

The **NASWA** Journal

VOLUME XLVI NUMBER 1

JANUARY 2006

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NASWA 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 Brandt** 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 Kulpville, 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 short-wave 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 on-line 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 WWCN. 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


OUR MOTTO IS - "UNITY AND FRIENDSHIP"

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-line 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* edited by Ray Bauernhuber, 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: P O Box 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.

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: ctcreditor@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 <antennapig@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. Non-member DXers and broadcasters are welcome.
- Aug 19, 2006 2006 Madison-Milwaukee Radio Get-together. The 13th Annual Madison-Milwaukee Get-together for DXers 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 cyberspace: <http://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 vogueish. 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 run-down 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 magazine-oriented 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** Saturdays at 0445, 0845 and 1345, plus Mondays 0145. Sirius listeners can hear **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 e-mail 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



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/review-etone1photo.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 flexibility 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 MHz or kHz 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 E1'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 E1'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 WWV 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 Sony 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 DXpeditions.

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 addition 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 to do some mental math if you use zero-beating 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 DXers will probably want to use an external loop or ferrite rod antenna for best results. One minor annoyance 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 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

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 guides 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. 

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**I think the
Sony ICF-2010
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the casual listener.**
.....

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
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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 $4 \mu\text{V}$ 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 $1.5 \mu\text{V}$ with the preamp on, and $4 \mu\text{V}$ 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 lummock 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 μ V 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 KW230, 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 yet 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 KOX 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 DXpedition 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 DXpedition 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

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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 DXing. 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 DRW-Darwin:

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
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(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 Dxplore). 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 definitely 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 Winter B-05 for *Voz Christiana* via SGO-Santiago:

0000-0100	Spanish	6070 SGO 17680 SGO
0000-0400	Portuguese	11745 SGO
0100-0400	Spanish	6070 SGO 11655 SGO 15585 SGO
0400-0600	Spanish	6070 SGO 11655 SGO
0400-1100	Portuguese	11890 SGO
0600-1200	Spanish	6070 SGO 9780 SGO
1100-2400	Portuguese	15485 SGO
1200-2400	Spanish	9635 SGO 17680 SGO

(Observer-BUL)

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

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

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)

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 democratico 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 Dexplorer/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 November. 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 just in August. 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):

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
 1430-1530 SEAs langs 12005 WER
 1530-1630 SEAs langs 11645 WER
 2330-0030 SEAs langs 7160 WER

BCE Radio Luxembourg:

0900-1545 Ge DRM 7295 JUL
 1545-1700 Ge DRM 7145 JUL

Bible Christian Association/BCA/:

1630-1700 Polish 6015 JUL Su

Bible Voice Broadcasting Network (BVBN):

0800-0915 English 5945 NAU Sa
 0800-0945 English 5945 NAU Su
 0815-0900 English 5945 NAU Fr
 0845-1015 Arabic 17545 JUL Fr
 0900-0915 Urdu 5945 NAU Fr
 0915-0930 Punjabi 5945 NAU Fr
 1400-1500 English 13645 WER Su
 1400-1545 English 13645 WER Sa
 1500-1530 Bengali 13645 WER Fr/Su
 1500-1600 English 12035 JUL Sa
 1500-1600 Urdu 12035 JUL Tu
 1530-1545 Urdu 12035 JUL We
 1530-1600 English 12035 JUL Mo/Th
 1530-1600 Hindi 13645 WER Mo-Fr
 1530-1600 Punjabi 12035 JUL Fr
 1530-1600 Urdu 12035 JUL Su
 1545-1600 English 12035 JUL We
 1600-1630 Amharic 13810 JUL Tu/Th
 1630-1700 Amharic 13810 JUL Mo/Tu/Fr
 1630-1715 Arabic 11645 WER Tu/We
 1630-1730 Amharic 13810 JUL Th/Sa/Su
 1630-1730 Arabic 11645 WER Mo/Th/Fr
 1630-1800 Amharic 13810 JUL We
 1630-1900 English 9460 JUL Su
 1640-1715 English 9460 JUL Mo-We/Fr
 1640-1745 English 9460 JUL Th
 1645-1830 English 9460 JUL Sa
 1700-1730 Tigrina 13810 JUL Mo/Tu/Fr
 1715-1730 Hebrew 9460 JUL Tu
 1715-1835 Arabic 9730 JUL Mo/We/Fr
 1730-1800 English 9460 JUL Tu
 1730-1800 Somali 13810 JUL Sa/Su
 1800-1815 English 7210 JUL Sa
 1800-1815 Russian 9460 JUL Tu
 1800-1830 Persian 7210 JUL We/Th/Fr
 1800-1830 Spanish 7205 NAU Su
 1800-1835 Arabic 9730 JUL Tu/Th
 1800-1900 English 9460 JUL We/Fr
 1800-1900 English 9730 JUL Sa/Su
 1800-1900 Persian 7210 JUL Su
 1815-1900 Persian 7210 JUL Sa
 1830-1845 Hebrew 9460 JUL Sa
 1830-1900 Hebrew 9470 NAU Tu
 1845-1930 English 9460 JUL Sa
 1900-1930 English 7260 JUL Sa
 1900-1930 English 6015 JUL Su
 1900-2000 English 6015 JUL 9470 NAU Sa
 1900-2015 English 9470 NAU Su

1915-1930 Russian 6015 JUL Mo-Fr
 1915-2000 English 9470 NAU Fr
 1930-2000 English 7260 JUL Su
 1930-2000 Russian 6015 JUL Su
 2000-2030 English 6015 JUL Su

Brother Stair/The Overcomer Ministries (TOM):

1100-1200 English 6110 JUL 9855 WER
 1300-1500 English 6110 JUL 9855 WER
 1500-1600 English 6110 JUL 9855 WER Sa
 1600-1700 English 9855 WER Sa
 1900-2000 English 9495 JUL, ex 9845

CBS Radio Taiwan International (RTI):

1700-1800 Russian 5850 JUL
 2100-2200 Spanish 6120 NAU

Christian Science Monitor:

1000-1100 German 6055 JUL Su
 1800-1830 French 9470 JUL Tu till Jan. 31
 1800-1830 French 9490 JUL Th till Jan. 26
 1900-2000 Russian 9890 JUL Sa

CVC International:

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

Democratic Voice of Burma (DVOB):

2330-0030 Burmese 5955 JUL

Deutsche Welle (DW):

0600-1000 English 6140 JUL
 1000-1300 En/Ge DRM 6140 JUL
 1300-1600 English 6140 JUL
 1600-1900 En/Ge DRM 6140 JUL

Evangelische Missions Gemeinden:

1130-1200 German 6055 WER Sa/Su
 1200-1230 Russian 11840 NAU Sa
 1600-1630 Russian 6000 NAU Sa

Free People's Mission Krefeld Inc:

1200-1230 German 5945 WER Sa
 1630-1700 English 9490 WER Sa

HCJB (The Voice of Andes):

1600-1700 German 3955 JUL

Hrvatska Radio/Voice of Croatia:

0000-0400 Cr/En/Sp 7285 JUL
 0200-0600 Cr/En/Sp 7285 JUL
 0500-0800 Cr/En/Sp 9470 JUL
 0600-1000 Cr/En/Sp 11690 JUL
 2300-0400 Cr/En/Sp 7285 JUL

IBC Tamil Service:

0000-0100 Tamil WER 250

IBRA Radio:

1730-1800	Somali	9660 WER
1730-1830	Swahili	9520 JUL
1830-1845	English	9520 JUL
1900-2045	Hausa	9610 JUL
2000-2100	Arabic	7340 JUL

Mecklenburg Vorpommern Baltic Radio:

1300-1400	German	6130 JUL 1st Su
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Minivan (Independent) Radio:

1600-1700	Dhivehi	11800 JUL
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Missionswerke Arche

1200-1215	German	6055 WER Su
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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
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Radio Huriyo:

1630-1700	Somali	9820 WER Tu/Fr
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Radio Reveil Paroles de Vie:

1830-1900	French	11840 JUL Th
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Radio Rhino International Africa:

1500-1530	English	17870 JUL We/Fr
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Radio Traumland:

1400-1530	German	5925 JUL Su
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Radio Waaberi:

1330-1400	Somali	17660 JUL Fr
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RTBF:

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
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TNT Hit Radio:

1000-1600	Dutch/Mx	5910 JUL Sa
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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
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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 JUL Su

Voice of America:

1700-1800	Persian	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
1530-1600	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
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Voice of Ethiopian Salvation:

1600-1700	Amharic	9820 JUL Su
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Voice of Oromo Liberation (Sagalee Bilisummaa Oromoo):

