書**N4学** Journal

VOLUME XLVI NUMBER 1

JANUARY 2006



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N434 Notes

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

*Happy New Year everyone! As we start off a New Year, I hope one of your New Year resolutions included supporting your club with news, information and loggings. Our editors are always looking for your contributions which are what makes the club work. Without interesting contributions from the membership there would be no club. So, support your club by participating whenever you get a chance.

By the way, I didn't see new Eton E1 portable receiver as a gift over the holiday season. I must have missed communicated somehow but I don't know how my "hints" could have been construed as a new pair of sox's. Very disappointing!

Time marches on ... January 2006 marks the 10th year of operation of our website. Thanks to **Ralph Brandi** who created and nurtured our Internet presence all these years. Ralph has cooked up a 10th anniversary present in the form of a new look and feel to our website, as well as some new features and a new location, www.naswa.net. Read more about these exciting changes in the pages of this issue of the *Journal* as well as subsequent issues. Stay tuned!

Speaking of time marching on it is that time of the year when serious Winter SWL Festival plans need to be made. Yes, once again the gathering of the faithful will meet in Kulpsville, PA to celebrate the great hobby of radio in all its forms. This will be our 19th reunion of the best radio people in the world so you do not want to miss it. Watch Rich Cuff's column for updates and progress reports on developments. Check the Journal for the registration form, or visit www.swlfest.com where you can download a copy of the form. You have had plenty of warning so we expect to see you there in March.

Where do 200 issues go? It seems like it was only yesterday that the Executive Council began talking about launching an electronic Flashsheet to keep members up on the latest loggings, news and information in the shortwave broadcast world. First thanks to Sheryl Paszkiewicz and now Ray Bauernhuber we have had two excellent editors doing the editing chores for our weekly news source. To Sheryl and Ray and all the contributors? Thanks!

To mark the occasion of the 10th Anniversary of the Electronic DX Press (EDXP) this month, specially endorsed "Radio EDXP" commemorative QSLs are now being offered. These postal-mailed full detailed QSLs are available for correct reception reports received until the end of March 2006. These should be sent to Radio EDXP, 404 Mont Albert Road, Victoria 3127, Australia, and return postage is appreciated. Reports may also be sent via the online template at http://edxp.org, which will be verified via the Internet. Return postage is not required for on-line reports. At the present time, Radio EDXP programming is heard throughout the month within the DX Partyline features over HCJB Ecuador, HCJB Australia, WRMI and WWCR. It is also heard in the Dxing with Cumbre broadcasts over World Harvest Radio stations WHRA, KWHR, and WHRI. Bob Padula is looking forward to receiving many reception reports!

Also from Bob Padula is news that arrangements have been made for the inclusion of Radio EDXP News Reports in the restructured Wavescan programs over the English service of Adventist World Radio, transmitted from the KSDA facility in Guam. These monthly Radio EDXP features are titled "The Australian DX Report", and shorter news items from EDXP will be included at other times. The EDXP Report may be broadcast at any time during the month. As in the past, fully detailed

Radio EDXP QSLs will be issued for correct reception reports for the EDXP features, and these should be sent to Radio EDXP, 404 Mont Albert Road, Mont Albert, Victoria 3127, Australia. Return postage is required for these postal mailed QSLs. Electronically delivered QSLs are offered for reports sent via Email, to bobpadula@mydesk.net.au, or via the on-lime template at http://edxp.org. Reports which are received via postal mail, and which do not include return postage, will be QSLed via the Internet, provided that the reporter provides an E-mail address.

Now that the holiday season is over and the DX season is in full swing, perhaps it is now time for you to get on the distribution list for the club's electronic Flashsheet. The changing DX conditions will bring different DX conditions and new listening targets. The club's electronic Flashsheet helps members stay on top of the action with breaking shortwave news and information. If you are a current member of the club and want to receive the electronic Flashsheet just drop Rich D'Angelo (rdangelo3@aol.com) a note with your e-mail address, location and membership expiration date from your mailing

label. You can participate by sending your latest logs to the electronic Flashsheet ed-Bauernhuber. ited bv Rav DXRADIO@webtv.net. Each week the electronic Flashsheet brings a lot of exciting, late breaking DX news and information to our members. The electronic newsletter is an excellent supplement to the monthly Journal for the timely dissemination of DX loggings and breaking news. This is a service that is only available to our members. Deadlines are posted in the NASWA Flashsheet each week. Let's keep Ray busy!

Please remember to direct all communications about subscriptions, bulletin delivery issues, Super Bowl picks, the use of PayPal as a payment method, etc. to Bill Oliver at the club's Levittown address or to his electronic address, weoliver@comcast.net. The regular postal address is the familiar 45 Wildflower Road, Levittown, PA 19057. Inquiries sent to Wyomissing only slow down the process. Thanks!

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

FRENDX: Twenty-Five Years Ago (January 1981)

Mac Leonhardt's Headquarters Report led off with the news that 1981 was the club's 20th anniversary. Started in November 1961 as an all wave club, NASWA became all shortwave broadcast in 1966. Myron Smith indicated he would be stepping down as Scoreboard editor. A search began for a replacement editor. The Shortwave Center featured an interview of Glenn Hauser by John Moritz. Roger Legge provided the latest English Language Broadcasts to North America while in It Sounds to Me, Al Sizer wrote about American commercial broadcasters in shortwave and Bob Foxworth wrote about the DP-40 Preselector. Maxfield Greenwood and Stu Klein reacted to Ralph Perry's call to terminate the Scoreboard in Frendx. Bill Sparks wrote about two of his favorite QSLS, Radio Fiji and Radio Cook Islands. Sam Barto noted 108 countries were reported to the QSL Report. Stu Klein substituted for Terry Krueger on Log Report A and Brett Saylor stepped in for Terry Colgan in Log Report D.

Contribute!

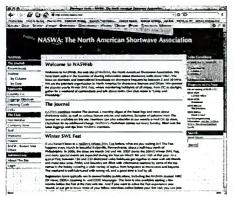
Send your loggings and QSL information off to our Distributing Editor, **Bob Montgomery** (Address: POBOX 1458, Levittown, PA 19058). He will forward them to the appropriate editor. Remember, Bob also distributes QSL report information and totals for the **Scoreboard** column. He can also be reached through the Internet at: RMonty23@netzero.net.

NASWA Offers CD of 1947-58 WRTHs

The NASWA Company Store is pleased to announce an exciting addition to our product line. We will be offering a new CD compilation of the 1947–1958 editions World Radio and TV Handbook. The CD is the creation of Michael Schmitz, Editor-in-Chief of the ADDX DXing club magazine Radio-Kurier, weltweit hören and is being produced by the ADDX. The CDS are in searchable PDF format. The CD contains a complete high quality copy of the entire contents of the original volumes. NASWA member Jerry Berg has previewed the CD and finds it a valuable addition to his library. His full review is in this issue of The Journal.

Copies of the CD are available through The Company Store at the introductory price of \$50US (including postage) until 31 January, 2006. From 1 February, 2006, the price will be \$60US (including shipping). Checks should be made payable to the Company Store. The CDS will be shipped directly from Germany. To order a copy of the CD please send a check to: Mike Wolfson, NASWA Company Store, 1842 Mifflin Ave., Ashland, Ohio 44805.

NASWA Announces New Web Site, Marks Tenth Year on the Web

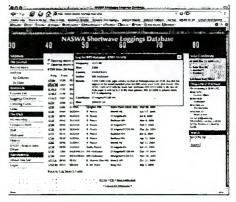


Another exciting feature of the site is the Shortwave Loggings Database. The database contains more than 15,000 loggings submitted to the NASWA Journal over the past seven years. It is the club's hope that the database will serve as a primary source of information for identifying stations when DXing.

NASWA webmaster Ralph Brandi hopes to add additional features to the site in the coming months and years, possibly including forums, a reconstituted weblog to cover international broadcasting, and maybe even podcasts. Any NASWA member interested in helping maintain the site is urged to contact him at webmaster@naswa.net.

January 2nd marks ten years since NASWA first opened its web site to the public, and to mark the occasion, the club has unveiled a completely redesigned, rethought and rennovated web site at a new address, www.naswa.net.

The very popular www Shortwave Listening Guide, originally created by John Figliozzi, has been completely revamped. More than 3,000 entries have been updated, and the new design offers quick access to all the information needed to find English language programming available on international shortwave broadcasts.



Calendar Of Events

- Jan 20 Meeting. Philadelphia Area NASWA Chapter. Kulpsville Holiday Inn, Kulpsville, PA at 7:30 PM. For more information contact Dan Cashin at 610-446-7831 or Internet: dcsckp@aol.com.
- Jan 20 Meeting. Boston Area NASWA Chapter. The Boston Area Dxers have found a new location for meetings. Inquiries about the BADXers may be sent to Paul Graveline at 978-470-1971 or Internet: ctreditor@aol.com. The URL for the BADX guys is http://www.naswa.net/badx/
- Feb 11 Meeting. The Cincinnati/Dayton Monitoring Exchange (MONIX) meets at the Lebanon Citizens' National Bank (LCNB), 425 West Central Avenue (Ohio 73), Springboro, Ohio at 7:00 PM. For more information contact Mark Meece at 937-743-8089 or e-mail at kantennapig@siscom.net. For additional information about MONIX, check out their web site at http://www.siscom.net/~mmeece/monix.html
- Feb 14 Forum. The Association of International Broadcasters (AIB) is holding a Regional Media Leaders Forum in New Delhi, India bringing together key executives from the South Asian broadcasting industry as well as regulators, politicians and journalists to debate issues facing the industry. Further information is available from AIB at register@aib.org.uk.
- Mar 3-4, 2006 Convention. The 19th Annual Winter SWL Festival, sponsored by NASWA, will be held at the Best Western—The Inn at Towamencin (Kulpsville to the rest of us), located at Exit 31 on the Northeast Extension of the Pennsylvania Turnpike, on 3rd and 4th March 2006. Richard Cuff and John Figliozzi co-chair the organizational committee. Of course, it's never too early to begin planning. This year's registration form appears in this month's Journal. See you there!
- May 4-7, 2006 50th Julilee DX Camp and Convention. The Danish Shortwave Clubs International (DSWCI) will hold its 50th year Jubilee with a DX Camp and AGM on 4-7 May 2006 at the beach resort of Vejers near the westernmost point of Denmark at the Scout camp. The DSWCI is preparing a large program of activities which include: a DX-Camp from Thursday afternoon throughout till Sunday morning; a cultural tour on Friday to the town of Varde including an Danish painting exhibition; various historical exhibitions and publications about the DSWCI are planned; the Annual General Meeting Saturday morning; some of the founders and old-timers will be invited; various DX-related lectures Saturday afternoon; special DX-broadcasts and a Jubilee Dinner Saturday evening. Participation fee is DKK 500,00 or EUR 70,00 to use the facilities. Participation in just the AGM is free. The club is looking to complete registration and payment of fees by 10 April 2006. Nonmember DXers and broadcasters are welcome.
- Aug 19, 2006 2006 Madison-Milwaukee Radio Get-together. The 13th Annual Madison-Milwaukee Get-together for oxers and Radio Enthusiasts will take place in Milwaukee, WI on Saturday August 19, 2006, with Tim Noonan hosting. Please contact Tim at dxing2@aol.com for additional information Further information will appear in the Journal as the event draws near.
- Sep 1-3, 2006 Convention. The National Radio Club and the DX Audio Service will hold their annual convention at the Best Western in Akron, Ohio on 1-3 September 2006. Room rates are \$68.00 per night. More information to follow.
- Mar 9-10, 2007 Convention. The 20th Annual Winter swl Festival, sponsored by NASWA, will be held at the Best Western—The Inn at Towamencin. Join us for this 20th anniversary extravaganza in the DX Mecca.

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).

Easy Listening

Richard D. Cuff • 42 North 37th Street • Allentown, PA 18104 • richard@thecuffs.us

Oh no! He's started a blog!

Yes, I have myself a blog home in cyberhttp://intlradio.blogspot.com. Some might argue that weblogs can often be nothing more than narcissistic initiatives by people who want to see themselves on the Internet, but my intention is to post longer-form commentary and reference information than would not be appropriate for either the Easy Listening column or posts I make at the swprograms e-mail list. Hopefully some folks might actually find this useful. I'll also provide link references too. For example, I'll post past Easy Listening columns there a few weeks after they appear in the NASWA Journal. Readers can post comments to blog entries, as well.

2005 review, 2006 projections

The most notable loss in 2005 international broadcasting was Radio Vlaanderen International. The Belgium story was similar to the Austrian story—funding responsibility for RVI, like Radio Austria International (RÖI), was passed to the domestic public broadcaster. Both public broadcasters, under budgetary pressure from domestically-focused legislatures, found it very easy to emaciate, in RÖI's case or eliminate, in RVI's case, the international broadcaster they inherited.

The VOA shrank in size in 2005, as English language services continued to be reduced. The *News Now* format is now regionally focused—there is no longer a true global version of *News Now*. More on the VOA later in the column.

The BBC World Service also shrank on shortwave in 2005, as ten of its language services—mostly in Central and Eastern Europe, plus Thai—were shut down, with the funding savings to be invested in a new Arabic language television venture. Looking at the numbers, the decision made sense—the services in question were seeing stagnant audiences, and those audiences had far more broadcasting choices than were available years ago. The risk is that this Arabic TV service becomes a money pit, in much the same way similar ventures from Deutsche Welle and Radio Australia have fared.

In addition to the language closures, the BBCWS also reduced its daytime broadcasting hours to Europe and its evening hours to the Americas. Thankfully, the BBC continues to emphasize shortwave delivery to Africa, and one or more frequencies targeting Africa are generally audible in eastern Pennsylvania from 1300 UTC to 0400 or later, except for Africa's overnight hours of 2100 UTC to 0300 UTC.

Kol Israel seems to regularly be at risk of shutdown, but all previous crises have been averted as budgets are shuffled as appropriate. Radio Slovakia International has survived shutdown threats before, but a long-term budgetary solution for its continuance hasn't yet been announced.

One of the key buzz phrases in International Broadcasting in 2005 was delivery platforms, as broadcasters continued to diversify how they made their programming available to listeners. The two hottest developments in this front were satellite radio and podcasting. Sirius satellite radio created further separation from its competitor XM as far as international broadcasting is concerned. as it added a 24-hour channel for Canada's CBC Radio One to USA subscribers when it launched its Canadian service in December of 2005. Sirius's Canadian listeners receive a channel called RCI Plus that includes many foreign-language transmissions of RCI along with the English programming targeting listeners in Asia, Europe and Africa. In

addition to the CBC programming, Sirius's **PRI World** channel airs programming from the CBC as well as **Deutsche Welle**.

Podcasting was perhaps an even bigger "radio" trend in 2005, because the concept of do-it-yourself programming, free of any FCC intervention, became voguish. A range of broadcasters, including the BBCWS, Radio Australia and its sibling Radio National, Radio Sweden, Deutsche Welle, the Voice of America, and recently Radio Netherlands, now offer portions of their broadcasts formatted for easy, automatic downloading to personal computers and digital audio players such as iPods and other MP3 players. It's quite convenient to open up podcast software such as iPodder and see fresh episodes of Asia Pacific, Background Briefing, and BBC documentaries ready for listening at the click of a button. The biggest downfall of podcasting is that there is no one single authoritative site to find all podcasts, but I would recommend Kevin Kelly's Public Radio Fan website (http://www.publicradiofan.com) as your starting point, as Kevin keeps the podcast listings up to date through the help of site visitors.

Fans of shortwave radio can rightfully grumble that these other delivery platforms siphon financial resources away from shortwave transmitter utilization, but the broadcasters hasten to point out that these alternate delivery platforms are necessary to reach audiences that would not likely listen on shortwave—"unduplicated listeners".

2006 will see these trends continue; another trend that has been slower to come to fruition than its founders would like is Digital Radio Mondiale (DRM) usage on shortwave. It appears Europe will be fertile ground for DRM, as broadcasters are now using it for round-the-clock test broadcasting. Disappointingly, listeners are still waiting for consumer-grade receivers (i.e. standalone receivers < \$300) to be launched; North American listeners report mixed results in DRM audibility, and there doesn't seem to be

an increase in DRM transmissions targeting North America.

Check out the January 2007 column to see how 2006 actually fared.

Voice of America: Still on the air, but tougher to receive

The voa has seen its services scaled back in recent years, with English language broadcasts to the Americas consisting exclusively of Special English, which is of little value to native English speakers. In addition, the News Now rolling news format has been transformed into a regional format based on the regions being targeted at a particular time—editions exist for Africa, South Asia and East Asia. The magazine & lifestyle programs Coast to Coast and Main Street have been discontinued, and Communications World is long gone.

However, the VOA continues to be audible on shortwave, especially on those frequencies targeting Africa. I've found the VOA particularly audible in Eastern Pennsylvania from 0300 to 0500 and from 1700 to 2100 UTC, in all instances on frequencies targeting Africa. VOA also is available in English live 24/7 on the Web, and many of its programs are available for on-demand listening and podcasting.

News Now should be considered somewhat like RCI's Canada Today in that the stories chosen are not necessarily news about a target region, but they include topics that are believed to be of interest to the geographic target in question. Here's a rundown of what you'll be able to hear at these times, along with frequencies noted as the best in Eastern Pennsylvania at a French Creek DXpedition:

0300 M-F: *Daybreak Africa*, a magazineoriented program of news, interviews and sports of interest to Africa; Sa-Su: *Africa News Now*, international news, news of the USA, and news of Africa (6035, 6045, 7340, 9885) 0330 M-F: Africa News Now; Sa: World Of Music, featuring music and interviews, with particular emphasis on the African Diaspora; Su: On The Line, an interview program on important international issues with officials, policy experts, and scholars (6035, 6045, 9885)

0400 M: American Profiles, the personal stories of notable Americans in today's world; Tu: America's Global College Forum, interviews with international college students attending college in the USA; W: Wordmaster, stories on the origin of words and phrases in English; Th: International Press Club, discussions with editors of global English-language newspaper editors; F: Hollywood Highlights, a weekly look at the American movie industry; Sa-Su: Africa News Now (9885)

0430 M-F: Daybreak Africa; Sa: Music Time In Africa, highlighting the best in traditional and modern African music; Su: Our World, examining global issues in science, technology, agriculture and the environment (try 9775)

1700 M-F: Africa World Tonight, an evening news magazine broadcast live, including the popular Sonny Side of Sports; Sa: On the Line; Su: Africa News Now (15240)

1730 M-F: Africa World Tonight continues, with an editorial at 1755; Sa: Press Conference USA, an interview program featuring multiple interviewers and a single newsmakers, with an editorial at 1755; Su: Music Time in Africa (15240)

1800 M-Th, Sa, Su: *Africa News Now;* F: *Sonny Side of Sports*, a phone-in program hosted by Sonny Young (hence the program name) regarding the African sports scene (15240, 17895)

1830 M, Tu, Th, F, Sa: World of Music; W: Straight talk Africa, a call-in program examining topics of special interest to Africans; Su: Encounter, a panel of experts discussing opposite sides of a controversial issue (15240, 17895)

1900 M, W, Th: World of Music (tentative based on schedule interpretation) Tu: Housecall, a live call-in health program that puts listeners directly in touch with medical professionals; F: Reporters' Roundtable, a program analyzing the week's major developments in Africa; Sa: Hip Hop Connection, the latest hip-hop music from the United States and Africa; Su: Africa News Now (15580, 17895)

1930 M-Th: Africa News Now; Fr: VOA News Review, with VOA reporters and editors reviewing the week's news; Sa: Hip Hop Connection continues; Su: Music Time in Africa (15580, 17895)

2000 M-Fr: Africa World Tonight, with a second live edition, plus an editorial at 2055; Sa, Su: Nightline Africa, featuring news and sports from Africa and around the world (13710, 15580)

Voice of Russia: Joe Adamov Passes Away

Moscow Mailbag has been a feature program on the Voice Of Russia since its days spewing propaganda as Radio Moscow, and the program's host-since the mid-1960s-was Joe Adamov. Joe answered questions with a touch of humor, and his frankness in speaking of Radio Moscow's role in spreading propaganda in the days of Glasnost was remarkable. Joe passed away in mid-December following a long illness; he was 84 years old and still on the air in the months prior to his demise. I would bet that most NASWA members probably heard Moscow Mailbag early in their shortwave listening experience, given how Radio Moscow used to dominate the shortwave bands on multiple frequencies.

"Programs I Like" review from Peter Bowen: Write On

Here's another recent contribution from Peter Bowen that was originally posted on the *swprograms* list: It's a peek behind the scenes, if you will. The BBC World Service generates lots of mail, partly due to its massive output, and Write On is a good means by which to get a glimpse of what some of that mail is all about.

Write On is a 13-15 minute programme that responds to listener comments about the World Service. These comments can come via e-mail, postal mail, SMS texting, and fax. Occasionally, there are also phone conversations with listeners, which allows for a more in-depth discussion of that person's complaint and/or point-of-view. And although most feedback is critical and questioning, there are also some comments of praise and compliments.

Comments and questions are read on-air by World Service announcers, with comments from the host frequently added or interspersed. Hosted, on a rotating basis by Dilly Barlow, Penny Vine and Nick Baker, listener questions and concerns are often put to the appropriate officials for a response. Those responses discuss station policies, plans, and programming philosophy. In addition, those responsible for specific programmes are put in the "hotseat", enabling listeners to learn of the "how" and "why" of program making.

When a response is vague, or unsatisfactory, the host will press the issue via follow-up questions. This process sometimes produces unsatisfactory results, yet nevertheless allows listeners of the programme to learn how and why World Service decisions are made. We may not agree with the official reasoning, but at least we know why something is being done or not done. It also allows us to learn of upcoming changes to frequencies, programs, and other services.

Write On is a vehicle for listeners to vent their displeasure with the World Service, and gain a brief insight into how it works. Regardless of how one views the comments offered in the show (good or bad or indifferent), I think that it is required listening for anyone who has a strong interest in the BBC World Service.

The program's website is http://www.bbc.co.uk/worldservice/programmes/

write_on.shtml; shortwave airtimes audible in North America include Saturdays 1345 to the Americas (15190) Africa and Europe (21470). Most us public radio stations that air *Write On* do so Saturdays at 0945 UTC; a few us public radio stations carry the 1345 airing. XM listeners can hear *Write On* Satudays at 0445, 0845 and 1345, plus Mondays 0145. Sirius listeners can here *Write On* Saturdays 1345.

Live webcasts are the same as the XM times noted above, along with Sundays 0245 on some BBC domestic stations. A good schedule reference is the *Public Radio Fan* website for *Write On*, http://www.publicradiofan.com/cgi-bin/program.pl?programid=463, or click "Programs by Name" in the left-hand menu on any Public Radio Fan page.

The latest edition of *Write On* is available for on-demand listening at the BBC website listed above; new episodes are refreshed Saturdays 0445 UTC.

SWL Fest Registration Season is at hand!

John Figliozzi and I are making preparations for the 19th (!) Winter SWL Fest, March 3-4, 2006; there are already a series of interesting forum topics shaping up, including a couple of themes we haven't explored in past Fests. A registration form is available elsewhere in the *Journal*; it can also be downloaded and/or printed from the Fest website, http://www.swlfest.com. The Fest website also has a link to an email discussion list that's a good place to ask questions if you haven't joined us in Kulpsville before.

Please register before late February—it's cheaper for you and less hassle for us if you register early. Hope to see many of you there!

Until February, 73 DE Richard

an/

Equipment Reviews

Alan Johnson • 2490 Sharon Way • Reno, NV 89509 • alanjohnson@gbis.com

The Eton E1XM Portable Receiver

This is probably the longest anticipated product release in the history of the radio industry. The Grundig Satellit 900 was announced in the 1996 edition of Passport To World Band Radio, with an anticipated release date of "early 1996". It was to be the replacement for the Satellit 700. Here we are almost ten years later with (finally!) the introduction of the Eton E1, which has a physical appearance almost identical to the early prototypes of the Satellit 900. Interestingly, this renamed radio will receive satellite radio, a form of broadcasting that didn't exist when the original Satellits were produced. It is produced by Eton, which took over Grundig's radio line and the new receiver is manufactured in India. Allegedly, the R. L. Drake Co. was involved with the engineering of the radio, which I think is entirely likely as it shares several features with the Satellit 800 and Drake appears to be providing service support. The street price is \$500. Was it worth the wait? Is it worth the price?-let's see.

Portable?

This is a big radio, although certainly not on the scale of the boom-box style Satellit 800. It measures 13.1 x 7.1 x 2.3 inches (WxHxD) and weighs 4 pounds without batteries. This compares with 12.25 x 7.25 x 3 inches and 4 pounds for the Satellit 700, 11.4 x 6.25 x 2.25 inches and 4 pounds for the Sony ICF-2010 and 11 x 7 x 2 inches and 3.25 pounds for the Sony ICF-SW77. Although the measurements are similar, the E1 seems to dwarf the Sonys when they are lined up side-by-side on a table. The extra size is put to good use, as the E1 has a 4 inch speaker and 4.5 x 3.3 inch LCD display with four levels of backlighting (including off).

The display shows frequency, time (either local or GMT) in 24 hour format, s-meter, squelch setting and selections for the 13 pushbuttons arranged along the bottom and right side of the display which set the various operating parameters. The case is finished with a pliable rubberized material that feels nice, but picks up skin oils well, although these are easily removed with a soft cloth. The tilt stand that folds out from the back of the case tilts the radio to a very ergonomic angle and is stable. The main anomaly in the case design is that there is no handle with which to carry this "portable" radio! Frequency coverage is from 100 kHz to 30 MHz and the FM coverage can be selected via the menu to be either 76 to 90 MHz or 87 to 108 MHz. The radio is powered by a supplied AC adapter cube (three prong grounded design) or by 4 internal "D" cell batteries. Installing the batteries entails flipping open the battery door on the lower left of the front panel, removing a second battery door and sliding the batteries into the battery holder. Alternatively, the radio can be powered by an external source of 7 to 15 volts DC. Maximum current drain using an external 9 volt supply is 900 ma, but this drops when using batteries to 175 ma in FM mode, 210 ma on LW/MW/SW and 350 ma in xm mode (latter three figures with backlighting off).

"Pro" Features Galore

One of my complaints over the years has been that radio manufacturers don't seem to pay attention to what listeners want in a radio. This is not the case with the E1, as it appears that a lot of thought went into this radio's design. This is certainly not a communications receiver, but it is

certainly capable of more than just casual program listening. For starters are the well-chosen IF filter bandwidths of 7.0. 4.0 and 2.3 kHz (manufacturer's specifications). The 7 kHz is great for program listening "in the clear", the 4 kHz is a good choice for listening to broadcasts under interference conditions and the 2.3 kHz is a good width for listening to amateur SSB signals or using ECSS technique for DX. Based on photographs of a disassembled E1 at: http://www.radiointel.com/reviewetone1photo.htm, the IF filters are metal cased units, which tend to have better shape factors than the smaller, cheaper plastic cube units used in many portables. The shape factors at the -6/-60 dB points as listed in the manual are 1.7, 2.25 and 2.17 from wide to narrow. The SSB selectivity is further improved by the "Enhanced SSB" feature which can be enabled from the Radio Settings menu. Engaging this . feature turns on an audio phasing circuit that attenuates the undesired sideband by an additional 30 dB.

Another tuning control that distinguishes the E1 as a connoisseur's portable is the Passband Tuning (PBT) control. This front panel knob shifts the passband by ±2 kHz in 100 Hz steps and works in all modes (including Sync) except FM and XM. This permits shifting the passband to enhance intelligibility/fidelity, even when a narrower filter is selected to reduce interference. I found the PBT to be very useful when used with the 4 kHz filter in AM or Sync modes and even permits use of the 2.3 kHz filter in AM mode when interference is particularly marked. Additionally, when Enhanced ssb is selected in the options menu the PBT can be used to reduce the nominal filter bandwidth by tuning the PBT to the opposite sideband. This worked well for me when listening in SSB mode with the 2.3 kHz filter. The E1 also has selectable Fast/Slow AGC (but no Off position or RF gain control), which is rarely seen in a portable receiver. There is also an "Auto" AGC setting, which switches to Fast when the radio is being tuned and goes back to Slow once the radio is tuned to a station. Instead of an RF gain control, the front panel "DX" pushbutton switches in a 10 dB RF preamplifier. There is a squelch control which has a graphic display just below the s meter. When the squelch control is engaged, only signals stronger than the squelch setting will be received. The visual feedback provided makes the squelch a pleasure to use.

The E1's tuning flexibilty sets it apart from other portables. The minimum tuning step is 10 Hertz, which makes ECSS tuning possible—a rare feature in portable receivers. The tuning rate can be set to either 10, 100 or 1.000 Hertz in MW or SW AM/Sync mode (10 and 1,000 Hertz in SSB mode) by pressing the "Fast/Tuning Lock" pushbutton-tuning lock is engaged by pressing and holding the button for two seconds. The 1.25 inch diameter tuning knob turns smoothly and tunes without chuffing. Although there is no tuning dimple on the knob, I'm able to spin it easily with my thumb when the radio is angled on its fold-out stand. Keypad tuning is available, and can be set to enter frequencies in either мнz or kнz formats. The radio tunes automatically when all display digits are filled or by pressing the decimal point key as an "Enter" key. This varies with the minimum tuning step selected—i.e. if the tuning step is set for one kHz, entering 9755 kHz requires two presses of the "." button to enter the frequency, while entering frequencies of 10,000 kHz or above requires no pressing of the decimal point key. The Select pushbar will step the tuning up or down in 5 kHz steps on sw, 9 or 10 kHz on MW and 100 kHz in FM mode. The radio can also be tuned to the low end of the standard international broadcasting meter bands by pressing the sw/Band key and either keying in the meter band numeric designation or selecting a meter band with the tuning knob or Select bar—this is a nice feature for bandscanning the various broadcasting bands. A Seek tuning feature is available which steps through the shortwave bands in 5 kHz steps and stops on signals that exceed the squelch setting.

The Sony ICF-2010 set the standard for synchronous detection in a portable, but the E1 exceeds that standard. The sync allows for selection of either sideband or double sideband. All filters are available in sync mode and the PBT can be used in sync mode, although the sync has to relock when the PBT is adjusted. The sync locks quickly and holds lock well even during deep fades. The sync detector's ability to reject the undesired sideband is exceptional. I did encounter some occasions where the sync would lose lock if there was a very nearby (less than one kHz) interfering station or on very deep signal fades.

Memories

Yes, the E1 has them-1700 to be exact. The first five hundred channels are displayed as ten channels per screen. Memory channels store frequency, mode, bandwidth, AGC and PBT setting, sync setting and can be labelled with up to 14 alphanumeric characters. The Select bar can be used to switch between memory pages and the tuning knob can be used to select memory channels on a particular page. The remaining 1200 memory channels are used by the "Country" pages with 10 channels per country ranging from Afghanistan to Yugoslavia. This takes up 1110 channels with the remaining 90 channels available for custom assignments. The country names can be edited, but the stored channels on a country page cannot be labelled. I'm not a big user of receiver memory channels, but I found the Country memory scheme to be very user friendly. The 90 unlabelled channels in the country memories permits having nine screens of 10 channels per screen which could be used for favorite listening targets such as pirates or utilities. The country memory screens can be quickly stepped through by holding down the Select bar. All memory channels can be scanned or only tagged memory channels can be scanned. In either scanning mode the squelch control can be set so that only signals of a certain strength are received. In the tagged scan mode (only), the radio can be set to either stop on a channel for 5 seconds and then resume scanning or to remain on the channel as long as the signal strength exceeds the squelch setting. This choice is made through the Radio Settings menu.

Intelligent design

Another area that shows a great deal of thought are the audio inputs and outputs. There are 1/8 inch stereo in and out jacks which allow connecting a CD, MP3 player, etc. to the E1 and playing it through the radio or connecting a tape recorder to the radio for recording. The line out jack is independent of the volume and tone controls. I used it to feed the EI's audio to my computer speakers. There is a 1/8 inch mono jack for an external speaker and a 1/8 inch stereo jack for headphones—the headphone output is true stereo for FM and XM only. Some E1 owners on the Yahoo E1 group complained that headphones only worked if the plug was only partially inserted into the jack, but this was not a problem on my unit. The external antenna jack is a PAL connector which is used for TV antenna connections in Europe but is unusual here in North America. Radio Shack sells a PAL to F adapter or PAL connectors can be purchased on eBay (plastic body) or from MCM Electronics (metal body) for those who want to make their own antenna cables. Universal Radio has a very nice adapter consisting of a in-line SO-239 connector and female PAL connector joined with 10 inches of coaxial cable. This permits using the common PL-259 connector and the short length of cable takes the strain off the EI's antenna jack. There are antenna switches (one for FM and one for HF) to select between the internal 39 inch whip antenna and the external antenna jack. The antenna selection is shown on the display—be sure to check the switch first if the radio seems deaf-I've gotten fooled by it! The only output that is

missing is a timer relay output to control a tape recorder—this can be worked around by using a tape recorder with voice activation mode.

