345 **MOLUCCAS RRI Ternate** 12/4 1229 Indo vocals (Line-KS)
- 3345 **S AFRICA Channel Africa** 11/13 1635 PT nx, IDs (With-HI)
- 3360 **GUATEMALA LV de Nahuala** 11/30 0058 talk, ment Guatemala (Smit)
- 3365 **INDIA AIR Delhi** 12/4 1258 subcont mx (Line-KS) 11/17 1650 speech abt human rights (With-HI)

- 3366 **GHANA GBC** 11/30 2300 ID, pop mx EG/lang not //4915 (Smit-TX) 12/1
0539 Afr mx, 0600 ID (Nels-OR)
- 3373.5 **JAPAN NHK Osaka** 11/23 1025 Radio English pgm-EG lesson (Howa-CA)
- 3380 **GUATEMALA R Chortis** 11/30 0118 SP vocals (Smit-TX)
- 3381 **S KOREA Vo People** 11/17 1710 KK talk, ment Pyongyang. Jammed. //3912
not jammed (With-HI)
- 3385 **NEW BRITAIN RENB** 11/29 1112 lang talk (Line-KS)
- 3390t **SIKKIM AIR Gangtok** 12/19 1157 monotonous vocal, talk, mournful singing like
Gregorian chant, anmt (Hill-MA)
- 3395 **NEW GUINEA R E Highlands** 11/24 1146 lang talk (Line-KS)
- 3481 **N KOREA Vo Natl Salvation** 12/17 1303 KK talk (Smit-TX)
- 3560 **N KOREA R Pyongyang** 12/17 1310 KR talks (Smit-TX)
- 3810L **ECUADOR HD2IOA** 12/3 0711 SP time stn & ID toh (Nels-OR)
- 3881 **S KOREA Vo People** 12/17 1315 KK talk by YL //3912 (Smit-TX)
- 3905 **IRIAN JAYA RRI Merauke** 12/4 1229 Indo vocals (Line-KS) 11/24 1136 light
mx, anmts, SCI, ID, nx (Ripp-VA)
- 3905 **NEW IRELAND R New Ireland** 11/20 0824 PD anmts (Nels-OR)
- 3925 **JAPAN R Tampa** 11/24 1157 JP tlks (Ripp-VA)
- 3930.1 **UNID** 12/4 0240 weak Europops, Brit DJ. Europirate or R Capital from S
Afr? (Alex-PA)
- 3945 **JAPAN R Tampa** 12/17 1319 slow paced JP talk (Smit-TX)
- 3965 **UNID** 11/27 0550 AR nx & cmtry (Lino-PA)
- 3975 **HUNGARY R Budapest** 11/28 0550 EG nx & cmtry (Lino-PA)
- 3976 **KALIMANTAN RRI Pontianak** 12/3 1159 SCI, RRI nx (Line-KS)
- 3985 **S KOREA Echo of Hope** 12/17 1321 KK talk (Smit-TX)
- 3987 **IRIAN JAYA RRI Manokwari** 11/29 1128 Indo pop vocals (Line-KS)
- 4000.2 **SULAWESI RRI Kendari** 11/29 1159 SCI, RRI nx (Line-KS)
- 4000.2 **UNID** 12/4 2108 Farsi talk, plucked string mx, talk, not an Indo! (Hill-MA)
- 4059 **CLAND Vo Peop Kurdistan** 11/22 1759 well known patriotic hymn (could you
hum a few bars) 1803 s/off (Serr-IT)
- 4085 **CLAND Vo Iraqi Kurdistan** 11/22 1803 AR poss nx, ment New York, well
known mx break, ID (Serr-IT)
- 4515.7 **PERU R Amistad** 12/5 2345 Andean mx, ute QRM. TC, canned ID 0101 & 0201,
still on 0305. Tnx Klemetz & Krueger (Nove-NC)
- 4552.4 **BOLIVIA Rdf Tropico** 11/26 2302 singing ads, gunfire, comunicados, IDs
(Nove-NC)
- 4606.5 **IRIAN JAYA RRI Serui** 12/4 1221 beautiful IN vocals (Line-KS)
- 4649 **BOLIVIA R Santa Ana** 12/4 2255 acoustic guitar & vocals, rel talk, 2318
ID in passing (Nove-NC)
- 4725 **MYANMAR R Myanmar** pres 12/1 1249 vocals, YL annrc (Smit-TX)
- 4746.5 **PERU Huanta 2000** 11/23 1055 huaynos & talk (TIN-JP)
- 4753.3 **SULAWESI RRI Ujung Pandang** 12/1 1306 nx, good (Smit-TX) 10/31 1315 pop
mx, AR anmts (Newb-NE) Not Indonesian? 12/4 1225 Indo mx (Line-KS) 12/1
2145 SCI at 2200 (Bran-NJ) 11/22 2135 IN mx, talks (Klin-NY) Great to hear
from you! Nice shack photo last month—sp
- 4760 **KASHMIR AIR Leh** 12/4 1258 lang talk (Line-KS)
- 4770 **NIGERIA R Nigeria** 11/30 2200 night sounds mx, vy good (Smit-TX) 11/20
2135 local mx, anmts, IDs (Klin-NY)
- 4775 **PERU R Tarma** 11/26 0400 Andean mx, SP talk (Froe-AZ)
- 4779 **GUATEMALA R Cultural Coatan** 11/21 1050 mx, talk, ID 1101 (Raym)
- 4779.8 **ECUADOR R Oriental** 11/30 2203 Christmas carols in SP, YL annrc (Smit-TX)
- 4782.3 **ECUADOR R Oriental** 11/13 1110 ID, FC (TIN-JP)

- 4783 **MALI RTV Malienne** 12/1 0638 //4835, 5995, talk, drums, ID, stringed inst, 0700 nx (Nels-OR)
- 4784.3v **MALI RTV Malienne** 11/30 2211 lang talk (Smit-TX)