1700-1800	Oromo	9820 WER Tu-Su
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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	Arabic	11835 JUL
1700-1900	Turkish	9925 JUL
1800-1900	German	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	English	9430 WER
0700-0900	English	15640 WER
1500-1800	English	15680 WER
1800-2000	English	9765 WER
2000-2100	English	7285 WER

(Observer-BUL)

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

1500-1600	NF 9660 POR, ex 9705
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(Observer-BUL)

GUATEMALA 2320H *Radio Isabel* 1160 x 2 harmonic. This one is signing on at 1130 with full canned ID including frequency and their call sign 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/Cum-bre DX)

IRAN Winter schedule for *Voice of Islamic Republic of Iran* (VOIROI/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-BUL)

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 sub-audible 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/Hausser-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)

0400-0759	13690
0800-1059	9765
1100-1300	13840
1300-1650	7230
1651-1750	11745
1751-2235	13595
2236-0358	15720

(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/Hausser-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	Tamil	NF 17480, ex 17490 // 15625.4
1015-1045	Sinhala	NF 17480, ex 17490 // 15625.4
1630-1700	Turkish	NF 6215.4 & 7600, ex 6255.4 & 7465
1915-0045	Urdu	NF 5835.4, ex 5840.4 (Islamabad program)
1415-1445	Russian	NF 9300, ex 9335 // 7550.4
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 Internacional/Radio Portugal* in Portuguese:
 0000-0300 9715 11980 13700 Tu-Sa

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

(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 folkloric 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 Dexplorer, 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 definitely 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		
0100-0200	Vietnamese	15445 TAI Sa
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
1730-1800	Oromo	6180 DHA

Bible Voice Broadcasting 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-Th

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

1900-1930	French	7260 WOF Th
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Eternal Good News

1130-1145	English	15525 DHA Fr
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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
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KBS World Radio

0700-0800	Korean	9535 SKN
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

1500-1530 Vietnamese 7380 TAI

Radio France International

0400-0500 French 7270 ASC 15210 DHA
 0600-0700 En/French 9865 ASC
 0600-0700 French 15210 DHA 17770 KIG
 1200-1230 English 15275 ASC
 1600-1630 Pashto 6010 DB 7170 DHA
 1800-1900 Persian 5995 TAC 6015 DHA

Radio Okapi

0400-0600 Fr/Lingala 11690 MEY
 1600-1700 Fr/Lingala 11890 MEY

Radio Prague

0000-0030 Spanish 11665 ASC
 0400-0430 English 6100 SAC
 2330-2400 Spanish 9660 SAC

Radio Sea Breeze/Shiokaze

1430-1500 Japanese 5890 IRK

Radio Solh/Radio Peace

0200-1200 Dari/Pashto 11675 DHA
 1200-1500 Dari/Pashto 15265 RMP
 1500-1800 Dari/Pashto 9875 RMP

Radio Taiwan International

1900-2000 French 3955 SKN
 1900-2000 German 6170 DHA

Star Radio Liberia

0700-0900 English 9525 ASC
 2100-2200 English 11960 ASC

Sudan Radio Service

0300-0500 En/Ar/Others 7120 WOF Mo-Fr
 0500-0600 En/Ar/Others 9525 WOF Mo-Fr
 1500-1700 En/Ar/Others 15575 WOF Mo-Fr
 1700-1800 En/Ar/Others 11705 WOF Mo-Fr

Trans World Radio Africa

1300-1315 Afar 13745 KIG Fr/Sa
 1800-1830 Amharic 12035 DHA Mo-Fr
 1800-1845 Amharic 12035 DHA Sa/Su

United Nations Radio

1700-1715 French 7170 MEY 9565 SKN 21535
 MEY Mo-Fr
 1730-1745 English 7170 MEY 9565 SKN 17810
 ASC Mo-Fr
 1830-1845 Arabic 7260 RMP Mo-Fr

UNMEE

0900-1000 En/Others 17670 DHA Su
 1030-1130 En/Others 17565 DHA Tu

Voice of Biafra International

2100-2200 English 7380 MEY We/Sa

Voice of Vietnam

0100-0130 English 6175 SAC
 0130-0230 Vietnamese 6175 SAC
 0230-0330 En/Sp 6175 SAC
 0330-0430 En/Sp 6175 SAC
 0430-0530 Vietnamese 6175 SAC
 1800-1830 English 5955 MOS
 1830-1930 Vietnamese 5955 MOS
 1930-2000 French 5955 MOS
 2000-2030 Russian 5970 SKN
 2030-2130 Vietnamese 5970 SKN

West Africa Democracy Radio

0700-0900 En/French 12000 WOF
 0900-1100 En/French 17860 WOF

WYFR

0500-0600 German 3955 SKN
 1400-1600 Hi/English 15520 DHA
 1600-1700 English 12010 DHA
 1700-1800 Arabic 9530 RMP
 1700-1800 English 3955 SKN 21680 ASC
 1800-1900 Arabic 9660 SKN
 1800-1900 English 7240 RMP
 1900-2000 Arabic 5965 RMP
 1900-2000 English 3230 MEY
 1900-2005 Swahili 9660 MEY
 2000-2100 English 3230 MEY 15195 ASC
 2030-2130 French 11985 ASC
 2100-2115 English 11655 MEY 15195 ASC
 2115-2200 English 11655 MEY 11875 ASC
 15195 ASC
 2200-2315 English 11875 ASC

(Observer-BUL)

UNITED STATES Frequency changes for **WEWN** in English:

0000-0500 NF 6875 EWN, ex-5085, 5875 and 5810

(Observer-BUL)

Frequency changes for **WHRI** Angel 1 in English via HRI:

0600-0700 NF 6125, ex 7315 Th-Sa
 0600-0700 7315 Su-We, ex daily
 0700-1000 7315, ex 0600-1000

(Observer-BUL)

Frequency change for **Voice of America**

1300-1500 Korean NF 9385 TIN, ex 15250

(Observer-BUL)

More US **VOA/RFE/RL/RFA** changes

0000-0200 Russian 12015 TIN RL (ex-11885)
 0200-0400 Kazakh 11785 PHT RL (ex-11885)
 0700-0900 Russian 15130 UDO RL (ex-17730)
 1400-1500 Canton 6050 TIN RFA (ex-15255)
 1400-1500 Cantonese 7280 TIN RFA (ex-9825)
 1400-1600 Kirgыз 15345 LAM RL delete
 1530-1600 Georgian 9610 KAV VOA (ex-11965)

1600-1615	Bosnian	11820 MOR VOA (ex-11965KAV)	0200	Hi/Ta/Ma/En	12070NVS-RUS
1600-1700	Bangla	11970 PHT VOA (ex-15185)	0230	French	7305 7360 9605
1730-1800	Oromo	9415 MOR VOA (ex-7245)	0250	English	7305 9605
		11955 KAV VOA (ex-11690)	0300	English	7360
1730-1800	Oromo	13755 MOR VOA (ex-13800, 13790)	0310	Armenian	6185 9645
1800-1900	Amharic	9415 IRA VOA (ex-7245)	0320	Spanish	7305 9605
		11955 KAV VOA (ex-11690)	0330	Kiswahili	7360 9660
		13755 IRA VOA (ex-13800, 13790)	0330	Russian	6185 7335 9645
1800-1900	Caucas	7125 IRA RL (ex-6215)	0330	Slovenian	4005
1900-1930	Tigre	9415 MOR VOA (ex-7245)	0345	Somali	7360 9660 Su
		11955 KAV VOA (ex-11690)	0350	Croatian	4005
		13755 IRA VOA (ex-13800, 13790)	0400	Amh/Tig	7360 9660
2100-2115	Ukrainian	6225 IRA VOA (ex-6215)	0400	Ukrainian	6185 7335
2115-2130	Ukrainian	6225 IRA VOA (ex-6215)	0410	Czech	4005 5885
2330-2400	Burmese	11840 IRA VOA (ex-7260)	0420	Byelorussian	6185 7335
			0425	Slovak	4005 5885
			0430	French	7360 9660
			0440	Hungarian	4005 5885
			0440	Lithuanian	6185 7335
			0500	Arabic	9645 11715
			0500	English	7360 9660 11625
			0500	Latvian	6185 7335
			0500	Polish	4005 5885 7250
			0520	German	4005 5885 7250
			0520	Romanian	6185 7335
			0530	Portuguese	9660 11625 13765
			0540	Bulgarian	6185 7335
			0540	French	4005 5885 7250
			0600	English	4005 5885 7250
			0600	French	9660 11625 13765
			0600	Scandinavian	6185 7335
			0630	English	9660 11625 13765
			0630	LatinMass	4005 5885.6185 7250 9645 11740 15595
			0700	It/Fr/En	4005 5885 6185 7250 9645 11740 15595 Mo-Fr
			0710	Romani.Mass	7250 9645 Su
			0715	Ukraini.Mass	9850 11740 Su
			0745	Arabic	5885 7250 9645 15595 Mo-Fr
			0830	ItalianMass	7250 Su
			0915	Papal Aud	5885 We
			0930	Ge'ez Liturgy	15595 17515 Su
			0930	Oriental Lit	11740 15595 17515 Su
			1000	Portuguese	21850 Mo-Fr
			1100	Angelus	5885 7250 9645 11740 15595 17515 21850 Su
			1100	Italian	5885 Mo-Fr
			1115	Italian	5885 Su
			1130	EnglishMass	15595 17515 Fr
			1130	Spanish	21850 Mo-Fr
			1200	French	5885 Mo-Fr
			1230	Chinese	6020PUG-PHL 13770 15235 Su-Fr
			1230	ChineseMass	6020PUG-PHL 13770 15235 Sa
			1300	Italian	5885 7250 9645 11740 15595 21850
			1315	Vietnamese	6205TCH-RUS 17515
			1330	Russian	5895SAM-RUS 9695
			1400	Spanish	7250 9645
			1415	Portuguese	7250 9645
			1415	Urdu	11850 13765 We/Su