Intelligent radio

The radio is programmed to recognize whether it is being powered by batteries or external power. The maximum audio output power decreases to 1.25 watts when on batteries from the maximum of 3 watts on external power. The display backlighting becomes momentary under battery power, coming on for a few seconds following control inputs. Similarly, the backlighting comes on briefly when the radio is turned off while on batteries vs. staying on at a dim level (can be set to off) when the radio is off. The "Light" button on the top of the radio can be pressed momentarily to provide 10 seconds of illumination or can be held down for three seconds to provide continuous illumination.

A unique intelligent feature of the E1 is the automatic clock setting function. If the radio is powered from the AC adapter and is powered off, the radio will tune to www and set the clock automatically. The internal antenna must be extended or an external antenna must be connected for this feature to work. The auto clock setting can be defeated through the clock menu, if desired. While on the subject of clocks, the E1 has two timers, each with independently settable on/off times.

Operation

The E1 is, simply put, a joy to operate. All the rotary controls work smoothly and the knobs are reasonably sized. The tuning is smooth, without chuffing. The pushbuttons have a solid, non-wobbly feel with positive action. The display is sharp and clear and is readable within a range of 30 degrees above and below the perpendicular to the display face—using the tilt out stand puts the radio at a good angle for desktop use

and operation. Universal Radio sells a plastic stand (\$14.95) which puts the radio into a more upright position. There is a contrast control for the display behind the battery door.

I used the E1 with a ten inch Hallicrafters speaker which the radio drove with ease. but the built-in speaker provides full, rich sound on its own. I used a Wellbrook ALA330s active loop antenna and had no problems with front-end overload, even with the radio's pre-amp engaged. I also checked with my other outdoor antennas and the radio's front-end remained well-behaved. I was unable to detect any significant birdies as I tuned across the spectrum, although my testing was limited by an increased amount of external rectification at my station since the weather has gotten cold. Any strange noises/buzzes I heard on the E1 (with no antenna connected and antenna switch set to "external") could also be heard on a Sonv 2010 as well.

The functions all worked as advertised. The ability to combine sideband sync detection, narrow filters and passband tuning make the E1 a formidable competitor. The sync detector holds lock very well and the opposite sideband rejection is very good. This is more than just a program listening portable radio. I think it would make for a easy to transport radio for serious listening in the field or on expeditions.

XM

One potential benefit of the E1 is its capability to receive XM satellite radio. This requires the purchase of an external antenna/receiver module which plugs into the right side of the radio. I used the Audiovox CNP1000 XM module, which sells for around \$50, to test the radio's XM capability. XM activation costs \$9.95 and the service costs \$12.95 per month. I placed the antenna out on my air conditioning unit, turned it to face south-east, ran the 25 ft. cable to the radio and I had XM. I had been

resistant to trying satellite radio, but must admit I enjoy having access to many genres of commercial-free music. I personally prefer Sirius, since it carries BBC World Service, CBC Radio One, PRI, two NPR streams and the World Radio Network, while XM only has the BBC and one public radio channel. The XM BBC stream is the Americas stream, which has feature programs as well as news and Sirius carries the news-oriented PRI stream. The best way to decide between the two services is to go to their websites, compare the programming lineups and subscribe for a free trial on-line subscription which lets you listen for three days on your computer.

The comparison

To see how the E1 stacked up against other portables, especially the "gold standard" Sony ICF-2010, I put fresh batteries in the E1, a '2010 and a Sony ICF-SW77 and lined them up on the dining room table, using just the radio's built-in whip antennas. I was surprised to find that both Sonys were more sensitive than the Eton, requiring that I switch in the pre-amp on the Eton to receive stations that could be received with the '2010 set to "DX" and the SW77 set to "Normal". So, the Eton would probably benefit from some additional antenna wire clipped to the whip. However, the E1's addtion of a 4 kHz filter and PBT allowed for better recovery of intelligible audio, even though the signals were weaker. I did notice that using the AC adapter with the E1 boosted signal strengths by 3 to 4 s units, but this phenomenon occurred with all three portables. This is most likely due to coupling of the antenna/ground to the AC mains, since just using a 12 volt battery as the external power supply for the E1 made no difference in signal levels. The E1 had the fullest sound—the '2010 had a "crisper" sound, since it has a smaller speaker, hence less bass response. Both the E1 and the sw77 have separate bass and treble tone controls which really helps to tailor the audio response. The ability of the sync detectors to hold lock during fading was about equal among the three radios. The E1 has much better SSB/ECSS reception capability due to its 10 hertz minimum tuning step versus 50 kHz for the '2010 and SW77. In addition, I preferred the tuning knob on the E1, which is closer to that of a "real radio", unlike the side wheel of the '2010 and tuning disc on the SW77. The '2010 has 32 memory channels (which are easy to use since each channel has a dedicated front panel button), the SW77 has 162 which can be labelled with station identifiers and the E1 has 1700 memory channels.

The cons

Unfortunately, no radio is perfect and the E1 does have some faults, which may bother some users more than others. The things that bugged me the most are that the radio is not "spot-on" frequency and there is an asymmetry in the tonal response of the filters. When zero-beating an AM station in SSB mode I had to tune up 60 Hertz from the station's actual frequency on one E1 sample and 90 Hertz on another. The variation didn't seem to change significantly with temperature or with length of time that the radio was on. This doesn't affect the operation of the radio, but you have do have to do some mental math if you use zerobeating to determine a station's exact frequency. Apparently there is an adjustment that can be made to improve the frequency accuracy, but it is not recommended that users try this, since it requires circuit board removal. In fairness to Eton, the stated specification for frequency accuracy is +/-100 Hertz, so both units are within spec. What bothered me more was that there was more audio treble and "brightness" in LSB. both in SSB and AM Sync modes. This was more pronounced when using the 4 and 2.3 kHz filters, less so with the 7 kHz filter. This was with the PBT turned off and the radio tuned to zero-beat. I'm not sure if the cause is due to the filters themselves or due to a misalignment of oscillators within the radio. This phenomenon can be compensated for by adjustment of the PBT.

Other deficiencies I noted were the previously mentioned lack of a carrying handle, which means that two hands are usually needed to move the radio about. One lack that some owners may find very problematic is the absence of an internal ferrite rod antenna for LW/MW reception (the E1 uses its whip antenna for these frequency ranges). The lack of such an antenna means that the radio can't be rotated to null out interfering stations on mediumwave. Mediumwave pxers will probably want to use an external loop or ferrite rod antenna for best results. One minor annovance for me was the tone controls-the bass and treble turnover points are set too low and too high respectively to be optimally useful on shortwave due to its inherent narrower bandwidth. although they work work well on FM and XM. The treble control did work well to reduce high frequency hiss on shortwave. Some users have complained that there seems to

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be a lot of hiss in the audio—I didn't notice excessive hiss on mine, at least not more than I would expect with a 7 kHz bandwidth filter. There is no noise blanker on the radio, but I seldom use them anyway.

The bottom line

I think the Sony ICF-2010 finally has a worthy successor in the Eton E1. This radio has features that will be extremely useful to the serious listener, but is easy enough to use for the casual listener. I would consider it to be an upgrade of the Drake sw8, as regards its performance and features. While it is not truly a portable, due primarily to its size, weight and lack of a handle, it is certainly transportable. I do not feel that it is a complete replacement for a desktop receiver, especially for anyone with room for a decent outdoor antenna and who is interested in utility listening or serious Dxing. The E1 has no competition in the premium portable range (there aren't any others anymore), but the Icom R75 and Winradio G-303 are only slightly more expensive and offer better performance for utility listening, although they require outdoor antennas, are not self-contained and don't offer FM or XM reception.

For those who want more information on this radio, I would recommend joining the Yahoo E1 group at: http: //groups.yahoo.com/group/ETON-E1-XM-Radio/ and follow the discussions there. The owner's manual and quick start quides can be downloaded in PDF format from the files section of the Yahoo group. The E1 is available from several sources, including Universal Radio and Grove, as well as from general electronics retailers such as Circuit City and Sharper Image. Sharper Image has had the E1 on sale for 15% and 20% off for brief periods. Initially, the E1 was in short supply, but the radio now appears to be readily available from most sources. I would like to thank George Zeller and Jerry Berg (both satisfied E1 owners) for their input for this review.

Shortwave Center

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As we enter another new year, please accept my very best wishes for a happy, healthy and prosperous one for you and yours. Let me also put in a word to the radio gods for improving propagation conditions. We've languished at the bottom of the solar cycle long enough, I say!

What a difference a month makes! Your swc editor was a little under the weather and a little too snowed under at work last month resulting in no December column. Sincerest apologies. However, as you will see as you peruse the next few pages, we've come roaring back with two exciting club

announcements from Ralph Brandi and Mike Wolfson, along with an excellent preliminary review of the groundbreaking and long-awaited Eton E1-XM by George Zeller. Ralph, Mike and George are all NASWA members and their contributions to this month's column are greatly appreciated! How about you lending us a hand—your writing hand! Send your much anticipated submission for this column to your editor via e-mail or postal mail using the addresses on the masthead.

All that's left for you to do is sit back, relax, read and enjoy!

NASWA Celebrates Ten Years on the Web with a New Web Site

Ten years ago, on January 2, 1996, NASWA announced the opening of its web site at http://www.anarc.org/naswa. The site has proved very popular over the years, winning design awards early on, and providing useful services like the www Shortwave Listeners Guide, a database of programs broadcast on shortwave stations, and the NASWA Country List and Awards Program Guide. For years, the NASWA site has ranked among the top sites when searching for relevant terms like "shortwave" on major search engines such as Google (where we have the top two links for "shortwave" and the top link for "shortwave radio", and have for some years), making the NASWA site a popular destination for information about shortwave radio and the radio hobby. The site serves thousands of visitors every month.

But the hosting service that served the club well ten years ago no longer does. Space and bandwidth that seemed enormous ten years ago have not grown, as the original hosting company for the site was bought and bought again without any expansion of what our fees provided. Limitations served to forestall expansion opportunities. Other hosting companies offer much more for less money than our existing service provider. As we approached our tenth year on the web, the club decided to move the site to a new server, one that provides plenty of resources and room to expand.

This January, to mark our tenth year on the web, we introduce the new NASWA web site, www.naswa.net.

We've retained all of the favorite old features, such as the programming database and the country list. We've updated the site with new representative columns from the pages of *The Journal*. And we've added a few new twists. For example, any column posted to the site can be commented on by visitors.

The new NASWA web site also includes the resurrection of a feature we had for a while a few years ago, the NASWA Loggings Database. The Loggings Database contains virtually all loggings submitted to *The Journal* since

November, 1998. By default, the search facility only searches the past two years worth of logs, since older items may not reflect current conditions on the bands. However, sometimes stations are reactivated after a considerable length of time, and you can search the entire database of more than 15,000 loggings covering more than seven years to reflect that. The club hopes that the Loggings Database will be a useful tool for club members and non-members alike in assisting identification of stations on the shortwave bands.

Behind the scenes, the new site is built using state-of-the-art tools that make it much easier to maintain than the old site, meaning that it will be easier to keep up to date. Almost all of the content on the site is kept in databases and dynamically generated, minimizing the amount of work required to post items. The design attempts to provide an attractive face while remaining simple to use and accessible to the blind and visually impaired. We've also built the site in such a way that none of the many links on the web to the old site will break;

they will all be automatically redirected to the new site.

The opportunities that this move to a new server provide are impressive. Possibilities that may be implemented include a resurrection of the NASWA weblog, the first pioneering weblog to cover shortwave and international broadcasting, forums for discussing equipment and the latest catches, and maybe even podcasting. Whether these happen depends a lot on the membership of the club. One reason the old site fell behind the times was that there was only one person managing it. We would like to expand the circle of members involved in the site, and would like to hear from any members who would be interested in performing tasks like moderating forums or authoring posts for a potential weblog. If you're interested in contributing, or if you just have comments on the new site, you can contact me, Ralph Brandi, at webmaster@naswa.net or ralph@brandi.org, or by visiting www.naswa.net and clicking on the link at the bottom of any page that says "Contact the webmaster".

Old Meets New—The WRTH on CD

By Jerry Berg 38 Eastern Avenue Lexington, MA 02421 jsberg@rcn.com

If you are a WRTH collector or a shortwave history aficionado, you are probably among those of us who wish they had the very early WRTHS in their collections. Original WRTHS from the 1950s—especially the early 1950s—are increasingly hard to find, and 1940 editions are even more elusive and may cost you a king's ransom if you locate one.

There is nothing like the feel of an old WRTH to give radio history some authenticity. However, if you are willing to accept an electronic alternative, you now have one. The ADDX—the Assoziation Deutschsprachiger Kurzwellenhörer, or Association of German DXers—has produced a CD containing the first

12 editions of the WRTH, from the first one in 1947 through the 1958 volume. The CD is the creation of Michael Schmitz, Editor-in-Chief of the ADDX magazine, "Radio-Kurier." The WRTHS are in .pdf format, and they are complete, cover to cover. The quality of the images is very good, and while virtually all the WRTH content in those days was in black and white, the color covers are fully captured on the CD.

Use of the CD is very easy. You insert it into your disk drive, the Adobe Acrobat reader opens, and you see a page containing thumbnail images of the 12 editions. You click on the one you want and up it comes. You can page through or jump around in the book using the usual Acrobat features.

One of the very nice things about the CD is its search capability—all the WRTHS are fully

searchable. You enter a search term and a panel appears showing all the places in the WRTH where that term can be found. You click on the place one you want to check and Acrobat takes you to it. In addition, you can search all the editions at once if you want to, although that is obviously slower. If you are into shortwave history, this is a powerful tool.

If your WRTHS from the 1940s are fifth gener-

ation photocopies, you are going to like this CD. It has a good looking label and it comes in a clear plastic case, and it is available through the NASWA Company Store. The CDS will be shipped directly from Germany. The price until 31 January, 2006 will be \$50 US (including postage). From 1 February, 2006, the price will be \$60 US. Checks should be made payable to the NASWA Company Store. The mailing address is: Mike Wolfson, 1842 Mifflin Ave., Ashland, Ohio 44805 USA.

The Eton E-1 Portable Receiver

A Preliminary Look

November 2005

By George Zeller

Last summer I placed my name on the back order list for an Eton E-1 portable receiver at Universal Radio in Reynoldsburg, after only playing with one sample of the radio in the Universal showroom. Three months went by before Eton managed to ship an inventory to Fred Osterman at Universal.

But, in early November, my E-1 arrived.

There is already an excellent review of this receiver in the 2006 edition of Passport to World Band Radio on pp. 139-146 [as well as an exhaustive review by NASWA's Alan Johnson elsewhere in this issue -ed.]. The radio is clearly a breakthrough model, and it deserves the seven page review, which is a lot of space in Passport for a portable receiver. I decided to evaluate the E-1 as a communications receiver, not as portable. That is of course an unfair comparison. The \$500 us price of the E-1 is dramatically less than you would pay for a Ten Tec 340 or a used ICOM R-9000. But, it is also a dramatically higher price than you would pay for any other portable receiver. The radio straddles the line between a portable and a communications receiver, with some features of both.

I have only used the E-1 for about a week, so this review is only a preliminary first look at this extremely interesting new receiver.

Amazingly, this is the first portable receiver ever manufactured that incorporates both a passband tuning circuit and a three mode AM synchronous detector, including LSB, USB, and DSB. The E-1 has three bandwidth filters. nominally 7, 4, and 2.3 kHz. The radio also features variable AGC settings, including fast, slow, and automatic. The combination of these four features is unprecedented in a true portable receiver. Even many higher priced communications receivers do not include this combination of features. Therefore, it is clear that the E-1 is the first serious attempt to manufacture a portable with selectivity capabilities that might make it appealing as a DX rig. The filter combination is reminiscent of both the Drake sw8 and the Grundig 800 Boom Box. This is no accident, since the Eton E-1 was largely designed by Drake with the intention of marketing the radio as the Grundig Satellit 900. But, there have been changes in the radio since its history as the vaporware Satellite 900.

The Basics

Frequency Coverage—The radio tunes 100 kHz to 30,000 kHz, covering the longwave, medium wave, and shortwave bands. In addition, it tunes the FM broadcasting band. In fact it tunes two FM broadcasting bands, either the 87 to 108 MHz North American FM band, or the 76 to 90 MHz Japanese FM

band. Selection of the FM bands is done via a menu setting, so if you are headed for Tokyo you can easily change the band coverage. The precise frequency to which the E-1 is tuned is displayed on the front panel display screen in very large digits that are easy to see.

Modes—The radio tunes AM, AM synchronous detection (including LSB, USB, and DSB synch), FM (broadcasting bands only), upper sideband, and lower sideband modes. There are actually two versions of the sideband mode. An AF circuit can be selected via a menu if desired that allegedly provides an additional 30 dB of rejection of the undesired sideband when either USB or LSB is in use.

XM Mode—The E-1 receives XM satellite broadcasts, but only if the user purchases an outboard XM adaptor and also pays the XM company for the pay radio service. I refuse to pay for radio, so I do not have the XM adaptor, and I do not want one. Various reviews that I have seen on the internet and the E-1 manual both say that the battery drain of the E-1 in XM mode is high, so apparently this is a mode that works best with the external wall wart mains power supply. The XM mode does not work at all without the extra XM adaptor and the monthly cost of an XM satellite subscription.

Sensitivity—The nominal sensitivity spec for the E-1 is claimed at less than 4 µV normally, and less than a half a µv with the preamp on. The already published sensitivity measurements in Passport show that the E-1 comfortably exceeds these published specifications, with or without the preamp on. This is comparable to the legendary performance of the Sony 2010. FM sensitivity is quoted at 1.5 µV with the preamp on, and 4 µv with the preamp off. I did not test the radio yet as an FM DX receiver. The preamp does supply an audible boost to the AF gain, albeit with a slight reduction in the dynamic range of the receiver. This is the same situation that you see with preamps in virtually all receivers.

Selectivity—The three (3!!!) bandwidth filters nominally measure at 7, 4, and 2.3 kHz. This is very similar to the arrangement in the Drake sw8. The bandwidths are good choices. The wide one lets powerful signals blast in with excellent audio fidelity. The narrow one is good enough to copy cw and other digital signals. The medium bandwidth is a good compromise between the wide and narrow filters. The previously published Passport test measurements showed good shape factors for each of these three filters.

Front End—During my brief period of using the receiver I have noticed no images or mixing products, either with the supplied whip antenna or with an external antenna connected to the E-1. This is consistent once again with the previously published Passport test measurements. The preamp slightly degrades the front end performance, as preamps do in all receivers, but this has not been noticeable to me in an urban area full of RF interference from 50 KW medium wave transmitters and other miscellaneous local RF pollution.

Tuning Resolution—The E-1 tunes in 100 Hz steps on LW/MW/SW and in 20 kHz steps in FM. The SW frequency resolution is shown on the receiver front panel to 100 Hz. This is unprecedented in a portable receiver. My own E-1 zero beats to all WWV frequencies within that 100 Hz resolution, with the display spot on.

Tuning methods—The E-1 has a tuning knob right on the front panel, unlike some other portables and even unlike a couple of communications receivers and all of the PC based receivers. The knob is small but it feels good while tuning in 100 Hz steps. It is larger than all of the other knobs on the front panel, but it is smaller than traditional knobs on communications receivers. There is a very convenient slewing button on the front panel for tuning up and down the bands in 5 kHz steps. That slewing button is adjustable via menu on medium wave to either 10 kHz or 9 kHz steps, for either North American or European bands. There also is

keypad tuning by a front panel keypad that works well. Frequency entry on the keypad can be set via a menu to either kHz or MHz. Further, there is a very good band scanning function, labeled "seek," which rapidly searches up the band until it comes to a signal that is louder than the squelch level that has been set with the front panel squelch knob. The seek function works as well as the excellent seek function in the Philips DC-777 car radio, and it has the added capability that it is linked to an adjustable squelch. Casual bandscanning for big signals is a real joy with this very good scanning search function. The only drawback to it is that it seeks in only one direction, and that is up. If you want to seek down, you have to tune below where you want to go and then seek scan up. Amazingly, during a seek scan, the E-1 stops right in the middle of station carriers, just like the Phillips DC-777.

Memories—The E-1 has the capability to store 1,700 frequencies in its memories. Of these, 500 are called "memory" channels, while the other 1,200 are called "country" channels. The memories store frequency, bandwidth filter, AGC setting, and mode, not merely the frequency. The memories can be given alphanumeric tags. So, the first thing that I did to try out the memories was to put 6925 kHz in there, and I labeled it as "PIRATE." The memories work, but the procedure for storing and recalling those 1,700 memories and adding alphanumeric labels to them has a substantial learning curve attached to it. I am still in the middle of that learning curve, and I am not yet fluent in the operation of the memories. The complexity of the memory functions on the E-1 is not nearly as convenient as the memory pushbuttons on the front panel of the Sony 2010. In fact, until you learn how it works, it is quite confusing. But, the memory capacity is obviously much greater in the E-1 than it is in the Sony. There is a procedure where you can put several frequencies within the country memories, for instance a variety of BBC frequencies under United Kingdom, for the purpose of scanning those frequencies to see which one is active at the moment. I have not yet mastered this

skill, given my ongoing learning curve to learn the procedures for E-1 memory storage and retrieval functions. So, I cannot give a full evaluation to this portion of the E-1's capabilities. Be advised that the memory storage and retrieval functions are fairly complex, but it looks like they can eventually be mastered, even by a lummox like me. Once memories are stored, there is a dedicated "t-scan" front panel button that will scan through the stored memories to see if anything is active on the stored country memory frequencies. But, I am finding it more convenient to just toggle through the memories with the tuning knob. This is sort of like the old-style TV channel changer in the wonderful ICOM R-9000 arrangement for tuning through memories. But, the E-1 arrangement for tuning memories remains considerably more complicated than the ICOM procedure is.

AGC—The E-1 has variable AGC settings, unlike almost all other portables. These include fast, slow, and automatic. Attack time is claimed at 1 mSec, with the decay in 300 mSec in fast and 3 seconds in slow. An AGC threshold of 1 µV is claimed. The Passport test measurements again show that the E-1 actually exceeds this claimed specification. The automatic AGC function merely turns off the slow AGC while using the tuning knob to tune around the bands. An adjustable AGC is a function that breaks new ground in portable shortwave receivers.

S Meter—The s meter is a digital version that is displayed at the top of the large front panel screen. It shows s units, and it appears to be about as accurate as s meters are in most receivers. I normally do not care for digitally generated s meters, but this one works fairly well. It reminds me of the stunningly superb digital s meter in the Kneisner and Doering KWZ30, but it is not quite up to that standard of excellence.

Passband Tuning—The E-1 contains a good passband tuning circuit. This is almost unknown in other portable shortwave receivers. The passband shift moves the IF in sideband modes, and it functions well.

It also functions in AM modes, although in AM all that it does is detune the signal away from a carrier. The current offset of the PBT control is visible on the front panel with 100 Hz steps on the offset display. That is of course amazing. Only expensive DSP receivers have had that capability in the past. The PBT function can narrow the effective bandwidth of the 2.3 kHz filter, of course.

Automatic Clock Set-The E-1 has two internal clocks. One is set to UTC and the other is set to local time, with the local time offset from UTC selectable in a menu. The UTC clock always appears in the upper right corner of the front panel display. It shows only hours and minutes, but not seconds. Interestingly enough, the E-1 claims to automatically set the clocks by referencing wwv (not wwvB) while the radio is off. It allegedly scans the various wwv frequencies until it hears one with sufficient strength, and then it automatically sets the clocks to the wwv signal. I use the word allegedly, since although I have set my E-1 to do this, I have not vet verified that it actually works. As I write this, the E-1 clock in my radio is almost one second fast. I am still waiting for the E-1 to synchronize with wwv to the precise second, despite leaving the radio plugged in with the antenna extended overnight. In XM mode, the E-1 supposedly does the same synchronization to the correct time from the xm satellite signals. Not having the xm adaptor in my possession, I cannot verify or refute this claim.

Front Panel Display—The unusually large E-1 front panel display takes up much of the front of the receiver. It is well lit when the panel illumination light is on. It displays the tuned frequency to 10 Hz in very large digits. The display also contains the nice S meter, the UTC clock, indications of the mode in use, identification of the meter band being tuned, and labels for all of the buttons used to set the various parameters in the radio. The display is black on white, unlike the odd orange and green coloring found on the display panel on some other portables and communications receivers. (See below for one significant flaw in the

front panel display, which is #5 in the list of receiver warts).

Power Supply—The E-1 uses four D cell batteries or a supplied AC to DC wall wart to draw power from a mains power supply. I have not tested battery drain, but allegedly it is modest current drain for a receiver of this type. The wall wart does not produce interference to the receiver, in my experience. The front panel illuminating light turns itself off when battery power is in use to conserve the batteries, but there is a button on the top of the E-1 to turn it back on, if desired.

Size—The Eton E-1 is about one inch taller and one inch wider than a Sony 2010. In depth it is about a half inch fatter than a Sony 2010. Thus, the E-1 is a true portable receiver, and it is not a boom box. For those of us used to 2010s it will be a real eye opener to hear the depth of audio that can come out of a portable shortwave receiver inside a relatively small case. It is actually astonishing.

Timers—The E-1 contains two timers, which enable the radio to function as a clock radio, if desired. There is even a snooze button on the top of the radio. But, I assume that few people will purchase an E-1 primarily for use as a clock radio because of the E-1's price.

Important Quirks

The E-1 uses a supplied whip antenna. That antenna is well mated to the radio circuitry. and I have been surprised to find how sensitive the radio is with just that whip antenna in use. But, for DX purposes, an external antenna is of course desirable. Unfortunately, the external antenna connector on the side panel of the radio is a nonstandard PAL jack. Thus, in order to connect the E-1 to an external antenna, some means of adapting a PL259 jack from standard coax cable connections to a PAL female jack is necessary. Fred Osterman at Universal Radio sells a SO239 to KOK adaptor for this purpose at a modest price of \$7.95. Or, you can take your chances at Radio Shack as you try to

find a scheme to meld a PL259 coax cable connector to a PAL female connector on the side of the E-1. Radio Shack does sell an F to PAL Adapter as part #278-265B. This is a very important point that should be understood before an E-1 is purchased. The antenna adaptor does not come standard with the E-1 receiver, despite the fact that the manual claims that this adaptor is supplied. Nobody should purchase an E-1 unless they simultaneously purchase the proper PAL antenna adaptor so that an external antenna can be hooked up to the receiver.

On the side panel of the radio there is a switch that toggles between the supplied whip antenna and an external antenna. I did not notice this switch at first. When I initially connected the E-1 to an external antenna, the received signals actually declined by 2 s units in comparison with the E-1 whip antenna. That baffled and stunned me at first, until I discovered the slide switch to change to the external antenna. That sort of blunder is sort of like the time that I took down Ed Mauger's antenna at a French Creek Dypedion by mistake. But, my initial blunder may actually have value in retrospect. The reduction in the signals with the external antenna switch off suggests to me that the antenna connection switch appears to be well shielded and effective.

So, How Well Does The E-1 Work?

Right out of the box, I was very pleasantly surprised by the performance of the E-1, even prior to the time when I figured out the complexity of the memory, scanning, and menu functions. The audio coming out of the E-1 is very good, indeed. The main feature that makes the radio jump out and grab you is the stunningly outstanding performance of the AM synchronous detector. It produces very good audio right out of the internal speaker that is in the E-1. That audio is adjustable by front panel treble and bass controls, a feature absent on almost all communications receivers. There is an audio line out for use with an external speaker and a second headphone jack, which can

improve the audio quality even more. The AF line out jacks are a small walkman-style connections that are designed for Walkman headphone jacks. But, there is an audio line in as well, using an identical walkman-style jack. Certainly JRC would never put an audio line in as part of their communications receiver design, and none of the other current manufacturers do this, either, since no modern communications receivers come with a decent internal speaker. The E-1 has been designed to be a radio that puts out very good listenable audio, particularly for program listening purposes. The fact that other receiver manufacturers never consider this point is very odd, indeed. After all, we use radios to hear the audio from demodulated radio signals. Thus, the attention to audio quality in the E-1 is immediately noticeable and strongly commendable. Local FM audio on music sounds very good, too, with a wide AF frequency response from the internal speaker. (There of course is no stereo reproduction through the single internal speaker in the E-1). FM audio to external ' speakers or headphones can be set to mono or stereo via menu. The radio has a circuit similar to those found in most car radios . that automatically shifts very weak FM broadcast signals to mono, until sufficient gain comes back in the signal to automatically switch it back to stereo. It does not appear that the E-1 demodulates AM stereo audio as stereo on domestic medium wave stations that transmit stereo signals.

The synchronous detector performs better than any other synch detector that I have seen except for an outboard Sherwood SE-3. The E-1 synchronous detector locks easily on even weak carriers, and then it holds lock vigorously. If there is adjacent channel interference, the LSB or USB synch knocks the QRM right out, in combination with the three bandwidth filters. Thus, recoverable audio from weak signals is unusually good in the E-1, particularly for a portable receiver. The combination of the outstanding synchronous detector, the three bandwidths, the adjustable AGC and the passband tuning circuit make the E-1 a candidate for Dxing. at least in portable use.

I have not yet used the receiver in a quiet pxpediton setting, so I reserve the right to have future additional opinions, either pro or con, on the suitability of the E-1 as a portable DX receiver.

The first day that I took it out of the box, I heard three North American shortwave pirates on the E-1 using just the supplied whip antenna. Those included WMPR, Undercover Radio, and Captain Morgan, all on 6925 kHz. I also heard Take it Easy Radio on 6925 with about equal ease on the E-1 and the ICOM R-9000 during the weekend after that, as well as a new pirate, WEKG, with the same results. An extremely weak signal from North American pirate WCAP was barely copied on both an ICOM R-9000 and the E-1. The recoverable audio from this extremely weak and barely copied signal was about the same on the E-1 and the ICOM. I tried the E-1 late in the afternoon, to see how it would fare as the Africans fade in at my home location in Ohio just before local sunset. The E-1 was pulling in clearly audible signals from very weak Africans as they faded in on 60 meters. This was a very good sign. This is my favorite method of testing intelligible audio out of a receiver on a weak signal. So, early tests of the DX receiving ability of the E-1 are coming out favorably.

There is some complexity in learning to use the receiver, particularly in terms of the menus for setting internal function parameters and in terms of storing and recalling memories. But, fortunately the E-1 manual is fairly well written and is easy to understand. Keeping the manual handy is helpful during the learning curve for interacting with the fine points of the menus and memories. The manual could use an index, but it does not have one. Nevertheless, it is a useful manual. The manual does contain a table of contents, as well as a block diagram of the E-1's circuitry, but there is no schematic diagram provided. You can download the manual from the internet if you want to take a look at it:

http://www.radioscanner.ru/files/manuals/e1 manual.pdf

The cabinet in which the E-1 circuitry is housed deserves brief comment. As is the case with the large majority of portables, the E-1 case is plastic. But, it is a strange kind of plastic that almost feels rubbery to the fingers. It looks like this material will resist scratching, but we shall see about this over the long run.

The Warts

There are a handful of features in the E-1 which lower its level of performance below some communications receivers.

1. No Noise Blanker, There is no noise blanker in the E-1, and thus noise cancellation can be a problem in noisy RF environments. You have to deal with local RF noise via external antennas while using the E-1, since the receiver has no noise cancellation capabilities. My local urban noise in Cleveland is significantly more audible (and thus more bothersome) on the E-1 than it is on my other receivers, especially on longwave and medium wave. The same sad situation is true with static on the bands in my early listening tests. Static sounds somewhat harsher on the E-1 than it does on my Ten Tec 340 or my ICOM R-9000. I am at a loss in trying to explain this quirk, but it is definitely apparent to my ears. It is possible that good audio reproduction causes static and noise to be audible, just as program content from a transmitter is audible with good AF fidelity. After all, the noise is in fact there on the band, and the E-1 reproduces it clearly. There is no internal E-1 function that can attempt to attenuate this noise in the IF, but you can try to shape it out of the audio with the effective AF treble and bass controls.

2. No Ferrite Rod. There is no ferrite rod inside the cabinet for use as an antenna on Medium Wave. For Mw use, the whip antenna is the default, or you can add an outboard MW antenna through the nonstandard PAL jack. Some MW antennas that are designed to inductively couple with an internal ferrite rod inside a portable radio will therefore not work well with the E-1.

