PN4学和 Journal

VOLUME XLII NUMBER 12

DECEMBER 2002

























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N4 Notes

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

Season's greetings to all members and their families. It's never too late to sneak a Universal Radio catalog in front of a family member with the appropriate pages folded and specific items circled as a reminder of what you want.

Nobuya Kato mentions that the Japan Short Wave Club (JSWC) will be doing another special broadcast in commemoration of its 50th anniversary over Adventist World Radio from Agat, Guam. The broadcast will feature Japanese and English segments on 15 December 2002 from 2100 UTC on 11960 and 11980 kHz and on 16 December 2002 from 1300 UTC on 11755 and 11980 kHz. The program host will be Masaru Kawagoe with JSWC member Toshimichi Ohtake as quest. A special QSL card from the JSWC will be issued for correct reception reports sent to: Japan Short Wave Club (JSWC), 50th Anniversary Committee, P. O. Box 138, Yokohama Port, 231-8691 Japan. They are looking for reports in English with 1 IRC or US\$1.00 return postage.

December wraps up another calendar year although the DX season is in full swing. I usually manage to do some extra listening this time of the year because of a backlog of unused vacation days I need to take before the New Year commences. This year appears to be no different for me. Whatever your pleasure, make it a safe and happy time.

The 2003 edition of Passport to World Band Radio is out. It's another terrific volume filled with useful information about the shortwave bands. The blue pages are a terrific resource while looking for an exotic station. The address section is always valuable to hobbyists writing to stations for information or QSL requests. Each year I thoroughly wear out my copy of Passport; it passes the test each year. Besides highly

useful and accurate information, the book holds up to daily use. Kudos to Larry Magne and the entire Passport gang at IBS International for another superb volume.

Adrian Peterson reports the results of the 2002 Adventist World Radio "Wavescan" DX contest that ran throughout the month of September 2002. Following an appraisal of all entries, "Wavescan" announced the World Winners for the year 2002. The First Place winner will receive the coveted Bronze Medallion, and all three will receive an autographed copy of Jerry Berg's book, On the Shortwaves. The three World Winners for 2002 are: First-Peter Boeck, Offenbach, Germany, Second—Nucio Ribas, Parana, Brazil, and Third—Dr. Floyd Layer, Terre Haute, Indiana USA. The additional Continental Winners will receive a copy of the 2003 edition of either Passport to World Band Radio or World Radio TV Handbook. The Continental Winners for 2002 are: Africa-David L. Gordon (South Africa), Americas— Ruben G. Margenet (Argentina), Asia-Nobuya Kato (Japan), Europe—Gunter Jacob (Germany), Pacific—Peter Grenfell (New Zealand) and North America-Matthew Weitendorf (USA). In addition, a new category was established and this is listed as "Entries of Merit" and each will receive an AWR Souvenir. There were 25 such recipients. Congratulations to all! AWR is inviting listeners to enter the 2003 contest that is scheduled to run during the month of September. Listeners will be asked to submit a list of unique QSLs (QSLs that you own that you consider no one else in the world has). Full details to follow later in 2003.

Check out this month's Musings for some interesting thoughts about antenna setups. I am always amazed at the number of possibilities to address specific circumstances. Once again, NASWA members show that they can be very creative when it comes to obtaining the best results possible to enjoy our common hobby.

Also from Adrian Peterson we learn that Adventist World Radio inaugurated a new shortwave transmitter on the island of Guam, replacing the former unit that was previously identified as KSDA3. Last year, AWR embarked on a modernization program at its flagship station KSDA, Guam. This project included the replacement of all four transmitters. Reception reports on the new KSDA3 are welcome (Adventist World Radio, 39 Brendon Street, London W1H 5HD, England) and you can ask for a special endorsement on your OSL card confirming the usage of this new transmitter.

The Rhein-Main-Radio-Club will host the 2003 European DX Council Conference in the Frankfurt, Germany area on 13–17 August 2003. The Danish Shortwave Club International will hold its Annual General Meeting and DX Camp at Vejers Beach, Denmark on 16–18 May 2003. Further details will appear in the Calendar of Events, as they become available.