WRNO estimates that it may be April of May of 2006 before they are on the air. This estimate is based on the amount of time needed to completely determine the damage to the station from Hurricane Katrina and to make repairs. They do know that both the antenna system and transmitter building-sustained damage in the storm. (Johnson-FL, Dec 6/ Cumbre DX)

URUGUAY 9650, Emisora Ciudad de Montevideo, Montevideo, 1518-1530, December 23, Spanish, music, local ads: Transportes Uruguay Fleet, Confiteria La Opera "una confiteria con clase," Restaurante Panamericano, Motores Electricos Ltda., Farmacia Nicaragua "su farmacia de confianza," complete ID as: "En su receptor, CX42, Emisora Ciudad de Montevideo, Uruguay, transmitiendo en 1370 kHz, la frecuencia que se sintoniza con mayor frecuencia." (Arnaldo Slaen, Argentina, Noticias DX/DX Listening Digest/Hauser-OK)

UZBEKISTAN Winter B-05 for CVC International via TAC-Tashkent:

0100-0300	English	7355 TAC
0100-0400	Hindi	9570 TAC
0300-0600	English	13685 TAC
0400-1100	Hindi	13630 TAC
1100-1400	Hindi	9500 TAC
1400-1700	Hindi	9855 TAC

(Observer-BUL)

VATICAN STATE Complete B05 shortwave schedule of Vatican Radio

0000	Chinese	13780KHB-RUS
0025	Urdu	7335 9865 Mo/Th
0030	Portuguese	7305 9605
0040	Hi/Ta/Ma/En	7335 9865
0100	Spanish	7305 9605 11910
0145	Spanish	7305 9605 11910

1430	Hi/Ta/Ma/En	9310TAC-UZB	11850 13765
1500	Ge/Polish	5885 7250	9645
1530	EnglishMass	9310TAC-UZB	11850 13765 Sa
1530	Italian	5885 7250	9645 Fr
1530	Music	5885 7250	9645 Sa-Th
1600	Kiswahili	11625	13765
1600	Vespers	5885 7250	9645
1615	Somali	11625 13765	Sa
1630	Amh/Tig	11625	13765
1630	Arabic	9755	11850
1630	Italian	5885 7250	9645
1650	Armenian	7365	9585
1700	Fr/English	4005 5885	7250 9645 9755
1700	French	11625	13765
1710	Russian	6185 7365	9585
1730	English	9755 11625	13765
1730	Slovenian	4005 5885	7250
1740	Ukrainian	6185	7365
1750	Croatian	4005 5885	7250
1800	Byelorussian	6185	7365
1800	Portuguese	9755 11625	13765
1810	Hungarian	4005 5885	7250
1820	Lithuanian	6185	7365
1830	Czech	4005 5885	7250
1840	Latvian	6185	7365
1845	Slovak	4005 5885	7250
1900	Polish	4005 5885	7250
1900	Romanian	6185	7365
1900	Spanish	9755 11625	Sa
1920	Bulgarian	6185	7365
1920	German	4005 5885	7250
1940	Rosary	4005 5885	7365 9755 11625
1940	Scandinavian	6185	7250
2000	Albanian	6185	7250
2000	English	7365 9755	11625
2000	Italian	4005	5885
2020	Esperanto	4005 5885	Su
2020	Esperanto	6185 7250	We/Th
2020	It/English	6185	Mo
2030	French	7365 9755	11625
2030	French	4005 5885	7250
2050	English	4005 5885	7250
2100	Russian	5910	7370
2120	Spanish	4005 5885	7250
2140	Arabic	4005 5885	7250
2200	Chinese	6145 7305	9600(via PK-RUS thru Feb 04, KHB-RUS thereafter)
2200	Italian	4005	5885
2230	Italian	4005	5885
2250	Esperanto	4005	5885 Su
2315	Vietnamese	7305NVS-RUS	9600

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 network use 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 to 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

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

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 trained several generations of professional announcers, translators and journalists. Although Joe was born in Georgia, he 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 its 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 hearing 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.

-AQ



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. MALLETT, 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!



QSL Report

Sam Barto • 78 Blakeman Road • Thomaston, CT 06787



TURKMEN RADIO
National Television & Radio
Broadcasting Company of
Turkmenistan



Dear Richard A. D'Angelo

Q Thank you for your reception report. We are pleased to verify your reception of Turkmen Radio:

S Date of Reception: 08.08.2008
L Time: 12:08 - 13:10 (1508-1710) UTC
Frequency: 5075 kHz
Transmitter Power: 10 kilowatts

Signature

Official Seal

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 Tikhiv

* 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).

CANADA: Radio Canada International 9515 via Sackville f/d "60th Anniversary" 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).

RADIO HUAMACHUCO
ONDA MEDIA - 816 - 812.
D. A. X. 2-H.

Mannel Domingo Gil Gil
DIRECTOR GERENTE



RADIO POLONIA

Warsaw - View of the Old Town across the Vistula

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"



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 broadcast from T-Systems in Julich. (D'Angelo-PA).

CZECH REPUBLIC: Radio Prague

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

Karlova Studanka" cd., with beer coaster, pad in 3 1/2 wks. (Lodell-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 Diaspora 9405 via Julich f/d e-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 Eastern 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.

CROATIA



HRVATSKA RADIOTELEVIZIJA, 10000 ZAGREB, Privatje 3

HRT

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

EWTN**WEWN**

1500 High Road
 P.O. Box 176
 Mendenhall, AL 35114 USA
 1-205-271-2900 ext. 2017
 Fax: 1-205-271-2974
 www.QSL.com

**Verification ("QSL") Card**Date/Date/Time/Date 11 December, 2003Time/Time/Zone/Hours 1439-1508 UTCLocator 11975

Stanley
 for WTN

PLACE
STAMP
HERE

Scott Barbour
 P.O. Box 993
 Intervale, NH 03845

MOLDOVA: Voice of Russia 7180
 via Kishinev f/d "60th
 Anniversary of the Great
 Patriotic War - Parade on
 Red Square" cd. w/ sked.
 in 3 wks. for an e-mail
 rpt. (Loudell-DE).

MOROCCO: Radio Farda 9865
 via Briech f/d cd. in 34
 ds. (Wilkins-MO).

NEW ZEALAND: Radio New Zealand International 11820
 f/d "New Zealand - The
 Ultimate Experience" cd.
 w/ schedule in 3 wks. for
 2 IRCs. (Loudell-DE).

NIGERIA: Radio Nigeria 7275
 Corporation of Nigeria, Abuja National Station, Broadcasting House,
 P.O. Box 377 Gwagwalada / P.M.B. 71, Gark 1, Abuja, Nigeria. (D'Angelo)

SAIPAN: Radio Free Asia 13625 f/d cd. in 190 ds. (D'Angelo-PA).
SOUTH AFRICA: Radio Okapi 11890 via Meyerton f/d ltr. in 24 ds. (Craig-
 head-KS). 11690 f/d ltr. w/ schedule from v/s Kathy Otto in 12 ds.
TAJIKISTAN: Radio Free Asia 11540 f/d "SWL Fest" cd. and an (D'Angelo)
 "EDXC 2005" cd. in 5 mos. w/o
 site. (Loudell-DE).

TURKISH NORTHERN CYPRUS: Radio
 * Bayrak 6150 p/d e-mail ltr.
 in 7 mos. v/s Mustafa Tosun.
 (Lare-MI).

USA: 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).