- 3. Audio Contains Some Hiss. The otherwise excellent audio in the E-1 is somewhat marred by a continually audible hiss noise, particularly when using the wide 7 kHz bandwidth. This is not unlike the hiss noise that was notorious in the JRC NRD 525. The hiss noise can be cut by turning the treble adjustment down, but this AF solution mars the otherwise excellent audio output from the E-1.
- 4. No Carrying Handle. There is no carrying handle for the E-1. There is not even any provision for a strap handle like the Sony 2010 had. This is an odd design feature for a portable radio. I am going to have to consider the purchase of an aftermarket case of some kind to transport the radio around. No carrying case comes supplied with the radio.
- 5. Front Panel Display Invisible from Some Angles. One very unusual property of the E-1 is that for the front panel display to be visible, you have to look at it with your eyes perpendicular to the display. If you look downward toward the front panel display from an angle other than perpendicular, all of the markings on the display are completely invisible. I have never seen a display monitor like this one before, so it is something to be aware of. In order to solve the problem of the front panel visibility and the lack of a carrying handle, Fred Osterman at Universal Shortwave sells a plastic stand that the radio can be placed on while in use. That provides a good visual angle for the front panel display. You can also avoid the problem by using the E-1 like a laptop so that you are always looking down from a perpendicular angle at the front panel display.
- 6. No Notch Filter. The E-1 does not have a notch filter built in. So, the elimination of heterodynes has to be done with creative use of the USB/LSB functions either in ECSS or in AM Synch, along with creative use of the passband tuning control. The lack of a notch can be troublesome in some DX situations.
- 7. Antenna Jack is Low Impedance. The E-1 is designed to have its nonstandard PAL antenna jack mated with a low impedance antenna. Standard coax cable is designed to

connect with HF antennas that are relatively high impedance for this purpose. When I at first found that external antennas lowered signal levels in the E-1 because of my failure to notice the external antenna switch on the side panel. I theorized that this impedance mismatch might be related to my problem. It turned out that this was not true, and I was just ignorant of the antenna switch. But, this is an issue for future experimentation. It might be desirable to lower the impedance of external antennas with an antenna tuner or a balun for enhanced DX performance. My Alpha Delta sloper appears to work fine with the E-1, but I may try out a tuner or a balun later, to see whether it improves signal levels.

8. Quality Control. There is concern in DX circles about manufacturing quality control from the new generation of shortwave receivers that are manufactured in mainland Asia. The E-1 is manufactured in Bangalore, India. Thus, some of the quality control problems that have been seen in the

The E-1 is a

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The radio is going to generate some excitement in our hobby.

past in shortwave portables manufactured in China may possibly be less evident in production samples of the E-1. I know for sure that my own sample is not a dud. It will remain to be seen how consistent the quality of production will be in the E-1 samples shipped for sale in North America.

My Overall Evaluation

After only one week of use, I am very pleasantly surprised with the excellent performance of the Eton E-1 portable receiver. It is fun to use, and it actually performs well. It may not be a Watkins Johnson or Ten Tec DSP monster, but in my judgment this radio sets a new standard to which all other portables will be compared. Aside from the slight hiss in the wide bandwidth audio, the quality of the audio received in the E-1 is very, very good, indeed. This is true on both local FM music programming and also on shortwave. The radio is sensitive even with the built in whip antenna, and thus, it is a good candidate for portable use, even for oxing. At \$500 the receiver is at the pricey end of the portable range, but with all of the features it supports, including the stunningly good synchronous detector, I think that the receiver is worth \$500. This radio is certain to have a major impact on the DX hobby.

Many of the sales that the E-1 is generating so far are from nontraditional retailers in our hobby such as Sharper Image and other firms that do not specialize in shortwave equipment. Unfortunately, the radio is sufficiently complex that it is likely that many people purchasing the radios will be complete novices in shortwave listening. Thus, it would be a good idea if the receiver were coupled with a copy of the WRTH or Passport, or even a NASWA membership, when it is sold to casual owners. But, this is not happening in the retail market, so there are bound to be some disappointed E-1 customers who have no idea what shortwave radio is. Thus, they will probably be unable to take full advantage of the complexity and features that the E-1 supports. When it turns out that they find that they cannot

hear Panama or Trinidad after all, there may be some disappointed novice purchasers of this receiver. They would be better off if they buy their E-1 from Universal Shortwave or Grove Enterprises, where they can be matched with shortwave radio information that will not be available at Sharper Image.

In addition, the XM side of the radio is another source of customers for the receiver. Some people probably are buying the radio primarily for its XM capabilities, which I did not. Most of the XM people probably are also relatively ignorant of shortwave radio. They could also use a copy of Passport or WRTH, as well as a subscription to NASWA, PopComm, or Monitoring Times so that they can get some initial educational exposure to shortwave radio.

On the internet I have noticed some complaints that although the E-1 does support XM satellite radio, it does not currently support either DRM or RDS. Since XM satellite radio is not audible in Europe, and since DRM shortwave and RDS channel identifiers are both widespread in Europe, this may hurt the marketing of the E-1 in Europe.

Having said all this, I am very pleased that I purchased an Eton E-1 receiver. I suspect that many of the readers of this review will also want to do the same. If you do get one, I think that like me, you will be very pleasantly surprised at the quality of the receiver's performance. Once you get hooked on the astonishingly superb E-1 synchronous detector, all of your other radios will seem timid when compared with the E-1. I cannot emphasize this point strongly enough. Years from now, the E-1 will be remembered for its phenomenal synchronous detector.

But, given the various warts that I describe here, it does not look like the E-1 will replace traditional tabletop communications receivers for serious DXing. Nevertheless, this is a DX capable receiver that is worth consideration by serious DXers who are looking for a portable DX rig. The radio is going to generate some excitement in our hobby.

Listener's Notebook

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

AUSTRALIA Winter B-05 for CVC International via

DEM = Datail.		
0000-0200	Chinese	15500 DRW
0400-0600	Chinese	15250 DRW
0400-1000	Indonesian	17820 DRW
0600-0900	English	15335 DRW
0600-1200	Chinese	17635 DRW
0900-1100	English	11955 DRW
1000-1300	Indonesian	15365 DRW
1100-1800	English	13635 DRW
1200-1500	Chinese	13685 DRW
1300-1700	Indonesian	7245 DRW
1500-1800	Chinese	13695 DRW
2200-2300	Chinese	9865 DRW
2300-0200	Indonesian	15250 DRW
2300-2400	Chinese	15500 DRW

(Observer-BUL)

AUSTRIA Winter B-05 for *CVC International* via MOS=Moosbrunn:

1000-1100 English-DRM 9760 MOS

(Observer-BUL)

AZERBAIJAN 6110.8, 1400, Dec 21, Radio Azerbaijan International. This must be one of the hardest-to-hear foreign services. No definite ID even now, but many mentions of Azerbaijan in a Turkic language preceded by interval signal and opening music. Vlad Titarev has heard this identify as Radio Azerbaijan International instead of the old Voice of Azerbaijan. (Ritola-FIN in Dxplorer). Here in Denmark the station is covered by the Overcomer Ministry via Juelich and VOA Tinang both in English and on 6110.0, but it causes a strong heterodyne from 6110.8. (Petersen-DK/DSWCI DX-Window)

CAMBODIA Despite several attempts, the following former Cambodian SW-station could not be heard in Vietnam, Laos, Cambodia or Thailand: National Radio of Cambodia, Phnom Penh, on 4907, 6090 and 11940 which definetly is off the air. (Anker Petersen-DK, touring CBG, dswci DXW Dec 14/BC-DX/Bueschel-DE)

[This could be why...]

In 2001, German DX-er Uwe Volk did pass the SW transmitter site of the National Radio of Cambodia at Steung Meanchey in the SW corner of Phnom Penh and I passed the same site on Nov 21 this year. When comparing our photos, it is evident to me that the SW antennas have been dismantled in the meantime. (Petersen-DK/DSWCI DX-Window)

CANADA Extended transmissions of Radio Canada International:

0100-0200	Spanish	6100 SAC, ex 0100-0130
0300-0400	Arabic	5840 HBY 6025 WER, ex
		0330-0400
0300-0400	Spanish	6130 SAC 9755 SAC, ex
	-	0300-0330
0400-0500	Arabic	5995 SKN 7265 SKN, ex
		0430-0500

(Observer-BUL)

CHILE Winte	r B-05	for	Voz	Christiana	via
SGO=Santiago	:				
0000-0100	Spanish		6070	SGO 17680 SG	0
0000-0400	Portugue	ese	11745	SG0	
0100-0400	Spanish		6070	SGO 11655 SG	0
			15585	SG0	
0400-0600	Spanish		6070	SGO 11655 SG	0
0400-1100	Portugue	es e	11890	SG0	
0600-1200	Spanish		6070	SGO 9780 SGO)
1100-2400	Portugue	ese	15485	SG0	
1200-2400	Spanish		9635	SGO 17680 SG	0
(Observer-BU	L)				

CHINA Frequency changes for China Radio International:

0000-0057	Spanish	NF 9435 KAS, ex 9865 // 5990 9590 9745 9800 15120
0100-0200	Mandarin	11845 13655
0100-0200	Russian	13600
0200-0300	Tamil	13715 13610 11870
0300-0400	Tamil	13600 13735
1000-1600	Japanese	7190 + others, ex-0930-1530

CLANDESTINE—AFRICA 12130, Radio Free Southern Cameroon via Krasnodar, 1812–1822, December 25, English, many identifications by male in English: "Radio Free Southern Cameroon...." Short local instrumental music and talk by male. [Sundays only—GH] (Arnaldo Slaen, Argentina, Noticias DX/DX Listening Digest/Hauser-OK)

(Observer-BUL + Raja-India, Padula-Austrlia/EDXP)

CLANDESTINE—ASIA Free North Korea Radio (from South Korea) started transmissions on 5880, scheduled 1500–1600, acc. to a well-informed source via Irkutsk-RUS. Website: http://www.freenk.net. (Bernd Trutenau-LTU/EDXP/Padula-AUS)

There is some confusion about Freedom North Korea, Radio and Radio Shiokaze (Sea-Breeze).

Latest information:

Free North Korean Radio 5880 via Petropavlovsk 1500-1600 Korean. (Nagoya DXers Circle)

Station is reported to have been founded by North Korean defectors.

Shiokaze (Radio Sea-Breeze) 5890 via Irkutsk 1400–1500 and 1900–1930 Japanese. (Nagoya DXers Circle)

Programming is intended for Japanese citizens presumed to have been kidnapped by North Korea. (Padula-AUS/EDXP)

CLANDESTINE—LATIN AMERICA 6135 Radio Republica, 2200-2400, Dec 21, new clandestine program directed to Cuba, gave frequency as 9955, address as P.O. Box 110235, Hialeah, FL, 33011, program "Alternativa" at 2230. "Feliz Navidad, Cuba," "Esta es Radio Republica, Voz del directorio democrtica Cubano...," "Radio Republica, con fe en la victoria." Deutsche Welle on 6135 from *0000. See their website: http://www.radiorepublica.org (Berg-MA and Herkimer-NY). Via WRMI? (Petersen-DK/DSWCI DX-Window)

GABON 4777 Radio Gabon, Libreville, 12/14 0616-0655 fade out, Dec 14, news reports in French, ID 0620, actualities by reporters, more talk, another ID 0650, followed by local pop music; getting noisier and weaker by 0630.

7270 Radio Gabon, Libreville, 0800-0815, Dec 14, news in French with mentions of Libreville, 0805 canned ID "Radio Gabon" by same woman as heard earlier on 4777, into longer reports; weak, about 40% intelligible. (Brandi-NJ in Dxplorer/DSWCI DX-Window/Petersen-DK)

GEORGIA According to a message from the German section of Radio Georgia, the management of Georgia's national public service broadcaster shut down the foreign language departments at the end of Nowember. The transmissions had already been suspended for several months. (Bernd Trutenau-LTU/EDXP/Padula-AUS)

This is the answer to my inquiry about the closure of *Radio Georgia* from the new, attractive General Director of Georgian RTV, Tamar Kintsurashvili. She says that the closure is only temporary and service will be resumed when money has been found for repair. So there is hope as to my experience it is hard to withstand the zeal and ambition of modern Eastern-European ladies:)

Tamar Kintsurashvili wrote:

"Dear Mr. Eike Bierwirth,

"Thank you very much for your letter.

"I am extremely glad to hear appraisal of the Western Europe service provided by the Georgian Public Radio.

"It is to my complete understanding that the current developments taking place in Georgia attracts attentions of many in Europe and there has been increasing interest towards our foreign issues. Considering this, it is within our country's as well as the Public Broadcasting's interest to ensure coverage of our news for the countries abroad.

"I agree with you that unfortunately the broadcasting service of Georgian Public Radio to Western Europe has been interrupted. But, please be informed that it's been stopped in March and I was appointed as a General Director justi in Augest. It's only temporarily measure due to technical problems that the channel presently faces. The Broadcasting's transmitters are very old and outdated and require urgent replacement. Renewal of the technique as well as the programs issued in foreign languages will take some time as update of the facilities requires serious financial resources. At present, we work on this issue and as soon as technical problems are solved broadcasting of the Western Europe will be renewed.

"Once again I thank you for expressing your interest towards the programs prepared by the Public Radio. I hope we will be able to provide the programs to the foreign audience soon and with improved service quality.

"Yours Sincerely,

"Tamar Kintsurashvili, General Director Georgian Public Broadcasting 68 M. Kostava str. Tbilisi 017, Georgia" (Bierwirth/Hard Core DX)

GERMANY Deutsche Welle changes:

1200-1400 German NF 13590 SAM, ex 17480 2200-2300 English NF 6000 TRM, ex 6180 (Observer-BUL)

Updated B-05 for DTK T-Systems

Adventist World Radio (AWR):

Auventist	WOITH RUNIO	(ANA).
0500-0600	Bulgarian	6045 JUL
1000-1100	Italian	9610 JUL Su
1900-1930	Arabic	9800 JUL
1930-2000	Arabic	9800 deg We
1930-2000	Kabyle	9800 JUL Su-Tu
1930-2000	Tachelhit	9800 JUL Th-Sa
2000-2030	French	9695 JUL

Athmee Yatra He/Gospel For Asia (GFA): 0030-0130 SEAs langs 7210 WER

1330-1430	SEAs langs	13600 WER	1915-1930	Russian	6015 JUL Mo-	Fr
1430-1530	SEAs langs	12005 WER	1915-2000	English	9470 NAU Fr	
1530-1630	SEAs langs	11645 WER	1930-2000	English	7260 JUL Su	
2330-0030	SEAs langs	7160 WER	1930-2000	Russian	6015 JUL Su	
non n. I			2000-2030	English	6015 JUL Su	
	io Luxembou Ge DRM 72	_	Brother	Stair/The	Overcomer	Ministries
0900-1545 1545-1700	Ge DRM 71		(TOM):	bean, The	Overcomer	241/1131/103
1545-1700	Ge DKM 71	.40 JUL	1100-1200	Fnalish 6	110 JUL 9855 W	FP
Bible Chi	ristian Assoc	iation/BCA/:	1300-1500		110 JUL 9855 W	
1630-1700		15 JUL Su	1500-1600	•	110 JUL 9855 W	
1030 1700	rousi. oc	,15 001 0u	1600-1700		855 WER Sa	2. (0
Bible Voi	ice Broadcas	ting Network (BVBN):	1900-2000		495 JUL, ex 984	5
0800-0915	English	5945 NAU Sa				
0800-0945	English	5945 NAU Su	CBS Rad		ternational (R	<i>TI)</i> :
0815-0900	English	5945 NAU Fr	1700~1800	Russian 58	350 JUL	
0845-1015	Arabic	17545 JUL Fr	2100-2200	Spanish 61	120 NAU	
0900-0915	Urdu	5945 NAU Fr			-	
0915-0930	Punjabi	5945 NAU Fr		Science Mo		
1400-1500	English	13645 WER Su	1000-1100	German 60		
1400-1545	English	13645 WER Sa	1800-1830		470 JUL Tu till 3	
1500-1530	Bengali	13645 WER Fr/Su	1800-1830		490 JUL Th till 3	lan. 26
1500-1600	English	12035 JUL Sa	1900-2000	Russian 98	890 JUL Sa	•
1500-1600	Urdu	12035 JUL Tu	CVC Total			
1530-1545	Urdu	12035 JUL We		rnational:	(20 MED	
1530-1600	English	12035 JUL Mo/Th	0500-0700	English 94		
1530-1600	Hindi	13645 WER Mo-Fr	0700-0900	English 15		
1530-1600	Punjabi	12035 JUL Fr	1500-1800	English 19		
1530-1600	Urdu	12035 JUL Su	1800-2000	English 97 English 72		
1545-1600	English Amharic	12035 JUL We	2000-2100	Eligusii 72	AAW CO2	
1600-1630 1630-1700	Amharic	13810 JUL Tu/Th 13810 JUL Mo/Tu/Fr	Democra	tic Voice of	Burma (DVOB)	
1630-1715	Arabic	11645 WER Tu/We	2330-0030	Burmese 59	, .	
1630-1730	Amharic	13810 JUL Th/Sa/Su	2330-0030	Durmese J.	,,,, oot	
1630-1730	Arabic	11645 WER Mo/Th/Fr	Deutsche	: Welle (DW)):	
1630-1800	Amharic	13810 JUL We	0600-1000	English	6140 JUL	
1630-1900	English	9460 JUL Su	1000-1300	En/Ge DRM		
1640-1715	English	9460 JUL Mo-We/Fr	1300-1600	English	6140 JUL	
1640-1745	English	9460 JUL Th	1600-1900	En/Ge DRM	6140 JUL	
1645-1830	English	9460 JUL Sa		-		
1700-1730	Tigrina	13810 JUL Mo/Tu/Fr	Evangeli	sche Mission	s Gemeiden:	
1715-1730	Hebrew	9460 JUL Tu	1130-1200	German 60	055 WER Sa/Su	
1715-1835	Arabic	9730 JUL Mo/We/Fr	1200-1230	Russian 11	1840 NAU Sa	
1730-1800	English	9460 JUL Tu	1600-1630	Russian 60	000 NAU Sa	
1730-1800	Somali	13810 JUL Sa/Su				
1800-1815	English	7210 JUL Sa			Krefeld Inc:	
1800-1815	Russian	9460 JUL Tu	1200-1230		945 WER Sa	
1800-1830	Persian	7210 JUL We/Th/Fr	1630-1700	English 94	190 WER Sa	
1800-1830	Spanish	7205 NAU Su	1103D /W			
1800-1835	Arabic	9730 JUL Tu/Th		re Voice of A		
1800-1900	English	9460 JUL We/Fr	1600-1700	German 39	J55 JUL	
1800-1900	English	9730 JUL Sa/Su	Uniatelia	Padio /Voia	a of Croatia	
1800-1900	Persian	7210 JUL Su		Radio/Voice	-	
1815-1900	Persian Hebrew	7210 JUL Sa	0000-0400 0200-0600	Cr/En/Sp Cr/En/Sp	7285 JUL 7285 JUL	
1830-1845 1830-1900	Hebrew	9460 JUL Sa 9470 NAU Tu	0500-0800	Cr/En/Sp	9470 JUL	
1845-1930	English	9460 JUL Sa	0600-1000	Cr/En/Sp	11690 JUL	
1900-1930	English	7260 JUL Sa	2300-0400	Cr/En/Sp	7285 JUL	
1900-1930	English	6015 JUL Su	2300-0400	er/ rri/ ah	1200 JOE	
1900-2000	English	6015 JUL 9470 NAU Sa	IBC Tam	il Service:		
1900-2015	English	9470 NAU Su	0000-0100		ER 250	
	_					

IBRA Radio:

Mecklenburg Verpommern Baltic Radio:

1300-1400 German 6130 JUL 1st Su

Minivan (Independent) Radio:

1600-1700 Dhivehi 11800 JUL

Missionswerke Arche

1200-1215 German 6055 WER Su

Pan American Broadcasting (PAB): 0030-0045 English 5945 JUL Su

1430-1445	English	13820 JUL Sa
1430-1445	English	13800 WER Su
1545-1600	English	13820 JUL Su
1600-1630	English	13820 JUL Su
1600-1630	Persian	13820 JUL Th
1930-2030	English	7260 NAU Sa from Jan.7
2000-2015	English	7260 NAU Su

Radio Free Asia (RFA):

0100-0300 Tibetan 9670 WER

Radio Hurivo:

Somali 9820 WER Tu/Fr 1630-1700

Radio Reveil Paroles de Vie:

1830-1900 French 11840 JUL Th

Radio Rhino International Africa:

1500-1530 English 17870 JUL We/Fr

Radio Traumland:

1400-1530 German 5925 JUL Su

Radio Waaberi:

1330-1400 Somali 17660 JUL Fr

RTRF:

0600-0815	French	17580 JUL Mo-Fr
0600-1100	French	17580 JUL Sa/Su
1100-1300	French	21565 JUL
1600-1900	French	13590 JUL Mo-Sa
1700-1900	French	13590 JUL Su

Save the Gambia Development Project - Voices from the Diaspora:

2000-2030 Wolof/En 9405 JUL Sa

TNT Hit Radio:

1000-1600 Dutch/Mx 5910 JUL Sa

Trans World Radio (TWR):

0630-0645 Slovak 6130 JUL Mo-Fr 0930-0945 Hungarian 6105 JUL 7210 JUL Tu-Sa

1130-1200 Slovak 6130 JUL 7225 JUL Sa

Universal Life (UNL)

·····			
1230-1300	German	6045 JUL Sa	
1200-1300	German	6045 JUL Su	
1900-1930	English	7105 JUL Su	
0100-0130	English	7145 JHL Su	

Voice of America:

1/00-1800	rersian	12110 JUL
1800-1900	Persian	9495 JUL
1900-2000	Persian	9680 JUL
1900-2000	Turkish	9485 JUL

Voice of Democratic Eritrea:

1500-1530	Tigrina	12015 JUL Sa
15301600	Arabic	12015 JUL Sa
1700-1730	Tigrina	9820 JUL Th
1730-1800	Arabic	9820 JUL Th

Voice of Democratic Path of Ethiopian Unity:

1900-2000 Amharic 9620 JUL We/Su

Voice of Ethiopian Salvation:

1600-1700 Amharic 9820 JUL Su

Voice of Oromo Liberation (Sagalee Bilisummaa Oromoo):

1700-1800 Oromo 9820 WER Tu-Su

Voice of Russia (VOR):

0200-0400	Ru "Russ.Inter.Radio"	5995 JUL
1500-1600	Ru "Commonwealth"	9555 JUL
2000-2200	Ru "Russ.Inter.Radio"	5965 JUL
2000-2200	Ru "Russ.Inter.Radio"	5975 JUL
2100-2200	Ru "Russ.Inter.Radio"	5990 JUL
2300-2400	Arabic	6175 JUL

WYFR (Family Radio):

1700-1800 1700-1900 1800-1900 2000-2100	German	11835 JUL 9925 JUL 3955 JUL
2000-2100	Arabic	5925 JUL
2000-2100	French	9465 WER

(Observer-BUL)

Winter B-05 for CVC International via WER-Wertachtal:

0500-0700 0700-0900 1500-1800	English	9430 WER 15640 WER
1800-1800 1800-2000 2000-2100	English	15680 WER 9765 WER 7285 WER

(Observer-BUL)

FINLAND Frequency change for YLE Radio Finland in Finnish & Swedish:

1500-1600 NF 9660 POR, ex 9705

(Observer-BUL)

GUATEMALA 2320H Radio Izabel 1160 x 2 harmonic. This one is signing on at 1130 with full canned ID including frequency and their callsign of TGRI. The canned ID had "Onward Christian Soldiers" playing in the background. They have a nice signal and are also heard in the evenings till 0000*. In addition to the above ID, they often use the slogan "La Voz Evangelica." (Johnson-FL, Dec 19/Cumbre DX)

IRAN Winter schedule for Voice of Islamic Republic of Iran (VOIROI/IRIB):

lic of Iran (V	OIROI/IRIB):	
0030-0130	Bengali	5905 6185
0030-0230	Spanish	6015 9680 9905
0100-0230	Tajik	5955 6175
0130-0230	English	6120 9665 "Voice of
		Justice"
0130-0230	Kazakh	7135 7265
0130-0230	Urdu	3945 6010 6190
0230-0300	Hindi	13725 15165
0230-0300	Uzbek	6040 6175
0230-0330	Pashto	6095 6140
0230-0330	Spanish	9905
0230-0530	Arabic	6065 13790 13800
0300-0330	Armenian	7295
0300-0330	Russian	6040 7125
0330-0430	Arabic	7250 9505 "Voice of
		Islamic Palestinian
		Revolution"
0330-0430	Kurdish	3945 6145 Sorrani
		dialect
0330-0430	Swahili	13640 15260
0330-0530	Azeri	9865
0330-0630	Dari	9875 13740
0430-0500	Hebrew	9820 11925
0430-0600	Turkish	13750 15260
0500-0530	Russian	12025 15530 17680
		17780
0530-0630	Bosnian	15235 15340
0530-0630	Spanish	13720 15320
0530-1430	Arabic	13790 13800 15545
0600-0700	Hausa	17810 21810
0630-0730	Albanian	15235 15340
0630-0730	French	15425 17590
0630-0730	Italian	13620 15085
0730-0830	German	15085 17590
0730-0830	Pashto	11990 15440
0830-0930	Bengali	11705
0830-0930	Swahili	15240 17660
0830-1430	Dari	9940 13720
0930-1000	Armenian	9695 15260
1030-1130	English	15460 15480
1200-1300	Chinese	9895 11670 13645 15150
1230-1330	Malay	15200 15275
1230-1330	Pashto	6175 7170 11870
1300-1330	Japanese	9510 9640
1300-1400	Kazakh	9660 11745
1330-1430	Kurdish	5990 Kirmanji dialect
1330-1430	Urdu	6175 9835 12005
1430-1500	Dari	9940
1430-1530	Bengali	7295 9565 9930

1430-1530	Hindi	9875 13745
1430-1530	Kurdish	5990 Sorrani dialect
1430-1530	Pashto	3945
1430-1530	Russian	7165 9575 9735
1430-1630	Arabic	15545
1430-1700	Azeri	6200
1500-1600	Uzbek	5945 5955
1530-1630	English	7330 9940
1530-1630	Kurdish	5990 Kirmanji dialect
1530-1730	Urdu	3945
1600-1730	Tajik	5945 5955
1600-1730	Turkish	7125 7310
1630-1730	Armenian	6185 7230
1630-1730	Pashto	6005 6015
1630-1930	Arabic	6065
1700-1800	Russian	3985 7170
1730-1800	Urdu	6130 7225
1730-1830	Bosnian	7295 9705
1730-1830	German	6215 7185
1730-1830	Swahili	9595 11750
1800-1900	Russian	6035 7305
1830-1930	Albanian	6100 7165
1830-1930	French	6180 9565 9755
1830-1930	Hausa	7335 9775
1900-1930	Hebrew	3985 5970
1930-2000	Italian	6215 7380
1930-2030	Arabic	6065 "Voice of Islamic
		Palestinian Revolution"
1930-2030	English	6010 7320 9855 11695
1930-2030	Russian	3985 7205
2030-0230	Arabic	6065
2030-2130	Albanian	6100 9740
2030-2130	Spanish	7130.7350
2100-2130	Japanese	6145 7185
2130-2230	Bosnian	7235 9710
2230-2330	Malay	5945 7275
2330-0030	Chinese	7130 7325 9635
(Observer-BU	L)	

KAZAKHSTAN (non) Frequency change for Democratic Voice of Burma in Burmese:

1430-1530NF 9415 A-A, ex 15480 // 17495 MDC

(Observer-BUL)

LAOS Heard in Indochina: 4678 Radio Nationale Lao, Xam Nua, *2300-2340, Nov 15 and 23, Lao ann, Laotian songs. Also heard 1039-1042, Nov 25, Lao ann, native singing.

6130 Radio Nationale Lao, Vientiane, 2340-0020, Nov 18, 20 and 23, Lao news. Also heard 0925-0927, Nov 18, Lao ann, and 1117-1515, Nov 13, Lao talks, martial march and choir of men.

7145 Radio Nationale Lao, Vientiane, 0020-0025. Nov 18, talk in Khmer.

All Laotian SW and MW stations had signed off when I checked the bands in Savannakhet at 1650, Nov 14 (2350 local time). (Anker Petersen-DEN,

touring LAO, dswci DXW Dec 14/BC-DX/Bueschel-DE)

MALAYSIA RTM Traxx FM in English was heard on reactivated 7295 kHz, 30 Dec at 1025 and again with news at 1100. The station had been silent on shortwave for several months. (Alan Davies visiting Lop Buri, Thailand/Cumbre DX/Johnson-FL)

MONGOLIA 7260, presumed Khekh Tenger, 2249 Dec 23 with very exotic vocal by male performing weird, acrobatic trills and falsetto warbling. Woman in Turkic-sounding talk at 2254 (Mongolian and the Turkic languages are both in the Altaic family), brief orchestral music, more talk. Silence at 2259 followed by six high pips, orchestral fanfare, into what seemed news by woman. Same sequence when rechecked just before 0100 (Dec 24 UT). Weak and choppy, intermittent ham QRM; nothing audible on listed //s of 4895 and 4830. Both days, a weak subaudible het began on 7290 just before 2300 and continued into the next hour, indicating that a second station was now operating on the frequency. No audio discernible, though (Bob Hill, MA, DX-plorer/ DX Listening Digest/Hauser-OK)

NETHERLANDS Frequency change for *Radio Netherlands*

1300–1400 Dutch 9450-Khabarovsk, ex-9940 (RN Media Network blogspot)

NEW ZEALAND Radio New Zealand International schedule:

0400-0759 15720 0800-1059 9885 1100-1300 15530 1300-1650 9870 1651-1750 11980 1751-2235 15720 2236-0358 17675

DRM Service (begins 22 January 2006)

13690

0800-1059 9765 1100-1300 13840 1300-1650 7230 1651-1750 11745 1751-2235 13595 2236-0358 15720

0400~0759

(RNZI & Observer-BUL)

NICARAGUA According to a personal letter from Lic. Evaristo M. Perez, dated Dec. 12, 2005, Radio Miskut has been off the air on shortwave [5770] due to a serious problem in transmitter. John Freeman brought it back to US for repair, but no news has been heard for more than a year. They are now transmitting only on FM with limited coverage. He hopes to resume shortwave service in 2006 (on the condition that the transmitter is available.). (Tet-

suya Hirahara, Japan, Dec 29/DX Listening Digest/ Hauser-OK)

2139.7H Radio La Chontalena (2 x 1070v kHz harmonic). I have been hearing this one for a number of days now during both the local morning and evening hours. I finally heard a complete ID today at sign on, "1070am, La Chontalena, la radio (1 word missed) en Chontales." This was by a woman and it sounded like it was recorded. This station is located in the town of Santo Tomas, Chontales, Nicaragua. Chontales is on the east side of Lake Nicaragua. I'm not sure of their call or power.

Formal sign on this Saturday was 1200 and it is just after 1100 during the week. They did play about 20 minutes of music today before signing on. Sign off is at 0000. The national anthem is heard at both sign on and sign off. Programming is in Spanish and I have heard a number of ads for businesses in Santo Tomas. They ID quite often but simply with a canned "Chontalena" announcement by a man in between songs. The programs are mostly music with a variety of types played. I have even heard one song in English.

The station's signal and modulation are good here in SW Florida. Given the apparent demise of Radio Miskut on SW, this is the only Nicaraguan station currently heard on the SW bands, at least for those who count AM harmonics. (Johnson-FL Dec 6-10/Cumbre DX)

PAKISTAN Some frequency changes for Radio Pakistan:

0945-1015 NF 17480, ex 17490 // Tamil 15625.4 Sinhala NF 17480, ex 17490 // 1015-1045 15625.4 Turkish NF 6215.4 & 7600, ex 6255.4 1630-1700 & 7465 NF 5835.4, ex 5840.4 1915-0045 Urdu (Islamabad program) Russian NF 9300, ex 9335 // 7550.4 1415-1445 1700-1900 Urdu NF 9365, ex 9360 // 7530 1815-1900 Arabic NF 7600, ex 7465 // 6235.4 (Observer-BUL)

PAPUA NEW GUINEA I am continuing to provide professional engineering support to Wantok Radio Light, Port Moresby.

It is proposed that the existing frequency of 7120 be changed to 7325. This will eliminate interference from/to the amateur radio service in the Asia-Pacific Region.