- 4789 **IRIAN JAYA RRI Fak-Fak** 12/4 1226 Indo vocals (Line-KS)
- 4790 **INDIA AIR Chennai** 12/3 0032 subcont mx, gone at 0045 (Nels-OR)
- 4790 **PERU R Atlantida** 11/20 0937 ballads, huaynos (Nels-OR)
- 4796.5 **BOLIVIA R Mallku** 11/24 2325 pres w/ballads, mostly talk btwn 2 annrcs (Nove-NC) I think we showed this as Peru last time-sp
- 4799.8 **GUATEMALA R Buenas Nuevas** 12/4 1100 Xmas mx, talk, ID in SP or dialect (Raym-NH) 11/29 1129 ID, Jingle Bells in SP (Riga-IL) 12/17 0056 ID, beautiful It Came Upon a Midnite Clear (Smit-TX)
- 4800 **INDIA AIR Hyderabad** 12/4 1320 subcont mx (Line-KS)
- 4810 **ARMENIA Vo Armenia** 11/13 1540 local chant, phone calls, ancmts flute, freq anmt, class mx, IS 1600, ID (Serr-IT)
- 4815 **BURKINA FASO RTV Burkina** 11/19 2130 FR Waf mx, anmts, ID, poor (Klin-NY)
- 4815 **ECUADOR El Buen Pastor** 12/17 0103 echo talk, choir (Smit-TX)
- 4819.2 **HONDURAS LV Evangelica** 10/31 1125 SP preaching (Newb-NE) 11/29 1127 instl mx & ID (Riga-IL) Hi Chris! 11/5 0430 SP hymns & rel talk (Lino-PA) 11/30 0315 SP rel pgm (Tres-PA)
- 4820 **BOTSWANA R Botswana** 11/22 2103 lang discussion, Western pop mx (Klin-NY)
- 4820 **INDIA AIR Calcutta** 12/5 0026 subcont mx, 0100 ID (Nels-OR) 12/4 1308 subcont mx (Line-KS)
- 4824.4 **PERU LV de la Selva** 11/23 1003 ID, FM freq (TIN-JP)
- 4830 **VENEZUELA R Tachira** 11/24 0330 ID, Latin mx & talk (Froe-AZ) 11/30 0320 SP cmtry (Tres-PA) 11/17 2354 mx pgm, ID (Fiel-MI)
- 4831 **MAURITANIA ORTM** 11/21 2150 AR mx, prob ID, good (Klin-NY)
- 4832 **COSTA RICA R Reloj** 11/30 0320 SP cmtry (Tres-PA)
- 4835 **GUATEMALA R Tezulutlan** 11/21 1025 nonstop marimbas, 1058 Indian lang ID & opening anmts (Quag-NY) 11/26 0330 ID & nx abt Central America, good (Froe-AZ) 10/31 0311 marimba, ID (Newb-NE) 11/29 1132 marimba mx (Riga-IL)
- 4835 **MALI RTV Malienne** 12/1 0638 drums, anmts, ID 0700, FR nx (Nels)
- 4840 **INDIA AIR Mumbai** 11/14 1557 talk, instl mx, drama (Serr-IT) 12/5 0051 subcont mx, 0100 ID, nx (Nels-OR)
- 4845 **BOLIVIA R Fides** 11/6 1140 rel talk & mx, tomorrow's pgm & good IDs (Klin-NY)
- 4845 **BRAZIL R Cultura** 11/29 0056 PT Xmas mx (Tres-PA)
- 4845 **GUATEMALA R Kekchi** 11/29 1153 instl mx, ID in lang (Riga-IL) 12/8 0230 Xmas mx, rel talk, ID (Klin-NY)
- 4845 **MAURITANIA ORTM** 11/30 2143 AR vocals, OM annrc (Smit-TX) 11/15 0714 AR continuous talk (Newb-NE) 12/1 0712 FR talk, ID 0730 (Nels-OR)
- 4850 **INDIA AIR Kohima** 12/4 1302 mixing w/China (Line-KS) 12/8 1156 subcont mx, ment Pakistan (Ripp-VA)
- 4850 **UZBEKISTAN Uzbek R** 10/29 1725 local chants, IS & ancmt w/poss ID, nx (Serr-IT)
- 4855.6 **PERU R La Hora** 11/24 2305 ad string, ID, cmtry (Nove-NC)
- 4860 **INDIA AIR Delhi** 11/14 1604 local vocals, instl mx, poor (Serr) 12/2 1415 YL poss nx, subcont mx (Nels-OR) 12/3 1233 EG nx // 3365 (Line-KS)
- 4874.5 **IRIAN JAYA RRI Sorong** 12/3 1159 nx, NA, anmts (Line-KS)
- 4875 **BRAZIL R Roraima** 11/18 0803 ZY mx, frequent IDs (Nels-OR) 12/17 12/17 0115 excited speech, ment Brasil, echo (Smit-TX)
- 4875 **INDIA AIR Imphal** 12/4 1321 lang talk (Line-KS)
- 4875.4 **BOLIVIA R La Cruz del Sur** 11/24 2350 huaynos, acoustic guitar, IDs (Nove-NC)
- 4879.2 **BANGLADESH Bangladesh Betar** 12/11 1155 talk, ment Bangladesh flute, 5+1 TP, more talk (Nove-NC)

- 4880 **INDIA AIR Lucknow** 12/3 0055 subcont mx, ID 0100 (Nels-OR) 12/4 1304 subcont mx (Line-KS) 11/24 1725 EG sitar mx, ID, nx (With-HI)
- 4885 **BRAZIL R Clube** 11/25 0345 ID, mx pgm (Froe-AZ) 11/5 0445 pol speech, ID w/echo (Lino-PA)
- 4885 **BRAZIL unid** 11/20 0549 lite mx, wolf whistle sig btwn tunes. Slogan or ID unintelligible (Brou-IL)
- 4885 **KENYA KBC** 11/27 2020 SH talk, Afr mx, NA to 2105* (Raym-NH)