USA (Pirates): Undercover Radio
 f/d cd. w/ T-Shirt and ltr.
 in 30 ds. for 3 IRCs. (Ray)..
 from the IRCA. Sorry I threw

RADIO NACIONAL DE ANGOLA

Caro Senhor

Acomosmo a recepção de sua carta, sobre as condições de escuta da
 nossa estação emissora, na frequência de 5312 KHz. aos 14-12-03
 no período das 1439 às 1508 e das 23.00 às 23.12 horas GMT.

Obrigado Senhor

Nossa agradeço sua carta e as informações sobre as condições
 de escuta na frequência de 5312 KHz. às 14-12-03
 horas GMT.

Dear Sir

We received your letter regarding conditions of broadcast on short
 wave frequencies of 5312 KHz. between 1439 and 1508
 from 14-12-03.

Radio Nacional de Angola, Av. 17, 1111-1115

B.P. 276, 1111-1115, PROGRAMAS

Tel. +351 21 3630700

Ca. Postal 1228 - Telas 2008 Estrelas AX - Luanda-República Popular de Angola

the envelope away that had your last name on it...Sam. 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).

RADIO NACIONAL DE BRASILIABrasilia, Brasil 10, VI, 1975

This document confirms the reception

report(s) outlined below:

21:44/22:00 GMT

27, III, VI 11780 KHz 22 m. b.

/ / / KHz m. b.

/ / / KHz m. b.

/ / / KHz m. b.

Thank you

INTERNATIONAL SERVICE

Transmitter: 250 kW

Antenna: (55 Km. NW Brasilia)

31/25/50 metre rhombic.

RHO 4/0, 6/70°, Az 32° True North

Mr. Samuel L. Barto

245 Cherry Ave.

Highgate Apt. No. J-11

Watertown, Conn. 06795

U. S. A.

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.

Sam

Contributors' Page


Bob Montgomery • P.O. Box 1458 • Levittown, PA 19058 • RMonty23@netzero.net

DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA	NRD-545 AOR AR-7030 100' LW
Scott BARBOUR, Intervale, NH	R-75, MLB-1, 200' Beverage
Ray BAUERNHUBER, Whitestone, NY	Sony 2010, 23' vertical antenna
Jerry BERG, Lexington, MA	R8 19, 41, 90 meter dipoles
Bill BERGADANO, Freehold, NJ	Icom 718, 170' tuned inverted L
Luca BOTTO FIORA, Rapallo, ITALY	R7, Sat 500, Dipole, LW, MFJ1206, AT2000
Mike BRANCO, Islip, NY	No equipment listed
Ralph BRANDI, Middletown, NJ	AOR7030, R8, 300' longwire, T2FD
George CARAS, Saco, ME	RX340, R8B, Orion, R30, SE3, 550lw, verticals
Rich D'ANGELO, Wyomissing, PA	TenTec R340, Lowe HF-150, DX Sloper
Tim DAVISSON, Norton, OH	Icom IC718, off-ctr-fed folded dipole
Jerry ERVINE, Hidalgo, TX	R2000, 5 band Vert, wire, Palomar preamp
Jim EVANS, Germantown, TN	RX340, 30 m wire, R* AN-LP1
Bob FRASER, Belfast, ME	Sony ICF-2003 ICF-SW100S 2m LW
John HERKIMER, Caledonia, NY	NRD535D, 199' longwire
George HERR, Olinda, HI	no equipment listed
Ron HOWARD, Monterey, CA	NRD545, LW 160'
Victor JAAR, Longueuil, QUE	Galaxy R530, 30 m wire
Mark LITTLEFIELD, Kenmore, NY	RX340, sloper
Bob MONTGOMERY, Levittown, PA	NRD535D, R390A, RX320, HF150, SE3, T2FD,
Dale PARK, Honolulu, HI	Sangean ATS-818CS
Jim RONDA, Tulsa, OK	FRG-100B, FRG-7, Eavesdropper
Louis Crisler SMITH, Thurmont, MD	R-75, 160' long wire
Mark TAYLOR, Madison, WI	R-75, Sat 800, EWE, Eavesdropper
Joe WOOD, Gray, TN	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 database for the new broadcasting season. Visit the Guide on the new NASWA web site at <http://www.naswa.net/swlguide/>. 

NASWA

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

Tropical Band Loggings

2000-5900 kHz

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

- 2310 **AUSTRALIA VL8A** 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)
- 2315 **USA WWCW** 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 WWCW** 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)
- 3235 **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)
- 3240 **SWAZILAND TWR** 0302-0312, EE rel prg, fair signal, good African opening 12/1! (Bergadano-NJ)
- 3255 **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)
- 3291 **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 mx. 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 musicfsl artists & holiday greetings. F/G 12/18. (Barbour-NH)
- 3310 **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)
- 3340 **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)
- 3945 **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)
- 4052 **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)
- 4319u **DIEGO GARCIA AFN** 2301-2315 AFN program. Weak signal just at/above noise level, but definitely 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-OK) 4754.9, 0110-0245 W PP talk, ID, talk by M w/romantic music, Apparent prayer 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; prgm 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; 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 ancw 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 frecuencia de 4780 kilocyclos, onda corta", music. 12/8. (Brandi-NJ)
- 4790 **PERU R. Atlantida** 1316 M DJ w/pop mx; swisher; poor 12/5. (Crisler-Smith MD)
- 4796.33 **BOLIVIA 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 comunidad", 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 ancw 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 mvs://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 ancw 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)
- 4819 **HONDURAS La Voz Evangelica** Tegucigalpa 0207-0220 SS, W ancw, 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)
- 4830 **CHINA China Huayu 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)
- 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 ancw; 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-Mauritain 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 días, buenas días ... Radio la Hora." Fair signal but fading fast by 1118, 12/19. (D'Angelo/FCDX-PA)
- 4860 **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 ancw. 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, the 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)
- 4910 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 Sikelele 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. Educaçao Rural* 1028 ads, time pips, talk by M, full ID as "Radio Educaçao Rural de Tefe, Amazonas, Brazil" at 1232, more ads. 12/3. (Brandi-NJ)
- 4925 INDONESIA *RRJ* 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 tlc, IDs & TCs; ad string 0128, then a romantic vocal. Fair signal but awful noise made this poor overall; 12/7. (D'Angelo-PA)
- 4940 **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)
- 4965 **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)
- 4970 **INDIA 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 tlc 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)
- 5005 **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)
- 5030 **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)
- 5035 **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 dias," 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-OK) 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 WWCN** 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. Fair 11/4. (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 WWCW** 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)
- 5850 **RUSSIA Special Radio** (via Tashkent); RCI via Sweden hrd here in FF, small but decent signal at early 1830, 12/22. Het on fqy audible from 1857, then RCI off and Special Radio IS, intro in RR, into prgm 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 <http://www.online-translator.com/text.asp?lang=en> 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 this is the first time I have had a useable signal. (Berg-MA)
- 5890 **RUSSIA R.Sea Breeze** Irkutsk; *1400 Japanese, piano mx & talk by M. Fair-Poor 12/13. (Botto Fiora - ITALY) 

Company Store

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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, it's been a busy month. Good listening. Mike 