The use of the new frequency is subject to approval from the PNG Telecom Regulatory Authority (PANGTEL).

Spectrum studies of 7325 show that this fre-

quency is clear of co-channel interference from other broadcasters in the Asia-Pacific region during most of the nighttime period, confirmed by on-site monitoring in Port Moresby. We are aware that China Radio International also uses 7325, from Xian, carrying Turkish programming 1600-1700, which is not considered to be a major constraint.

In the longer term, it is planned to move nighttime operations to 3 MHz, and retain 7 MHz for daytime transmissions. Present operations on 7 MHz are not satisfactory for night-time coverage, due to signal drop-out in the primary service area after about 1000, until around 2000.

The existing transmitter and antenna are design-limited to operate only on 7 MHz, and operations on 3 MHz would require new facilities, and additional funding will need to be obtained. (Padula-Australia/EDXP)

PERU 4060v Radio Corazon, Huandoy, Ancash (p), 1300, Dec 07, Spanish program, new station! (Canote-PRU via Slaen-ARG, Dec 07/DSWCI DX-Window/ Petersen-DK)

4385.7 Radio Vision, Chiclayo, 2340-0130, Dec 03, ex-Radio Imperio. Reactivated on this frequency. ID as "Radio Vision. anuncia onda media en 1350 khz. presentando el programa Cancionero Andino," "Desde la ciudad de la amistad transmite Radio Vision 1350amplitud modulada...." But like Radio Imperio at 0100 it has an evangelical program from Iglesia Pentecostal la Cosecha, (Rodriguez-COL/ DSWCI DX-Window/Petersen-DK)

10353.0 Radio Willkamayu, 1259, Dec 07, Spanish program. (Canote-PRU via Slaen-ARG, Dec 07/DSWCI DX-Window/Petersen-DK)

PHILIPPINES 9582, Radio ng Bayan, Dec. 22 at 2338-0010. Phone interview program in Pilipino till 2357, then weather forecast and program guide. ID at 0000 as "Radio ng Bayan, Network, Network (bagidan),...Philippine Broadcasting Service...," followed by news (Iwao Nagatani, Japan, Japan Premium/DX Listening Digest/Hauser-OK)

Frequency changes for FEBC in various SoEaAs languages:

1130-1200 NF 9460 BOC, ex 9920 1200-1230 NF 9455 BOC, ex 9920 1230-1300 NF 9465 BOC, ex 9920 1200-1300 NF 7410 IBA, ex 7400 1400-1430 NF 6070 BOC, ex 6055 2300-2330 NF 9470 BOC, ex 9490

(Observer-BUL)

PORTUGAL Updated schedule for RDP International/Radio Portugal in Portuguese:

0000-0300 9715 11980 13700 Tu-Sa

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0600-1300 9815 Mo-Fr
0745-0900 11660 Mo-Fr
0800-0930 11875 17710 21830 Sa/Su
0930-1055 9815 11875 17710 21830 Sa/Su
1055-1100 9815 11875 21830 Sa/Su
1100-1300 11875 21655 21830 Sa/Su
1100-1300 21655 21830 Mo-Fr
1300-1455 11875 15575 21655 21830 Sa/Su
1300-1700 15575 Special extra transmissions
1400-1600 15690 Mo-Fr
1455-1500 15575 21655 21830 Sa/Su
1500-1655 11960 15575 21655 21830 Sa/Su
1655-1700 11960 15575 21655 Sa/Su
1700-1755 11960 17680 17825 21655 Sa/Su
1700-1900 17825 Special extra transmissions
1700-2000 17680 21655 Mo-Fr
1755-1800 17680 17825 21655 Sa/Su
1800-1900 11630 11740 17680 17825 21655 Sa/Su
1900-2100 11630 11740 15540 17680 21655 Sa/Su
1900-2400 15540 Special extra transmissions
2100-2400 9460 11825 15555 Special extra
          transmissions
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(Observer-BUL)

RUSSIA According to monitoring in November/December, GTRK-Kamchatka on 6075 carries a local program at:

0010-0100 Sa/Su 0100-0110 Mo-Fr (local news, irregular) 0100-0200 Mo-Fr 0600-0610 Mo-Fr (local news, irregular) 0600-0700 Mo-Fr 1810-1900 Su-Th 1910-2000 Su-Th 2010-2100 Tu 2210-2300 Fr/Sa

(Takasaki-JPN/Hard Core DX)

11975 Kamchatska Rybatskaya (Fisherman's Program) on Dec.11 at *0000-0030 noted with a very strong open carrier at 2350 (with a Unidentified Station in Standard Chinese heard underneath. which went off the air at 2359).

Sign-on with a drumroll, followed with clear ID's for 'programa Kamchatska Rybatskaya ' by male host. Female speaker with more ID's, opening information, a 'muzyka' jingle (up-beat) This was followed with a commentary interview by a fisherman's wife about life in the Kamchatka Peninsula. The rest of the program consisted of modern Russian 'Pop' music (with one selection's lyrics similar to 'One Is The Loneliness Number') to more traditional Russian folklorico ballads that one would hear in the country side. Unbelievable signal was noted with a 5x5 copy, with signals pining at well over 10db's over s9. (Ed Kusalik-Alb-CAN, DXplorer Dec 11/BC-DX/Bueschel-DE)

SLOVAK REPUBLIC Slovak Radio service to continue in cut-down regime Excerpt from report by Slovak commercial news TV station TA3 on 21 December

Slovak Radio foreign service has been under threat for several months as 55m korunas needed for its operation are missing. The government did not give radio the needed money but, on the other hand, under the valid law Slovak Radio is obliged to operate its foreign service. The government therefore dealt with the situation once again today [21 December]. As a result, Slovak Radio will receive a small amount of money, less than a fifth [of what is needed].

For comparison, Czech Radio foreign service received from the government a subsidy of 62.4m Czech korunas for this year.

The government stated that Slovak Radio did not make any changes to improve its economic management and, as regards its foreign service the government would meet its demands only partially.

Under the law, the [Slovak Radio] foreign service cannot be scrapped and therefore it will operate in the following three months in a cut-down regime.

If the government fails to find money for the Slovak Radio foreign service, the situation will probably have to be resolved by an amendment to the law on Slovak Radio.

[One dollar equals 31.83 Slovak korunas or 24.17 Czech korunas]

(Source: TA3 TV, Bratislava, 21 Dec/BBC Monitoring/RN Media Network Blogspot)

SOUTH AFRICA Winter B-05 for CVC International via MEY-Meyerton:

0515-1545 English 9555 MEY

(Observer-BUL)

TANZANIA 5050 Radio Tanzania, Dar es Salaam, 1810-2100*, Dec 16, 17 and 18, back on the air. Swahili talks and African music. (Goonetilleke, Ritola and Titarev in Dxplorer, Van Arnhem and Petersen/DSWCI DX-Window/Petersen-DK)

THAILAND Heard in Indochina. Despite several attempts, the following former Thai domestic SW-station could not be heard in Thailand, Vietnam or Cambodia: 6070 Radio Thailand, Pathumthani. It is definetely off the air. (Anker Petersen-DK, touring THA, dswci DXW Dec 14/BC-DX/Bueschel-DE)

UNITED KINGDOM BBC World Service has discontinued broadcasts in Slovak and Polish. Other languages facing the ax are Bulgarian, Croatian, Czech, Greek, Hungarian, Kazakh, Slovene and Thai. The cuts are being made to finance a new Arabic TV channel. (Padula-AUS/EDXP)

Updated B-05 schedule for VT Communications relays:

Adventist	World Radio	
0200	Viotnamore	15445 TAT Ca

0100-0200	Alethaniese	TO440 INT OF
0300-0330	Oromo	9550 DHA
0300-0400	Amh/Tigr	9760 DHA
1200-1300	Indon/En	15110 DHA
1300-1330	Chinese	11720 DHA Mo-Fr
1300-1330	Uiyghur	11720 DHA Sa/Su
1330-1400	Chinese	11720 DHA
1400-1500	Vietnamese	11695 TAI
1500-1600	Punj/Hi	11695 DHA
1500-1600	Nepali/En	9530 DHA

6180 DHA

Bible Voice Broadcastina Network

0015-0130	Hindi	6020 DHA
0030-0045	Telugu	6020 DHA Sa
0030-0100	Bengali	6040 DHA
0030-0100	English	6010 DHA Fr-Su
0030-0100	Hindi	6010 DHA Mo-T

Oromo

China Radio International

0000-0100	Spanish	9745 BON
1100-1400	Po/Ch/En	15540 SGO
1500-1800	English	6100 MEY
1800-1900	Chinese	6100 MEY
2100-2200	Portuguese	17645 SGO

Eglise du Christ

1730-1800

1900-1930 French 7260 WOF Th

Eternal Good News

1130-1145 English 15525 DHA Fr

Gospel for Asia

0000-0130	SoEaAs langs	6145 DHA
1230-1330	SoEaAs langs	15515 DHA
1400-1500	SoEaAs langs	15215 DHA
1600-1630	SoEaAs langs	9785 DHA
2300-2400	SoEaAs langs	6040 DHA

HCJB

1700-1730 Russian 9805 RMP 2100-2230 Arabic 12025 SAC

Hmong Lao Radio

0100-0200 Laotian 15260 TAI We/Fr

KBS World Radio

0/00-0800	Rolean	ADDD DIVIN
1800-1900	Russian	7235 RMP
1900-2000	Arabic	7180 RMP
2000-2130	Ge/En	3955 SKN
2000-2100	French	5955 SKN

Leading The Way

1700-1730	Persian	7290 RMP Tu/Fr
1700-1730	Russian	7290 RMP Sa/Su

Little Saigon Radio			Voice of Vietnam			
1500-1530	Vietnamese	7380 TAI	0100-0130	English	6175 SAC	
1500 1550	***************************************	7300 ==	0130-0230	Vietnamese		
Radio France International			0230-0330	En/Sp	6175 SAC	
0400-0500	French	7270 ASC 15210 DHA	0330-0430	En/Sp	6175 SAC	
0600-0700	En/French		0430-0530	Vietnamese		
0600-0700	French	15210 DHA 17770 KIG	1800-1830	English	5955 MOS	
1200-1230	English	15275 ASC	1830-1930	Vietnamese		
1600-1630	Pashto	6010 DB 7170 DHA	1930-2000	French	5955 MOS	
1800-1900	Persian	5995 TAC 6015 DHA	2000-2030	Russian	5970 SKN	
1000 1500	1 CISIUII	3333 Mid 0013 DIM	2030-2130	Vietnamese		
Radio Ok	capi		2050 2150	***************************************	3370 3.2.	
0400-0600	Fr/Lingala	11690 MEY	West Afr	rica Democra	cv Radio	
1600-1700	Fr/Lingala	11890 MEY	0700-0900	En/French	12000 W0F	
2000 2700	,		0900-1100	En/French		
Radio Pr	aaue		0,00 1100	21.7 - 1 - 1 - 1	2.00001	
0000-0030	Spanish 11	665 ASC	WYFR			
0400-0430	English 61		0500-0600	German	3955 SKN	
2330-2400	Spanish 96		1400-1600	Hi/English		
2330 2100	opunion so	00 5.10	1600-1700	English	12010 DHA	
Radio Se	a Breeze/Shi	okaze	1700-1800	Arabic	9530 RMP	
1430-1500	Japanese	5890 IRK	1700-1800	English	3955 SKN 21680 ASC	
1430 1300	dapanese	3030 IIdk	1800-1900	Arabic	9660 SKN	
Radio So	lh/Radio Pea	ice	1800-1900	English	7240 RMP	
0200-1200	Dari/Pashto		1900-2000	Arabic	5965 RMP	
1200-1500	Dari/Pashto		1900-2000	English	3230 MEY	
1500-1500	Dari/Pashto		1900-2005	Swahili	9660 MEY	
1300-1000	Daily Lasilto	3073 KH	2000-2100	English	3230 MEY 15195 ASC	
Radio Ta	iwan Interna	tional	2030-2130	French	11985 ASC	
1900-2000	French 39		2100-2115	English	11655 MEY 15195 ASC	
1900-2000	German 61		2115-2200	English	11655 MEY 11875 ASC -	
1900-2000	German Or	70 DIIK	2115-2200	Liigiisii	15195 ASC	
Star Pad	lio Liberia		2200 2215	English	11875 ASC	
0700-0900	English 95	SE VCC	2200-2315	English	110/5 A3G	
2100-2200	English 11		(Observer-BU	JL)		
2100-2200	Engusii II	900 A3C				
Sudan R	adio Service		UNITED ST	ATES Freque	nc y c hanges for WEWN in	
0300-0500	En/Ar/Othe	ers 7120 WOF Mo-Fr	English:			
0500-0500	En/Ar/Othe		0000-0500	NF 6875 EW	N, ex-5085, 5875 and	
1500-1700	En/Ar/Othe			5810		
	En/Ar/Othe		(Observer-Bl	π,		
1700-1800	En/Ai/Othe	is 11/05 WUF MO-FI	(ODSELACI-DO)L)		
Trans W	orld Radio Af	rica	Frequenc	v changes for	WHRI Angel 1 in English	
1300-1315	_	745 KIG Fr/Sa	via HRI:	,g		
1800-1313		035 DHA Mo-Fr	0600-0700	NF 6125, ex	: 7315 Th-Sa	
1800-1845		035 DHA Sa/Su	0600-0700	7315 Su-We		
1000-1045	Anutane 12	035 DHA 3a/3u	0700-1000	7315, ex 06		
IInited N	ations Radio				00 1000	
1700-1715		70 MEY 9565 SKN 21535	(Observer-BU	JL)		
1/00-1/15		Y Mo-Fr	Eroguana	ar change for	Voice of America	
1730-1745		70 MEY 9565 SKN 17810				
1/30-1/43		C Mo-Fr	1300-1500	Korean NF	9385 TIN, ex 15250	
1830-1845		60 RMP Mo-Fr	(Observer-BU	JL)		
1030-1043	Alabic /2	DU RMF MU-FI			as i	
UNMEE			More US	<i>VOA/RFE/RL,</i>	-	
	En /Other	17670 DUA C	0000-0200		2015 TIN RL (ex-11885)	
0900~1000	En/Others	17670 DHA Su	0200-0400	Kazakh 1	1785 PHT RL (ex-11885)	
1030-1130	En/Others	17565 DHA Tu	0700-0900	Russian 1	5130 UDO RL (ex-17730)	
Voice of Biafra International			1400-1500		050 TIN RFA (ex-15255)	
•	•		1400-1500	Cantonese 7	280 TIN RFA (ex-9825)	
2100-2200	Engush 73	80 MEY We/Sa	1400-1600		5345 LAM RL delete	
			1530-1600	Georgian 9	610 KAV VOA (ex-11965)	
					,	

1600-1615	Bosnian	11820 MOR VOA (ex-	0200	Hi/Ta/Ma/En	12070NVS-RUS
		11965KAV)	0230	French	7305 7360 9605
1600-1700	Bangla	11970 PHT VOA (ex-15185)	0250	English	7305 9605
1730-1800	Oromo	9415 MOR VOA (ex-7245)	0300	English	7360
		11955 KAV VOA (ex-11690)	0310	Armenian	6185 9645
1730-1800	Oromo	13755 MOR VOA (ex-13800,	0320	Spanish	7305 9605
		13790)	0330	Kiswahili	7360 9660
1800-1900	Amharic	9415 IRA VOA (ex-7245)	0330	Russian	6185 7335 9645
		11955 KAV VOA (ex-11690)	0330	Slovenian	4005
		13755 IRA VOA (ex-13800,	0345	Somali	7360 9660 Su
1000 1000	C	13790)	0350	Croatian	4005
1800-1900	Caucas	7125 IRA RL (ex-6215)	0400 0400	Amh/Tig Ukrainian	7360 9660
1900-1930	Tigre	9415 MOR VOA (ex-7245) 11955 KAV VOA (ex-11690)	0400	Czech	6185 7335 4005 5885
		13755 IRA VOA (ex-11890)	0410	Byelorussian	
		13790)	0425	Slovak	4005 5885
2100-2115	Ukrainian	6225 IRA VOA (ex-6215)	0430	French	7360 9660
2115-2130		6225 IRA VOA (ex-6215)	0440	Hungarian	4005 5885
2330-2400		11840 IRA VOA (ex-7260)	0440	Lithuanian	6185 7335
(Bueschel-DE		•	0500	Arabic	9645 11715
(Duescher-Dr	, Dec 12/De	,-DK)	0500	English	7360 9660 11625
WRNO es	timates tha	t it may be April of May of	0500	Latvian	6185 7335
2006 before they are on the air. This estimate is			0500	Polish	4005 5885 7250
based on the amount of time needed to completely			0520	German	4005 5885 7250
determine the damage to the station from Hurricane			0520	Romanian	6185 7335
Katrina and to make repairs. They do know that			0530	Portuguese	9660 11625 13765
both the antenna system and transmitter building-			0540	Bulgarian	6185 7335
sustained damage in the storm. (Johnson-FL, Dec 6/			0540	French	4005 5885 7250
Cumbre DX)			0600	English	4005 5885 7250
			0600	French	9660 11625 13765
		ora Ciudad de Montevideo,	0600	Scandinavian	
Montevideo, 1518-1530, December 23, Spanish, mu-			0630	English	9660 11625 13765
		es Uruguay Fleet, Confiteria	0630	LatinMass	4005 5885 6185 7250 9645 11740 15595
La Opera "una confiteria con clase," Restaurante			0700	It/Fr/En	4005 5885 6185 7250 9645
		Electricos Ltda., Farmacia	0700	11/11/11	11740 15595 Mo-Fr
•		de confianza," complete ID	0710	Romani Mass	7250 9645 Su
as: "En su receptor, CX42, Emisora Ciudad de Mon-			0715		9850 11740 Su
tevideo, Uruguay, transmitiendo en 1370 kHz, la frecuencia que se sintoniza con mayor frecuencia."			0745	Arabic	5885 7250 9645 15595 Mo-Fr
(Arnaldo Slaen, Argentina, Noticias DX/DX Listening			0830	ItalianMass	7250 Su
Digest/Hauser-OK)			0915	Papal Aud	5885 We
Digest/ Hause	I-OK)		0930	•	15595 17515 Su
UZREKISTA	N Winter F	3-05 for CVC International	0930	Oriental Lit	11740 15595 17515 Su
via TAC=Tash!		03 101 070 11101111111111111111111111111	1000	Portuguese	21850 Mo-Fr
0100-0300	English 7	7355 TAC	1100	Angelus	5885 7250 9645 11740 15595
0100-0400	-	9570 TAC			17515 21850 Su
0300-0600	English 1		1100	Italian	5885 Mo-Fr
0400-1100	•	3630 TAC	1115	Italian	5885 Su
1100-1400		500 TAC	1130	EnglishMass	15595 17515 Fr
1400-1700	Hindi 9	1855 TAC	1130	Spanish	21850 Mo-Fr
(Observer-BU	I.)		1200	French	5885 Mo-Fr
(02301761 20	-,		1230	Chinese	6020PUG-PHL 13770 15235
VATICAN ST	TATE Comp	lete BO5 shortwave sched-	1230	ChineseMass	Su-Fr 6020PUG-PHL 13770 15235 Sa
ule of Vatican Radio			1300	Italian	5885 7250 9645 11740 15595
0000 Chinese 13780VHR-PUS			1300	ıtatidil	2003 7230 9043 11740 13595

21850

7250 9645

7250 9645

5895SAM-RUS 9695

11850 13765 We/Su

1315 Vietnamese 6205TCH-RUS 17515

1330 Russian

1415 Portuguese

1400 Spanish

1415 Urdu

0000 Chinese

0025 Urdu

0100 Spanish

0145 Spanish

0030 Portuguese 7305 9605

0040 Hi/Ta/Ma/En 7335 9865

13780KHB-RUS

7335 9865 Mo/Th

7305 9605 11910

7305 9605 11910

D=DRM mode experimental bcs (Vatican Radio leaflet

Also registrations noted for: 1500-1515 English 7240(FLE-HOL) 2045-2130 English 9800(SAC-CAN) (Bueschel-DE/WWDXC/BC-DX Dec 10)

VIETNAM Dien Bien BS with pretty weak signal on

6317.1 kHz at 1245.

Radio Son La on 4739.7 kHz is quite readable. I've heard Radio Son La signing off at 1400. (Huuskonen-FIN/Hard Core DX)

ZAMBIA Winter B-05 for Christian Voice via LUS=Lusaka:

0400-0800 English 6065 LUS 0800-1700 English 9865 LUS 1700-0400 English 4965 LUS

(Observer-BUL)

NTIA SEEKS TO CURTAIL USE OF OUT-OF-BAND FREQUENCIES BY BROADCASTERS The

Office of Spectrum Management of the National Telecommunications and Information Administration (NTIA) sent a letter to the International Bureau of the FCC on Sep 29, 2005. The letter cites three instances of interference from private shortwave broadcasters in the last 12 months dating back to Nov 2004. The NTIA letter lists 115 Federal Fixed and Mobile Service frequencies in the shortwave bands.

The NTIA sent the letter to the FCC on behalf of the Federal Emergency Management Agency (FEMA). FEMA owns, operates and maintains a very large high frequency radio system known as the FEMA National Radio System (FNARS). The NTIA letter asserts that the receivers in the FNARS HF networkuse current technology and still receive interference from shortwave broadcasters operating 13 kHz away from the FEMA frequency. The letter requests that the FCC immediately remove from the broadcast schedule any frequency located plus or minus 13 kHz from the listed FEMA frequencies. The combined spectrum identified for protection by NTIA in the letter totals over 2000 kHz.

The FCC has authorized private broadcasters on select out-of-band frequencies on a non-interference basis for many years. Broadcasters recognize they must quickly vacate the frequency in the event of actual interference and have promptly done so when asked by the FCC. The NTIA contends that interference, when it occurs, cannot be resolved in a timely manner.

Licensees learned of the NTIA letter after the B05 schedule had been finalized and many broadcasters had already printed and distributed their frequency schedules expected to go into effect on Oct 30, 2005. The FCC International Bureau is in the process of evaluating the letter and talking to NTIA and FEMA. The FCC will issue instructions to licensees when a decision is reached.

If the NTIA / FEMA request is granted by the FCC, it would displace 120 hours of broadcasts by 14 private shortwave licensees. The three broadcasters

with more than 20 hours in jeopardy are EWTN Global Catholic Radio, Family Radio and World Harvest Radio.

Some of the licensees scrambled to find new frequencies before B05 went into effect. Those that chose not to change, but to wait for the outcome of the FCC decision, were authorized those frequencies under the following condition in their B05 authorizing letter:

"In addition, we note that the National Telecommunications Information Administration has requested that some of the out-of-band frequencies be removed from the Commission's HF Broadcast Schedule. (See attached letter) The Commission is still evaluating this request; however, you are on notice that you may have to vacate certain frequencies depending on the outcome of this request." (NASB/EDXP/Padula-AUS)

TWO GIANT LOSSES TO THE SHORTWAVE

WORLD The Voice of Russia has announced the death after a long illness of veteran broadcaster Joe Adamov, a few weeks short of his 86th birthday. He started work as an announcer at the foreign language service of Radio Moscow in 1942, and for over 40 years hosted one of the station's most popular programs, Moscow Mailbag. In his 62 years with the station, Joe Adamov frained several generations of professional announcers, translators and journalists. Although Joe was born in Georgia, he was was actually Armenian. He will be remembered as the voice

of the Cold War, but those who met him and worked with him have memories of a much nicer and kinder man than might have been imagined from some of his broadcasts. (RN Media Network Blogspot)

and...

The DXing community has lost one of it's most well known Latin America DXer. Bjorn Malm passed away November 29 after suffering from a massive heart attack. He was very well known for the past 40 years or so with a focus to Latin America DXing from his home in Quito, Ecuador. His work can be found from http://www.malm-ecuador.com/. He also regularly contributed to the Hard-Core-DX.com channel "Voces de America" and you will be able to find his loggings in http://www.hard-core-dx.com/index.php?topic=voces.

(Risto Kotalampi-FIN/Hard Core DX)

Wonder how many of us thrilled at hearind Joe Adamov answer our questions on the air? To my mind, losing Adamov is like watching another chunk of this struggling, still-great hobby falling into the sea. Likewise for Bjorn Malm, whose news and diligent reportage have kept alive the dwindling flame of Latin American shortwave DX. Sadly, I doubt there other Bjorn Malms ready to take up the reins in that part of the world, and this loss belongs to all of us.

They will both be missed.

-AC

GW/

WELCOME TO THE FOLLOWING NEW MEMBERS

DAVID NEHER, Marion, IN
BRAD NOBLET, Lebanon, NH
BERNON WALKER, Taylorsville, IN
DANA N. BROWN, Harpursville, NY
THOMAS H. LEIGH, Cedar City, UT
ROBERT POTTER, El Cerrito, CA
PAMELA PRODAN, Wilton, ME
PAUL SHINN, Valley Springs, CA
BOYD SMITH, Castle Rock, CO
DAVID A. MALLETTE, Leesburg, FL
JEFFREY C. PENNELL, Maple Shade, NJ

Pirate Radio Report

Chris Lobdell • P.O. Box 146 • Stoneham, MA 02180-0146 • clobdell@comcast.net

Hello and welcome to the January 2006 edition of *The Pirate Radio Report. Happy New Year to all.* I hope you all received that Eton E1 that you wanted from Santa. Even though it doesn't always read the correct frequency, it still is a great radio.

Europirate Season Is Here!

Tis the season for logging those Europirate stations here on the East Coast of North America. Look for many stations on Sunday morning between 0700–1000 UTC in the frequency range of 6200-6350 kHz. Also check the same range of frequencies after 2000 UTC on Saturday afternoon. Because of the weak nature of these signals, they usually don't make it past Cleveland, Ohio. Sorry George.

Many thanks to the following contributors: Rich D'Angelo-French Creek-PA, John Herkimer-NY, George Maroti-NY, Mark Taylor-WI, Joe Wood-TN.

Alfa Lima International, was heard on 15073.5 kHz from Holland at 1454 to 1540 on December 11th. Signal strength was varying between S5 and S8, depending on the fades. Usual techno music, Sandstorm at 1536 UTC. Greeting to Jerry Strawman in Iowa. [Maroti-NY]

The Crystal Ship was heard sailing the high seas on 3479 kHz AM mode. on December 27th at 0157 UTC. Several IDs as "You're Tuned to the Crystal Ship Shortwave-the official voice of the Blue States Republic". Music from the 1950s, 60s, and early 70s. Signal started poorly and then improved around 0200. It faded to unreadable around 0240. Thanks to Bob Montgomery for tip. [Wood-TN via Flashsheet]

Cupid Radio, another Dutch pirate, was heard on 6304.7 kHz, AM mode from 2108–2135 UTC on December 24th. Although a weak signal, noise levels were down, so I was able to recognize some songs like "Clocks" by Coldplay and "A Forest" by the Cure. ID

and greetings to me at 2121. When signal peaked, SINPO was 14442. [Maroti-NY]

That strong Euro-Pirate, Mystery Radio was noted with a strong signal at 0139 past 0210 UTC on December 19th with the usual menu of techno pops with jingle IDs. Several full ID at 0159 including Mystery Radio with more non-stop music. Fair with some UTE QRM. [D'Angelo/FCDX-PA]

Take It Easy Radio, noted on 6925 kHz USB on December 3rd from 0220 to 0330 UTC. Two "Kraft Music Hall with Bing Crosby" shows from 1944, and IDs and talk by the Desparado. [Taylor-WI]

The Voice of the Islands, we're not sure which islands they are referring to, but this new one was heard on the unusual frequency 13887.9 kHz AM mode from 1541–1602 UTC on December 24th. Tough copy with utes and other noises, Xmas songs "Grandma Got Run Over by a Reindeer," "Hark the Herald Angels Sing," "Jingle Bells Rock" ID by man at 1547 with "Ho! Ho! Ho!" Peaked at 1602 with Bing's "I'm Dreaming of a White Christmas" but dropped fast. Thanks to George Maroti tip. A U.S. pirate, I guess? [Herkimer-NY via Flashsheet] Word has it they plan to be on during New Years as well.

Radio Boomerang, a rather strong Dutch Pirate, was logged on 6310 kHz from 2030 to 2035 sign off on December 10th on a tip from George Maroti. Heard at decent level with dance music, man accented-EG announcer with IDs, etc. Reached for a minidisc to start recording and they were gone 2035*. [Herkimer-NY via Flashsheet]

WICA via Voodoo Radio relay was logged on 6925 kHz USB on December 21st at 0309 to 0335 UTC. Christmas music and comedy sketches, several periods of talking, finally clear ID at 0333. Just barely above static floor. Poor. [Taylor-WI via Flashsheet]

Happy Pirate DX!

ďV



ABU DHABI: Athmik Yatra 6040 and 15590 via Gospel for Asia via Al-Dhabbaya p/d "Family with Radio" cd. in 3 mos. for a rpt. to the Carrollton, TX addr. This was for a reception in Vietnam. (Craighead).

ASCENSION ISLAND: Star Radio 11965 via English Bay p/d cd. w/ form ltr. in 21 ds for 1 IRC and a rpt. sent to the Hirondelle Foundation in Switzerland. (Barbour-NH). f/d cd. w/o site in 14 wks. v/s P.P.

Nihada.(Craighead-KS). ASIATIC RUSSIA: Radio Stantsiya Tikhiy Okean / Primorskoye Radio 12065 via Vladivostok f/d multi-colored coat of arms and NTP Vladivostok logo cd. in 10 wks. (Craighead-Vietnam). Bible Voice Broadcasting 12065 via Vladivostok f/d "World Map" cd. w/ site and a personal note in 3 wks. (Craighead-Vietnam).
AUSTRALIA: Voice International 13685 via Darwin f/d "Long Antenna" cd. w/ shoulder bag, booklets, stickers, schedule and a copy of the New Testament in 5 wks.(Loudell-DE).

AUSTRIA: Radio Austria International 13730 f/d "Parliament and Town Hall" cd. in 1 mo.(Loudell-DE). 9870 f/d cd. in 3 wks. (Loudell-DE).

BULGARIA: Radio Bulgaria 9700 f/d "Bulgarian Sea Resorts - Dunes View" cd. w/ schedule in 17 wks. (Loudell-DE).

RADIO MUAMACHUCO
ONDA MEDIA - 919 - KRZ.
O, A, X. 2-H.

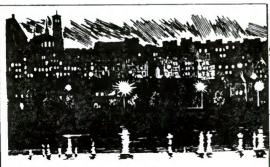
Manuel Domingo Gil Gil DIRECTOR GENENTE

CANADA: Radio Canada International 9515 via Sackville f/d "60th Anni-versary" cd. in 8 ds.(Lare-MI). Radio Sweden International 6010 via Sackville f/d big sized "Stockholm Balloon" cd. in 1 mo. (Loudell-DE). Voice of Joy 9530 via Sackville I mailed a rpt. to Box 610411, Dallas, TX 75261, the address that was announced on their broadcast, but my letter was returned marked "Return to Sender / Attempted / Not Known / Unable to Forward". I then sent an e-mail to voiceofjoy @comcast.net. About 12 hours later I received an e-mail from Dean

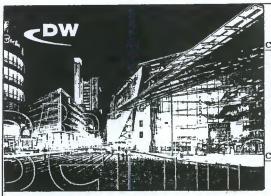
Phillips stating that he would send a QSL -2 ds. later a f/d "Map" cd. arrived. (Craighead-

KS).
CANARY ISLANDS: Full Gospel Church of Las Palmas 6715 p/d e-mail ltr in 7 mos. v/s Pastor Byung Sung Chung. (Lare-MI).

CHINA, PEOPLES REPUBLIC OF: Time Station BPM 15000 f/d cd. in 5 wks. (Craighead-Vietnam). China Radio International 13790 f/d "Chin's Endangered Rare Animal"



RADIO POLONIA



cd. of the "Stump-tailed Macaque" w/ schedule in 5 Wks. (Loudell-DE).

CLANDESTINE: Save the Gambia Project 9405 via Julich e-mail reply received from Walter Brodowsky at T-Systems in 25 ds. Walt confirmed that what I heard was a transmission from Radio Miami International was was broadcast from T-Systems in Julich. (D'Angelo-PA). ZECH REPUBLIC: Radio Praque

7345 via Litomysl f/d "Czech Spas - Karlovy Vary" cd. in 1 mo.(Loudell-DE). f/d "Czech Spas

Karlova Studanka" cd., with beer coaster, station pennant and a note pad in $3\frac{1}{2}$ wks. (Lodell1-DE).