- 4890 **PAPUA NBC** 10/31 1310 C&W mx, EG anncr (Newb-NE) 12/3 1150 local vocals, Feliz Navidad song, anmts (Line-KS)
- 4890.2 **PERU R Chota** 10/11 0230 huaynos, ID (Newm-IN)
- 4910 **INDIA AIR Jaipur** 12/2 1415 subcont mx, talk in lang (Nels-OR) 12/4 1303 lang nx (Line-KS)
- 4910 **UNID** 2203 Mideast mx, Farsi sounded like "ha-YOM ba-RO-ye" cut on & off through 0130, off at 0156, on 0300 (Hill-MA)
- 4915 **GHANA GBC** 11/18 0550 Afr chorus & drums, EG ID (Newb-NE) 12/1 0538 Ids, mx, nx, lotto numbers (Nels-OR) 12/16 2231 Afr mx, drums, EG/lang (Smit-TX) 11/18 2100 EG mx, anmts, IDs (Klin-NY)
- 4919 **ECUADOR R Quito** 11/24 0321 ID & mx mix (Froe-AZ) 11/7 0540 ID & SP Latin mx (Lino-PA) 11/13 0345 local mx, ID (Klin-NY) 11/30 0320 SP cmtry (Tres-PA) 11/20 0538 SP pop, ads, ballads (Brou IL)
- 4920 **INDIA AIR Chennai** 12/3 0050 subcont mx, ID 0100, nx (Nels-OR) 12/3 1233 EG nx (Line-KS)
- 4925 **SUMATRA RRI Jambi** 12/3 1159 SCI, RRI nx (Line-KS)
- 4930 **TURKMENISTAN Asgabat** 10/31 1716 local chants, talk (Serr-IT)
- 4930.6 **HONDURAS R Costena Ebenezer** 10/10 0310 SP rel mx, ads for sweepstakes, travel agency (Newm-IN)
- 4939.4 **VENEZUELA R Amazonas** 12/17 0130 man talking abt musica en la casa, instls (Smit-TX)
- 4940 **INDIA AIR Guwahati** 11/30 1235 instls, mixing w/China (Smit-TX) 12/8 1215 subcont mx peaking thru (Ripp-VA)
- 4950 **KASHMIR AIR Srinagar** pres 11/6 1651 chants, ancmts, phone calls (Serr-IT)
- 4955 **COLOMBIA R Nacional** 11/25 0320 ID w/Latin mx pgm (Froe-AZ) 11/7 0445 class 20th cent mx, YL anncr (Newb-NE) 12/17 0137 male anncr, mx (Smit-TX) 11/6 0500 Latin pop mx (Lino-PA)
- 4960 **DOMINICAN REP R Villa** 12/1 0203 distorted mx, ancmts, sudden s/off in mid song (Smit-TX) 11/16 0414 LA mx, ID (Newb-NE)
- 4960 **ECUADOR R Federacion** 11/13 1105 Shuar talk & HC mx (TIN-JP)
- 4960 **SAO TOME VOA** Relay 10/31 0302 Mideast nx, jamming (Newb-NE) 12/1 0535 FR nx //7265 (Nels-OR)
- 4960 **VANUATU R Vanuatu** 11/20 0700 EG nx, lang, Yellow Bird & ID & good night (Nels-OR) I'm sure Jenny submitted this too but I think I lost it—sp
- 4960 **VIETNAM Vo Vietnam** 12/12 1138 SEAs mx, ID, mx bridge, talks (Ripp-VA)
- 4975 **CHINA Fujian PBS** 12/1 1303 YL, love songs //2340 (Smit-TX)
- 4975.2 **PERU R del Pacifico** 11/20 0940 local pop mx pgm (Nels-OR)
- 4976 **UGANDA R Uganda** 10/31 1704 EG nx, anmt, poss ID, muffled audio poor (Serr-IT) 11/24 0304 EG ID, very poor sig (Froe-AZ)
- 4980 **VENEZUELA Ecos del Torbes** 11/26 0315 ID, mx pgm (Froe-AZ) 10/31 1103 Latin mx, singing to guitar (Newb-NE) 11/30 0330 SP LA mx (Tres-PA) 11/16 0203 local mx, exc (Levi-PA)
- 4980.3 **CHINA Xinjiang PBS** 12/4 0124 exotic vocals, brief anmt, opera vocal (Hill-MA)
- 4985 **BRAZIL R Brasil Central** 12/3 2355 //11815 pop mx, ID at 0001 & 0037 (Nels-OR)

- 4990 **INDIA AIR Itanagar** 12/4 1319 subcont singing (Line-KS) 12/8 1145 subcont mx, anmts (Ripp-VA)
- 4990.9 **PERU R Ancash** 11/20 0931 man screaming in SP over piano mx, ID 1000 (Nels-OR) Sounds lovely 12/17 0146 SP talk (Smit-TX)
- 4991.9 **SURINAM R Apintie** 11/29 0237 contempo mx, anmts, ID 0300. If you are lucky you will hear Apintie drums at s/off (Ripp-VA) 11/27 0524 romantic songs, ID in EG, "greetings worldwide" (DAn)
- 5000 **VENEZUELA YVTO** 11/25 0208 TP & anmts in SP (Riga-IL)
- 5005 **NEPAL R Nepal** 11/30 0012 IS, chimes, s/on anmts (Smit-TX) 11/30 1150 SEAs mx, ID, TP at 1215 (Ripp-VA)
- 5010 **INDIA AIR Thiru.** 11/30 0020 instl, Hindi chants, anmts, mx bridge, EG nx 0035 (Smit-TX) 12/3 0035 sitar mx, fade before 0100 (Nels-OR)
- 5015 **TURKMENISTAN Asgabat** 10/31 1633 local mx & chants, excited tlk pop song, IS 1700, poss ID & nx (Serr-IT) 12/4 0040 talks, regional mx, anmt, ment Turkmenistan (Kohl-PA)