International Band Loggings

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- 5910 **UKRAINE RUI** Simferopol in EG 0110, "News and Reports", "Music from Ukraine", sked, ID, IS, contact info, into UK lang 0200 (Barbour NH 11/14, Ronda OK 12/7, Davisson OH 12/7)
- 5910 **COLOMBIA Marfil Estereo** Puerto Lleras in SP 0946, campesino pgm lengthy periods of barnyard sounds, TC's, OM anncr 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)
- 5960 **RUSSIA R Tikhii Okean (R. Station Pacific Ocean)** via Vladivostok in RS *0935-1000*, chimes IS, at s/on which starts w/"Moscow Radio-Radio-Radio (echo effect), pop mx, ID "Govorit Vladivostok", also many ID's "Radiostantsiya Tikhii Okean", audio muffled (Howard CA, Berg MA, Barbour NH)
- 5970v **BRAZIL R Itatiaia** Belo Horizonte in PT 0835, conversation, animated as string, ads, tlks, positive ID at 0910 by which time signal was on its way out (Berg MA 11/14)
- 6005 **SPAIN REE** Noblejas in EG 0045, "Radio Waves", two different renditions of the song "Videos Killed the Radio Star", machine gun sound at intervals, f-g (Fraser ME 11/13)
- 60102 **BRAZIL R Inconfidencia** Belo Horizonte in PT 0845, ads, talk, quick IDs, g (Berg MA 12/8)
- 6035 **COLOMBIA LV del Guaviare** in SP 2240, ads, accordion mx, ID 2255, wiped out by CRI Canada relay s/on 2300 (Brandt 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)
- 6055 **TURKEY V of Turkey** in EG 1955, TK songs, tlk re TK athletes in past Olympics, g (Jaar QUE 12/12)
- 6055 **RWANDA R Rwanda** Kigali in FR 2030-2100*, lite vocals, ment Rwanda, fair audio, s/off w/o ancmr (Berg MA 12/10) in FR 2033, pgm of highlife mx, nx at 2054, ID at s/off (D'Angelo FCDX 11/14)
- 6060 **BRAZIL R Tupi** Curitiba in PT 0830, clear ID, fqys, religious pgm, f/o by 0945 recheck Berg MA)
- 6080 **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)
- 6085 **OMAN R Sultanate of Oman** in AR 0226, tlk by YL, ID 0230, mx, // to web feed (Brandt NJ 11/14)
- 6130 **LAOS LNR** Vientiane in Laotian 1142-1204, YL tlk b/w mx bits, vocal ballads, 7 gongs at 1200 and into fanfare and presumed ID, OM/YL w/nx, soundbites, p-f (Barbour NH 11/15, Berg MA 12/9)
- 61398v **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 (Brandt NJ 12/8) in SP 1025, IDs, TC 1033, into pgm of favorite songs (Ronda 11/24)
- 6145 **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)
- 6165 **CROATIA Hrvatska R.** via Deanovec in CR 2200, ID, nx, ment Zagreb, hrd regularly (Jaar QUE 12/9)
- 6185 **BRAZIL R Nacional da Amazonias** Brasilia in PT 0725-0800, songs, fqy, IDs, phone call-in show with occasional Brazilian mx, QRM from weaker stn on same fqy (Littlefield NY 12/2)
- 6188 **PERU R Oriente** Yurimaguas in SP 1108, tlks by OM/YL, group vcls, ID, p (D'Angelo FCDX 11/14)
- 6235nf **KUWAIT VOA** relay in EG 2155-2232, "American Stories" in special EG, ID, 6 pips and into Pahsto nx at 2200, back to EG pgming w/VOA Asian News Now, f (D'Angelo PA 11/19) in EG 2350-2359* special EG bcst 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)
- 6285 **NORTH KOREA V of Korea** Kujang in EG 1006-1040, tlk abt Pres Bush and control of border b/w North and South Korea, several tlks re "the great leader of N Korea", ID 1042, feature re the revival of Korean musical theatre w/songs out of the Broadway tradition (Montgomery PA, Ronda OK, Jaar QUE)
- 6937 **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)
- 7100 **ERITREA V of the Broad Masses of Eritrea** via Asmara in Tigrinya? 0355, nice Horn of Africa instr'l mx followed by tlk, presumed ID, news, poor and fading fast (D'Angelo FCDX/PA 11/14)
- 7110 **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 OK 12/8)

- 7110 **GERMANY IBC Tamil** via Wertachtel in Tamil 0026-0100*, non-stop tlk by OM in Tamil, brief mx segment, YL w/ID and London address, discussion pgm by 2 OMs, 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)
- 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)
- 7250 **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)
- 7270 **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 Egyp RTV Union Abu Zaabal** in EG/AR 0158, AR mx, pips, ID, sked, "Holy Kor'an and its meaning" feature, nx, weak but clear (Barbour NH 12/5)
- 7320 **IRAN VOIRI Sirjan** in EG 2010, rpt on the World Mining Conference at Teheran, f (Fraser ME 11/17)
- 7330 **RUSSIA R Tikhyy 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, //9360 stronger but obliterated at 1855 w/WYFR s/on, 7530 down to whisper at s/off (Barbour 12/5)
- 7600 **BULGARIA R Varna** in BG 2306, ezl pops/ballads, banter b/w sels, ID 2332, f (Barbour NH 11/20)
- 7811usb **USA AFRTS** relay via Key West, FL in EG 0210, Eagles vs. Seahawks 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, cmntry 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 Mac'kerell's DRM rpt, vg (Park HI 11/21)
- 9990 **EGYPT Egyp RTV Union** in EG 2120, nx re Egyptian elections interspersed with Mideast music, fair (Wood TN 11/05) in AR 2025, music, IS, nx, fyqs, 3 pips 2114, EG ID, NA*, f-g (Ervin CA 11/25)
- 11133l**sb** **ARGENTINA Radio La Red** (MW) relay Buenos Aires in SP 0148, ad string, ID 0150, brief vocal, into long talk by 2 OMs, 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)
- 11690 SOUTH AFRICA R *Okapi* relay via Meyerton in Vern 0419, OM/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)
- 11735 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)
- 11810 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)
- 11845 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, ancmts, nx including items from other reporters, fair signal w/QRN, //9525 w/much weaker signal, rare catch at this QTH (Evans TN 11/21)
- 11860 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)
- 11880 AUSTRALIA *ABC* in EG 0745, again carrying domestic pgrmg, ABC live sports, IDs, p-f with sig going downhill by 0830, into RA prgmg 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)
- 12010 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)
- 12040 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 (Ervin 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)
- 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)
- 13725 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)
- 13755 NORTHERN MARIANAS *VOA* relay Tinian Is. in Special EG 2230, VOA News, VOA Economic Report, and American Mosaic 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 prgm 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 **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)
- 21680 **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 (Brandt 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 (Brandt NJ 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 (Brandt 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 (Brandt 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 (Brandt 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 Motpur 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= Montsineri 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= Taiwan, 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, CA= Central America, Eu= Europe, FE= Far East, LA= Latin America, ME= Middle East, NA= 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 Eu	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	

RADIO AUSTRALIA	0000-0100	As Pa	9660 12080 13670 15240 15415> 17715 17750 17775 17795
RADIO AUSTRALIA	0100-0200	As Pa	9660 12080 13670 15240 15415 17715 17750 <17775 17795
RADIO AUSTRALIA	0200-0400	As Pa	9660 12080 13670 15240 15415 15515 17750 21725
RADIO AUSTRALIA	0400-0500	As Pa	9660 12080 13670 15240 15415> 15515 17750 21725
RADIO AUSTRALIA	0500-0600	As Pa	9660 12080 13670 15160 15240 15415> 15515 17750
RADIO AUSTRALIA	0600-0700	As Pa	9660 12080 13670 15160 15240 15415 15515 17750
RADIO AUSTRALIA	0700-0800	As Pa	9660 9710 12080 13630 15160 15240 15415 17750
RADIO AUSTRALIA	0800-0900	As Pa	5995 9580 9590 9710 12080 13630 15240v 15415> 17750
RADIO AUSTRALIA	0900-1000	As Pa	9580 9590 11880 15240v 15415>
RADIO AUSTRALIA	1000-1100	As Pa	9580 9590 11880 15240v 15415
RADIO AUSTRALIA	1100-1200	As Pa	5995 6020 9475 9560 9580 9590 11880 <15240v
RADIO AUSTRALIA	1200-1300	As Pa	5995 6020 9475 9560 9580 9590 11880
RADIO AUSTRALIA	1300-1400	As Pa	5995 6020 9560 9580 9590
RADIO AUSTRALIA	1400-1500	As Pa	5995 6080 7240 9475> 9590 11660> 11750
RADIO AUSTRALIA	1500-1600	As Pa	5995 6080 7240 9475 9590 11660 11750
RADIO AUSTRALIA	1600-1700	As Pa	5995 6080 7240 9475 9710 11660
RADIO AUSTRALIA	1700-1800	As Pa	5995 6080 9475 9580 9710 11880
RADIO AUSTRALIA	1800-1900	As Pa	6080 7240 9475 9580 9710 11880
RADIO AUSTRALIA	1900-2000	As Pa	6080 7240 9500 9580 9710 11880
RADIO AUSTRALIA	2000-2100	As Pa	9500 11650 11660 11880 12080
RADIO AUSTRALIA	2100-2200	As Pa	7240 <9500 9660 11650 11660 <11695 12080 13630 15515
RADIO AUSTRALIA	2200-2300	As Pa	12010 13630 15230 15240v 15515 17785 17795
RADIO AUSTRALIA	2300-0000	As Pa	9660 12010 12080 13670 15230 <15240v 15415> 17750> 17785 17795

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
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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
RADIO AUSTRIA INT	1305-1320	Eu	6155 13730	Monday
RADIO AUSTRIA INT	1315-1330	As Au	17855	Tuesday to Friday
RADIO AUSTRIA INT	1345-1400	As Au	17855	Monday to Friday
RADIO AUSTRIA INT	1345-1400	Eu	6155 13730	Tuesday to Friday
RADIO AUSTRIA INT	1605-1620	NAM	13675c	Monday
RADIO AUSTRIA INT	1615-1630	NAM	13675c	Tuesday to Friday
RADIO AUSTRIA INT	1645-1700	NAM	13675c	Monday to Friday
RADIO AUSTRIA INT	2343-2358	SAM	9870	Monday to Friday

Weekend schedule:

RADIO AUSTRIA INT	0005-0030	CAM	7325	Sunday and Monday
RADIO AUSTRIA INT	0033-0100	NAM	7325	Sunday and Monday
RADIO AUSTRIA INT	0605-0630	ME	17870	repeated at 0535-0600 Sunday
RADIO AUSTRIA INT	1305-1330	Eu	6155 13730	repeated at 1335-1400 Saturday and Sunday
RADIO AUSTRIA INT	1305-1330	As Au	17855	repeated at 1335-1400 Saturday and Sunday
RADIO AUSTRIA INT	1605-1630	NAM	13675c	repeated at 1635-1700 Saturday and Sunday
RADIO AUSTRIA INT	2335-0000	SAM	9870	Saturday and Sunday

The station also has a short English news bulletin to Europe at 0709 on 6155.