ECUADOR: Radio Quito 4919 e-mail reply in 1 day. (D'Angelo-PA). EGYPT: Radio Cairo 11885 f/d "Archaeological Ruins" cd. w/ station sticker and schedule in 11 wks. (Loudell-DE).

GERMANY: Deutsche Welle 9440 via Wertachtal f/d "Koln-Kiev Ukrainian Schedule" cd. w/ site in 122 ds. for 1 IRC. Schedule was rcvd.(Barbour-NH). Radio Waaberi 17550 via Julich I received a second brief

e-mail verie in 5 wks. after I sent the station an e-mail rpt. I had previously rcvd. an e-mail QSL from Ali Gulaid in 14

hours. (Craighead-KS). Voices from the Dia-spora 9405 via Julich f/de-mail from T-Systems in 2 ds. (Craighead-KS). Minivan Radio 13855 via Julich f/d ltr. in 2 mos. and a f/d "Space Shuttle" cd. from Jeff White at Radio Miami International in 13

mos. (Craighead-KS).

GOA: All India Radio 11740 via Panaji f/d cd.
in 5 mos. v/s A.K. Bhatnagar. (Lare-MI). GREECE: Radio Farda 9775 via Kavala f/d "RFE/ RL" cd. in 7 mos. (Craighead-KS).

INDIA: All India Radio 9425 FM Rainbow via Bangalore e-mail QSL confirming reception of the test transmission in 1 day from Sunil Bhatia, Director of Spectrum Management and Synergy Division Directorate General. He indicated that rpts. can be e-mailed to:

www.allindiaradio.gov.in (Howard-CA). All India Radio 4970 North East-ern Service via Shillong rcvd. e-mail reply in 30 minutes from the above v/s. He is outstanding! (Howard-CA).

ITALY: Words of Life 5775 via Italian Radio Relay Service short ltr. in 10 ds. from v/s George Haas, Secretary / Treasurer (D'Angelo-PA).

Italian Radio Relay Service 5775 e-mail QSL rcvd. in 8 ds. from v/s Ron Norton. (D'Angelo-PA).

KUWAIT: Radio Free Asia 9365 via Kuwait City f/d color "Mosque and Palm

HRVATSKA RADIOTELEVIZIJA

To: Mr. Willshaw.

We are pleased to verify your reception of our station.

Date: 2000.05.28 Time: 03:00 to 03:16

Power (kW): 100

Freq. (kHz): 9.925.0

Transmitter Location: Julich

Comments: Thank You for nice reception report.



Trees" sheet in 7 weeks from George Miller, Transmitter Plant Supervisor. (Craig head-KS).

Page 39

WEWN 1500 Mph Rand 10.0 km 176 Weinlere, AL 35374 WA 1-705 2271-2700 and, 2017 fact 1705 271-2708 weed-flowfaces	PLACE STAMP HERE	MOLDOVA: Voice of Russia 7180 via Kishinev f/d "60th Anniversary of the Great Patrotic War - Parade on Red Square" cd. w/ sked. in 3 wks. for an e-mail rpt. (Loudell-DE).			
Date Botom / Folker 1 January 2002 P.O.	Barbour Box 893 roule, NH 03845	MOROCCO: Radio Farda 9865 via Briech f/d cd. in 34 ds. (Wilkins-MO). NEW ZEALAND: Radio New Zea- land International 11820 f/d "New Zealand - The Ultimate Experience" cd. w/ schedule in 3 wks. for 2 IRCs. (Loudell-DE).			
Corporation of Nigeria, p.O. Box 377 Gwagwalada SAIPAN: Radio Free Asia 13 SOUTH AFRICA: Radio Okapi head-KS). 11690 f/d ltr	Abuja National S / P.M.B. 71, Gar 625 f/d cd. in 19 11890 via <u>Meyerto</u> . w/ schedule from a 11540 f/d "SWL	n f/d ltr. in 24 ds.(Craig- m v/s Kathy Otto in 12 ds. Fest" cd. and an (D'Angelo) "EDXC 2005" cd. in 5 mos. w/o site. (Loudell-DE).			
Mar and march	we so condições de secuta de SARA, Khr. sos SARA. USA SARA, Khr. sos SARA. USA SARA, SAR	KISH NORTHERN CYPRUS: Radio. Bayrak 6150 p/d e-mail ltr. in 7 mos. v/s Mustafa Tosun. (Lare-MI). : Radio Six International 5105 via WBCQ f/d "Clock/Lo- go/Globe" cd. in 3 wks. v/s Tony Currie. (Loudell-DE). WRMI 7385 Voice of the NASB cd. in 532 ds. (Barbour-NH). same in 504 ds. from v/s Jeff White. (D'Angelo-PA). (Pirates): Undercover Radio f/d cd. w/ T-Shirt and ltr.			
in 30 ds. for 3 IRCs.(Ray) from the IRCKSorry I threw the envelope away that had your last name on itSam. Pirate Radio Boston 6925 laminated "Logo" cd. for an e- mail rpt. to: pirateradio boston@yahoo.com (D'Angelo-PA). UZBEKISTAN: Bible Voice Broadcasting 7485 via Tashkent f/d "World Map" cd. w/ site in 1 mo. (Craighead-KS). VATICAN CITY: Radio Vatican 7305 f/d "The Palazzina Leo XII - Vatican Radio's Technical Headquarters" cd. w/ schedule and stickers in 7 wks. (Loudell-DE).					
KHz m. b. 24 Thank you was 1 11:	AS Cherry Ave. Ighgate Apt. No. J-11 atertown, Coun. o6795	This will end another QSL Column. Next months should be significantly larger. Hope everyone had a great Holiday Season with lots of goodies under the tree.			

Contributors' Page

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DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA Scott BARBOUR, Intervale, NH Ray BAUERNHUBER, Whitestone, NY Jerry BERG, Lexington, MA Bill BERGADANO, Freehold, NJ Luca BOTTO FIORA, Rapallo, ITALY Mike BRANCO, Islip, NY Ralph BRANDI, Middletown, NJ George CARAS, Saco, ME Rich D'ANGELO, Wyomissing, PA Tim DAVISSON, Norton, OH Jerry ERVINE, Hidalgo, TX Jim EVANS, Germantown, TN Bob FRASER, Belfast, ME John HERKIMER, Caledonia, NY George HERR, Olinda, HI Ron HOWARD, Monterey, CA Victor JAAR, Longueuil, QUE Mark LITTLEFIELD, Kenmore, NY Bob MONTGOMERY, Levittown, PA Dale PARK, Honolulu, HI Jim RONDA, Tulsa, ox Louis Crisler SMITH, Thurmont, MD Mark TAYLOR, Madison, WI Joe WOOD, Gray, TN

NRD-545 AOR AR-7030 100' LW R-75, MLB-1, 200' Beverage Sony 2010, 23' vertical antenna R8 19, 41, 90 meter dipoles Icom 718, 170' tuned inverted L R7, Sat 500, Dipole, LW, MFJ1206, AT2000 No equipment listed A0R7030, R8, 300' longwire, T2FD RX340, R8B, Orion, R30, SE3, 550lw, verticals TenTec R340, Lowe HF-150, DX Sloper Icom IC718, off-ctr-fed folded dipole R2000, 5 band Vert, wire, Palomar preamp RX340, 30 m wire, R* AN-LP1 Sony ICF-2003 ICF-SW100s 2m LW NRD535D, 199' longwire no equipment listed NRD545, LW 160' Galaxy R530, 30 m wire RX340, sloper NRD535D, R390A, RX320, HF150, SE3, T2FD, Sangean ATS-818CS FRG-100B, FRG-7, Eavesdropper R-75, 160' long wire R-75, Sat 800, EWE, Eavesdropper DX-390, Grundig Mini 100 PE, whip antenna

WWW Shortwave Listening Guide

Looking for programs to listen to? You can find what programs are on for the current hour or list programs of a desired type on a given day at the www Shortwave Listening Guide on NASWeb. Webmaster Ralph Brandi has updated almost four thousand entries in the datqabase for the new broadcasting season. Visit the Guide on the new NASWA web site at http://www.naswa.net/swlguide/.

NACABP

Visit our newly redesigned and refreshed club home page on the World Wide Web at http://www.naswa.net/

Tropical Band Loggings

Dan Ferguson • 4205 Friendfield Trace • Little River, SC 29566 • troplogs@zerobeat.org

- 2310 AUSTRALIA VI.8A Alice Springs 1136-1143 pop vocal, then M ancr in EE; P/F 12/20. //2485 VL8K Katherine was poor. (D'Angelo/FCDX-PA) 1142 mx & tlk; earlier a show about John Lennon. P/F 12/10. (Herr-CA)
- USA WWCR 0600-0610 Don't know if this was a spur or not. M in EE w/ID, freqs and skeds. Stated freq was 3215 kHz. Prgm "Rock the Universe" featuring oldies rock mx on the Rainbow Records label. Mx included "Rocking the Universe," and "Yes Sir, That's my Baby." VG // 3215 VG; 12/19. (Wood, TN)
- 3185 USA WWRB 0431-0440 ultra conservative political rhetoric with ads for booksellers. ID at 0434 as "This is Radio Station WWRB." "Heralds of Truth" prgm with Pastor Bob. G-VG; 12/4. (Wood, TN).
- 3215 USA WWCR 0605-0611 Abbott and Costello comedy routines. Good 12/27. (Wood, TN)
- 3220 PNG R. Morobe 1018 definite audio but unable to make out. Poor 11/24. (Herr CA)
- PNG R. W. N. Britain 1141-1146 noted in passing w/EE talk by M, then a selection of island music. Poor due to noise level 12/20. (D'Angelo/FCDX-PA)
- SWAZILAND TWR 0302-0312, EE rel prg, fair signal, good African opening 12/1! (Bergadano-NJ)
 S.AFRICA BBC Meyerton 0314 EE political cmtry; a quick check of R. Sondergrense-Meyerton on 3320 at the same time showed a remarkably strong signal as well. Good 11/24. (Ronda-OK)
- 3290 PNG R.Central Boroko 1021 unreadable with ute QRM; het USB from Guyana, and LSB from unknown. Poor 11/24, (Herr-CA)
- GUYANA GBC, V. of Guyana 0446-0503 M in Indian EE with dramatic monolog dealing with the Raj era of India. Ments of Mr. Nehru. At TOH there was an ID as "World Briefing" by BBC nx. Good 11/24. (Wood, TN) 3291.15 0402-0503 11/8 in EE, BBC nx pgm, ID as BBCWS 0430 & 0500 (Caras, ME) 3291.16 0123-0137 EE. cover of Simon & Garfunkel tune. M at 0129 w/date, talk re phone poll, then listener phone calls. No ID noted. P/F 11/15. (Barbour-NH) 3291.18 0500, always a het here but this is first time I've had a readable signal in a while. Relay BBC world service news. EE Fair 11/24. (Herr-CA) 3291.17 0140-0204 M in EE w/mx prg. Talk re various musicafsl artists & holiday greetings. F/G 12/18. (Barbour-NH)
- BOLIVIA R. Mosoj Chaski Cochabamba 0937-1025 in Quechua. M&W alternating w/talk, W w/Andean mx & vcls, clear ID 0954, possible ID at ToH, probable news / actualities, Andean music. Poor 11/30. (Taylor-WI) 0944-0951 rustic vocal, then M ID & Quechua talk. More rustic vcls. F/G 12/19. (D'Angelo/FCDX-PA)
- 3325 INDONESIA RRI Palangkaraya 1026 Muslim rel mx just barely readable. Bahasa Indonesian, Poor 11/24. (Herr-CA)
- HONDURAS HRMI 0340-0405 SS ballads w/M b/w selections; full ID 0404. Booming signal, best reception from this station in a long time. 11/29. (Barbour-NH) 0430-0505 SS rel mx, mostly rel talk from 0445; poor 11/10 due QRN. (Caras, ME) 0036-0045 SS, interesting Latin mx at tune in; M brief anmts 0038 w/ID, more mx; heavy QRN 11/30. (Montgomery, PA)
- 3365.1 BRAZIL R. Cultural Araraquara 2352-0005 M&W PP tlk, M vocal; M ID & fqy anmts 2358, then The Mamas and Papas singing "California Dreaming." Poor 12/19. (D'Angelo/FCDX-PA)
- 3375.1 BRAZIL R. Educadora 0943 PP talk, local music (sounds almost like Peruvian music, not surprising given station location in far west of Brazil), ID 0952 & 0954; 12/8. (Brandi-NJ)
- IRAN VOIRI 0207-0216 Vernacular, ancr w/numerous ments. of "Islam", mx bridge, then talk re "Iraq". Fair 12/19. (Barbour-NH)
- 3955 S.AFRICA BBC WS 0313-0316 interview with M, just even w/qrn level; 12/1. (Bergadano-NJ)
- 3976 INDONESIA-KALIMANTAN RRI Pontianak 1046-1102, Nov.19, Indonesian, Indo ballads and announcer b/w selections. Talk thru ToH w/ LSB slop appearing at 1057. Poor. (Barbour-NH) 3976.05, 1339 W in lang, seems to cut, not fade in and out. Fair 12/26. (Herr-CA)
- 4000 CHINA Nei Menggo PBS 1035 M&W in CC; a regular here; fair 11/24. (Herr-CA)
- 4005 VATICAN Vatican Radio 0415 0430 Czech; IS 0423, 0425, then in SK; 11/9. (Caras, ME)
- GUATEMALA R. Verdad 0456-0504 "Bringing in the Sheaves" in SS with some cmtry by M and operatic insp mx in SS. Poor 12/5. (Wood, TN) 4052.5, 0044-0100 SS/EE, M ancr, preacher at tune in. Really poor audio with lots of fades but audible. S5 signal level. Organ mx and children singing at 0047. In the past noted in EE and SS but totally SS. Christmas mx at 0055, Jingle Bells. Lords prayer in EE at 0058. M SS ID 0100. 11/30. (Montgomery, PA)

- 4070 EURO-PIRATE R. Spaceman 2230-2300+ pop mx, ID, frequent anmts. Very weak in noisy conditions. (Alexander-Pa 11-26)
- DIEGO GARCIA AFN 2301-2315 AFN program. Weak signal just at/above noise level, but defi-4319u nitely there 12/8. Appeared to be running parallel to NPR news and All Things Considered program from strong Key West signals on 5446.5 usb, 7811 usb, 12133.5 usb. Can't remember this transmitter paralleling Key West in the past, but 4319 usb now appears as Diego Garcia on AFN web page. (Jim Evans, TN) 0103 Philadelphia 76ers vs. Milwaukee basketball, military e-mail address afnsports@dodmedia.osg.mil given during commercial break 0153, ID as AFN Sports; 12/8. (Brandi-NJ) downright strong at 2100 Dec 12, a split second behind //12133.5U. (Berg-MA) 12/13, 0047 two men talking about sports (mentions coaches, female wrestlers, etc.), 0056 clear AFN ID, weak, lost by 0100, probably //7811(USB) which was fair. Dec 19, fading in about 0042, was fair by 0046 and gone before 0100, clearly //7811(USB) (Howard-CA) 2356, fair 12/16. (Davisson-OH) 0110-0135 NBA basketball game with Cleveland playing New Jersey. P/F 12/10. (D'Angelo-PA) 0015 man speaking; perhaps sports commentary; gone in QRN by 0100; vy poor 12/8. (Ronda-OK) fading in about 0045 till fading out about 0108, mostly fair. Only about three minutes separate DG sunrise from my sunset, for good Grayline reception. On 24th Sports Byline USA w/Ron Barr interview with Nate Thurmond; on 25th Focus on Racing Radio, 0057 full ID "This is American Forces Network, an activity of the U.S. Department of Defense", gives Riverside, Calif. address, National Anthem played both days at 0059, ToH AP Radio news. 12/24 & 25. (Howard-CA)
- 4409.73 BOLIVIA(P) R. Eco 2328-2335+ SS, nice ballads & easy-listening mx. W at 2335 when suddenly buried under static. Music resumed but signal never fully recovered; 11/30. (Barbour-NH)
- 4498.1 BOLIVIA Radio Estambul 0958-1025 M w/TC & SS tlk, Bolivian vocals. Nice ID 1010 mentioning "Radio Estambul ... onda corta." Ad string 1018, more IDs and rustic music. Poor 12/19. (D'Angelo/FCDX-PA) 4498.15, 1006-1022 SS, mx w/solid ID 1010. Various ancrs over mx at 1017. P/F 12/19, noisy by t/out. Pleased to log this for the first time! (Barbour-NH)
- 4604.96 INDONESIA R. Serui 0955 12/10 Music followed by male in lang. Poor 12/10. Also 1334 M in lang; P/G 12/26. (Herr-CA) 4605 1154-1203 W ancr in Indo, instl mx. Song of the Coconut Islands at 1159, then news; poor 12/13. (D'Angelo-PA) 4605.06, 1212-1232 Indo, nice "island" ballads w/ announcer b/w selections. Suddenly gone at 1217. Back at 1225 re-check w/ same format. Decent signal 12/5. (Barbour-NH)
- 4716.8 BOLIVIA Radio Yura 1002-1009 rustic song by children, M SS anmts, ID & frequency. Program of rustic Bolivian vocals. Poor 12/20. (D'Angelo/FCDX-PA)
- 4750 SUDAN R. Peace 0350 chant-like choral mx; ID 0400 with the clear word "Peace" and then back to rhythmic singing and talk by man. Mx audio just above poor; spoken audio at strain level; poor 12/15. This parallels what Ralph Brandi reported on 10/17 (Ronda-OK)
- 4754v BRAZIL R. Educação Rural Campo Grande 0417 PP ad string, into what seemed a phone-in prgm; short mx breaks; poor 12/23. (Ronda-0K) 4754.9, 0110-0245 W PP talk, ID, talk by M w/romantic music, Apparent sports and news 0125, ID at BoH, talk by M, apparent prayer repeated between M&W, ID at ToH, live event report, further romantic music with M ancr. G/F 12/1. (Taylor-WI)
- 4760 LIBERIA ELWA 2150 music, IDs 2159, into rel program by American preacher, program ending about 2225, gospel music. 11/14. (Brandi-NJ) 2212-2303** M w/ EE rel tlk; pgm ended 2225 mentioning Old Town Bible program from Portland, Oregon. Soft Christmas instl mx. M ID 2229, then choir vocals at the beginning of another program feature. Closing ID by M & s/off anmts in EE. P/F 12/19. (D'Angelo/FCDX-PA)
- 4774.96 PERU R. Tarma 1050 ID by M DJ, ads, "Feliz Navidad desde Radio Tarma"; 12/17. (Brandi-NJ)
 4775 SWAZILAND TWR 0350-0356 M talk in Lomwe, ID 0355, 11/8. (Caras, ME) 0350 soft vocal mx;
- 4775 SWAZILAND TWR 0350-0356 M talk in Lomwe, ID 0355, 11/8. (Caras, ME) 0350 soft vocal mx, EE ID 0356; IS & ID 0359, into German program; F/P 12/23. (Ronda-OK)
- 4777 GABON R. Gabon 0616 M w/FF nx rpts, W ID 0620, actualities by reporters, more talk, another ID 0650, then local pop music; getting noisier and weaker by 0630 but still largely intelligible until about 0655; 12/14. (Brandi-NJ)
- 4780 DJIBOUTI RTD Djibouti *0300-0325+ Ss/on w/lcl instl mx. vern talk 0301, Koran 0302, tlk 0313. Horn of Africa mx 0321. Poor, weak with some ute QRM 11/12. (Alexander-PA) 0322 M w/emotional pol/rel speech at blistering pace. Into HOA funk classic afro call response. W ID 0330. M w/ nx ments "Senegal". G-VG 11/29. (CrislerSmith MD) 0355-0505 AA, chants, mx back to chants after 0500. Difficult ID 12/4. (Caras, ME)12/4 0405 Korann chanting, 0410 AA talk; F/P 12/6. (Ronda-OK) 0406-0411 M AA Koran, rough not smooth like Saudis. Into fiery preaching, fair 12/22. (CrislerSmith MD) 0403 Koran chanting; tough going in persistent local QRN; poor 12/22. (Ronda-OK)

- 4780 GUATEMALA R. Coatan 0223-0231* pgm of vocals hosted by M w/SS talk, multiple IDs at 0229. After a brief piano music segment, another M ancr w/s/off ID & anmts accompanied by instrumental music. P/F 11/30. (D'Angelo-PA) 0048-0135 SS talk by W to ToH, "London Bridges" tune w/ID & freq., M w/apparent news, music, long talk by different man, Christmas music ("Silent night"). Fair / improving throughout, 11/30. (Taylor-WI) 1134 M SS rel pgm, ID as "Radio Cultural". Fair 12/10. (Herr-CA) 1030 NA by hoir, ID "Desde San Sebastian Coatan, esta es Radio Coatan, en frequencia de 4780 kilocyclos, onda corta", music, 12/8. (Brandi-NJ)
- 4790 PERU R. Atlantida 1316 M DJ w/pop mx; swisher; poor 12/5. (CrislerSmith MD)
- 4796.33

 80LIVIA R. Mallku 0953-1003 continuous SS music w/nice ID 0956. Poor 12/22. (Barbour-NH)
 4796.46, 2307 multiple IDs within a minute of tuning in, "en servicio de la communidad", talk
 by M&W, more IDs 2314; 12/23. (Brandi-NJ) 4796.5, 0925-0958 nice flute music followed by
 a man with multiple IDs. Program of vocals hosted by M ancr w/talk in SS and more IDs. Fair
 12/19. (D'Angelo/FCDX-PA)
- 4799.75 GUATEMALA R. Buenas Nuevas, San Sebastian 1130 M in SS w/heavy interference from sweeper. Poor 12/10. (Herr-CA) 4799.8, 0137-0155 in SS. Two men in apparent interview with call in pgm (inc. by a child), ballad. QRM from "sweeper" signal. Fair 11/30. (Taylor-WI)
- 4809.93 ARMENIA Voice of Armenia 2043 lang talk, mx; // Windows Media feed at mms://live.armradio.am/armradio/; moderate CODAR QRM, 12/19. (Brandi-NJ)
- 4810 MEXICO XERTA 0007 romantic SS ballads; sometimes peaking to good; a rare instance here when this freq has not been troubled by a nasty ute; F/G 11/22. (Ronda-OK) 4809v, 1004-1033 SS, SS ballads & occasional ancr thru BoH. Fair tho tuned down from 4810 to avoid ute QRM, 11/22. (Barbour-NH)
- 4815 BRAZIL R. Difusora Londrina 0024-0041 M in PP talk alternating with segments of group vocals.

 M ID 0030 during program change. Talk feature with several people. Fair signal but CODAR QRM
 12/14. (D'Angelo-PA)
- HÓNDURAS La Voz Évangelica Tegucigalpa 0207-0220 SS, W ancr, canned ID, vocal music by a female group, then male (probably CCM in SS); QRM from "sweeper" and occasional USB digital signal. Fair 11/30. (Taylor-WI) 4819.15, SS 0358-0450 M w/rel talk, ballads after 0440 ID; elusive; 11/9. (Caras, ME)
- 4820 TIBET Xizang PBS 2233-2240 W in CC talk, //4800 (Ge'ermu) with relay of CNR. F/G signal but CODAR QRM marred reception 12/19. (D'Angelo/FCDX-PA)
- CHINA China Huayi Broadcasting 2201-2204 M&W talking, string of CC promotional anmts;

 F/G signal 12/19 until transmitter quit on them. (D'Angelo/FCDX-PA)

 ARACLE TOWNS OF THE PROMOTE TH
- 4830.1 INDIA AIR Jammu 0024-0050 instl mx, then W w/Hindi talk. Flute and sitar music until 0030 ID by M, then musical fanfare & brief news. Into Hindi vocals at 0033. Poor 12/19 with CODAR QRM. (D'Angelo/FCDX-PA)
- 4835.45 PERU R. Marañon Jaen 1058 music, time pips, rooster crowing, canned Christmas ID with snippets of numerous Christmas carols, ending with an ID for Radio Marañon; 12/17. (Brandi-NJ) 4835.46, 1020-1035+ SS talk, ID, ads, jingles. OA folk mx. Weak in quiet conditions 11/25. (Alexander-PA) 4835.5, 1042-1053 OA vocals, W SS ancr; M ID, then a female vocal with flute music. Fair 12/19. (D'Angelo/FCDX-PA) 4835.4, 1055 morning prgm, local campo vocals, many slick canned promos/anmts with "Marañon!" repeated often, ID as "Radio Marañon, la voz y el sentir de nuestros pueblos." Fair 12/19. (Herkimer, NY)
- 4840 INDIA AIR Mumbai 2353-0005 Vernacular, IS at t/in, choral-like music, brief M then Hindi mx thru t/out. Poor w/ 4845-Mauritaine splatter 11/29. (Barbour-NH) 0210-0235 Dec 19, man going strong with Hindi language talk. Brief musical segment followed by more talk segments. Time pips at 0230 followed by ID but fading fast. Poor 12/19 overall but hanging in surprising late. (D'Angelo/FCDX-PA)
- 4845 BOLIVIA(P) R. Norteño 0950-1003 SS, M&W w/ tlks thru ToH, buried under ute QRM. Poor, very noisy 11/14. (Barbour-NH)
- 4855.6 PERU R. La Hora 1036 M SS talk, then W. ID in passing as "Radio La Hora" by W; 12/8. (Brandi-NJ) 1105-1122 W SS talk w/"buenas dias, buenas dias ... Radio la Hora." Fair signal but fading fast by 1118, 12/19. (D'Angelo/FCDX-PA)
- INDIA AIR Delhi 1226-1235 noted with big signal on tune-by w/W in EE discussing upcoming programs, "Please stand by for the news" at 1229, pips, ID by M ("This is All India Radio"), into EE news. Switched to Hindi at 1235. 12/10 (Herkimer, NY) 1226-1241 M w/Hindi talk, time pips 1230, EE ID & nx by another M ancr. Poor 12/9. Also 1228-1234 M w/Hindi talk till 4+1 time pips 1230, then ID and news. Poor 12/23. (D'Angelo-PA)
- 4865 BRAZIL R. Alvorada 0240-0310 M w/PP rel talks, followed by "amen" & choir vocals. More talks, Silent Night and a few other Christmas songs were played. Fair 12/19. (D'Angelo/FCDX-PA)

- 4865 USA WWCR 0553-0600 ultra conservative prgm with ments of suspected terrorists cells in Northeastern Tennessee, USA. Ads for videos, water filtration systems, and diet supplements. ID at TOH as "From Nashville, Tennessee we are WWCR." Good 12/27. (Wood, TN)
- 4885 BRAZIL R. Clube do Para 0510-0526 Brazilian dance club mx. M ancr every 3-4 songs. Fair 12/4. (Wood, TN)
- 4885 BRAZIL R. Dif. Acreana 0250 with what seemed PP sports cmtry; Acreana ID 0254; second ID 0301, into ad string; PP pop vocals 0303; additional IDs 0310 & 0313; fair 12/8. (Ronda-OK)
- 4890 GABON RFI 0412-0435 M&W FF talk, pop mx vocal by W; ID 0430, then African news. Poor to fair with CODAR QRM. //7270 (Ascension Islands) was very good. 12/23. (D'Angelo-PA)
- 4890 PNG NBC Port Moresby 1044-1105 EE, continuous US pop tunes till ToH when M ancr made a few brief anmts, then IS & W began news items. Poor reception of this one of late but fairly audible this check, 11/24. (Montgomery-PA) 1053 'Do you believe in magic'. The most reliable tropical band Pacific station here. Fair 11/24. (Herr-CA)
- 4895 INDIA AIR Kurseong 1154-1205 Hindi vocal by M, musical fanfare 1200, ID & Hindi talk by M; more Hindi music. P/F 12/19. (D'Angelo/FCDX-PA)
- 4903.9v BOLIVIA R. San Miguel 1028-1040 M SS talk, ID & TC. Rustic Bolivian vocals with series of ads at 1032, then another ID & TC. Poor 12/19. (D'Angelo/FCDX-PA)
- 4905

 TIBET Xizang PBS 2240-2250 M w/Tibetan talk noted //4920. P/F 12/19. (D'Angelo/FCDX-PA)
 4909.2

 ECUADOR R. Chaski (P) 1121-1135 M w/long SS talk, mention of "onda corta" and "la radio"
 but no ID noted. Talk by various men followed by brief repetitions by a group (almost KJES
 like). Poor 12/19. Again, 1030-1110 inspirational music w/M ancr over some of the songs. Fair
 12/20. (D'Angelo/FCDX-PA) 4909.23, 1123 mx & M SS ancr. P/F 12/10. (Herr-CA) 4909.23, found
 with a pretty good signal at 1030, still in past 1100; tried again 12/25 & found them popping
 on at 1012, not as strong then, but they picked up quite a bit after 1030, tho overall still not
 as good as 12/24 because of heavy QRN this morning. Xmas mx at first, then all Ecuadorean
 mx w/anmts in between by a woman till man picked up at 1045; long discourse with "Glory,
 Glory Hallelujah" in the background, back to HC mx 1054. Quechua at least from 1045, maybe
 before also. I caught a couple of ments. of R. Chaskis, but no formal ID as such. 12/24 & 25.
 (Berg-MA) 4909.25, 1046 Andean music, M ID 1052, more music, ID as "Radio Chaskis del Norte"
- 1057; 12/22. (Brandi-NJ)
 ZAMBIA R. Zambia 2055 m w/EE talk, mentions of Zambia, into ABBA "Dancing Queen", local music, phone calls on air; 12/19. (Brandi-NJ) 0309-0320 in Lozi. Afr group singing w/drums, M ancr w/quick ID 0311, another song, anmt over "La Banba", talk show w/ studio participants. Good 12/1. (Taylor-WI) 2145 DJ taking phone calls, interspersed with brief bits of Congolese-style guitar music, many mentions of Lusaka and Zambia, time pips 2200, closing with a capella choral version of "Nkosi Sikele Africa". 11/25 (Brandi-NJ) 0314 lively talk in vernac between two men and a woman; mx break 0315 and back to talk; drums, vocals, & ID 0329-0330 and back to talk; poor 12/1. (Ronda-OK) 4910.5, 0246-0305 in Lozu, Fish Eagle call, NA, ID, Afropop, M ancr w/group singing. (Taylor-WI)
- 4915 GHANA Ghana BC Corp 2106-2203 M ending EE nx; then pgm about the music of Ghana. Retuned to hear music with talks in local language. ID 2200 as "This is the Ghana Broadcasting Corporation." Followed by news. Fair to good at tune in but beginning to lose ground to strengthening Brazilian from 2145. 12/18. (D'Angelo/FCDX-PA)
- 4918.97 ECUADOR R. Quito 1047 big band mx, possible ID by M with mention of Ecuador, into NA 1050, ID 1053; sound badly distorted at first, not quite as badly by 1055 but still noticeable. 12/8. (Brandi-NJ) 4919, 0410-0505 SS, lively LA mx, SS ballads, talk mostly by men; ID 0502, anmts, ads, muffled mod 11/12. (Caras, ME) 4919v, 0249 W in SS, into quiet orchestral & vocal mx; ID 0259, into faster paced mx. P/F 11/21. (Ronda-OK)
- 4924.89 BRAZIL R. Educação Rural 1028 ads, time pips, talk by M, full ID as "Radio Educacao Rural de Tef≠, Amazonas, Brazil" at 1232, more ads. 12/3. (Brandi-NJ)
- 4925 INDONESIA RRI Jambi 1047 Indian sounding music. Poor 11/24. (Herr,Ca) 2157-2202 M talking in Indonesian; 2158 Song of the Coconut Islands. Jakarta news 2200 but essentially useless as Brazilian gaining strength rapidly. Very poor 12/19. (D'Angelo/FCDX-PA)
- 4930 BOTSWANA VOA 0408-0415 in EE, nx, ID 0415, 11/5. (Caras, ME) 0330 EE ID, into Africa Now News prgm; in same time period with the same prgm: //6035-Botswana, very good; //6045-Morocco, good; //6080-Sao Tome, poor 12/6. (Ronda)
- 4939.64 VENEZUELA R. Amazonas 2318 local pop music, commercials, many IDs by excitable M DJ; 12/23. (Brandi-NJ) 4939.66, 0130-0324* SS talk, IDs, LA mx. Futbol play-by-play coverage. S/off with NA. Fair 11/26. (Alexander-PA) 4939.67, 1005-1025+ lively LA mx, several IDs at 1019-1020; SS anmts. Fair 11/12. (Alexander-PA) 4939.7, 0113-0121 SS, music w/M b/w selections; ID 0120; poor 11/29. (Barbour-NH) 4939.7, 0121-0150 Latin vocals program hosted by M ancr