Here's a reminder that Bob Padula (bobpadula@bigpond.com) of the Electronic DX Press that the 14th edition of the Australasian Shortwave Guide (ASWG) is now available. The quide contains 36 pages of information, covering the international shortwave transmission period that commenced on 27 October 2002, and concludes on 30 March 2003, the BO2 period. ASWG provides comprehensive information about English shortwave schedules to Australia, Asia, the Far East, the Indian sub-continent, the Pacific, and for broadcasts in all languages to Australia and the Pacific. The data is arranged in two sections, by studio country and starting time. Each entry shows broadcasting organization, frequency, starting time, finishing time, language, target area, transmitter site, transmitter country, studio country, and days of operation. The ASWG costs A\$10.00 posted to Australian addresses, US\$10.00/A\$20.00/10 Euros/7 IRCs posted airmail to any other country. Payment may be in cash, bank check, personal check, postal order, mint Australian stamps, IRCS or credit card via PayPal (NEW!). A soft copy version is now available. It will be sent via e-mail, as an unprotected ZIPped Word 7.0 document, compressed to 100 KB; the document or parts of it may then be printed (36 pages). Data in the tables may be searched and/or sorted as required. The soft version is A\$10.00 to Australian addresses and US\$5.00 or Euro 5 to any other country. Checks must be drawn on Australian banks, in Australian currency. Orders and payments should be sent to the author: Bob Padula, 404 Mont Albert Road, Surrey Hills, Victoria 3127, Australia.

Last call (yeah, I know I said that last month but this time I mean it, hi!) for contacting Ron Hunsicker (1238 Cleveland Avenue, Wyomissing, PA 19610-2101; e-mail: ronhunsi@ptd.net) if you are interested in forming a regional NASWA chapter in the greater Reading, PA area. Anyone that has an interest in shortwave radio is welcome to participate. Ron is willing to be the coordinator so please contact him if you are interested in meeting other club members on a periodic basis. Hopefully we will have an announcement about an upcoming meeting in the near future.

Each month more and more members sign up for the latest hot DX news, loggings, and information on the shortwave bands with the club's weekly electronic Flashsheet, edby Sheryl Paszkiewicz, spasz@dataplusnet.com or P.O. Box 716 Manitowoc, WI 54221-0152 for non-electronic submissions. Please feel free to join your fellow club members in receiving our electronic newsletter, which 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 members. Deadlines are posted in the NASWA Flashsheet each week. If you are a current member of the club and want to receive the electronic NASWA 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. I have another missing person this month! Michael Quinn, please contact me. Thanks!

Remember to please direct all communications about subscriptions, bulletin delivery issues, etc. to **Bill Oliver** at the club's Levittown address or to his electronic address, weoliver@worldnet.att.net. The regular postal address is the familiar 45 Wild-

flower Road, Levittown, PA 19057. Inquires sent directly to me in 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 (December 1977)

Gilfer Associates was seeking authors to develop potential manuscripts on topics related to shortwave listening and international broadcasting. Sam Barto will leave Log Report B to replace Bill Oliver as asl Report editor. Steven Wisenblood will become the new Log Report B editor in January. In the Shortwave Center, Robert Fraser wrote about shortwave station WRUL in Scituate, MA while Malcolm Kaufman provided a comparison between the Panasonic RF-2200 and Sony ICF-5900W. In the asl Report, Tom Gavaras reported his verification of AFAN McMurdo, Antarctica. Myron Smith's Scoreboard featured 163 reporters with James Young having the most countries heard (222) and Richard Pistek the most countries verified (208).

Calendar Of Events

- Dec 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.
- Dec 20 Meeting. Boston Area NASWA Chapter. The Boston Area DXers have found a new location for meetings. Inquiries about the BADXers may be sent to Paul Graveline at 978-470-1971 or Internet: ctreditor@aol.com. The URL for the BADX guys is http://www.anarc.org/naswa/badx/
- Jan 10 Meeting. The Cincinnati/Dayton Monitoring Exchange (MONIX) meet at the Lebanon Citizens National Bank on U.S. Route 42 in Mason at 7:00 PM. For more information contact Mark Meece at 513-743-8089 or e-mail at <radioscan@siscom.net>. For additional information about MONIX, check out their web site at http://www.siscom.net/~mmeece/monix.html
- Mar 7–8, 2003 Convention. The 16th 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 7th and 8th March 2003. Richard Cuff and John Figliozzi co-chair the organizational committee. It's never too early to begin planning. See you there!
- May 16–18, 2003 Annual General Meeting ("AGM") and DX Camp. The Danish Shortwave Club International will hold its AGM and DX Camp at Vejers Beach, Denmark on 16–18 May 2003. Further details will be published, as they become available.
- Aug 13-17, 2003 Convention. The Rhein-Main-Radio-Club will host the 2003 European DX Council Conference in the Frankfurt, Germany area on 13-17 August 2003. Further details will be published, as they become available.
- Sep 2003 Contest. 2003 Adventist World Radio "Wavescan" px contest is scheduled to run during the month of September. Listeners will be asked to submit a list of unique QSLs (QSLs that you own that you consider no one else in the world has). Once in a lifetime frequency usage, emergency broadcasts, emergency transmitters, transmitter on wrong frequency, mistaken frequency entry, harmonic radiations, etc, etc? Full details to follow later in 2003.