- 5019 **COLOMBIA Ecos del Atrato** 12/5 0230 talk, ads, ment Colombia, Caracol ID 0259 (Raym-NH) 11/19 1039 long talk, some vocals, nice ID 1043, 1048 (D'An-PA)
- 5025 **BENIN R Parakou** 11/19 2125 FR Afr mx, ID, some talk (Klin-NY)
- 5025 **CUBA R Rebelde** 11/26 0100 ID & soccer game (Froe-AZ) 11/30 0330 SP LA mx (Tres-PA)
- 5027.1 **PAKISTAN R Pakistan** 11/28 0157 Koran, TC, Urdu poss nx (Howa-CA)
- 5030 **CHINA CNR 1** 11/24 1430 EG "China Today" past 1500 (Wein-CO) 12/1 1310 YL CH talk (Smit-TX)
- 5035 **CENT AFR REP Rdf Centafricaine** 11/20 2115 FR talk, cmtry, ment Bangui (Klin-NY)
- 5047 **TOGO Radio Lome** 11/22 1744 lang instl mx, talk, ment Lome, flute, fast percussion (Serr-IT) 12/2 0551 FR OM w/Afr mx pgm ID 0558, nx, cmtry (Nels-OR) 12/15 2228 Xmas carols in FR & EG ID (Smit-TX) 11/18 2121 FR/EG excited talk, ID (Klin-NY) 2207 on 10/30 nx in FR (Hume-ON)
- 5050 **TANZANIA R Tanzania** 10/31 1628 talk, mx break, anmt, instl mx, poor (Serr-IT)
- 5054.6 **COSTA RICA Faro del Caribe** 11/29 0300 SP ID (Froe-AZ) 11/7 0430 fading in & out in SP (Lino-PA) 11/30 0330 SP cmtry (Tres-PA)
- 5060 **UZBEKISTAN R Tashkent** 12/4 1203 EG nx, IDs, "You are tuned to Radio Tashkent". (Bran-NJ)
- 5070 **USA WWCR** 11/30 0330 EG pol talk (Tres-PA)
- 5085U **USA WGTG** 11/26 0300 Y2K talk abt how everything will be broadcast in SSB in future (Froe-AZ) 12/8 0418 EG talk abt firearms ownership etc (Uhle-OR) 11/29 0100 EG rel mx (Tres-PA)
- 5100 **LIBERIA R Liberia** EG 10/9 2210 Afr/reggae mx (Newm-IN) 11/25 2400* EG nx, Ids, Afr pops, goodbye everyone, no NA (Alex-PA)
- 5250 **CHINA CRI** feeder 10/30 1720 poss Malaysian, class mx, ID to 1727* (With-HI)
- 5500 **SUDAN R Omdurman** 10/28 1730 ment Sudan, Khartoum, regional mx (With-HI)
- 5523 **PERU R Sudamerica** 11/22 1115 folklore pgm & talk (TIN-JP)
- 5598 **UNID (VIETNAM?) Lao Cai** 12/12 1155 SEAs mx, 1st time hrd any- thing copiable from what may be this. (Ripp-VA)
- 5745 **USA WHRI** 10/11 0106 talk abt gold market (Hume-ON)
- 5800 **TAJIKISTAN RT** 11/15 1745 drama, Mideast mx //7510 (With-HI)

International Band Loggings

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- 5930 **CZECH REPUBLIC R Prague** in EG 1659, IS, ID's, nx, press review, //17485 (Serra ITALY 12/14)
- 5985 **CONGO RDN Congolaise** in FR 2036, Afro mx, tlks, ID "Radio Congo" 2100, f (Raymond NH 12/1)
- 5990 **INDIA AIR Aligarh** in lang 0045, subcontinental mx, ID 0100 (Nelson OR 12/3)
- 5995 **MALI RTV Malienne** in FR 0638, ancmts separated by drumbeats, ID 0700, nx, exc (Nelson OR 12/1)
- 6010 **ITALY RAI Rome** in EG 0050, nx w/update on building collapse in Foggia, //9657 (Fraser MA 11/13)
- 6025 **UZBEKISTAN R Tashkent** in Urdu(p) 1215, ID in EG 1219, IS, //9715 stronger (Brandi NJ 11/25)
- 6040 **CANADA RCI Sackville** in EG 2320, ID, rpt on child abuse at day care centers (McGuire MD 11/25)
- 60499 **NIGERIA RN Ibadan** in EG 2104, nx, ID 2112, drums, polit cmntry, p (Kohlbrener PA 11/27) in EG 2127, tlk re Taliban and budget figures, ID 2130, good until BBC s/on 2128 (Brandi NJ 12/10)
- 6055 **JAPAN R Tampa Tokyo** in JP1240, rapid tlk, mx, //9595, QRM from R Marti (Brandi NJ 11/25)
- 6065 **IRAN VOIRI Teheran** in EG 0035, Koranic chants, national & regional nx, p (McGuire MD 12/11)
- 6105 **COSTA RICA R Universidad** in SP 0422, classical mx, ID's 0424 & 0426 (Nelson OR 11/24)
- 60999 **ALBANIA R Tirana** in AL 0716, pgm preview, ID's, pop mx, f (Serra ITALY 11/15)
- 6100nf **LIBERIA R Liberia Int Monrovia** in EG 0700, nx, political tlk abt Liberian affairs, Afro pop mx, ID's, fair signal (Alexander PA 11/26) ED: Listed daily sked for this station is 0600-1800.
- 61101nf **MEXICO R Mil** in SP 0333, local Mexican mx, frequent ID's (Nelson 11/24) ED: Move from 61048?