- w/ SS tlk, IDs & TCs; ad string 0128, then a romantic vocal. Fair signal but awful noise made this poor overall; 12/7. (D'Angelo-PA)
- CHINA Voice of Strait (presumed); 1408-1534 programming in Chinese. Was looking for their show in EE, "Focus on China," which is scheduled from 1430-1500, on Sat. & Sun., but it was not on 12/3 (Sat). (Howard-CA)
- 4949.98 ANGOLA R. Nacional do Angola 2118 Cuban music, lengthy talk by M in PP, time pips at TOH, ID "Radio Nacional do Angola", into news, canned ID with echo at 2206. 11/13. (Brandi-NJ) 4950, 0401-0412 M w/PP nx; anmts 0405, then ID & more news; fair 12/19. (D'Angelo/FCDX-PA)
- 4960 INDIA AIR Ranchi 1135-1203 Vernacular, talks by M & W b/w Hindi music bits. Ads featuring "doorbell" effects and URL I couldn't fully copy. Hindi ballads at 1150. Nice ID 1200 then "doorbell" ad again. Mx intro and M at 1202. Fair at t/in then slowly fading. 12/20. (Barbour-NH) 1145-1235 mix of Hindi talks and nice Indian music. Several anmt breaks where each anmt was preceded by a door bell chime. Time pips and ID at 1230 followed by music. Nice signal at tune in but beginning to fade out around 1215 and almost gone by tune out; 12/20. (D'Angelo/FCDX-PA)
- PERU R. Santa Monica 0944-1002 M&W w/long SS talk. Segment of instrumental music followed by ID and series of announcements. Poor with muffled audio. (D'Angelo/FCDX-PA)
- 4965 ZAMBIA Christian Voice 2116 various contemporary Christian music, M EE ID 2146 as "Christian Voice", mentioning broadcasting from Zambia; 12/19. (Brandi-NJ)
- 4965.8 PERU R. Santa Ana 1007-1032 f/o; program of OA vocals hosted by M ancr w/ID, TCs & ad strings. Fair to poor 12/20. (D'Angelo/FCDX-PA)
- 1NDIA AIR Shillong 1332-1504 ads, folk songs in EE, sub-continent music and songs, 1430-1500 W in EE with music program "Golden Classics," with songs by Elvis ("Hound Dog," "Love Me Tender" and "Too Much"), Andy Williams ("Moon River" and "Spooky"), several IDs: "This is the North Eastern Service of All India Radio broadcasting from Shillong on 60.36 meters, corresponding to 4970 kHz." ToH: "Listeners we welcome you to our program of Western instrumental music entitled Light Jazz." Fair. Very pleasant listening 11/26. (Howard-CA) 1144-1156 M w/Hindi vocal followed by brief talk by W ancr. More Hindi vocals and talks by the W ancr. Poor 12/19. (D'Angelo/FCDX-PA)
- 4974.8 PERU R. del Pacifico 2314-2340 SS tlk by W; M ID2329, then a discussion by two women. Various anmts at 2325 and some choir vocals at 2329. Poor to fair 12/18. (D'Angelo/FCDX-PA)
- 4975.09 BRAZIL R. Mundial Osasco; maybe I've just missed it in the past but this was a surprise. Fair signal at 0815 Dec 11, lady ancr with phone talk. ID at 0825, ads, a "R. Mundial informa . . ," back to talk at 0830, by which time the signal was on the way out. (Berg-MA)
- 4976 UGANDA R. Uganda 0405-0431 Mw/EE nx, ID 0417, then W w/feature; mx 0426. Very weak 11/29. (D'Angelo-PA) 4975.95, 2020 Western pop & country music, mixed with African pop music, announcer in EE, Glen Campbell "Rhinestone Cowboy", Tina Turner "We Don't Need Another Hero", "time check" for a few minutes before midnight, wishing listeners a Merry Christmas at 2057, Village People "Y.M.C.A" at 2100, off mid-song at 2102; 12/23. (Brandi-NJ) 4976, 2035-2102 M DJ, pops ("We Don't Need Another Hero" by Tina Turner). Closed with Village People's "YMCA" but thankfully cutoff in mid-song at 2102. Fair and a little noisy today. 12/23. (Herkimer, NY)
- 4985 BRAZIL R. Brasil Central 0425-0508 in PP, great PP pop tunes, good to hear again since last April, ID 0502; 12/1. (Caras, ME)
- 4990 INDIA AIR Itanagar 1445-1517 in language; subcontinental music and songs, 1450-1500 news (PM in Kuala Lumpur, report in EE about the petrol storage area near London exploding), fair. The strongest AIR station on 60 meters; 12/12. (Howard-CA)
- 4990 SURINAME R. Apintie 0402-0415 in EE, American pop mx, ID 0405. 11/7. (Caras, ME) 0404-0505 continuous mix of pop and rock vocals and some Christmas music. Jingle ID 0421. Poor to fair 12/16. (D'Angelo-PA)
- EQ.GUINEA R. Nacional 2205 Afr pop music, SS talk, ID 2212 by M&W as "Radio Bata", song by Cesaria Evora, then SS-language rap tune, more music, same ID as before at 2221, more music, brass band rendition of NA at 2256. 11/25. (Brandi-NJ) 2240-2304* Vern talk. Afro-pops. S/ off with their lengthy NA. Weak, poor in noise 11/11. (Alexander-PA) Very poor but readable 2255 with SS talk; off or lost 2300; first time heard; 11/29 (Ronda-OK) 2154-2210 SS, nice mix of SS ballads and native Hilife music. M w/talks, ID in passing. Good 11/30. (Barbour-NH) 2220-2255 nice prgm of continuous soul/pop vocals and Afro rhythms. Closing anmts and ID by man at 2251, NA, off 2255*. Fair 12/22. (Herkimer, NY) 0541-0605 highlife vocals w/M ancr hosting with SS talk and ID. News 0600. P/F 12/24. (D'Angelo-PA) 2155 African pop music and Christmas carols ("Es Navidad"), no anmts till 2255, when ancr IDed in SS as Radio Bata, gave TC, sign-off, into national anthem, off at 2257; 12/19. (Brandi-NJ)

- 5010 INDIA AIR Thiruvananthapuram 1226-1235 M talking in Hindi until time pips at 1230, then EE ID and the news ready by M ancr ("This is All India Radio. The news read by ..."); fair 12/12. (D'Angelo-PA) Also 0121-0140 M w/long Hindi language talk followed by 5+1 time pips at 0130, ID by another man, flute music segment and news in Hindi language. Poor to fair 12/1. (D'Angelo-PA) 1242 1308 M&W ancrs alternating w/occ. Indian music shorts, ID at ToH. Not sure what language. 12/24. (probably not Hindi.) (Taylor-WI)
- 5014.4 PERU R. Altura 1059-1107 ad string followed by formal canned ID at 1100 by M ancr. Another ancr spoke briefly in SS before OA vocals. Fair to good signal 12/19. (D'Angelo/FCDX-PA)
- 5015 TURKMENISTAN Turkmen Radio 2350 local music, ID 0000 "Turkmeni Radiosi ... Programma Watan", NA (matches NA for TR 2nd program on www.intervalsignals.net), NA ending @ 0003; 12/23-24. (Brandi-NJ)
- 5019.88 SOLOMON IS SIBC 1440 relay BBC with Heather Payton. Fair 11/24. (Herr,CA)
- BURKINA FASO R. Burkina 2300-2400* FF talk. Afro-pops. S/off with instrumental tune. Good 11/11. Gene Scott not on the air. (Alexander-PA) 2301 African pop music, ID by FF speaking M DJ 2307, more music, including reggae, west African-style pop music, another ID by W @ 2327, full address given by M at 2355, ID by W 2356, music, s/off by OM DJ, returning to air tomorrow morning, NA on synthesizer. 11/25. (Brandi-NJ)
- 5030 CHINA CPBS Beijing 1234+ Mandarin, M&W w/ talks, CNR "jingle" music. Poor 12/5. (Barbour-NH) BRAZIL R. Aparecida 0810-0830+ Very weak with PP anmts, ads, jingles, local pops/ballads. Much stronger on // 6134.77, 9630.02; 11/12. (Alexander-PA) 0708 caught mid-ID with mention of Brazil, quiet guitar-based music, ID by M DJ at 0712 between songs, commercials at 0715; 12/14. (Brandi-NJ) 5035.5, 2216-2234 PP, ballads, ad/promo strings & ID jingles. Fair/poor as was // 6134.8: 11/30. (Barbour-NH)
- 5040.06 ECUADOR Voz del Upano 0945 very low modulation, similar to TIFC-5054.6 before they cleaned it up, but better than the near total absence of modulation that I have noted before. Talk, light mx; modulation seemed to improve a bit arnd 1000 and I finally got a readable Voz del Upano ID at 1003 with a long list of calls and fqys, then into Rosary. 12/17. (Berg-MA)
- 5045 BRAZIL R. Guaruja Paulista 2235-2247 PP, PP mx, ad strings & "Guarja Paulista" IDs. F/P 11/30. (Barbour-NH)
- 5054.6 COSTA RICA TIFC Faro del Caribe, San Jose 0141-0204 M w/SS Christmas music, talk b/w selections; ID 0202. Poor/fair w/ lots of slop via 5050-WWRB. 12/19. (Barbour-NH) 0405-0540 SS, SS pop mx some Christmas songs, best copy in usb; 12/5. (Caras, ME) 0904 12/03 music followed by M in SS, poor 12/3. (Herr, CA) 0719 Salsa music, other local music, ID "Faro del Caribe... Mil Ochenta kilohertz" 0729; 12/14. (Brandi-NJ) 1042-1105, rel pgm & mx, SS ballads, ToH, "muy buenos d;as," rooster crowing, then sound of roosters and chickens for about one minute, the audio was prominent for a change, poor-fair 12/2. (Howard-CA) 0933 SS religious talk between man and woman; F/G 12/3. (Ronda-0K) 5054, 0535-0549 M in SS with insp mx and tlk. Fair 12/4. (Wood, TN) 5054.5, 0234 M in SS w/many references to El Salvador. 12/21. (Taylor-WI) 5054.55, 1105 best hrd in a long time with SS devotional talk by man over light guitar mx. Audio still lacks punch but improved. 12/21. (Herkimer, NY) 5055, 0617-0628 adult contemporary insp mx in SS w/M ancr; ID 0628. Fair 12/19. (Wood, TN)
- 5070 USA WWCR Nashville 0551-0556 two M w/ EE talk about cell phone usage and how to get a good deal. Good 12/4. (Wood, TN)
- 5100 UNID 0540-0547 M in EE with sports, the W in EE w/nx and several ments of Johannesburg. Very Faint. Any ideas? 12/27. (Wood, TN)
- 5110.06 USA WBCQ Kennebunk, ME, USA 0927 EE rel pgmg, "Voice of the Martyr". Poor with deep fades 12/3. (Herr, CA)
- 5446u USA AFRTS Key West 0558-0637 talk about chewing gum and oral hygiene. ID at TOH. 'Sports Overnight America' prgm with call ins. Good 12/4. (Wood, TN)
- 5470 LIBERIA R. Veritas 2243-2301* continuous romantic vocals in EE to 2255 when M ancr spoke in EE mentioning benediction was next. Soft instl mx followed as another man gave station ID and Lord's Prayer. Carrier was cut as soon as he was done. Fair 12/19. (D'Angelo/FCDX-PA) Heard with VOA EE news at 2050 followed by VOA cmtry, then Veritas ID at ToH and contd. local prgmng. (Berg-MA) 5469.96, 2305-2309* tune-in to EE rel message & prayer asking for peace in Liberia. Lord's Prayer at 2307 followed by lite mx until 2309 s/off. Fair11/4. (Alexander-PA)
- 5500 ETHIOPIA V of Tigray Revolution 0431-0501* mix of beautiful Horn of Africa vocals and talks in Tigrinya language. Poor to fair. Deteriorating quickly and either sign off or lost in rapidly rising noise. Checked //6350 but blocked by mess of different noises; 11/29. (D'Angelo-PA) *0356-0415+s/on w/flute IS. Vern talk at 0400. Weak 11/4. Stronger on // 6350. (Alexander-PA)
- 5544.7 PERU R. San Andres 0031-0102 rustic OA instls & vocals hosted by M ancr w/SS talk, IDs and mentions of Santa Rosa and Lima. Poor with a mess of noise marring reception, 12/8. (D'Angelo-PA) 5544.65, 0205-0300+ OA folk mx, SS anmts, ID. Weak, poor in noise, 11/19. (Alexander-PA)

5765 USA WWCR 0535-0540 two M in EE tk about private citizens "assisting" the US Border Patrol in its duties on the US/Mexico border. Ments of real time internet access to videos showing airborne surveillance of border. Good 12/27. (Wood, TN)

RUSSIA Special Radio (via Tashkent); RCI via Sweden hrd here in FF, small but decent signal 5850 at early 1830, 12/22. Het on fgy audible from 1857, then RCI off and Special Radio IS, intro in RR, into prom of long RR rock selections, a couple of anmts & IS repeats during the hr, but mostly mx. Seemed to have some audio dropouts at first, but then stabilized. Signal highly variable until it steadied at 1935, improved more arnd 1945, and not bad by 1952 when played last song (an instrumental). Then closing anmt in RR, IS once, and a surprise anmt in EE by W: "You are listening to Special Radio, Moscow, Russia. You can listen . . . 6.240 MHz. every Thursday at 6 p.m. UTC. . . . problem of Special Radio . . . actual music from Russia . . . problem . . . Russia . . . a musical problem has developed . . . musical gifts which are shared by Special Radio . . . names recommended records Special Radio Media Project. You can find lists of this series from site of Special Radio. Special Radio Internet . . . www.specialradio.ru, E-mail admin@specialradio.ru. Listen to actual music from Russia, and this is not a joke." Then IS three times, half-minute of silence and off at 2000*. There is a lot of stuff on their website, which has an EE version. Also try http://rr.specialradio.ru/news/index.php?top=15 and translate to EE via that page gives xmtr site as Tashkent, 100 kw. Looks like a private b/cer, not a govt svc, and reminds me of the private b/cers c. 1991, e.g. Ala, Centre, Galaxy. Thursdays only; have tried a couple of times before but

RUSSIA R.Sea Breeze Irkutsk; *1400 Japanese, piano mx & talk by M. Fair-Poor 12/13. (Botto Fiora - ITALY)

this is the first time I have had a useable signal. (Berg-MA)

Company Store

5890

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It's a little hard for me to accept that another year has passed. Seems like January 2005 was just a couple of weeks ago.... First of all, I have one big announcement to make. The Company Store is making available copies of the newly created compilation CD of the 1947-1958 WRTH. This is a high quality CD containing the entire contents of each year's edition in searchable PDF format. The CDS are available through "The Store" for the introductory price of \$50(US) until 31 January, 2006. After that date, the price will be \$60(US). Shipping included. A formal announcement is also in this month's edition of The Journal. No radio shack will be complete without one. In addition to this announcement, I have 2 reminders and a couple of updates. The first reminder involves the club special we are offering on the new WRTH for 2006. The new edition is available for \$26.90 plus \$4.00 shipping in the US, \$8.00 to Canada and actual costs for other parts of the world for orders postmarked by 31 January, 2006. The other reminder involves the reprint catalogs we're offering of articles from the much loved Fine Tuning's Proceedings. We have 2 versions of the reprint catalog available. Check out The Company Store ad for details. As an update, the special on the 2006 Passport to World Band Radio has expired and is only available at the regular price listed in The Company Store ad. Finally, our supplier for the baseball style caps with the club logo embroidered on the front we are offering messed up our order. Instead of having a velcro band on the back to adjust the size, he ordered caps with the normal plastic adjustment strap. If you're still interested, the caps are \$12.00 with \$3.00 shipping to u.s. addresses and \$6.00 to Canada. If you're ordering from somewhere else, please get in touch with me so I can find out exactly how much the shipping will cost. Obviously, its been a busy month. Good listening. Mike GA/

5901-30000 kHz

International Band Loggings "

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UKRAINE RUI Simferopol in EG 0110, "News and Reports", "Music from Ukraine", sked, ID, IS, 5910 contact info, into UK lang 0200 (Barbour NH 11/14, Ronda OK 12/7, Davisson OH 12/7) COLOMBIA Marfil Estereo Puerto Lleras in SP 0946, campesino pgm lengthy periods of barnyard 5910 sounds, TC's, OM anner has his "trilled r's down pat (Berg MA 11/15) 5930 CZECH REPUBLIC R Prague in EG 2111, nx on arrest of criminals, ments of several health insurance companies in financial difficulty due to health care fraud, E-mail addr, ID, f (Wood TN 11/26) 5965v MALAYSIA National FM via RTM Kajang in Malaysian 1540, YL DJ w/pop songs, station jingle, reciting from the Quran, ID for "Nasional FM", f-p (Howard CA 12/10) RUSSIA R Tikhiy Okean (R. Station Pacific Ocean) via Vladivostok in RS *0935-1000*, chimes 5960 IS, at s/on which starts w/"Moscow Radio-Radio-Radio (echo effect), pop mx, ID "Govorit Vladivostok", also many ID's "Radiostantsiya Tikhiy Okean", audio muffled (Howard CA, Berg MA, Barbour NH) BRAZIL R Itatiaia Belo Horizonte in PT 0835, conversation, animated as string, ads, tlks, positive 5970v ID at 0910 by which time signal was on its way out (Berg MA 11/14) SPAIN REE Noblejas in EG 0045, "Radio Waves", two different renditions of the song "Videos Killed 5005 the Radio Star", machine gun sound at invervals, f-g (Fraser ME 11/13) BRAZIL R Inconfidencia Belo Horizonte in PT 0845, ads, talk, quick IDs, g (Berg MA 12/8) 50102 COLOMBIA LV del Guaviare in SP 2240, ads, accordion mx, ID 2255, wiped out by CRI Canada relay 5035 s/on 2300 (Brandi NJ 11/23) in SP 0103-0210, talks, ments of "Colombiana", TCs, IDs, Rumba mx, phone call from listeners, many ad strings, p-f (D'Angelo PA 12/8) 5055 TURKEY V of Turkey in EG 1955, TK songs, tlk re TK athletes in past Olympics, g (Jaar QUE 12/12) 5055 RWANDA R Rwanda Kigali in FR 2030-2100*, lite vocals, ment Rwanda, fair audio, s/off w/o ancmt (Berg MA 12/10) in FR 2033, pgm of highlife mx, nx at 2054, ID at s/off (D'Angelo FCDX 11/14) BRAZIL R Tupi Curitiba in PT 0830, clear ID, fqys, religious pgm, f/o by 0945 recheck Berg MA) 5060 5080 SINGAPORE RSI in EG 1113, interview re Singapore University, overview of India/s energy program RSI promos, IDs, interview of book on ancient CH architecture, poor (Barbour NH 11/14) OMAN R Sultanate of Oman in AR 0226, tlk by YL, ID 0230, mx, // to web feed (Brandi NJ 11/14) 5085 LAOS LNR Vientiane in Laotian 1142-1204, YL tlk b/w mx bits, vocal ballads, 7 gongs at 1200 and 5130 into fanfare and presumed ID, OM/YL w/nx, soundbites, p-f (Barbour NH 11/15, Berg MA 12/9) 51398v COLOMBIA R Lider via R Melodia Bogota in SP 2227, ID, local mx, nice ballads "Musica Papapito", nx, QRM Havana (Ervine CA 11/23, Bergadano NJ 11/16) in SP 0840, local pop mx, ID, dominant over DW in EG (Brandi NJ 12/8) in SP 1025, IDs, TC 1033, into pgm of favorite songs (Ronda 11/24) 5145 CANADA R Japan relay via Sackville in EG 1900, tlks on Bush trade issue w/Brazil, Iran, uranium conversion, Japan/US conflicts over importing beef, tariffs, vg (Branco NY 11/6) 5165 CROATIA Hrvatska R. via Deanovec in CR 2200, ID, nx, ment Zagreb, hrd regularly (Jaar QUE 12/9) BRAZIL R Nacional da Amazonias Brasilia in PT 0725-0800, songs, fqy, IDs, phone call-in show 5185 with occasional Brasilian mx, QRM from weaker stn on same fgy (Littlefield NY 12/2) 5188 PERU R Oriente Yurimaquas in SP 1108, tlks by OM/YL, group vcls, ID, p (D'Angelo FCDX 11/14) KUWAIT VOA relay in EG 2155-2232, "American Stories" in special EG, ID, 6 pips and into Pahsto 5235nf nx at 2200, back to EG pgming w/VOA Asian News Now, f (D'Angelo PA 11/19) in EG 2350-2359* special EG bost w/tlks about Pres Cleveland, use of silver in the US, etc., YL w/pgm info on "The Making of a Nation", sudden s/off 2359 (Montgomery PA 11/23) in EG 2315, feature on "Functioning in Business", special EG 2330, abrupt s/off 2359, back on 0000, no ID's (Berg MA 12/10) NORTH KOREA V of Korea Kujang in EG 1006-1040, tlk abt Pres Bush and control of border b/w 5285 North and South Korea, several tlks re "the great leader of N Korea", ID 1042, feature re the revival of Koran musical theatre w/songs out of the Broadway tradition (Montgomery PA, Ronda OK, Jaar QUE) 5937 CHINA PBS Yunnan via Kunming in Vern 1114-1146, interesting listening w/OM at t/in and mx bits, ballad 1129, series of brief tlks, each followed by gongs and short ballad, at 1139 there was a shouting OM w/pounding drums, more gongs and shouting, OM over flutes, p-f at best (Barbour NH 11/21) ERITREA V of the Broad Masses of Eritrea via Asmara in Tigrinya? 0355, nice Horn of Africa 7100

7110

instr'l mx followed by tlk, presumed ID, news, poor and fading fast (D'Angelo FCDX/PA 11/14)

ETHIOPIA R Ethiopia Addis Ababa in Vern 0340-0401, bouncy Afro-pop mx, TC 0400, chimes, nx?, interview b/w jazz-like mx bits, no sign of //9704 (Barbour NH 11/15, Ronda 0K 12/8)

- 7110 GERMANY IBC Tamil via Wertachtel in Tamil 0026-0100*, non-stop tlk by 0M in Tamil, brief mx segment, YL w/ID and London address, discussion pgm by 2 0Ms, p-f (D'Angelo PA 11/23)
- 7115 THAILAND R Thailand in Burmese 1147, tlks, mx, IS, ID, into Malaysian, p (Barbour NH 11/28)
- 7120nf UNITED KINGDOM Sudan Radio Service via Wooferton relay in EG 0309, nx until 0313, then into nx in AR, ID, musical interlude, followed by "The Road to Peace" feature, f (D'Angelo PA 12/7)
 7120 PAPUA NEW GUINEA Wantok Radio Light via Port Moresby in EG 1205-1301, relig sermon to
- 1225, choral mx, some upbeat pops, ID, "Night Light Show", TC, p-f (Herkimer NY 12/7)
 MALAYSIA Sarawak FM via RTM Kuching in Bidayuh 1458-1530, pop songs, nx, several "Sarawak
- 7130 MALAYSIA Sarawak FM via RTM Kuching in Bidayuh 1458-1530, pop songs, nx, several "Sarawak FM" jingles, //5030, both fyqs p-f with QRM from China on both channels (Howard CA 12/3)
- 7190 UZBEKISTAN R Tashkent Int in EG *1200, tlk by OM on country's different ethnic groups, songs in different langs, nx, jingle, Central Asian style-mx, ID, s/off EG pgm at 1228, back on in Uzbek at 1230, IS, p-f (D'Angelo PA 11/22, Taylor WI 12/10, Jaar QUE 12/14)
- 7215 SOUTH AFRICA TWR relay via Meyerton in Amheric 0325, IS, ID in EG, into lang pgming, with alternating OM and YL speakers, fair reception (Ronda OK).
- 7235 SINGAPORE RSI in IN 1208, OM and YL tlks b/w mx bits, ID, jingle, p-f (Barbour NH 11/15)
- VATICAN CITY Vatican Radio in EG 0605-0630*, interesting pgm on the history of the Papacy and items about the Swiss Guard and poetry by Wilford Owen, good (Wood TN 11/24)
 INDIA AIR Chennai in EG 1137-1240, FM Gold pgm w/nx in EG followed by pgm of Hindi vocals and
- HD tlks, 3+1 pips 1230, ID in EG, nx, cmntry re Pakistan, fair, //9470 (D'Angelo FCDX 11/14)

 7270 EGYPT Egupt RTV Union Abu Zaabal in EG/AR 0158, AR mx, pips, ID, sked, "Holy Kor'ran and its
- meaning" feature, nx, weak but clear (Barbour NH 12/5)

 7320

 IRAN VOIRI Sirian in EG 2010, rpt on the World Mining Conference at Teheran, f (Fraser ME 11/17)
- 7330 RUSSIA R Tikhiy Okean (R. Station Pacific Ocean) via Vladivostok in RS *0935-1000*, chimes IS, all RS programming, nice RS ballads, many IDs, //5960 (Howard CA 12/10, Berg MA 12/11)
- 7455 GUAM KTWR Agana in CH 1147, tlks over mx, jingle mx, ID(p) at 1200, f, //9910 (Barbour 11/19)
 7530nf PAKISTAN R Pakistan in Urdu 1833-1903*, Ko'ran and AR-style vocals, Ko'ran went on to 1858. p, /
 79360 stronger but obliterated at 1855 w/WYFR s/on, 7530 down to whisper at s/off (Barbour 12/5)
- BULGARIA R Varna in BG 2306, ezl pops/ballads, banter b/w sels, ID 2332, f (Barbour NH 11/20)
 USA AFRTS relay via Key West, FL in EG 0210, Eagles vs. Seahawls football game (Ronda OK 12/6) in EG 2117, "Clark Howard Show" re reducing personal debt, short nx bits, f (Barbour NH 12/5)
- 9290 LATVIA Radio 73 (Germany) relay in GM 1315-1400, much traditional Xmas mx, some IDs in EG, website, postal address, request for reports, fair (Herkimer NY 12/11)
 9335 SRI LANKA R Free Afghanistan relay in Pashto 0225, pop mx, ID 0230, nx, vg (Crisler-Smith 12/2)
- 9410 CYPRUS BBC relay Limassol in EG 2158, sports feature w/ments of UK vs Pakistan cricket match, other tlk about Davis Cup and futbol, vg (Wood TN 11/22)
- 9435 PHILIPPINES FEBC Manila via Bocaue in IN 2242, translation of EG sermon into Indonesian, hymn, ID at 2300, into nx? items (Taylor WI 12/5)
- 9445 INDIA AIR Bangalore in EG 2159, cmtry re elections, cricket, and building new airport (Wood 11/22)
- 9525 POLAND R Polonia Warsaw in EG *1259, IS, IDs prior to s/on, into nx, f, //11850 (D'Angelo 11/22)
- 9615 ALASKA KNLS Anchor Point in EG 1213, feature on "American Highway", promo, testimonial, pop ballad, Bible giveaway w/contact info and URL, p (Barbour NH 11/21)
- 9615v BRAZIL R Cultura São Paulo in PT 2233, '40s style big band mx, several IDs (Brandi NJ 11/13)
- 9675 COSTA RICA REE (Spain) relay in SP 0507, excellent pgm of opera and classical mx w/extended descriptions of selections, vg, //6055 (Wood TN 11/24)
- 9705 INDIA GOA AIR Panaji (Goa) in EG 2306, nx, ID, cmntry, excellent classical Indian instrum'l mx, good to 2320 when signal degraded to fair, //9950, 11645 (Evans TN 12/8)
- 9770 CANADA RCI in EG *2100. "Business Sense" with nx of General Motors layoffs and plant closures followed by a detailed analysis from a Canadian viewpoint, sports, wx (Wood TN, Fraser ME)
- 9885 NEW ZEALAND RNZI in EG 0835, "Mailbox" w/ Chris Mackerell's DRM rpt, vg (Park HI 11/21)
- 9990 EGYPT Egypt RTV Union in EG 2120, nx re Egyptian elections interspersed with Mideast music, fair (Wood TN 11/05) in AR 2025, music, IS, nx, fqys, 3 pips 2114, EG ID, NA*,. f-g (Ervine CA 11/25)
- 11133lsb ARGENTINA Radio La Red (MW) relay Buenos Aires in SP 0148, ad string, ID 0150, brief vocal, into long talk by 2 0Ms, 5+1 pips 0200, ID, nx, p-f (D'Angelo PA 11/30)
- 11550 MADAGASCAR R Sweden relay in EG 0130, IS, ID, xmsn beamed to S Asia, f (Davisson OH 12/7)
- 11550 SWEDEN RSI Horby in EG 1335, talks about start up of a new nuclear agreement, lots of protests, difficult copy due to echo effect at about 3/4 of a second apart, S-9 w/fades (Montgomery PA 11/24)
- 11675 UNITED ARAB EMIRATES FEBA relay via Al Dhabbaya in Lang? 1348, subcont mx, tlk, address, sked, two FEBA IS signals at 1359 s/off (Jaar QUE 12/14)

- 11690` JORDAN R Jordan in EG 1418-1450, AR and US rock mx, relaying FM local, ID, nx headlines, wx & e-mail address, fair over co-channel Quito (Barbour NH 12/5, Herr CA 12/11)
- SOUTH AFRICA R Okapi relay via Meyerton in Vern 0419, 0M/YL w/ments of Bukavu, Congo, and several "Okapi" jingles, full ID 0429, fair (Barbour NH 11/21) in FR *0400, jingle ID, fone interview, clear "Okapi" ID 0431, fair (Ronda OK 12/3).
- 11695 UNITED ARAB EMIRATES AWR relay via Al Dhabbaya in Punjabi 1505, subcont'l song, tlk by YL, ID, India? address, fair (Jaar QUE 12/6)
- 11735 NORTH KOREA V of Korea Kujang in EG 0132, pgm on the mx of Korea, mind-numbing cmntry, f-g
 (Ronda OK 11/23) in SP *0000, IS, IDs, NA, ancmt, sked, no //'s noted, weak (Jaar QUE 12/5)
- TANZANIA Spice FM via Radio Zanzibar in EG 1803, nx, IDs, into AR news and music1815, fair (D'Angelo PA 11/19, Herkimer NY 11/25) in SH/EG 1733-1810, ment soccer Zanzibar, drums, nx in EG 1800, poor-fair (Howard CA 11/25) in SH 1817, hi-life vocals, tlks, pips, mx (Ronda OK 11/21)

 JORDAN R Jordan Al Karanah in AR 1443, pips 1415, ID, AR nx, vocal interludes, ment Jordan
- several times, into interesting mix of Mideast and Euro mx, f-p (D'Angelo PA, Ronda OK)

 SOUTH AFRICA AWR relay via Meyerton in FR 2018, relig pgm, IDs in FR/EG, into pgm in Yoruba
- language at 2030, fair to good (Ronda OK 11/23)

 11850 POLAND R Polonia Warsaw in EG 1259, IS, anomts, nx including items from other reporters, fair
- signal w/QRM, //9525 w/much weaker signal, rare catch at this QTH (Evans TN 11/21)

 SEYCHELLES BBC relay in EG 1700*, soccer scores, ment Manchester United, Birmingham etc., ID
- as BBC world service, fqys, skeds, g (Wood TN 12/17)

 11865 PORTUGAL Deut Welle relay in EG 1929, ID, pop mx feature hosted by YL, g (D'Angelo PA 12/4)
- AUSTRALIA ABC in EG 0745, again carrying domestic pgrmng, ABC live sports, IDs, p-f with sig going downhill by 0830, into RA prgmng at 0900 (Berg MA 12/10) in EG 2007, cmntry on surface international mail, sports w/tlk of rugby, ID, nx, YL w/tlk about Oceania, f-g (Wood TN 11/22)
- 11900 CHINA CRI via Kunming in EG 1311, nx, ID, tlks abt CRI and bird flu, g (Montgomery PA 11/24)
- 11975 SAO TOME VOA relay in EG 2014, ID, fqys, TC, "African World", tlk re anti-personnel mines in Africa and countries banning their use, g (Wood TN 11/22)
- 12005 ECUADOR HCJB Quito in EG 1230, feature on "Renewing Your Mind", g (Fraser ME 11/13)
- RUSSIA V of Russia via Komsomolsk in RS 0232, talk, RS choral mx of the type made popular by the Red Army Chorus, signal f/o at 0318 recheck (Ronda OK 11/23)

 ECUADOR HCJB Quito in GM 2255, low GM-blat Deutsch w/recital by YL, ID 2300, into high GM
- with gospel message and choir mx, s/ff 2359, good (Ervine CA 11/21)
- 12050 EGYPT Egypt RTV Union in AR 1400, discussion, nx, mx, ID (Branco NY 11/8, Wood TN 12/17 12055 RUSSIA V of Russia Moscow in RS 1424, ID 1430, RS choral mx, romantic songs, f-p (Ronda 12/2)
- 12055 ROSSIA V OJ ROSSIA PIOSEOW IN KS 1424, ID 1430, KS Chorac III., Iomande Songs, I'p (Roman II.) 27