VOICE OF AZERBAIJAN	1700-1730	ME	6110
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RADIO BANGLADESH	1230-1300	As	7185
RADIO BANGLADESH	1745-1900	Eu	7185

BELARUS RADIO MINSK	0300-0330	NAM	5970 7210	Mon, Tue, Wed, Fri, Sat
BELARUS RADIO MINSK	0330-0400	NAM	5970 7210	Sunday
BELARUS RADIO MINSK	2030-2100	Eu	7125 7340 7440	Mon, Tue, Thur, Fri
BELARUS RADIO MINSK	2200-2230	Eu	7125 7340 7440	Sunday

RADIO BULGARIA	0000-0100	NAM	7400 9700
RADIO BULGARIA	0300-0400	NAM	7400 9700
RADIO BULGARIA	0730-0800	Eu	9500 11500
RADIO BULGARIA	1230-1300	Eu	11700 15700
RADIO BULGARIA	1830-1900	Eu	5800 7500
RADIO BULGARIA	2200-2300	Eu	5800 7500

RADIO CANADA INT	0000-0057	SEAs	9880x
RADIO CANADA INT	0000-0159	N&CAm	9755
RADIO CANADA INT	1200-1259	SEAs	7105y 9665y
RADIO CANADA INT	1300-1329	SEAs	9665y 9725y
RADIO CANADA INT	1400-1659	N&CAm	9515 13655 17820
RADIO CANADA INT	1500-1557	As	9635x 11975x
RADIO CANADA INT	1800-1859	Af	7185x 9770x 11875w 17740
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	6020q 9570q/6075 7180 /7345
CHINA RADIO INT	0100-0200	NAm/As/Eu	6005c 6020q 9570q 9580N/6075 7180 /7345
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 9755g
CHINA RADIO INT	0500-0600	NAm/At/As	5960c 6190c/7220q 11750q 17505/ 11880 15350 15465 17505 17540
CHINA RADIO INT	0600-0700	NAm/At/As	6115c/17505 /11770 11880 15140 15350 15465 17505 17540
CHINA RADIO INT	0700-0900	Eu/As	11785q 17490 /11880 15350 15465 17540
CHINA RADIO INT	0900-1100	Eu/Pa	17490/ 15210 17690
CHINA RADIO INT	1100-1200	Eu/NAm	13665q 17490 / 5960c
CHINA RADIO INT	1200-1300	As/Pa	9730 11980 /9760 11760
CHINA RADIO INT	1200-1300	Eu	13665q 13790 17490
CHINA RADIO INT	1300-1400	NAm/As	9570h 11885c 15230c/11980
CHINA RADIO INT	1300-1400	Eu/Pa/LA	13610 13790 /11760 11900/
CHINA RADIO INT	1400-1500	Eu/As	9700 9795 13610/ 9560 11675 11765 11775
CHINA RADIO INT	1400-1500	NAm/Af	13675c 13740h 15230c/13685e 17630o
CHINA RADIO INT	1500-1600	Eu/As/Af	9435 9525/ 7160 9785 11775/13685e 17630o
CHINA RADIO INT	1500-1600	NAm	13740h
CHINA RADIO INT	1600-1700	Eu/Af	7255 9435 9525 / 6100n 9570 11900
CHINA RADIO INT	1700-1800	Eu/Af	6100 7255 / 6100n 9570 11900
CHINA RADIO INT	1800-1900	Eu	6100
CHINA RADIO INT	1900-2100	Af As	7295 9440
CHINA RADIO INT	2000-2130	Af	11640o 13630o
CHINA RADIO INT	2000-2200	Eu	5960q 7190 7285q 9490 9600
CHINA RADIO INT	2200-2300	Eu	7170r
CHINA RADIO INT	2300-0000	NAm/As	5990h 6040c 11970c/ 5915 7180
VOICE OF CROATIA	0300-0330	NAm	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	Eu/Af	5930/ 15710
CZECH RADIO PRAGUE	1800-1827	Eu/As Pa	5930/ 9400
CZECH RADIO PRAGUE	2100-2127	Eu/As Pa	5930/ 9430
CZECH RADIO PRAGUE	2230-2257	Af NAm	5930 7345
CZECH RADIO PRAGUE	2330-2357	NAm	5930 7345
HCJB ECUADOR	1100-1330	CAm Eu	12005 21455
EGYPT RADIO CAIRO	0200-0330	NAm	7270
EGYPT RADIO CAIRO	1215-1330	sAs	17835
EGYPT RADIO CAIRO	1630-1830	Af	11785
EGYPT RADIO CAIRO	2030-2200	wAf	15375
EGYPT RADIO CAIRO	2115-2245	Eu	9990
EGYPT RADIO CAIRO	2300-0030	eNAm	11885

EQ GUINEA	0600-0900	Af	15190	
RADIO AFRICA	1400-2200	Af	15190	
Sign off and sign off times are variable, transmissions irregular				
RADIO ETHIOPIA	1600-1700	Af	7165	9560
RADIO FRANCE INT	0400-0430	eAf	7315m	9555
RADIO FRANCE INT	0500-0530	eAf	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	6030i	7290w
GERMANY D WELLE	0400-0500	Af	6180k	9710w 15445i
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	Eu	6140j	
GERMANY D WELLE	1300-1600	Eu	6140j	
GERMANY D WELLE	1600-1700	As	6170i	9795i 11695w
GERMANY D WELLE	1900-2000	Af	11865s	12025w 15470s
GERMANY D WELLE	2000-2100	Af	6145k	9735w 9830k 12025w 15410i
GERMANY D WELLE	2100-2200	Af	7280w	9615i 11690k
GERMANY D WELLE	2200-2300	As	6000i	6225 Alma Ata
GERMANY D WELLE	2300-0000	As	6070i	9555k 9815i
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	EAs	11870	
AWR GUAM	1330-1400	SEAs	15660	not Sunday/Wednesday
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)
KTWR GUAM	0800-0930	Pa	11840	(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	JPa 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

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
VoIR IRAN	1530-1630	seAs	7330 9940
VoIR IRAN	1930-2030	Eu Af	6010 7320 7350 9855 9925 11695
IRELAND	0000-2400	Eu	4025 6220 7465 9385 Laser Hot Hits
IRELAND	1600-2330	Eu	3910 6295 12255 Reflections Europe Sunday
KOL ISRAEL	0430-0445	Eu Am Pa	7545 9345 17600 (6280 & 15640 replace 9345, 17600 from 15th Dec)
KOL ISRAEL	1030-1045	Eu 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)
IRRS 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	Eu	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	6030u 17560/ 11860p 15325 17810 17845/ 11935b 17825
RADIO JAPAN	0300-0400	Pa	21610
RADIO JAPAN	0500-0600	Eu/NAm/As	5975u 7230u/ 6110c/15195 17810/ 21755 Pa
RADIO JAPAN	0600-0700	Eu/NAm/As	7230u/11690 /11715 11760 11740p 15195/21755 Pa
RADIO JAPAN	1000-1100	Eu/Pa/ME	17585d/21755 /17720d ME
RADIO JAPAN	1000-1200	As/NAm	9695 11730 / 6120c
RADIO JAPAN	1400-1500	As/Pa	7200 9875 /11840f
RADIO JAPAN	1500-1600	As/NAm	6190 7200 9875 / 9505
RADIO JAPAN	1700-1800	NAm/Eu/Af	9535/ 11970 /15355m
RADIO JAPAN	2100-2200	Eu/Af/NAm	6090u 6180u/11855f/17825 / 6035p Pa
RADIO JAPAN	0100-0200	Pa	17685
regional	0600-0700	Hawaii	17870
services	2100-2200	Hawaii	21670
RADIO JORDAN	1400-1730	Eu 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	9650c
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	3955u
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
LAOS LNR Vientiane	1330-1405	As	7145