- 61348v **BOLIVIA R Santa Cruz** in SP 0958, ID, frequency, light mx (Howard CA 11/18)
- 6145 **GERMANY Deut Welle Wertachtel** in EG 0138, description of flamenco mx/dance (Levison PA 11/7)
- 6155nf **UNITED KINGDOM R Telefis Eireann** relay Rampisham in EG *0130-0145*, nx of Ireland, weak signal, xmsn lasted only 15 minutes altho listed sked calls for 0130-0200 (Field MI 11/10)
- 6190 **GERMANY Deutschlandfunk Berlin** in GM 0440, ID, tlks, severe QRM BBC 6195 (Brandi NJ 12/7)
- 6200 **CZECH REPUBLIC R Prague** in EG 0200, nx, political cmntry, vg, //7345 (Alexander PA 11/26)
- 6240nf **ARMENIA TWR Europe** relay via Yerevan in EG/lang *0012-0100, IS, relig pgming, Xmas mx, in EG to 0045 then into unidentified lang to 0100, f-p w/occasional rty QRM (Alexander PA 12/4)
- 6265 **ZAMBIA ZNBC Lusaka** in vernacular 0248, fish eagle IS, NA 0250, ancmts, Afro mx, Christian songs, ID "Radio One.....", weak signal w/rty QRM (Montgomery PA 11/23, Brouillette IL 11/12)
- 6522nf **PERU R Ondas del Rio Maranon Aramango, La Libertad** in SP 0054, reactivated here w/Andean pgmg include huaynos, comunicados, ads, numerous ID's to s/off 0107, QRM (Novello NC 11/30)
- 7105 **BELARUS R Belarus Int** in EG 2130, nx, cmntry, choral mx, QTH, p, //7210 (Alexander PA 11/25)
- 7115 **MOROCCO VOA** relay in Serbian *0630-0700*, ID, Dixieland jazz pgm, f (Findlater CA 11/27)
- 7125 **GUINEA RTV Guineenne Conakry** in lang 2328-0002*, Afro mx, tlk, extended mx sel repeated over and over for 10+ mins, ID?, recognizable NA at s/off (Brandi NJ 12/3, D'Angelo PA 12/5)
- 7130 **BOSNIA R Yugoslavia** relay in EG 0215, ID, cmntry on Kosovo & Albania, f (McGuire MD 12/7)
- 7155 **MOROCCO VOA** relay in RM *0430-0500*, ID, nx re Chechnya, Clinton in Greece (Findlater 11/21)
- 7165 **MOROCCO R Liberty** relay in Ukranian 0400-0500*, ID, nx, Clinton in Kosovo, f (Findlater 11/27)

- 7165nf **IRAN VOIRI** Teheran in Azeri 1749, hrd OK despite varying audio levels, ex-7170 (Hill MA 11/21)
- 7180 **MOLDOVA V of Russia** relay in EG 0200, rpt on the situation in Chechnya, ID, nx re Russian capture of Grozny, Yeltsin's health (Findlater CA 11/28, McGuire MD 11/26, Newbury NE 10/31)
- 72453 **ALGERIA RTV Algerienne** in AR 0314, possible radio drama, some QRM from R Liberty, hrd two nights in a row several hrs before nominally scheduled 1600 s/on (Brandt NJ 12/7)
- 72672 **PAKISTAN Azad Kashmir R** in lang 1158-1215*, subcont vcl, tlk, ment Pakistan, vp (Hill MA 11/28)
- 7285 **GERMANY Deut Welle Wertachtel** in EG 0205, world nx, ID, "Newslink", p (McGuire MD 12/14)
- 7300 **SLOVAKIA R Slovakia Int** in EG 0100, ID, IS, pips, rept on Austria & Kosovo, g (McGuire 12/7)
- 7335 **VATICAN STATE Vatican R** in EG 0132, musical pgm, "Hallelujah Chorus", ID (Field MI 11/21)
- 7335 **RUSSIA Radiostansiya Chechnya Svoboda** St Petersburg in RS *0257-0700*, test tones to 0300, instr IS and ID sequence 0300 & 0400, tlks, mx bks, nx, Xmas carol, in LSB to avoid Canadian time station (Alexander PA 11/26, Brandt NJ 11/22, Field MI 11/19)
- 7340 **RUSSIA V of Russia World Service** Moscow in EG 2200*, ID at s/off, 500 kw xmtr (Field MI 11/7)
- 7385nf **USA WRMI** Miami in SP/EG *0300, ex-7460, s/on with WRMI *ID's*, *QTH*, into re-broadcast of *Radio Prague* in SP at 0301 and in EG at 0401, vg (Alexander PA 11/28)
- 7410 **INDIA AJR** Bangalore in EG 2358, subcontinent mx, nx of Pakistan/India problems (Nelson OR 12/5)
- 7440 **RUSSIA V of the Mediterranean** Malta relay in EG 2020-2100, pgm re Malta, ID's, into AR pgming at 2100 with AR mx, Koran, weak signal (Alexander PA 11/25) ED: Xmtr power 500 kw.
- 7545nf **BULGARIA R Bulgaria** in EG 2210, ID, political nx, ment of Pres Clinton, g (McGuire MD 11/25)
- 9400 **BULGARIA R Bulgaria** in EG 0000, ID, nx re bombing of Grozny, RS elections (Findlater CA 12/15)
- 9435 **ISRAEL Kol Israel** in EG 2000, nx, ID, vg (Klinck NY 11/20) EG 0500, nx, ID, TC (McGuire 12/7)
- 9470nf **RUSSIA Radio Chechnya Svoboda** Moscow in RS 0645, tlks, RS pop songs, ID 0700, fqys, into nx type pgm, instrumental mx, //7335 (Rigas IL 11/30, Kohlbrenner PA 11/27)
- 9510 **ROMANIA RRI** Bucharest in EG 0645-0658*, nx re Kosovo, Serb refugees etc, f (Findlater CA 11/23)
- 9525 **POLAND Polish Radio** in EG 2040, nx re Boris Yeltsin being hospitalized, f-p (Pasquale PA 11/26)
- 9535 usb **JAPAN NHK** feeder Fukuoka in JP 0715-0730*, ezl vocals, tlks, g (Witham HI) ED: Only 600 watts!
- 9560 **HUNGARY R Budapest** in EG 0101, ID, nx, Hungary wants fuller relations w/Japan (Newbury NE)
- 9560 **FINLAND YLE Radio** in FN *0700, ID, Scandanavian nx, weak, //9840 (Findlater CA 12/14)
- 9600 **VATICAN STATE Vatican R** in EG 2300, "Postcard from Rome" feature, ID, g (McGuire MD 11/23)
- 9645 **SRI LANKA VOA** relay in EG 1700, ID, nx, E Timor massacre, Clinton in Kosovo, f (Findlater 11/26)
- 9655 **AUSTRIA RAI** Vienna in EG 0228, nx of Austrian elections, ID (Newman IN, Newbury NE)
- 9665 **ASCENSION IS R Japan** relay in EG 0000, rpts on Russia N Korea, financial nx, ID, p (McGuire 12/7)
- 9685 **IRAQ R Baghdad Int** in EG 2010, fqys at tune in, ID, AR mx, nx, muffled audio (Kohlbrenner 11/27)
- 96945 **BRAZIL R Rio Mar** in PT 2152, sermon, Christian choir w/pop vcls, no break at 2200, ID's at 2211 & 2215, echo effect tiresome but vg signal level (Hill MA 11/14, D'Angelo PA 11/14)
- 9700 **GERMANY Deut Welle Wertachtel** in SP 2300, IS, ID, L Am svce, econ nx, g (McGuire MD 11/12)
- 9705 **MEXICO R Mexico Int** in EG 1520, L Am mx, ID, QTH, fqys, sked (Brandt NJ 12/2, Newbury NE)
- 9725 **MOROCCO R Free Europe** relay in RM 0600, ID, nx re Chesneya, Clinton, //9605 (Findlater 11/19)
- 97373 **PARAGUAY RN del Paraguay** Ascuncion in SP 0806, canned ID, local folklore (Nozaki JP 11/13)
- 9740 **SINGAPORE BBC** relay in EG 1120, nx, 800 dead children missing in Indonesia (Montgomery 12/4)
- 9760 **PHILIPPINES VOA** relay in EG 1422, sports nx, history of Thanksgiving in USA, ID, TC, headlines (Brandt NJ 11/25) in EG 1215, cmntry on funding pgm for minority blacks (Newbury NE)

- 9835nf **MOROCCO R Free Europe** relay in RM *0400-0430*, cmntry, mx bks, EG ID, f (Treibel WA 11/22)
- 9865nf **CZECH REPUBLIC R Prague** in EG 0450, rpt on sensational journalism, ID, f, //11600 (Witham HI)
- 9880nf **UNITED KINGDOM HCJB** relay Skelton in AR *2100, mixing w/Kuwait until 2130 (Field MI 11/17)
- 9885nf **RUSSIA R Tikhyy Okean** Vladivostok in RS 1910-1945*, Seamen pgm, speech over PA system, nice RS folk mx, overmodulated, ID, //9900 from Irkutsk undermodulated (Witham HI 11/21)
- 9890 **RUSSIA V of Russia** St Pertersburg in EG 1815, mailbag , hrd over CRI (Witham HI) ED: 800 kw!