 12060 MADAGASCAR R Nile relay in Sudanese/EG 0402, YL in lang at t/in w/EG tlk overs, mx, many

 IDs, poor w/constant bubble jammer-like QRM (Barbour NH 11/15)
- 12133usb USA AFRTS relay via Key West, FL in EG 1648, tlk re free range poultry, ads for military personnel job placement, listeners' call-ins w/health questions, fair (Wood TN 12/17)
- 13600 SAO TOME VOA relay in EG 1631, nx in Special EG, many IDs (Caras ME 10/30)
- 13640 OMAN R Sultanate of Oman in AR 1550. lively modern AR mx, "Palestine Corner" feature, Big Ben type chimes, TC for local time, ID, nx, mx theme, tlk re stock exchange, ex 15140 (Jaar QUE 12/17)
- 13675 CANADA ROI Austria relay in EG 1650, mailbag, sked, tlk on early retirement, g (Fraser ME 11/14)
- SRI LANKA *R Free Asia* in Uyghur 1610-1657, news, OM w/monologue, CH jammer present at times ID 1657 (Caras ME 10/31) ED: Uyghur is a Turkic language used in the autonomous and farthest west province of China. Remarkable patience is required to stay thru 47 minutes of Uyghur to get the ID!
- 13735 SAO TOME VOA relay in FR 1941, Jerry Butler soul vcls, ancmts, ID, into VOA jazz pgm at 2000, best in USB to defeat persistent heterodyne (Ronda OK 11/20)
- best in USB to defeat persistent heterodyne (Ronda OK 11/20)
 13755 NORTHERN MARIANAS VOA relay Tinian Is.in Special EG 2230, VOA News, VOA Economic Report,
 and American Mosiac program (Davisson OH 11/17)
- 15140 OMAN R Sultanate of Oman in EG 1430-1502, pop mx, into AR 1458, ID, AR nx (Caras ME 10/12)
- 15195 ASCENSION ISLAND WYFR Family Radio relay in EG 2119, OM w/mentions of Biblical references dealing with the current era, f-p (Wood TN 12/16)
- 15220 FRANCE R Jamahiriya (Libya) relay in AR 1729, ID, upbeat Afro pops/vcls, f-p (Ronda OK 11/24)
- 15265 UNITED KINGDOM Radio Solh via Rampisham in Dari 1425-1500*, Afghani mx, IDs, s/off at end of song with any announcements, fair (D'Angelo PA 11/19)
- 15285 SOUTH AFRICA Channel Africa Meyerton in FR 1620, nx, sports, cmntry, Umtata song, end of FR xmsn at 1655 w/o ID, however IS follows w/several IDs in EG (Jaar QUE 12/9)

- 15290 JORDAN JRTV Al Karanah in AR 1245, tlks by several OM's on democracy, govt, Parliament in the Kingdom, no pause at 1300, sudden s/off 1302 in mid-sentence, f-g, continuation of same prgm at 1303 at 11810 w/improved signal, usual Jordan Armed Forces Radio pgm followed (Jaar QUE 12/14)
- 15475 GABON Africa #1 Moyabi in FR 1730, interview interspersed w/Afropop and Haitian mx, ID, group singing (Jaar QUE, Bauernhuber NY 12/4)
- 15700 BULGARIA R Bulgaria in BG 1450-1500*, ID, mx featuring woodwinds w/AR flair, g (Wood 11/21)
- 17595 SPAIN REE Noblejas in SP 1433, play by play of futbol match, crowd noise, exc (Blanco NY 11/6)
 17810 NETHERI ANDS ANTILLES R Nederlands relay via Bonaire in EG 2035, no of Tuylish authors trial
- 17810 NETHERLANDS ANTILLES R Nederlands relay via Bonaire in EG 2035, nx of Turkish author's trial and mentions of international attempts to ban torture, good (Wood TN 12/16)

ASCENSION ISLAND WYFR Family Radio relay in EG 1710, listeners' call-ins, talks re the actual date of Jesus Christ's birth, fair w/some static (Wood TN 11/5)

Digital (DRM) Reception

- 6130D GERMANY Deut Welle Wertachtel in EG 0854, very occasional audio, S/N ration around 12 dB on 14 kbps transmission, full ID plate plus messages, but little audio and not sustained for more than a fraction of a second (Brandi NJ 12/8)
- 7295D GERMANY Radio Luxembourg relay via Juelich in EG 0901, Dave Edmunds "I Hear You Knocking", INXS "Suicide Blonde", ID by DJ, Sally Carter with the Cappuchino show, TC, into Eric Burdon and the Animals "San Francisco Nights", Foreigner "Urgent", TC for quarter past nine, S/N 18 dB, solid audio from this 21 kbps transmission (Brandi N) 12/8)
- 9655D GERMANY Deut Welle Wertachtel in EG 1301, nx, Concert Hour, surprisingly strong, 21 dB S/N ratio, 100% audio for 20 kbps broadcast, multimedia also usable (Brandi NJ 11/26)
- 13750D VATICAN CITY Vatican Radio in SP 1242, nx, ID, broadcasts twice a day to the Americas in Spanish on satellite, Internet, and shortwave; sound quality kind of scratchy (poor production), but signal is solid, 21-22 dB S/N ratio, no dropouts on 17 kbps stream. Test xmsn to No America (Brandi NJ 11/26)
- 15896D GERMANY bit express (campus Radio Nuremberg) in GM? 1535, pop and rock mx, cover song "Give a Little Bit" by Goo Goo Dolls, "Jerk It Out" by Caesars, surprisingly strong reception for first five minutes about 30% intelligible, with S/N ration around 14 dB, but dropping to about 7 dB with periodic loss of lock and no audio by 1540, periodic breakthroughs for 5-10 seconds, then better again after 1600; 100 watts power per website (Brandi NJ 11/15)

Happy New Year and Great DXing wherever you are in 2006!!

SW

World DX Club

A British Based DX Club



The World DX Club was founded in 1968. The club has grown over the years with its emphasis on the broadcast side of the hobby. Membership is spread throughout the English speaking world on all continents including mainland Europe and North America. WDXC publishes a monthly bulletin Contact. The bulletin is compiled and distributed within 2 weeks of deadline, thereby ensuring up to date information, loggings and schedules. Contact averages about 60 pages a month. It features Shortwave Logbook, Schedules, Radio Topics, Radio World, Radio Marketplace, Radio Bookshelf, Making Contact, DX News, Mediumwave Scan, QSL Report, Clandestine, excerpts from Glenn Hauser's DX Listening Digest; Radio Without License, SWL/Media Programs, plus much more.

Members can participate in the club's e-mail group that provides immediate e-mails on time sensitive station and program information, and station schedules as received, plus advance text copies of the DX News and Radio Topics columns.

Club Membership Rates are UK £12.00, Europe £14.00, Rest of World £16.00, Surface mail US\$20.00, Airmail US\$24.00. Payable by check or bills to the North American Secretary - Richard A D'Angelo, 2216 Burkey Drive, WYOMISSING, PA 19610 USA or Payable in any acceptable form (no Irish PO's please) to - Arthur Ward, 17 Motspur Drive, NORTHAMPTON, England NN2 6LY. In North America, a sample copy of Contact is available for US\$2.00, or 4 IRC's from Rich D'Angelo at the above address.

Times & Frequencies In English

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Compiled by Mike Barraclough from station schedules, monitoring observations and reported updates. Updates and corrections are always welcome.

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Relay sites: a= Antigua, b= Bonaire, c= Sackville Canada, d= Abu Dhabi, D= Delano, e= Espana(Spain), f= WYFR Florida, g= Montsinery Guiana, h= Havana, H= Horby Sweden, i= Ascension Island, j= Julich Germany, k= Kigali Rwanda, l= Sri Lanka, m= Moyabi Gabon, n= Meyerton RSA, o= Bamako Mali, p= Singapore, q= Cerrick/Flaake, Albania, r= Russia(various), s= Sines Portugal, S= Sottens Switzerland, t= Talata Madagascar, T= Tashkent u= Skelton/Rampisham UK, v= Talwan, w= Werchatal Germany, x= Xian/Kashi/Kunming/Urumchi China, y= Yamata Japan, z= Agat, Guam

Abbreviations: /= target area divider, 1st< or >2nd half hour, Af= Africa, As= Asia, CAm= Central America, Eu= Europe, FE= Far East, LA= Latin America, ME= Middle East, NAm= North America, Pa= Pacific, e= east, n= north, s= south, w= west, Int= International, R= Radio, VO= Voice of

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AWR AFRICA	1800-1830	Af	3215n 3345n 11925n
AWR AFRICA	2000-2100	Af	9655n
KNLS ALASKA	0800-0900	FE	9615
KNLS ALASKA	1000-1100	FE	9615
KNLS ALASKA	1200-1300	FE	7355 9615
KNLS ALASKA	1400-1500	FE	9655
ALBANIA R TIRANA	0245-0300	NAm	6115 7455 Tuesday to Sunday
ALBANIA R TIRANA	0330-0400	NAm	6115 7455 Tuesday to Sunday
ALBANIA R TIRANA	1945-2000	Eu	7465 7530 Monday to Saturday
ALBANIA R TIRANA	2230-2300	Eυ	7110 Monday to Saturday
R NACIONAL ANGOLA	2100-2200	Af	7217
RAE ARGENTINA	0200-0300	NAm	11710 Tuesday to Saturday
RAE ARGENTINA	1800-1900	Eu	9690 15345 Monday to Friday
TWR ARMENIA	1710-1725	ME	5855
VOICE OF ARMENIA	1925-1945	Eu ME	4810 9965
AWR ABU DHABI	1200-1230	SAs	15110
AWR ABU DHABI	1530-1600	SAs	9530
HCJB AUSTRALIA	0000-0030	As	15530
HCJB AUSTRALIA	0130-0200	As	15405 (Sunday 0100-0115, 0130-0230)
HCJB AUSTRALIA	0700-0900	PA	11750
HCJB AUSTRALIA	1030-1130	As	15400
HCJB AUSTRALIA	1130-1200	As	15425
HCJB AUSTRALIA	1330-1400	As	15405 Sunday
HCJB AUSTRALIA	1400-1500	As	15390
HCJB AUSTRALIA	1500-1530	As	15425
HCJB AUSTRALIA	2230-2300	As	15530 Saturday and Sunday

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9660 12080 13670 15240 15415> 17715 17750 17775 17795
                    0000-0100 As Pa
RADIO AUSTRALIA
                                       9660 12080 13670 15240 15415 17715 17750 <17775 17795
RADIO AUSTRALIA
                   0100-0200 As Pa
RADIO AUSTRALIA
                   0200-0400 As Pa
                                        9660 12080 13670 15240 15415 15515 17750 21725
                                       9660 12080 13670 15240 15415> 15515 17750 21725
AT IASTRILA DIDAG
                   0400-0500 As Pa
RADIO AUSTRALIA
                   0500-0600 As Pa
                                       9660 12080 13670 15160 15240 15415> 15515 17750
                  0600-0700 As Pa 9660 12080 13670 15160 15240 15415 15515 17750
RADIO AUSTRALIA
                                        9660 9710 12080 13630 15160 15240 15415 17750
                  0700-0800 As Pa
RADIO AUSTRALIA
                   0800-0900 As Pa
                                        5995 9580 9590 9710 12080 13630 15240v 15415> 17750
RADIO AUSTRALIA
                                         9580 9590 11880 15240v 15415>
RADIO AUSTRALIA
                   0900-1000 As Pa
                    1000-1100 As Pa
                                        9580 9590 11880 15240v 15415
RADIO AUSTRALIA
                                        5995 6020 9475 9560 9580 9590 11880 <15240v
RADIO AUSTRALIA
                    1100-1200 As Pa
                                        5995 6020 9475 9560 9580 9590 11880
                   1200-1300 As Pa
RADIO AUSTRALIA
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RADIO AUSTRALIA
                   1300-1400 As Pa
                   1400-1500 As Pa
                                        5995 6080 7240 9475> 9590 11660> 11750
RADIO AUSTRALIA
                                        5995 6080 7240 9475 9590 11660 11750
                   1500-1600 As Pa
RADIO AUSTRALIA
                                       5995 6080 7240 9475 9710 11660
                   1600-1700 As Pa
RADIO AUSTRALIA
                                       5995 6080 9475 9580 9710 11880
6080 7240 9475 9580 9710 11880
                   1700-1800 As Pa
RADIO AUSTRALIA
                    1800-1900 As Pa
RADIO AUSTRALIA
                                       6080 7240 9500 9580 9710 11880
RADIO AUSTRALIA
                    1900-2000 As Pa
                   2000-2100 As Pa
                                        9500 11650 11660 11880 12080
RADIO AUSTRALIA
                                        7240 <9500 9660 11650 11660 <11695 12080 13630 15515
                   2100-2200 As Pa
RADIO AUSTRALIA
                                        12010 13630 15230 15240v 15515 17785 17795
RADIO AUSTRALIA
                   2200-2300 As Pa
                                        9660 12010 12080 13670 15230 <15240v 15415> 17750> 17785 17795
RADIO AUSTRALIA
                   2300-0000 As Pa
VOICE INT AUSTRALIA 0100-0300 As
                                        7355 Tashkent
VOICE INT AUSTRALIA 0300-0600 As
                                         13685
VOICE INT AUSTRALIA 0900-1000 As
                                         11955
VOICE INT AUSTRALIA 1100-1800 As
                                        13635
AWR AUSTRIA
                    2100-2200 WAf
                                        9830
Weekday schedule:
RADIO AUSTRIA INT 0013-0030 CAm
                                        7325
                                                    Tuesday to Saturday
RADIO AUSTRIA INT 0043-0058 NAm
                                         7325
                                                   Tuesday to Saturday
RADIO AUSTRIA INT 1305-1320 As Au
                                        17855
                                                     Monday
                                                      Monday
RADIO AUSTRIA INT
                   1305-1320 Eu
                                        6155 13730
RADIO AUSTRIA INT
                   1315-1330 As Au
                                         17855
                                                      Tuesday to Friday
RADIO AUSTRIA INT
                    1345-1400 As Au
                                         17855
                                                     Monday to Frida
RADIO AUSTRIA INT
                    1345-1400 Eu
                                         6155 13730
                                                      Tuesday to Friday
                                         13675c Monoay
Tuesday to Friday
RADIO AUSTRIA INT
                     1605-1620 NAm
RADIO AUSTRIA INT 1615-1630 NAm
                                        13675c
RADIO AUSTRIA INT 1645-1700 NAm
                                        13675c
                                                     Monday to Friday
RADIO AUSTRIA INT 2343-2358 SAm
                                         9870
                                                    Monday to Friday
Weekend schedule:
                                         7325
                                                    Sunday and Monday
RADIO AUSTRIA INT 0005-0030 CAm
                  0033-0100 NAm
RADIO AUSTRIA INT
                                         7325
                                                    Sunday and Monday
RADIO AUSTRIA INT
                                                 repeated at 0535-0600 Sunday
                    0605-0630 ME
                                         17870
                   1305-1330 Eu
RADIO AUSTRIA INT
                                         6155 13730 repeated at 1335-1400 Saturday and Sunday
RADIO AUSTRIA INT
                                         17855 repeated at 1335-1400 Saturday and Sunday
                    1305-1330 As Au
                                                  repeated at 1635-1700 Saturday and Sunday
                    1605-1630 NAm
                                         13675c
RADIO AUSTRIA INT
                                                    Saturday and Sunday
                                         9870
RADIO AUSTRIA INT
                     2335-0000 SAm
The station also has a short English news bulletin to Europe at 0709 on 6155.
VOICE OF AZERBAIJAN 1700-1730 ME
                                         6110
                                         7185
RADIO BANGLADESH
                   1230-1300 As
RADIO BANGLADESH
                     1745-1900 Eu
                                         7185
BELARUS RADIO MINSK 0300-0330 NAm
                                         5970 7210
                                                           Mon, Tue, Wed, Fri, Sat
                                                          Sunday
BELARUS RADIO MINSK 0330-0400 NAm
                                         5970 7210
                                         7125 7340 7440 Mon, Tue, Thur, Fri
BELARUS RADIO MINSK 2030-2100 Eu
                                        7125 7340 7440 Sunday
BELARUS RADIO MINSK 2200-2230 Eu
RADIO BULGARIA
                     0000-0100 NAm
                                         7400 9700
                                         7400 9700
RADIO BULGARIA
                    0300-0400 NAm
                                          9500 11500
 RADIO BULGARIA
                    0730-0800 Eu
                                         11700 15700
 RADIO BULGARIA
                     1230-1300 Eu
                                         5800 7500
 RADIO BULGARIA
                     1830-1900 Eu
                                          5800 7500
 RADIO BULGARIA
                     2200-2300 Eu
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RADIO CANADA INT 0000-0057 SEAs 9880v RADIO CANADA INT 0000-0159 N&CAm 9755 RADIO CANADA INT 1200-1259 SEAs 7105v 9665v **RADIO CANADA INT** 1300-1329 SEAs 9665y 9725y RADIO CANADA INT 9515 13655 17820 1400-1659 N&CAm RADIO CANADA INT 1500-1557 As 9635x 11975x RADIO CANADA INT 7185x 9770x 11875w 17740 1800-1859 Af RADIO CANADA INT 2100-2159 Eu 5850H 9770 RADIO CANADA INT 2100-2259 N&CAm 15180 RADIO CANADA INT 2200-2229 SAm 11990 RADIO CANADA INT 2230-2259 As 6160 Korea 7195 Korea 9730 RADIO CANADA INT 2300-2359 NAm 6100 CHINA RADIO INT 0000-0100 NAm/As/Eu 6020g 9570g/6075 7180 / 7345 0100-0200 NAm/As/Eu 6005c 6020q 9570q 9580h/6075 7180 /7345 CHINA RADIO INT CHINA RADIO INT 0200-0300 As 11770 13640 **CHINA RADIO INT** 0300-0400 NAm/As 9690e 9790h/11770 15110 **CHINA RADIO INT** 0400-0500 NAm 6190c 9755q 0500-0600 NAm/Af/As 5960c 6190c/7220q 11750q 17505/11880 15350 15465 17505 17540 CHINA RADIO INT **CHINA RADIO INT** 0600-0700 NAm/Af/As 6115c/17505 /11770 11880 15140 15350 15465 17505 17540 11785q 17490 /11880 15350 15465 17540 CHINA RADIO INT 0700-0900 Fu/As CHINA RADIO INT 0900-1100 Eu/Pa 17490/15210 17690 1100-1200 Eu/NAm CHINA RADIO INT 13665q 17490 / 5960c 1200-1300 As/Pa CHINA RADIO INT 9730 11980 / 9760 11760 CHINA RADIO INT 13665g 13790 17490 1200-1300 Eu CHINA RADIO INT 1300-1400 NAm/As 9570h 11885c 15230c/11980 1300-1400 Eu/Pa/LA 13610 13790 /11760 11900/ CHINA RADIO INT CHINA PADIO INT 1400-1500 Fu/As 9700 9795 13610/ 9560 11675 11765 11775 1400-1500 NAm/Af **CHINA RADIO INT** 13675c 13740h 15230c/13685o 17630o 1500-1600 Eu/As/Af 9435 9525/ 7160 9785 11775/ 136850 176300 CHINA RADIO INT CHINA RADIO INT 1500-1600 NAm 13740h 7255 9435 9525/6100n 9570 11900 **CHINA RADIO INT** 1600-1700 Fu/Af 6100 7255/6100n 9570 11900 CHINA RADIO INT 1700-1800 Ew/Af CHINA RADIO INT 1800-1900 Eu 6100 7295 9440 **CHINA RADIO INT** 1900-2100 Af As **CHINA RADIO INT** 2000-2130 Af 116400 136300 5960q 7190 7285q 9490 9600 CHINA RADIO INT 2000-2200 Eu 2200-2300 Eu 7170r CHINA RADIO INT 2300-0000 NAm/As CHINA RADIO INT 5990h 6040c 11970c/ 5915 7180 0300-0330 NAm VOICE OF CROATIA 7285 VOICE OF CROATIA 0700-0705 Pa 9470 VOICE OF CROATIA 1905-1915 Eu 6165 VOICE OF CROATIA 2315-2330 Eu NAm 7285 CUBA RADIO HAVANA 0100-0500 NAm 6000 6060 9820 CUBA RADIO HAVANA 0500-0700 NAm 6000 6060 9550 9820 11760 CUBA RADIO HAVANA 2300-0000 CAm 9550 CZECH RADIO PRAGUE 0100-0127 NAm 6200 7345 CZECH RADIO PRAGUE 0200-0227 NAm 6200 7345 CZECH RADIO PRAGUE 0400-0427 NAm 6100c 6200 7345 CZECH RADIO PRAGUE 0430-0457 As ME 9885 11600 CZECH RADIO PRAGUE 0800-0827 Eu 7345 9860 CZECH RADIO PRAGUE 1000-1029 As Af 21745 CZECH RADIO PRAGUE 1130-1157 Eu Af ME 11640 21745 CZECH RADIO PRAGUE 1400-1429 sAs NAm 11600 21745 CZECH RADIO PRAGUE 1700-1727 EWAf 5930/15710 CZECH RADIO PRAGUE 1800-1827 Eu/As Pa 5930/ 9400 CZECH RADIO PRAGUE 2100-2127 EWAs Pa 5930/ 9430 CZECH RADIO PRAGUE 2230-2257 Af NAm CZECH RADIO PRAGUE 2330-2357 NAm 5930 7345 **HCJB ECUADOR** 1100-1330 CAm Fo 12005 21455 EGYPT RADIO CAIRO 0200-0330 NAm 7270 EGYPT RADIO CAIRO 1215-1330 sAs 17835 EGYPT RADIO CAIRO 11785 1630-1830 Af EGYPT RADIO CAIRO 2030-2200 wAf 15375 EGYPT RADIO CAIRO 2115-2245 Eu 9990 EGYPT RADIO CAIRO 2300-0030 eNAm 11885

RADIO AFRICA 1400-2200 Af 15190 Sign off and sign off times are variable, transmissions irregular RADIO ETHIOPIA 1600-1700 Af 7165 9560 PADIO FRANCE INT 0400-0430 PAF 7315m 9555 RADIO FRANCE INT 0500-0530 #Af 11850m 11995 RADIO FRANCE INT 0600-0630 eAf 15155 17800 **RADIO FRANCE INT** 0700-0800 wAf 11725m RADIO FRANCE INT 1200-1230 Af 15275i 21620 **RADIO FRANCE INT** 1400-1500 ME swAs 5920r 7180x 17515 RADIO FRANCE INT 1600-1700 Af 9730n 11615 15160n 15365 15605 17850 RADIO FRANCE INT 1700-1730 Af 11615 15605 Schedule valid until February 26th RADIO FRANCE INT 0400-0430 eAf 7315m 11995 **RADIO FRANCE INT** 0500-0530 eAf 11850m 15155 RADIO FRANCE INT 0600-0630 eAf 15155 17800 RADIO FRANCE INT 0700-0800 wAf 11725m **RADIO FRANCE INT** 1200-1230 Af 15275i 21620 **RADIO FRANCE INT** 1400-1500 ME swAs 9580x 17515 **RADIO FRANCE INT** 1600-1700 Af 9730n 11615 15160n 15365 15605 17850 RADIO FRANCE INT 1700-1730 Af 11615 15605 Schedule valid from February 27th RADIO GEORGIA 0730-0800 Eu 11805 RADIO GEORGIA 0830-0900 Eu 11910 RADIO GEORGIA 0930-1000 ME 11910 Broadcasts suspended October 2005 **GERMANY D WELLE** 0000-0100 sAs 60301 7290w GERMANY D WELLE 0400-0500 Af 6180k 9710w 15445l **GERMANY D WELLE** 0500-0600 Af 7285w 9565k 12035k 15410d **GERMANY D WELLE** 0600-0700 Af 7225s 7225w 11785w 15440k **GERMANY D WELLE** 0600-1000 £w 6140i **GERMANY D WELLE** 1300-1600 Eu 6140i **GERMANY D WELLE** 61701 9795I 11695w 1600-1700 As **GERMANY D WELLE** 1900-2000 Af 11865s 12025w 15470s **GERMANY D WELLE** 2000-2100 Af 6145k 9735w 9830k 12025w 15410l **GERMANY D WELLE** 2100-2200 Af 7280w 9615| 11690k GERMANY D WELLE 2200-2300 As 60001 6225 Alma Ata **GERMANY D WELLE** 2300-0000 As 60701 9555k 9815l VOICE OF GREECE 1105-1200 Eu 12105 15630 17525 Sunday Its All Greek to Me VOICE OF GREECE 1500-1600 Eu NAm 9420 12105 15485 Delano 15630 Saturday Hellenes Around the World **VOICE OF GREECE** 1930-2000 Eu 7430 AWR GUAM 1000-1030 FAs 11870 **AWR GUAM** 1330-1400 SEAs not Sunday/Wednesday 15660 **AWR GUAM** 1330-1400 Japan 11980 AWR GUAM 1600-1630 SAs 9585 12065 AWR GUAM 1630-1700 SAs 11980 AWR GUAM 1730-1800 ME 9980 AWR GUAM 2230-2300 As 11655 11850 KTWR GUAM 0740-0900 sAs 15225 (0730-0900 Saturday and Sunday) 11840 KTWR GUAM 0800-0930 Pa (0815-0930 Saturday and Sunday) KTWR GUAM 1330-1400 SAs 9585 KTWR GUAM 1400-1500 SAs 9975 R BUDAPEST HUNGARY 0200-0230 NAm 9515 R BUDAPEST HUNGARY 0330-0400 NAm 9775 R BUDAPEST HUNGARY 1600-1630 Eu 6025 9565 Sunday R BUDAPEST HUNGARY 2000-2030 Eu 3975 6025(via Slovakia) R BUDAPEST HUNGARY 2200-2230 Eu/sAf 6025(via Slovakia)/ 9735 ALL INDIA RADIO 1000-1100 Pa As 13710 15020 15235 15260 17510 17800 17895 ALL INDIA RADIO 1330-1500 sAs 9690 11620 13710 ALL INDIA RADIO 1745-1945 Eu Af 7410 9445 9950 11620 11935 13605 15075 15155 17670 ALL INDIA RADIO 2045-2230 Eu Pa 7410 9445 9910 9950 11620 11715 **ALL INDIA RADIO** 2245-0045 As 9705 9950 11620 11645 13605

EQ GUINEA

0600-0900 Af

15190

VOICE OF INDONESIA 0200-0300 As Am 15150 VOICE OF INDONESIA 0800-0900 As Am 15150 VOICE OF INDONESIA 2000-2100 Eu 9525 15150 VoIR IRAN 0130-0230 NAm 6120 9665 VoIR IRAN 1030-1130 seAs 15460 15480 Vote tran 1530-1630 seAs 7330 9940 VOTR TRAN 1930-2030 Eu Af 6010 7320 7350 9855 9925 11695 IRFL AND 0000-2400 Eu 4025 6220 7465 9385 Laser Hot Hits IRELAND 1600-2330 Eu 3910 6295 12255 Reflections Europe Sunday KOL ISRAFI 0430-0445 Eu Am Pa 7545 9345 17600 (6280 & 15640 replace 9345, 17600 from 15th Dec) KOL ISRAEL 1030-1045 Fu Am 15640 17535 KOL ISRAEL 1830-1845 Eu NAm 7545 9345 11590 KOL ISRAEL 2000-2025 Eu Am Af 7545 11590 15640 (6280 replaces 11590 from 15th December) TRRS ITALY 0800-1300 Eu Af ME 13840 Saturday and Sunday **IRRS ITALY** 0900-1300 Eu 15725 Saturday Radio Mi Amigo IRRS ITALY 2000-2130 Eu Af ME 5775 Monday to Thursday, Saturday (-2300 Friday and Sunday) RAI ITALY 0055-0115 NAm 11800 **RAI ITALY** 0445-0500 Eu Af 5965 6120 7170 RAI ITALY 1935-1955 Fu 6035 9760 RAI ITALY 2025-2045 Af 6020 RAI ITALY 2205-2230 As FE 6090 RADIO JAPAN 0000-0015 As 13650 17810 RADIO JAPAN 0000-0100 NAm 6145c RADIO JAPAN 0100-0200 ME/As/Am 6030# 17560/ 11860p 15325 17810 17845/ 11935b 17825 RADIO JAPAN 0300-0400 Pa 21610 0500-0600 Eu/NAm/As 5975# 7230# 6110c/15195 17810/ 21755 Pa RADIO JAPAN 0600-0700 Eu/NAm/As 7230u/11690 /11715 11760 11740p 15195/ 21755 Pa RADIO JAPAN RADIO JAPAN 1000-1100 Eu/Pa/ME 17585d/21755 /17720d M.F. RADIO JAPAN 1000-1200 As/NAm 9695 11730 / 61200 RADIO JAPAN 1400-1500 As/Pa 7200 9875/11840 RADIO JAPAN 1500-1600 As/NAm 6190 7200 9875 / 9505 **RADIO JAPAN** 1700-1800 NAm/Ew/Af 9535/11970/15355m **RADIO JAPAN** 2100-2200 Ew/Af/NAm 6090u 6180u/11855i/17825 / 6035p Pa RADIO JAPAN 0100-0200 Pa 17685 regional 0600-0700 Hawaii 17870 services 2100-2200 Hawaii 21670 RADIO JORDAN 1400-1730 Fu NAm 11690 KOREA KBS WORLD R 0200-0300 NAm SAm 9560c 15575/11810 KOREA KBS WORLD R 0800-0900 As/Eu 9570/ 9640 KOREA KBS WORLD R 1200-1300 NAm 96500 KOREA KBS WORLD R 1300-1400 As 9570 9770 KOREA KBS WORLD R 1600-1700 As Af ME 5975 KOREA KBS WORLD R 1900-2000 As Eu 5975 7275 KOREA KBS WORLD R 2100-2130 Eu 39550 VO KOREA PYONGYANG 0100-0200 FE/LA 7140 9345 9730/11735 13760 15180 VO KOREA PYONGYANG 0200-0300 seAs 13650 15100 VO KOREA PYONGYANG 0300-0400 As 7140 9345 9730 VO KOREA PYONGYANG 1000-1100 seAs/LA 6185 9850/ 6285 9325 VO KOREA PYONGYANG 1300-1400 Eu/NAm 7570 12015/ 9335 11710 VO KOREA PYONGYANG 1500-1600 Eu/NAm 7570 12015/ 9335 11710 VO KOREA PYONGYANG 1600-1700 ME Af 9990 11545 VO KOREA PYONGYANG 1800-1900 Eu 7570 12015 VO KOREA PYONGYANG 1900-2000 ME Af 7100 9975 11535 11910 VO KOREA PYONGYANG 2100-2200 Eu 7570 12015 **LAOS LNR Vientiane** 0600-0630 As 7145 LAGS LNR Vientiane 1330-1405 As 7145