LIBYA VO AFRICA	0220-0225	Af	7320	
LIBYA VO AFRICA	1300-1400	Af	21675	21695
LIBYA VO AFRICA	2220-2225	Af	7320	
all frequencies are relayed via Issoudon, France				
LITHUANIA R VILNIUS	0030-0100	NAm	9875	
LITHUANIA R VILNIUS	0930-1000	Eu	9710	
LITHUANIA R VILNIUS	2330-0000	NAm	7325	
VOICE OF MALAYSIA	0600-0830	As/Pa	6175	9750 15295.
MOLDOVA	1700-1710	Eu	5960	Radio Pridnestrovye Monday to Thursday
MOLDOVA	1700-1720	Eu	5960	Radio Pridnestrovye Friday
VOICE OF MONGOLIA	1000-1030	As	12085	
VOICE OF MONGOLIA	1500-1530	Eu	12015	
VOICE OF MONGOLIA	2000-2030	Eu	12015	
TWR MONTE CARLO	0800-0920	Eu	9800	11865q (Saturday and Sunday 0745-0920)
RADIO NEPAL	0215-0230	As	5005	
RADIO NEPAL	1415-1425	As	5005	
RADIO NETHERLANDS	0000-0200	NAm	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	As Pa	9345T	12080t 15595t
RADIO NETHERLANDS	1800-1900	Af	6020t	9895 11655t
RADIO NETHERLANDS	1900-2100	Af	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	Pa	15530	
RADIO NEW ZEALAND	1300-1750	Pa	9870	
RADIO NEW ZEALAND	1751-1850	Pa	11980	
RADIO NEW ZEALAND	1851-2235	Pa	15720	
RADIO NEW ZEALAND	2236-0359	Pa	17675	
VOICE OF NIGERIA	0500-0700	Eu	15120	
VOICE OF NIGERIA	1000-1500	Eu	15120	
VOICE OF NIGERIA	1700-1900	Eu	15120	
VOICE OF NIGERIA	1900-2100	Af	7255	
RADIO OMAN	0300-0400	NAm	15355	
RADIO OMAN	1400-1500	Eu	15140	
RADIO PAKISTAN	0045-0115	sAs	7445	9340
RADIO PAKISTAN	0800-0810	Eu	15100	17835 also 1100-1104
RADIO PAKISTAN	1600-1615	Af 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	Pa	15135	17780
RADIO ROMANIA INT	1300 1400	Eu	15105	17745
RADIO ROMANIA INT	1800-1900	Eu	7120	9640
RADIO ROMANIA INT	2130-2200	Eu NAm	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	NAM	7180	7350 15425 15475 15595
VOICE OF RUSSIA	0400-0500	NAM	7150	7180 7350 9840 12010 15425 15475
VOICE OF RUSSIA	0500-0600	NAM	7150	7180 9840 12010 15425
VOICE OF RUSSIA	0600-0800	Pa	17665	17805
VOICE OF RUSSIA	0800-0900	Pa	17495	17665 17805

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	Eu/Af	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	Eu	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
S AFRICA R LEAGUE	1900-2000	sAf	3215
REE SPAIN	0000-0059	NAm	6055
REE SPAIN	2000-2059	Eu Af	9595 9680
REE SPAIN	2200-2259	Eu Af	6125 9595
SLBC SRI LANKA	0030-0430	As	6005 9770 15748
SLBC SRI LANKA	1330-1530	As	7275 11905 Hindi and English service
SWAZILAND TWR	0430-0500	Af	3200 4775
SWAZILAND TWR	0500-0600	Af	3200 4775 9500
SWAZILAND TWR	0600-0645	Af	11640n (-0615 Saturday and Sunday)
SWAZILAND TWR	0600-0900	Af	4775 6120 9500
SWAZILAND TWR	1700-2030	Af	3200
RADIO SWEDEN	0130-0200	AsPa	11550t
RADIO SWEDEN	0230-0300	NAm	6010c
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	9520j
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

TAIWAN R TAIPEI INT	1600-1700	As	11815	
TAIWAN R TAIPEI INT	1700-1800	Af	11850	Issoudun, France
TAIWAN R TAIPEI INT	1800-1900	Eu	3965	Issoudun, France
TAIWAN R TAIPEI INT	2200-2300	Eu	9355f	
RADIO TAJIKISTAN	0345-0400	ME	7245	
RADIO TAJIKISTAN	1645-1700	ME	7245	
RADIO THAILAND	0000-0030	Af	9680	
RADIO THAILAND	0030-0100	eCNAm	5890	Greenville
RADIO THAILAND	0300-0330	wCNAm	5890	Delano
RADIO THAILAND	0530-0600	Eu	13770	
RADIO THAILAND	1230-1300	As Pa	9810	
RADIO THAILAND	1400-1430	As Pa	9725	
RADIO THAILAND	1900-2000	Eu	9805	
RADIO THAILAND	2030-2045	Eu	9535	
VOICE OF TURKEY	0400-0450	Eu NAm/As	6020/	7240
VOICE OF TURKEY	1330-1420	Eu/AsPa	15155/	11735
VOICE OF TURKEY	1930-2020	Eu	6055	
VOICE OF TURKEY	2130-2220	As Pa	9525	
VOICE OF TURKEY	2300-2350	Eu NAm	5460	
UK BIBLE VOICE	0030-0100	SEAs	6010d	Friday, Saturday, Sunday
UK BROADCASTING	0800 0945	WEu	5945j	Sunday (0815-0900 Friday, 0800-0915 Saturday)
UK NETWORK	1030-1100	Korea	5895r	Sunday
UK	1130-1200	China	5950r	Saturday and Sunday (Thursday 1230-1245)
UK	1400-1500	SEAs	13645	Saturday and Sunday via Tashkent (-1545 Saturday)
UK	1500-1600	SEAs	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	EEu	6015j	Saturday (1900-1930, 2000-2030 Sunday)
UK	1900-2000	Af	7260j	Saturday and Sunday
UK	1900-2015	ME	9430	Sunday via Nauen (1915-2000 Friday, 1900-2000 Saturday)
UK CHRISTIAN VOICE	0500-0700	WAF	9430w	
UK	0515-1545	Af	9555n	
UK	0700-0900		15640w	
UK	1500-1800	WAF	15680w	
UK	1800-2000	WAF	9765w	
UK	2000-2100	WAF	7285w	
UK FAR EAST BC	0115-0130	India	5885	Yerevan Tuesday, Wednesday, Thursday, Friday
UK ASSOCIATION	1400-1415	SAs ME	7370r	
	1500-1545	India	7340r	
	1730-1745	SAs ME	7345r	
RADIO UKRAINE INT	0100-0200	NAm	5910	
RADIO UKRAINE INT	0400-0500	NAm	5910	
RADIO UKRAINE INT	1200-1300	Eu	9925	
RADIO UKRAINE INT	2200-2300	Eu	5840	
UNITED NATIONS	1730-1745	Af	7170n	9565u 17810i Monday to Friday
UNIVERSAL LIFE	0100-0130	As	7145j	Sunday
UNIVERSAL LIFE	1900-1930	ME	7105j	Sunday
USA KAIJ	0000 1400	NAm FE	5755	
USA KAIJ	1400-0000	NAm FE	13815	
USA KJES	0200-0330	NAm	7555	
USA KJES	1400-1600	NAm	11715	
USA KJES	1900-2000	Pa CAm	15385	
USA KTBN	0000-1600	NAm	7505	
USA KTBN	1600-0000	NAm	15590	
USA KWHR	0100-0500	As	17655	
USA KWHR	0500-0800	As	11565	15610
USA KWHR	0800-1100	As	9930	11565

USA 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	Eu ME	6110J	9855w
USA	1900-2000	Af	9845w	
USA PAN AMERICAN	0030-0045	SEAs	5945J	Sunday
USA BROADCASTING	1430-1500	ME	13820J	Saturday (Sunday 1430-1445, 1545-1630, Th 1600-1630)
USA	1430-1445	ME	13800J	Sunday
USA	2000-2015	Af	7260J	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
USA VOA	0300-0400	Af	4930	6035 6045 6080 7290 <7340 9885
USA VOA	0400-0500	Af	4930	4960 6080 <7290 9575 9775 <9885
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	1500-1600	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 15580
USA VOA	2030-2200	Af	4930	6035 11975 13710 15240 15580
USA VOA	0000-0030	Afghanistan	6235	
USA VOA	2030-2130	Afghanistan	7595	
USA VOA	2130-0000	Afghanistan	6235	
USA VOA	0900-1100	Eu ME	15615	
USA VOA	1100-1200	Eu ME	13685	15615 17755
USA VOA	1500-1700	Eu ME	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	FE 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 WBCQ	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 WBDH	0000-2400	NAm	5920	Spanish and English
USA WEWN	0000-0500	NAm	6875	
USA 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 Eu	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 WHRI	0900-1000	EuAf NAm	7315	7520
USA 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