- 9905 **FRENCH GUIANA Swiss R Int** relay in EG 0430, lots of Swiss polkas, ID 0500 (Kelley CA)
- 9930 **HAWAII KWHR** Naalehu in EG 1315, country gospel featuring Dolly Parton, QTH (Brandi NJ 12/4)
- 9935 **GREECE RS Macedonia Thessaloniki** in GK *0557, IS, NA, prayer, ID, sked, nx (Rigas IL 12/4)
- 9965 **ARMENIA V of Armenia Foreign Svce** in EG 2145*, local folk songs, ID, sked (D'Angelo PA 11/24)
- 9965 **PALAU KHBV V of Hope** in EG 1233, religious pgm, ID, QTH 1238, f (Raymond NH 12/5)
- 11530 **LEBANON V of Hope** in AR 1915, relig tlk & mx, p (Klinck NY 11/20) in AR 2358, AR mx, //6280, still on at 0200 (Brandi NJ 11/28) ED: Only 25 kw. Daily listed sked 2100-1300 Internal Svce
- 11550 **TAIWAN R Australia** relay in IN 2300, ID, EG lang lessons, f (Findlater CA 11/25)
- 11600 **SEYCHELLES FEBA Int Svce** in EG 1500, ID, gospel mx, "Story to Tell", f (Newbury NE 11/8)
- 11625nf **GUAM KSDA Adv World R** in HD 1523, Indian mx, ID in EG, QTH, g (Newbury NE) in EG 1525, Oriental mx, ID, QTH, f (Klinck NY 11/15) in EG 1658, ID, QTH "Agat, Guam" (Brandi NJ 11/28)
- 11630 **CHINA CNR** Lingshi in EG/CH 0052, cmntry on fighting crime in US with alternating EG/CH, f (Klinck NY 11/28) talking in Uighur(p) 0140, //10260 (Brandi NJ 12/6)
- 11635nf **RUSSIA Radiostantsiya Chechnya Svoboda** St. Petersburg in RS *0621, s/on after running test tones, tlks, instrm mx, vg, //7335 (Alexander PA 11/26) in RS 1157, two clear ID's 1200, nx, features, f-g //15605 stronger signal but "growl" marred reception (D'Angelo PA 11/19)
- 11640 **SEYCHELLES FEBA** in Punjabi(p) 0220, sermon, QTH Pakistan, IS 0230, choppy (Hill MA 11/23) in Oromo(p) 1706, "Amen" at end of pgm, theme song, familiar IS (Brandi NJ 11/28)
- 11640nf **SOUTH AFRICA TWR** relay Meyerton in EG *0600-0615*, ID's, opening psalms, sermon on Adam & Eve in Eden, IS played on hand bells (Findlater CA 11/19, Brandi NJ 11/17)
- 11650 **PHILIPPINES FEBC** in Lahu(p) 2328-2345*, theme mx, tlk, IS 2345, p, //15520 (Brandi NJ 11/19)
- 11655 **MADAGASCAR R Nederland** relay in EG 1845, tlk, cmnty re WTO in Seattle, ID, f (Uhler OR 11/30)
- 11660 **CHINA CPBS** Xi'an in MD 0505, tlks by YL & OM, g, //15285, 17700 (Witham HI 11/24)
- 11665nf **FINLAND YLE Radio** in FN/SW/EG 0245-0330*, '99 large events in review, //9655 (Findlater CA)
- 11675 **KUWAIT R Kuwait** in AR 0250, Koran chants to 0300, ID and into nx in AR, exc (Newman IN)
- 116798v **NORTH KOREA KCBS** in KR 0623, martial mx, tlk, ID?, //96663 (Brandi NJ 11/17)
- 11690nf **SINGAPORE R Nederland** relay in IN *1129, mostly talking, ID 1145 (Field MI 11/9)
- 11690 **CHILE Voz Cristiana** Santiago in SP 0215, "Tu Musica" pgm of Christian pop mx (Newman IN)
- 11715 **INDIA AIR** Portuguese Goa in EG 2134-2230, mx, nx, cmntry, interview, f (Raymond NH 11/17)
- 11730 **PHILIPPINES R Pilipinas** in EG 1915* (sounded like mix of EG/SP), tlk, ID, fqys (Brandi NJ 12/2)
- 11740 **SINGAPORE RTE** Ireland relay in EG 1000, nx re Ireland, QRM from WYFR s/on (Field MI 11/10)
- 11745 **CHILE Voz Cristiana** Santiago in SP 2145, Christian pop songs, tlk, ID, f (Kohlbrenner PA 11/27)
- 11750 **NETHERLANDS ANTILLES Deut Welle** relay in EG 0325, rpt on Czech economy, ID (Witham HI)
- 11795nf **GUAM KSDA Adv World R** relay in EG 1045-1100*, tlk re Bible passages, ID (D'Angelo PA 11/19)
- 118049v **BRAZIL R Globo** Rio de Janeiro 0813, "Musica sertaneja", f (Nozaki JAPAN 11/13)
- 11805 **OMAN R Sultanate of Oman** in AR 1749, ME vcls, Big Ben-style chimes, ID, nx, f-g (Hili MA 11/14)
- 11830 **BRAZIL R Anhanguera** Goiana in PT 0814, nx "Jornal da CBN", ID (Nozaki JAPAN 11/13)
- 11920 **THAILAND VOA** relay Udorn Thani in EG 1945, tlk on genetically altered foods, f (Klinck NY 11/20)
- 11975 **SAO TOME VOA** relay in EG 1955, tlk on sales techniques, g (Klinck NY 11/20)
- 11990 **SLOVAKIA RSI** in EG 0659, fqy, IS, pips 0700, ID, nx, classical mx, mailbag (Serra ITALY 11/15)

- 12015 **ECUADOR HCJB** Quito in EG 0120, cmntry on AIDS, HIV, homosexuals, exc (Levison PA 11/30)
- 12019v **VIETNAM V of Vietnam** Hanoi in EG 2340, Central govt. working on isolated towns (Newbury NE)
- 12045nf **INDIA AIR** Portugese Goa in HD 1712, tlks, regional mx, ID 1730, fair sig with whiskery(sic) audio, //13720 vg, 13770 g, //s left air 1730 (Hill MA 11/14, Witham HI 11/15)
- 12070 **UZBEKISTAN R Nederland** relay in EG 1532, nx, ID 1535, "Newslines" (Brandi NJ 12/2)
- 126895 **USA AFRTS** Florida in EG 0200, USB bcst, nx, sports, wx rpt (Levison PA 11/26) ED: On air 24 hrs.