LIBYA VO AFRICA	0220-0225	Af	7320
LIBYA VO AFRICA	1300-1400		21675 21695
LIBYA VO AFRICA	2220-2225		7320
all frequencies are relayed v	/ia Issoudon, I	France	
LITHUANIA R VILNIUS	0030-0100	NAm	9875
LITHUANIA R VILNIUS	0930-1000		9710
LITHUANIA R VILNIUS	2330-0000	NAm	7325
VOICE OF MALAYSIA	0600-0830	As/Pa	6175 9750 15295.
MOLDOVA	1700 1710	F.,	5960 Radio Pridnestrovye Monday to Thursday
MOLDOVA	1700-1710		
MOLDOVA	1700-1720	Εu	5960 Radio Pridnestrovye Friday
VOICE OF MONGOLIA	1000-1030	As	12085
VOICE OF MONGOLIA	1500-1530	Eu	12015
VOICE OF MONGOLIA	2000-2030		12015
AGICE OF MONGOLIX	2000-2030	CU	12013
		_	
TWR MONTE CARLO	0800-0920	Eu	9800 11865q (Saturday and Sunday 0745-0920)
RADIO NEPAL	0215-0230	As	5005
RADIO NEPAL	1415-1425		5005
MADIO HEFRE	-472-1452		
RADIO NETHERLANDS	0000-0500		6165b
RADIO NETHERLANDS	0500-0600	NAm Pa	6165b 11710b
RADIO NETHERLANDS	1000-1100	As Pa	7315r 9795r 12065r
RADIO NETHERLANDS	1200-1300	NAm	9890b
RADIO NETHERLANDS	1400-1600		9345T 12080t 15595t
RADIO NETHERLANDS	1800-1900		6020t 9895 11655t
RADIO NETHERLANDS	1900-2100	At	7120t 9895 11655t 17810b
RADIO NETHERLANDS	1900-2100	NAm	15315b 15525b 17725c Saturday and Sunday
RADIO NEW ZEALAND	0459-0759	Pa	15720
RADIO NEW ZEALAND	0800-1059	Pa	9885
RADIO NEW ZEALAND	1100-1259		15530
RADIO NEW ZEALAND	1300-1750		
			9870
RADIO NEW ZEALAND	1751-1850		11980
RADIO NEW ZEALAND	1851-2235	Pa	15720
RADIO NEW ZEALAND	2236-0359	Pa	17675
VOICE OF NIGERIA	0500-0700	Fil	15120
VOICE OF NIGERIA	1000-1500		15120
VOICE OF NIGERIA	1700-1900		15120
VOICE OF NIGERIA	1900-2100	At	7255
RADIO OMAN	0300-0400	NAm	15355
RADIO OMAN	1400-1500	Eu	15140
RADIO PAKISTAN	0045-0115	cΛc	7445 9340
RADIO PAKISTAN	0800-0810		15100 17835 also 1100-1104
RADIO PAKISTAN	1600-1615	AT ME	6215 9385 11570 15725
RADIO PILIPINAS	0200-0330	As	12025 15120 15270
RADIO PILIPINAS	1730-1930	As	11730 11890 15190
POLAND R POLONIA	1300-1400	Eu NAm	9525 11850
POLAND R POLONIA	1800-1900	Eu	7220 7265
RADIO ROMANIA INT	0100-0200	NAM	6150 9615
RADIO ROMANIA INT	0400-0500	NAm SAs	6115 9515 9690 11895
RADIO ROMANIA INT	0630-0700		15135 17780
RADIO ROMANIA INT	1300-1400		15105 17745
RADIO ROMANIA INT	1800-1900		7120 9640
RADIO ROMANIA INT	2130-2200		7145 9650 9755 11940
RADIO ROMANIA INT	2300-2400	Eu NAm	7105 9610 9640 11730
VOICE OF RUSSIA	0200-0300	NAM	7180 7250 7350 15425 15475 15595
VOICE OF RUSSIA	0300-0400		7180 7350 15425 15475 15595
VOICE OF RUSSIA	0400-0500		7150 7180 7350 9840 12010 15425 15475
VOICE OF RUSSIA	0500-0600		7150 7180 9840 12010 15425
VOICE OF RUSSIA	0600-0800	Pa	17665 17805
VOICE OF RUSSIA	0800-0900	Pa	17495 17665 17805

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VOICE OF RUSSIA
                      0900-1000 Pa
                                            17495 17665
VOICE OF RUSSIA
                      1500-1600 As
                                            6205 7260 7350 7415
VOICE OF RUSSIA
                      1600-1700 Eu/Af
                                            6130 7320/ 6005
VOICE OF RUSSIA
                      1600-1700 As
                                            4965 4975 6005 7260 7415 9470
VOICE OF RUSSIA
                      1700-1800 Eu/Af
                                            7320/ 7360
VOICE OF RUSSIA
                      1700-1800 As
                                            5910 7360 7415 9470
VOICE OF RUSSIA
                      1800-1900 EWAf
                                            5950* 6175* 7290/ 7360 11510 *Sat, Sun only
VOICE OF RUSSIA
                      1800-1900 As
                                            5910 7360 7415
VOICE OF RUSSIA
                      1900-2000 Eu/Af
                                            6175 7290 7390/ 7335 11510
VOICE OF RUSSIA
                      2000-2100 Eu/LA
                                            6145 7290 7330/15735
VOICE OF RUSSIA
                      2100-2200 Eu/LA
                                            7330/15735
The following changes take place on March 5th:
15595 replaces 9895 0400-0500 and 0500-0600 to North America, 11985 replaces 9470 1600-1700 to Asia
R SERBIA/MONTENEGRO 1930-2000 Eu
                                            6100
RADIO SINGAPORE INT 1100-1400 As
                                            6080 6150
RADIO SLOVAKIA INT
                      0100-0130 N&SAm
                                           7230 9440
RADIO SLOVAKIA INT
                      0700-0730 Pa
                                           13715 15460
RADIO SLOVAKIA INT
                      1730-1800 Fu
                                            5915 6055
RADIO SLOVAKIA INT
                      1930-2000 EU
                                            5915 7345
S AFRICA CHANNEL AF 0300-0400 Af
                                           3345 7390
S AFRICA CHANNEL AF 0400-0500 Af
                                           3345
S AFRICA CHANNEL AF 0500-0600 Af
                                           7240 11875
S AFRICA CHANNEL AF 0600-0700 Af
                                           7240 15255
S AFRICA CHANNEL AF 0700-0800 Af
                                           11825
S AFRICA CHANNEL AF 1000-1200 Af
                                           11825
S AFRICA CHANNEL AF 1400-1500 Af
                                            11825
S AFRICA CHANNEL AF 1500-1600 Af
                                           11825 17770
S AFRICA CHANNEL AF 1700-1800 Af
                                           15285
S AFRICA CHANNEL AF 2000-2200 Af
                                           3345
S AFRICA R LEAGUE
                      0800-0900 sAf/cAf
                                           7205 17700
                                                          Sunday
S AFRICA R LEAGUE
                      1900-2000 sAf
                                           3215
                                                        Monday
REE SPAIN
                      0000-0059 NAm
                                            6055
REE SPAIN
                      2000-2059 Fit Af
                                           9595
                                                 9680
                                                          Monday to Friday
REE SPAIN
                      2200-2259 Eu Af
                                           6125 9595
                                                          Saturday and Sunday
SLBC SRI LANKA
                      0030-0430 As
                                           6005 9770 15748
SLRC SRII ANKA
                      1330-1530 As
                                           7275 11905 Hindi and English service
SWAZILAND TWR
                      0430-0500 Af
                                           3200 4775 Monday to Friday
SWAZILAND TWR
                     0500-0600 Af
                                           3200 4775 9500
SWAZILAND TWR
                     0600-0645 Af
                                           11640n (-0615 Saturday and Sunday)
                     0600-0900 Af
SWAZILAND TWR
                                           4775 6120 9500
SWAZILAND TWR
                     1700-2030 Af
                                           3200
RADIO SWEDEN
                      0130-0200 AsPa
                                           11550t
RADIO SWEDEN
                      0230-0300 NAm
                                           60100
RADIO SWEDEN
                      0330-0400 NAm
                                           6010c
RADIO SWEDEN
                      1330-1400 EuAfAsPa
                                           7420 11550
RADIO SWEDEN
                      1330-1400 NAm
                                           15240
RADIO SWEDEN
                      1430-1500 EuAfAsPa
                                           11550
RADIO SWEDEN
                      1430-1500 NAm
                                           15240c
RADIO SWEDEN
                      1830-1900 Eu Af
                                           6065
RADIO SWEDEN
                      2030-2100 Eu Pa
                                           6065 7420t
RADIO SWEDEN
                     2230-2300 Eu Af
                                           6065
SWEDEN IBRA RADIO
                     1830-1845 EAf
                                           95201
SYRIA R DAMASCUS
                     2005-2205 Eu NAm
                                           9330 12085
TAIWAN R TAIPEI INT
                     0200-0300 NAm/As
                                           5950f 9680f/11875 15465
TAIWAN R TAIPEI INT
                     0300-0400 NAm/LA/As
                                           5950f/15215f/15320
TAIWAN R TAIPEI INT
                     0700-0800 NAm
                                           5950f
TAIWAN R TAIPEI INT
                     0800-0900 Pa
                                           9610
TAIWAN R TAIPEI INT
                     1100-1200 SEAs
                                           7445
TAIWAN R TAIPEI INT
                     1200-1300 FE
                                           7130
TAIWAN R TAIPEI INT
                     1400-1500 SEAs
                                           15265
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TAIWAN R TAIPEI INT	1600-1700	Δs	11815
TAIWAN R TAIPEI INT	1700-1700		11850 Issoudun, France
TAIWAN R TAIPEI INT	1800-1900		3965 Issoudun, France
TAIWAN R TAIPEI INT	2200-2300		
INTIMAN A INTELLINI	2200-2300	CU	9355f
RADIO TAJIKISTAN	0345-0400	ME	7245
RADIO TAJIKISTAN			7245
KAUIO IAJIKISIAN	1645-1700	ME	7245
RADIO THAILAND	0000 0030	A.4	0/00
RADIO THAILAND	0000-0030		9680
RADIO THAILAND	0030-0100		5890 Greenville
	0300-0330		5890 Delano
RADIO THAILAND	0530-0600		13770
RADIO THAILAND	1230-1300		9810
RADIO THAILAND	1400-1430		9725
RADIO THAILAND	1900-2000		9805
RADIO THAILAND	2030-2045	Eu	9535
VOICE OF TURKEY		Eu NAm/As	6020/ 7240
VOICE OF TURKEY	1330-1420		15155/11735
VOICE OF TURKEY	1930-2020		6055
VOICE OF TURKEY	2130-2220		9525
VOICE OF TURKEY	2300-2350	Eu NAm	5960
UK BIBLE VOICE	0030-0100		6010d Friday, Saturday, Sunday
UK BROADCASTING	0800-0945		5945j Sunday (0815-0900 Friday, 0800-0915 Saturday)
UK NETWORK	1030-1100		5895r Sunday
UK	1130-1200		5950r Saturday and Sunday (Thursday 1230-1245)
UK	1400-1500		13645 Saturday and Sunday via Tashkent (-1545 Saturday)
UK	1500-1600		12035j Saturday (1530-1600 Monday, Thursday, 1545-1600 Wednesday)
UK	1600-1900	ME	9460j Sunday(1640-1915, 1745-1800 Monday, 1640-1715 Tuesday, Wednesday
UK			Friday, 1640-1745 Thursday, 1645-1830, 1900-1930 Saturday)
UK	1800-1815	Iran	7210j Saturday
UK	1800-1900	ME	9730j Saturday and Sunday
UK	1900-2000		6015j Saturday (1900-1930, 2000-2030 Sunday)
UK	1900-2000		7260j Saturday and Sunday
UK	1900-2015	ME	9430 Sunday via Nauen (1915-2000 Friday, 1900-2000 Saturday)
UK CHRISTIAN VOICE	0500-0700		9430w
UK	0515-1545	Af	9555n
UK	0700-0900		15640w
UK	1500-1800		15680w
UK	1800-2000		9765w
UK	2000-2100	WAI	7285w
HIV FAR FACT DO		1 4.	
UK FAR EAST BC		inoia	5885 Yerevan Tuesday, Wednesday, Thursday, Friday
	0115-0130	CA- ME	
UK ASSOCIATION	1400-1415		7370r
UK ASSUCIATION	1400-1415 1500-1545	India	7370r 7340r
UK ASSUCIATION	1400-1415	India	7370r
	1400-1415 1500-1545 1730-1745	India SAs ME	7370r 7340r 7345r
RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200	India SAs ME NAm	7370r 7340r 7345r 5910
RADIO UKRAINE INT RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500	India SAs ME NAm NAm	7370r 7340r 7345r 5910 5910
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300	India SAs ME NAm NAm Eu	7370r 7340r 7345r 5910 5910 9925
RADIO UKRAINE INT RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500	India SAs ME NAm NAm Eu	7370r 7340r 7345r 5910 5910
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300	India SAs ME NAm NAm Eu Eu	7370r 7340r 7345r 5910 5910 9925 5840
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300	India SAs ME NAm NAm Eu Eu	7370r 7340r 7345r 5910 5910 9925
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745	India SAs ME NAm NAm Eu Eu	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130	India SAs ME NAm NAm Eu Eu Af	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745	India SAs ME NAm NAm Eu Eu Af	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930	India SAs ME NAm Eu Eu Af	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930	India SAS ME NAM NAM EU EU Af AS ME	7370r 7340r 7345r 5910 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930	India SAS ME NAM NAM EU EU Af AS ME	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000	India SAs ME NAM NAM Eu Eu Af As ME NAM FE NAM FE	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330	India SAS ME NAM NAM EU EU Af AS ME NAM FE NAM FE NAM FE	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KAIJ	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330 1400-1600	India SAS ME NAM NAM EU EU Af AS ME NAM FE NAM FE NAM FE	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330	India SAS ME NAM NAM EU EU Af AS ME NAM FE NAM FE NAM FE	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330 1400-1600 1900-2000	India SAs ME NAM NAM Eu Eu Af As ME NAM FE NAM FE NAM PA CAM	7370r 7340r 7345r 5910 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7555 11715 15385
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330 1400-1600 1900-2000	India SAS ME NAM NAM EU EU Af AS ME NAM FE NAM FE NAM FE NAM	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7555 11715 15385
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330 1400-1600 1900-2000	India SAS ME NAM NAM EU EU Af AS ME NAM FE NAM FE NAM FE NAM	7370r 7340r 7345r 5910 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7555 11715 15385
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES USA KJES USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-1600 1900-2000 0000-1600 1600-0000	India SAs ME NAM NAM Eu Eu Af As ME NAM FE NAM FE NAM NAM NAM NAM NAM NAM NAM NAM	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7555 11715 15385
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KJES USA KJES USA KJES	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-0000 0200-0330 1400-1600 1900-2000 0100-0500	India SAs ME NAM NAM EU EU Af As ME NAM FE NAM FE NAM PA CAM NAM NAM NAM As	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7555 11715 15385
RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT RADIO UKRAINE INT UNITED NATIONS UNIVERSAL LIFE UNIVERSAL LIFE USA KAIJ USA KAIJ USA KAIJ USA KJES USA KJES USA KJES USA KJES USA KTBN USA KTBN	1400-1415 1500-1545 1730-1745 0100-0200 0400-0500 1200-1300 2200-2300 1730-1745 0100-0130 1900-1930 0000 1400 1400-1600 1900-2000 0000-1600 1600-0000	India SAS ME NAM NAM EU EU Af As ME NAM FE NAM FE NAM	7370r 7340r 7345r 5910 5910 9925 5840 7170n 9565u 17810i Monday to Friday 7145j Sunday 7105j Sunday 5755 13815 7505 15385 7506 15590

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IISA KWHR
                      1100-1200 As
                                           9930
USA KWHR
                      1200-1400 As
                                           11570
USA KWHR
                      1400-1800 As
                                           9930
USA OVERCOMER
                      1100-1200 Eu ME
                                           6110j 9855w
USA MINISTRY
                      1300-1500 Fr MF
                                           6110j 9855w
IISA
                      1900-2000 Af
                                           9845w
USA PAN AMERICAN
                      0030-0045 SEAs
                                           5945
                                                       Sunday
USA BROADCASTING
                      1430-1500 MF
                                           138206
                                                        Saturday (Sunday 1430-1445, 1545-1630, Th 1600-1630)
USA
                      1430-1445 ME
                                           13800i
                                                        Sunday
USA
                      2000-2015 Af
                                           7260i
                                                       Sunday
USA UNIVERSITY
                      0000-1200 NAm
                                           5030 6150 7375 9725 Costa Rica
USA NETWORK
                      1200-2400 NAm
                                           9725 11870 13750
                                                             Costa Rica
USA GENE
                      1000-2200 NAm
                                           11775
                                                           Anguilla
USA SCOTT
                      2200-1000 NAm
                                           6090
                                                          Anguilla
IISA VOA
                     0300-0400 Af
                                           4930 6035 6045 6080 7290 <7340 9885
USA VOA
                                           4930 4960 6080 <7290 9575 9775 <9885
                      0400-0500 Af
USA VOA
                      0500-0600 Af
                                           4930 6035 6080 6105 7295 13710
USA VOA
                     0600-0700 Af
                                           <4930 <6035 6080 <6105 7295 11835 <11995 <13710
USA VOA
                     1500-3600 Af
                                           13600 13865 17715 17895
USA VOA
                     1600-1700 Af
                                           4930 15240 17715 17895
USA VOA
                     1700-1800 Af
                                           13710 15240 15445
USA VOA
                     1800-1900 Af
                                           4930 6035 11975 13710 15240 17895 *Sat, Sun
USA VOA
                     1900-2000 Af
                                           4930 4940 6035 11975 13710 15240 15580 17895
USA VOA
                      2000-2030 Af
                                           4930 4940 6035 11975 13710 15240 15589
USA VOA
                      2030-2200 Af
                                           4930 6035 11975 13710 15240 15580
IISA VNA
                     0000-0030 Afghanistan
                                           6235
USA VOA
                     2030-2130 Afghanistan
                                           7595
USA VOA
                   2130-0000 Afghanistan
                                           6235
USA VOA
                     0900-1100 Eu ME
IISA VOA
                     1100-1200 Eu ME
                                           13685 15615 17755
USA VOA
                     1500-1700 Frt MF
                                           9685 11835 15255
USA VOA
                      0000-0030 FE SAs Pa
                                           7120 9890 11760 15185 15290 17740
USA VOA
                     0100-0200 FE SAs Pa
                                           7200 11705 11820 17740
USA VOA
                     1200-1300 FF SAs Pa
                                           6110 9645 9760 11705 11715 15665
USA VOA
                     1300-1400 FE SAs Pa
                                           6110 9645 9760 11705
USA VOA
                     1400-1500 FE SAs Pa
                                           6110 7125 9645 9760 11705 15425
USA VOA
                     1500-1600 FE SAs Pa
                                           7125 9645 11895 13735
USA VOA
                     1600-1700 FE SAs Pa
                                           6160 7125 9645 9760 Monday to Friday
USA VOA
                      2200-0000 FE SAs Pa
                                           7120 9890 15185 15290 15305 17740
USA VOA
                     1730-1800 Zimbabwe
                                           4930 9830 12080 17785
USA VO BIAFRA INT
                     2100-2200 Af
                                           7380n Wednesday and Saturday
USA WBCQ
                     1800-2300 NAm
                                           18910 -0000 Tuesday, Wednesday, Friday, -0030 Wednesday
USA WBCQ
                     1700-0500 NAm
                                           9330 Monday to Thursday, Friday 2000-0100, Saturday & Sunday 2100-0430
USA WRCO
                     1900-0530 NAm
                                           7415 Monday to Friday, Saturday 2000-0600, Sunday 2100-0545
USA WBCQ
                     2300-1100 NAm
                                           5110 Monday to Friday, Saturday and Sunday 0000-1100
USA WBOH
                     0000-2400 NAm
                                           5920
                                                       Spanish and English
USA WEWN
                     0000-0500 NAm
                                           6875
IISA WEWN
                     0500-0800 NAm Eu
                                           5850 7570
USA WEWN
                     0800-1300 NAm Eu
                                           5850
USA WEWN
                     1300-1600 NAm
                                           9955
USA WEWN
                     1600 2000 NAm Eu
                                           13615 15785
USA WEWN
                     2000-2200 NAm Fit
                                           13615 17595
USA WEWN
                     2200-0000 NAm Eu
                                           7560 9975
USA WHRI
                     0100-0500 EuAf NAm
                                          5850 5860(Mon-Fr) 7315(Sa,Sun) 7490
USA WHRI
                     0500-0600 EuAf NAm
                                           5860(Mon-Fri) 7315(Sa,Sun) 7490 7555
USA WHRI
                     0600-0700 EuAf NAm
                                           5860 6125(Th-Sat) 7315(Sun-Wed) 7555
USA WHRI
                     0700-0900 EuAf NAm
                                           5860 7315
USA WHRE
                     0900-1000 FuAf NAm
                                           7315 7520
IISA WHRI
                     1000-1200 EuAf NAm
                                          7520 9495
USA WHRI
                     1200-1400 EuAf NAm
                                          7520 9840 15665
USA WHRI
                     1400-1600 EuAf NAm
                                           9840 11785(Mon-Fr) 15105(Sa,Sun) 15665
USA WHRI
                     1600-1900 EuAf NAm
                                          9840 15105 17650
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USA WHRI	1900-2100	FuAf NAm	9840 15285 15665	
USA WHRI	2100-2200		9840 11855 15665	
USA WHRI	2200-2300		7490 11855 15665	
USA WHRI	2300-0100		5850 7315 7490	
USA WINB	1100-1300	NAm	9320	
USA WINB	1300-2200	NAm	13570	
USA WINB	2300-0400		9320	
On Mondays to Fridays 974	0 is used 160	0-2100 instead	d of 13570	
USA WJIE	0960-2200	NAm	7490	
USA WJIE	2200-1000	Eu NAm	13595	
Station inactive November	2005			
USA WMLK	1600-2100	Eu ME	9265 Monday to Saturday	
USA WRMI	0900-1300	SAm	9955 Some Spanish programming	
USA WRMI	1300-1600	NAm	7385 Some Spanish programming	
USA WRMI	2300-0500	SAm	9955 Saturday and Sunday, some Spanish programming	
USA WRMI	2200-0900	NAm	7385 (0000-0500 Tue-Sat only, some Spanish programming 2200-	2300)
USA WRNO	2200-1600	NAm	7395	
USA WRNO	1600-2300	NAm	15420	
Station not yet on the air as	s of November	2005		
USA WTJC	0000-2400	NAm	9370	
USA WWCR	0000-0200		3215 5070 5930 7465	
USA WWCR	0200-1000		3215 5070 5765 5935	
USA WWCR	1000-1100		5070 5765 5935 9985	
USA WWCR	1100-1300		5070 5765 5935 15825 5765 5935 9985 15825	
USA WWCR	1300-1400		7465 9985 13845 15825	
USA WWCR	1400-1600		9985 12160 13845 15825	
USA WWCR USA WWCR	1600-1900		9975 12160 13845 15825	
USA WWCR	2100-2200		7465 9975 12160 13845	
USA WWCR	2200-2300		5070 7465 9985 13845	
USA WWCR	2300-0000		3215 5070 9985 13845	- 7
This schedule is valid to 28		1074111	3223 3070 7703 23073	
This selection is valid to 20	,			
USA WWCR	0000-0100	NAm	3215 5070 7465 13845	
USA WWCR	0100-0200	NAm	3215 5070 5935 7465	
USA WWCR	0200-1000	NAm	3215 5070 5765 5935	
USA WWCR	1000-1100	NAm	5070 5765 5935 9985	
USA WWCR	1100-1300	NAm	5070 5765 5935 15825	
USA WWCR	1300-1500	NAm	7465 9985 13845 15825	
USA WWCR	1500-1900	NAm	9985 12160 13845 15825	
USA WWCR	1900-2200	NAm	9975 12160 13845 15825	
USA WWCR	2200-2300	NAm	7465 9985 12160 13845	
USA WWCR	2300-0000	NAm	5070 7465 9985 13845	1
This schedule is valid from	1st March			
USA WWRB	0000-0500		3185 5050 5745 6890	
USA WWRB	1300-1500		9320	
USA WWRB	1500-1700		9320 15250	
USA WWRB	2300-0000	NAm Eu Af	9320 11915 15250	
USA WWRB	2300-0000	NAM	6890	
HEA WYED	0000-0100	NAm/LA	6085 9505 9715/ 5985 11855 15170 15400	
USA WYFR USA WYFR	0100-0200		6065 9505	
USA WYFR	0100-0200		15060v	
USA WYFR	0200-0300		6065 9505 9525/ 5985 11855	
USA WYFR		NAm/LA	6065 9505/ 9985 11740	
USA WYFR	0400-0500		7780/ 6065 6855 9505 9715	
USA WYFR		Eu/NAm	7520/ 6855	
USA WYFR	0600-0700		9860/ 6000	
USA WYFR	0600-0700		7780 11530/11580	
USA WYFR			7780/ 5985 6855 7455 9715/ 9495	
USA WYFR	0700-0900		9985	
USA WYFR	0800-1000		5950 6855 7455	
USA WFYR	0900-1100		9450r	
USA WYFR	1000-1100	NAm	5950 6855 6890 7455	

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USA WYFR
                   1100-1200 NAm/LA
                                       5950 6890 7780 11830/ 5810 11725
USA WYFR
                    1200-1300 NAm/LA
                                        6890 7780 11970/11530
                    1300-1400 NAm
USA WYFR
                                        7780 11830 11855 11970
                   1300-1500 As 7580r 11560v
1400-1500 NAm 11565 11855 13695 17760
1500-1600 NAm/LA 11565 11855 17760/15210
1500-1600 As 6280v 15520d
USA WYFR
USA WYFR
USA WYFR
USA WYFR
                   1600-1700 NAm/LA
USA WYFR
                                       11565 11830 13695 17760/ 6085
                                       15520d
USA WYFR
                    1600-1700 As
                    1600-1700 Eu/Af
                                       18980 21455/17690
USA WYFR
USA WYFR
                   1700-1800 NAm
                                       13695 17555
USA WYFR
                   1700-1800 Eu/Af
                                       18980 21455/21680i
USA WYFR
                   1800-1900 Eu/Af
                                       7240u 18980/ 15115
USA WYFR
                   1800-1900 NAm
                                       13695 17535 17555
                   1900-2000 Eu/Af
USA WYFR
                                       15565 18980/ 3230n 6020t 15115 15195i
                   1900-2000 Eu/Af 15565 18980/ 3230n 6020t
1900-2000 NAm/LA 13695 17535 17555/ 6085
USA WYFR
                   2000-2200 Eu/Af
2000-2200 NAm/LA
2100-2200 Fu/As
USA WYFR
                                        5745 6855 7360r 7580/ 3230n 6020t 15115 15195i
USA WYFR
                                       17535 17555/17575
USA WYFR
                                       5745 6855 7360r 7580/ 11875i(from 2115) 15565
USA WYFR
                   2200-2300 Af
                                       11875i(to 2315) 21525
                   2200-2300 NAm/LA
IISA WYFR
                                       11740/ 9690
                   2300-0000 NAm/LA 11740/ 5985 11855 15170 15400
USA WYFR
UZBEK R TASHKENT
                  0100-0130 As
                                       7160 7190
UZBEK R TASHKENT 1200-1230 As
                                       5975 7190
UZBEK R TASHKENT 1330-1400 As
                                       5060 7190
UZBEK R TASHKENT 2030-2100 As
                                       7185
UZBEK R TASHKENT 2130-2200 As
                                       7185
VATICAN RADIO
                   0140-0200 As Pa 7335 9865
VATICAN RADIO
                  0250-0320 NAm
                                       7305 9605
VATICAN RADIO
                  0300-0330 Af
                                       7360
VATICAN RADIO
                                       7360 9660 11625
                  0500-0530 Af
                  0600-0630 Eu 4005 5885 7250
0630-0700 Af 9660 11625 13765
VATICAN RADIO
VATICAN RADIO
                   0730-0745 Eu AsPaAf 4005 5885 6185 7250 9645 11740 15595
VATICAN RADIO
VATICAN RADIO
                    1530-1550 As Pa
                                        9310 11850 13765
                   1715-1730 Eu AsPaAf 4005 5885 7250 9645 9755
VATICAN RADIO
VATICAN RADIO
                   1730-1800 Af 9755 11625 13765
VATICAN RADIO
                  2000-2030 Af
                                       7365 9755 11625
VATICAN RADIO
                   2050-2120 Eu
                                       4005 5885 7250
VOICE OF VIETNAM 0100-0130 NAm
                                      6175c
VOICE OF VIETNAM 0230-0300 NAm
                                        6175c
VOICE OF VIETNAM
                  0330-0400 NAm
                                       6175c
VOICE OF VIETNAM
                   1100-1130 As
                                       7285
VOICE OF VIETNAM
                    1230-1300 As
                                       9840 12020
                                      7285 9840
                    1500-1530 SEAs
VOICE OF VIETNAM
VOICE OF VIETNAM
                    1600-1630 Eu SEAs 7220 7280 9550 9730
VOICE OF VIETNAM
                   1800-1830 Eu
                                       5955 Moosbrun 7280 9730
VOICE OF VIETNAM 1900-1930 Eu
                                       7280 9730
VOICE OF VIETNAM
                    2030-2100 Eu As
                                       7220 7280 9550 9730
VOICE OF VIETNAM
                   2330-2400 As
                                       9840 12020
YEMEN RADIO SANA'A 0600-0700 ME Af
                                      9780
YEMEN RADIO SANA'A 1800-1900 ME Af
                                        9780
ZAMBIA CHRISTIAN V 0400-0800 Af
                                       6065
ZAMBIA CHRISTIAN V 0800-1700 Af
                                        9865
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4965

ZAMBIA CHRISTIAN V 1700-0400 Af

19th Annual

Winter SWL Fest Sponsored by N4344

March 3-4, 2006

Best Western—The Inn at Towamencin (Formerly Holiday Inn),

Sumneytown Pike, Kulpsville, Penna.

Plan to attend your favorite forums Friday and Saturday. Enjoy meeting with your friends in the Hospitality Room. Bring radio related items for the swap meet or to donate for the Silent Auction. Check out your friends' receivers, bring one of your own for others to try!

No frills; just shortwave, longwave, mediumwave, pirates, and scanning. Once again you will enjoy the camaraderie of your hobby friends.

Please note, there is an incentive for you to pre-register, as prices are more expensive for those who wait. Registration options are also more flexible than in the past, with new one-day and student registrations. If you wish to participate in the meals, you must register and inform us that you will be attending by Thursday morning, March 2nd. If you choose not to participate in the meals, the hotel has a restaurant, and there are other restaurants nearby.

Your registration must be received by February 21, 2006 (note the earlier date) for the best prices; registrations received after that date are priced higher. See the registration form below.

Many things, like the raffle, remain the same:

GRAND PRIZE To be announced

SPECIAL Register early to win a sw portable! One free entry for an early-bird registration received by February 10, 2006.

Please bring items for the Silent Auction. Proceeds are donated to charity.

Checks should be made payable to WINTER SWL FEST. Register directly with the hotel for your rooms by calling the Best Western at (215) 368-3800. For 2005, one special rate \$75 single or double! Tell the hotel staff you're with the WINTER SWL FEST to receive this special room rate. You must make your reservation directly with the hotel to receive this rate; reservations via the Best Western 800 number or web site are not eligible for this rate. Up to the minute info. can be found on the WINTER SWL FEST Web Page at http://www.swlfest.com/ or from http://www.anarc.org/naswa/.

The Best Western—The Inn at Towamencin is located at Exit 31 of the PA Turnpike Northeast Extension-Lansdale Interchange. Improved access from the south with the Blue Route (1-476)—ask for details. Limo service is available from Phila. Intl Airport directly to the hotel.

Please submit the following form with your registration amount or send for more information to:

swl winterfest P.O. Box 4153 Clifton Park, NY 120

	Clifton Park, NY 12065	
NAME:	(spouse's name)	
ADDRESS:		
CITY:	E-MAIL:	(REQ. FOR REG. CONFIRMATION)
CHECK ON	E OR MORE	
REGISTRATION RECEIVED BY	LATE OR ON-SITE REG.RECEIVED	BANQUET:
FEBRUARY 21, 2006:	AFTER FEBRUARY 21, 2006:	Roast Beef
Full (\$47)	Full (\$55)	Chicken
Two-Day Partial (\$17)	Two-Day Partial (\$20)	
One-Day Partial (\$9)	One-Day Partial (\$10)	RAFFLE TICKETS:
New! Lunch-only Saturday (\$23)	One-Day Partial w/Lunch (\$25)	raffle tickets, please
New!Spouse Lunch-only Sat (\$13)	Full Spouse/son/daughter (\$40)	(\$1 ea./ 6 for \$5/ 13 for \$10)
Full Spouse / etc. (\$32)	Banquet only (Spouse) (\$25)	Registration Fee Enclosed \$
Banquet only (Spouse) (\$19)	Spouse etc. Lunch-only (\$15)	Raffle Tickets Fee Enclosed \$
Student (\$5)	Student (\$5)	Total Check/Money Order \$

Registration is not transferrable; cancellations after February 20. 2006 cannot be refunded, however we will refund raffle ticket money if you have to cancel.

Company Store

Mike Wolfson KB8TYT • 1842 Mifflin Ave. • Ashland, OH 44805 • mwolfson@bright.net

The following items are available through the Company Store. Shipping is extra as noted.

Publications	
Shortwave Listening Guidebook by Harry Helms. A beginners guide to shortwave listening covering equipment and more.	\$19.95 +2.00 s/h US +4.00 s/h Can.
Joe Carr's Receiving Antenna Handbook A guide to high performance receiving antennas from longwave to HF and VHF.	\$19.95 +2.00 s/h US +4.00 s/h Can.
Joe Carr's Loop Antenna Handbook Comprehensive but readable guide to understanding and building loop antennas.	\$16.50 +2.00 s/h US +4.00 s/h Can.
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