USA WHRI	1900-2100	EuAf NAm	9840 15285 15665
USA WHRI	2100-2200	EuAf NAm	9840 11855 15665
USA WHRI	2200-2300	EuAf NAm	7490 11855 15665
USA WHRI	2300-0100	EuAf NAm	5850 7315 7490

USA WINB	1100-1300	NAm	9320
USA WINB	1300-2200	NAm	13570
USA WINB	2300-0400	NAm	9320

On Mondays to Fridays 9740 is used 1600-2100 instead 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
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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 of November 2005

USA WTJC	0000-2400	NAm	9370
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USA WWCRC	0000-0200	NAm	3215 5070 5930 7465
USA WWCRC	0200-1000	NAm	3215 5070 5765 5935
USA WWCRC	1000-1100	NAm	5070 5765 5935 9985
USA WWCRC	1100-1300	NAm	5070 5765 5935 15825
USA WWCRC	1300-1400	NAm	5765 5935 9985 15825
USA WWCRC	1400-1600	NAm	7465 9985 13845 15825
USA WWCRC	1600-1900	NAm	9985 12160 13845 15825
USA WWCRC	1900-2100	NAm	9975 12160 13845 15825
USA WWCRC	2100-2200	NAm	7465 9975 12160 13845
USA WWCRC	2200-2300	NAm	5070 7465 9985 13845
USA WWCRC	2300-0000	NAm	3215 5070 9985 13845

This schedule is valid to 28th February

USA WWCRC	0000-0100	NAm	3215 5070 7465 13845
USA WWCRC	0100-0200	NAm	3215 5070 5935 7465
USA WWCRC	0200-1000	NAm	3215 5070 5765 5935
USA WWCRC	1000-1100	NAm	5070 5765 5935 9985
USA WWCRC	1100-1300	NAm	5070 5765 5935 15825
USA WWCRC	1300-1500	NAm	7465 9985 13845 15825
USA WWCRC	1500-1900	NAm	9985 12160 13845 15825
USA WWCRC	1900-2200	NAm	9975 12160 13845 15825
USA WWCRC	2200-2300	NAm	7465 9985 12160 13845
USA WWCRC	2300-0000	NAm	5070 7465 9985 13845

This schedule is valid from 1st March

USA WWRB	0000-0500	NAm	3185 5050 5745 6890
USA WWRB	1300-1500	NAm	9320
USA WWRB	1500-1700	NAm Af	9320 15250
USA WWRB	1700-2300	NAm Eu Af	9370 11915 15250
USA WWRB	2300-0000	NAm	6890

USA WYFR	0000-0100	NAm/LA	6085 9505 9715/ 5985 11855 15170 15400
USA WYFR	0100-0200	NAm	6065 9505
USA WYFR	0100-0700	As	15060v
USA WYFR	0200-0300	NAm/LA	6065 9505 9525/ 5985 11855
USA WYFR	0300-0400	NAm/LA	6065 9505/ 9985 11740
USA WYFR	0400-0500	Eu/NAm	7780/ 6065 6855 9505 9715
USA WYFR	0500-0600	Eu/NAm	7520/ 6855
USA WYFR	0600-0700	NAm/LA	9860/ 6000
USA WYFR	0600-0700	Eu/Af	7780 11530/ 11580
USA WYFR	0700-0800	Eu/NAm/LA	7780/ 5985 6855 7455 9715/ 9495
USA WYFR	0700-0900	Af	9985
USA WYFR	0800-1000	NAm	5950 6855 7455
USA WYFR	0900-1100	As	9450r
USA WYFR	1000-1100	NAm	5950 6855 6890 7455

USA WYFR	1100-1200	NAm/LA	5950 6890 7780 11830/ 5810 11725
USA WYFR	1200-1300	NAm/LA	6890 7780 11970/11530
USA WYFR	1300-1400	NAm	7780 11830 11855 11970
USA WYFR	1300-1500	As	7580r 11560v
USA WYFR	1400-1500	NAm	11565 11855 13695 17760
USA WYFR	1500-1600	NAm/LA	11565 11855 17760/15210
USA WYFR	1500-1600	As	6280v 15520d
USA WYFR	1600-1700	NAm/LA	11565 11830 13695 17760/ 6085
USA WYFR	1600-1700	As	15520d
USA WYFR	1600-1700	Eu/Af	18980 21455/ 17690
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
USA WYFR	1900-2000	Eu/Af	15565 18980/ 3230n 6020t 15115 15195i
USA WYFR	1900-2000	NAm/LA	13695 17535 17555/ 6085
USA WYFR	2000-2100	Eu/Af	5745 6855 7360r 7580/ 3230n 6020t 15115 15195i
USA WYFR	2000-2200	NAm/LA	17535 17555/ 17575
USA WYFR	2100-2200	Eu/Af	5745 6855 7360r 7580/ 11875i(from 2115) 15565
USA WYFR	2200-2300	Af	11875i(to 2315) 21525
USA WYFR	2200-2300	NAm/LA	11740/ 9690
USA WYFR	2300-0000	NAm/LA	11740/ 5985 11855 15170 15400
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	0500-0530	Af	7360 9660 11625
VATICAN RADIO	0600-0630	Eu	4005 5885 7250
VATICAN RADIO	0630-0700	Af	9660 11625 13765
VATICAN RADIO	0730-0745	Eu AsPaAf	4005 5885 6185 7250 9645 11740 15595
VATICAN RADIO	1530-1550	As Pa	9310 11850 13765
VATICAN RADIO	1715-1730	Eu AsPaAf	4005 5885 7250 9645 9755
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
VOICE OF VIETNAM	1500-1530	SEAs	7285 9840
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
ZAMBIA CHRISTIAN V	1700-0400	Af	4965

19th Annual Winter SWL Fest

Sponsored by **NASA**

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 (I-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 12065

NAME: _____ (SPOUSE'S NAME) _____

ADDRESS: _____

CITY: _____ E-MAIL: _____ (REQ. FOR REG. CONFIRMATION)

CHECK ONE OR MORE

REGISTRATION RECEIVED BY FEBRUARY 21, 2006:	LATE OR ON-SITE REG. RECEIVED AFTER FEBRUARY 21, 2006:	BANQUET:
<input type="checkbox"/> Full (\$47)	<input type="checkbox"/> Full (\$55)	<input type="checkbox"/> Roast Beef
<input type="checkbox"/> Two-Day Partial (\$17)	<input type="checkbox"/> Two-Day Partial (\$20)	<input type="checkbox"/> Chicken
<input type="checkbox"/> One-Day Partial (\$9)	<input type="checkbox"/> One-Day Partial (\$10)	RAFFLE TICKETS:
<input type="checkbox"/> New! Lunch-only Saturday (\$23)	<input type="checkbox"/> One-Day Partial w/Lunch (\$25)	<input type="checkbox"/> raffle tickets, please
<input type="checkbox"/> New! Spouse Lunch-only Sat (\$13)	<input type="checkbox"/> Full Spouse/son/daughter (\$40)	(\$1 ea./ 6 for \$5/ 13 for \$10)
<input type="checkbox"/> Full Spouse / etc. (\$32)	<input type="checkbox"/> Banquet only (Spouse) (\$25)	Registration Fee Enclosed \$ _____
<input type="checkbox"/> Banquet only (Spouse) (\$19)	<input type="checkbox"/> Spouse etc. Lunch-only (\$15)	Raffle Tickets Fee Enclosed \$ _____
<input type="checkbox"/> Student (\$5)	<input type="checkbox"/> 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.
Radio Monitoring: the How-to Guide by Skip Arey. Guide for new listeners to MW, HF, VHF and above.	17.95 +4.00 s/h US +8.00 s/h Can.
Passport to Worldband Radio 2005 Great source of information about shortwave stations, frequencies in use and schedules.	\$20.95 +4.00 s/h US +8.00 s/h Can.
World Radio and TV Handbook 2005 Long considered to be the bible for shortwave listeners.	\$27.95 +4.00 s/h US +8.00 s/h Can.
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NASWA T-Shirts Return of a favorite in NASWA blue with the club logo.	\$14.00 S-XL 16.00 XXL +4.00 s/h US +8.00 s/h Can.
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NASWA Coffee Mugs 11 oz. white mug with the club logo on two sides. Return of a favorite with the club logo in NASWA blue.	\$5.50 +5.50 s/h US +11.00 s/h Can.

Please make all checks payable in U.S. funds to "The NASWA Company Store".



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