- 13620 **INDIA AIR** Bangalore in Pushtu *0215-0300*, tlks, intermittent chanting, f, //11735 (Findlater 12/14)
- 13640nf **CANADA RTE** Ireland relay Sackville in EG 1830, nx of Ireland, wx rpt, sked, IRA statement, //21630 (Witham HI 11/16, Field MI 11/10)
- 13660 **GERMANY Swiss R Int** relay Julich in IT 1835, tlks, ID, f, //11910 Julich Witham HI 11/21
- 13670 **NETHERLAND ANTILLES RVT** Belgium relay in EG 2235, feature on Y2K, g (McGuire MD 12/10)
- 13675 **UNITED ARAB EMIRATES R Dubai** in EG 0330, nx re Egyptian air crash, f (Pasquale PA 11/19)
- 13730 **AUSTRIA RAI** Vienna in EG 1345, profile of book on Austrian Jews under Emperor Franz Joseph I, g (Fraser MA 11/21) in GM 1918, local mx w/DJ, some yo deling, g (Levison PA 11/23)
- 13860 **ICELAND Rikisutvarpid** Reykjavik in IC 1447, tlks w/others joining in (Newbury NE) ED: 10 kw!
- 15105 **GERMANY Good News World R** via Julich in EG 1615, relig tlk, ID, QTH, f (Witham HI 10/30)
- 15130 **NORTH KOREA R Pyongyang** in SP 0045, lively mx mix, ID 0050 in SP, g (Klinck NY 11/15)
- 151498 **INDONESIA V of Indonesia** in EG 2000-2100*, nx, cmntry, ID, local mx, rpt on peacekeepers in East Timor, skeds & "Love Ambon" at s/off (Alexander PA 11/25, D'Angelo PA 11/20, Pasquale PA 11/26)
- 15180 **NORTH KOREA R Pyongyang** in EG 0024, features on "The Revolution", ID (Costello NJ 12/6)
- 15200 **INDIA AIR** Bangalore in EG 1850, ethnic mx, vocals, nx, exc (Levison PA 11/23) ED: 500 kw xmtr
- 15215 **SOUTH AFRICA Channel Africa** in EG/PT 0610, Afro mx, nx, ID, tlks (Newbury NE, Serra ITALY)
- 15225 **GUAM KSDA Advent World R** relay in DN/JP 2227, end of DN pgm 2229, full ID in EG, invited reception rpts from listeners, into JP Pgming 2230, p-f (D'Angelo PA 11/14)
- 15250 **SRI LANKA VOA** relay in EG 0200-0300*, ID, nx re Clinton's Greek/Turkey visits, f (Findlater CA)
- 15330 **UZBEKISTAN R Tashkent** in Uzbek(p) 1159, IS twice, ME mx, strong but echoey (Hill MA 11/24)
- 15335nf **PAKISTAN RP** in Urdu 1758, ID, nx, cmntry, local mx, f (Klinck NY 11/9)
- 15355 **GABON R Japan** relay in EG 1742, Japanese mx, interviews, ID's, f (Klinck NY 11/20)
- 15365 **ROMANIA RRI** Bucharest in EG 1745, "DX mailbag", tlk on tourism, ID's, g (Klinck NY 11/20)
- 15385 **SPAIN REE** Noblejas in EG 0120, ID, US and Puerto Rico argue over water rights, g (Newbury NE)
- 15425 **SRI LANKA SLBC** in EG *0029-0300, choral opening, pips and ID at s/on followed by early bird pgm w/jazz version of Bonanza, mx mix (D'Angelo PA 11/26, Newbury NE, 11/4, Montgomery PA 11/23)
- 15435 **LIBYA R Jamahiriya** in AR 1500, chants, ancmts, mystic mx (Uhler OR 11/30, Newbury NE 11/2) in EG 2045, statement that US tourists would be welcome to visit Libya, g (Pasquale PA 11/26)
- 15470 **RUSSIA V of Russia WS** Komsomolsk relay in EG 0400, ID, classical mx, nx, f (Findlater CA 11/23)
- 15500 **MALI China R Int** relay in FR/CH 2205-2257*, nx in FR, ID in CH, tlks, //11970 (Findlater 11/27, McGuire MD 11/14) in EG 2055*, flute mx, "This is CRI saying Good-bye" (Newbury NE)
- 15550 **CHINA China R Int** Beijing in CH 0107, mix of Western & CH mx, CH ancmts, f (Klinck NY 11/15)
- 15555 **SWITZERLAND SRI** Sottens in AR/FR 1745, tlks in AR, fqy, sked, IS, ID, into FR, f (McGuire 11/25)
- 15590 **JAPAN R Japan NHK** Tokyo in EG 0138, tlk on JP poets & flowers, vg (Klinck NY 11/15)
- 15685nf **TAJIKISTAN** Dushanbe relay of *V of Tibet* in Tibetan *1233, advertised s/on is 1225 but nothing til 1233, regular pgming begun 1240, off at 1255, listed//s 15645, 15680 (Field MI 11/11)
- 15715 **GERMANY V of Hope** via Julich relay in EG 1350, relig sermon re belief in Jesus, f (Newbury NE)
- 15820 **ARGENTINA R Rivadavia Continente** domestic feeder in SP 0400, entertainment tlk show, modern Argentine pops, nx 0800, f (Nozaki JP 11/13) ED: Only 5 kw xmtr, listed 24 hrs daily.

- 15880 **CHINA** *China R Int* Beijing in Mandarin 0940, tlks, hrd again on 1206 recheck, g (Costello NJ 11/28)
 17515nf **VATICAN CITY** *VR* Rome in SH/Amheric 1630, carillon bells IS & ID 1655, f-g (Treibel WA 11/29)
 17570 **RUSSIA** *R Nederland* relay Khabarovsk in DT *2330, nx re Kosovo, E Timor, f (Findlater CA 11/22)
 17595nf **RUSSIA** *V of Russia WS* Petropavlovsk relay in EG 0400, IS, ID, news and views (Witham HI 11/23)
 17660 **ECUADOR** *HCJB* Quito in EG 1938, "Ham Radio Today", solar cycle disappointing (Fraser 11/10)
 17660 **RUSSIA** *R Rossii* Moscow in RS 0237, long tlk, switched to YOR feed in EG briefly 0300, then came back to RS w/IS and ID, //17595, 15595, all good level (Brouillette IL 12/3)
 17660nf **ITALY** *RAI* Rome in IT 1700-1800*, excerpt from New World Symphony, ID, IS (Treibel WA 11/29)
 17675 **NEW ZEALAND** *RNZI* in EG 1803, interview abt New Guinea tribes, ID, IS, exc (Uhler OR 11/22) in EG 0204, ID, nx, feature on church's role in NZ Polynesian society (Brouillette IL, Montgomery PA)
 17705 **USA** *V of Greece* relay Delano, Calif ornia in GK 1854, interview, ID, IS, exc (Uhler OR 11/20)
 17710nf **CANADA** *CBC Radio One (HS)* via Sackville in EG 1630-1659*, relig pgm, ID, xmtr & website at sign off (extended s/off on Sundays only, earlier s/off on weekdays (Treibel WA 12/19)
 17735 **NORTH KOREA** *R Pyongyang* in SP 0217, typical strident crantry, ID, jamming (Brouillette IL 12/3)
 17835 **PAKISTAN** *R Pakistan* in Urdu 0605, nx, tlks, //21460, p (Witham HI 11/4)
 17865 **CANADA** *R Austria Int* relay in EG 1605, world nx, Rpt from Austria, exc (Levison CA, Fraser MA)
 17880 **MALI** *China R Int* relay in AR 1626, tlk, ancmt, ID? mix w/pop mx, //15125 (Serra ITALY 11/14)
 21455usb **ECUADOR** *HCJB* Quito in JP 2030, dialog, Andean mx, into EG 0015 (Witham HI 11/11) 1/2 kw!
 21725 **AUSTRALIA** *RA* in EG 0205, nx, financial rpt, very weak but clear in quiet condx (Brouillette 12/3)
 21740 **AUSTRALIA** *RA* in EG 0050, mailbag feedback, mx, ID, IS kookabura calls, g (Uhler OR 12/4)
 21770nf **SPAIN** *REE* Noblejas in SP 1600, xmsn to Africa/ME. many vocals, nice rhythm (Levison PA 11/21)
 259299nf **COSTA RICA** *REPI* Santa Ana in EG 1627, song abt the water cycle & other ecological songs, ID, QTH, phone #, e-mail address, "Web of Life Audio" (Brandt NJ 11/28) Daily sked 1600-2300 - 2 kw.

Clandestine, Tentatives, Presumed, Or Unknown

- 59753 **COLOMBIA** *R Autentica (p)* in SP 0635, organ mx, hyped relig tlk, f to 0700 (Kohlbrenner PA12/5)
 6130 **LAOS** *Lao Nat Radio (t)* in lang 1203, nx, typical programming format of past (Rippel VA 12/11)
 62615 **COLOMBIA** *V de la Resistencia* in SP 2215-2231*, folk mx, tlk, ID's, NA, f (Alexander PA 10/31)
 6920 **SUDAN** *Jammer*, Horn of Africa type mx 0408, switch to 8000 at 0414 (Brandt NJ 11/20)
 7230 **INDIA** *AIR Panaji (p)* in Farsi *1615, IS, mixing w/another Farsi stn 1625, ham QRM (Hill MA 12/9)
 7235 **IRAN** *V of the Islamic Revolution of Iraq* in AR 0350, cheesy mx, ID 0430, //7295, 6195 (under BBC) (Brandt NJ 12/7) ED: listed schedule 0330-0530 with 250 kw xmtr.
 7540 **TAJIKISTAN** *R Free Asia* via Dushabe relay in CH 1845, pop & ehtrnc CH mx (Newbury NE 11/16)
 8840 **IRAN** *V of the Mojahed* in Farsi 0242, on this bizarre fqy, low audio, //7880, ID (Hill MA 11/23)
 94897 **ABKHAZIA** *Abkhazian R (t)* in RS? 0428, short tlk & vcls, fanfare, nx, p (D'Angelo PA 11/21)
 95175nf **ERITREA** *V of Sudan* in AR *0400, anthem, ID, tlk, local mx, poor copy w/hets from 9515 & 9520, // 80008, f (Alexander PA 11/25) ED: Listed daily sked 0400-0600, 1200-1400, 1600-1800. 1 kw!
 95685nf **SAUDI ARABIA** *V of the Iraqi People* via Jeddah in AR 2220, tlk, mx, ID 2241 (Brandt NJ 12/1)
 11540 **TAJIKISTAN** *R Free Asia* Dushanbe relay in Tibetan 1145, tlk, ID in EG at 1200, f (Rigas IL 11/29)
 11550rf **TAIWAN** *R Portugal* relay 2229-2259*, ID in PT, mx, pgm titled "Pgm Timor Loro" (Field MI 11/17)

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