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).

Musings

This column provides a forum where members can express comments, ideas, and thoughts about NASWA or the SW radio hobby. Please feel free to comment on anything presented this month (or previous months). Opinions expressed here are are solely those of the submitters. Please submit all Musings to Richard A. D'Angelo, 2216 Burkey Dr., Wyomissing, PA 19610 or via email: rdangelo3@aol.com.

Errol Urbelis, 563 Meadow Road, Kings Park, NY 11754-5009

I have had no luck in receiving QSL cards from the same stations through the past 6 or 7 years. I always send return postage, many different types of enclosures (stamps, radio decals, radio bumper stickers, newspaper articles, etc.). The station are Radio Kuwait—5 reports with nothing received; All India Radio—8 reports with no luck; Voice of Armenia (Yerevan)—6 reports with nada, nothing, zilch; Radio St. Helena—still waiting for 1998 and 1999 QSL cards. I have 6 previous QSL cards. I have done follow up but still nothing.

What I don't understand is that all of these stations ask for reception reports, give their e-mail and regular addresses. What's the problem? Not to mention WWBS, WWCR, WEWN, WHRI, WHRA and KWHR (no response in 8 months).

Attention Scott Barbour

I just recently picked up several Sangean models from the local Radio Shack (now switching to Grundigs). I have the 505, 606 and 909. All I use is a 100, 125 and 600-foot long wires and the Antron 99 vertical. They all work very good in various situations. I also use a switching system so all my receivers can be easily connected with alligator clips on the rod antenna. The Antron 99 "V" works just fine above 13 mcs, it cuts out a lot of ORN from 9 mcs and above. Hope this helped you out a little bit, Scott. I see now with over 40 years experience, one antenna will not do.

I had a great time at Kulpsville, this year. I hope to see you at Kulpsville in 2003.

73, Errol

Angela Gibson, HC4 Box 110, Doniphan, MO 63935

Just wanted to drop you all a note on an interesting variation of a longwire shortwave antenna I have been using for several months with very good reception results. I have several different radios, which I listen to on a regular basis, and two main locations where I have my "listening posts" set up. Being in and out of the house quite a bit, I needed a good antenna to connect to on my front porch. I ran 50 foot length of #14 wire (coated) around the inside of my porch roof (ceiling), leaving about 4–5 foot hanging down to connect to my shortwave radio antenna via a metal alligator clip. The **fun** part is that instead of running separate wire for an indoor use antenna connection, I ran the opposite end of my wire into the house. I installed small hooks along the ceiling wall top and connected a BNC connector to this inside end so to be able to jack in my Yaesu VR-500, which I utilize extensively for shortwave listening, especially at night and during cold weather.

During warmer weather I can use the outside alligator clip connection on my Grundig YB-400 directly clipped on the telescoping whip with BNC connector. I have experimented with various connections inside and out, and this configuration gives me the best reception both

ways. Please note that I have also experimented with VHF/UHF reception with this set up and have had fairly good reception improvement in these bands as well.

Thanks for the opportunity to share my ideas with our members. Love the Journal. [Note to Emily in New York—I apologize for misplacing your address, please write!] Angela

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

Our first DXpedition of the season, and thirteenth overall, to French Creek State Park is now history. This DXpedition was a Sunday through Tuesday two-day event with the group arriving Sunday afternoon. The crew consisted of Fred Kohlbrenner, Ed Mauger, Kris Field and me. This DXpedition saw us in Cabin #10 which was the initial cabin for our first outing here a few years ago. The weather was fine making antenna installation problem free.

After the antennas were set up, we watched football; after all it was Sunday afternoon! I know this was a DXpedition but somehow our intensity level just isn't what it use to be. Besides, it was a good game, hi!

We had some interesting antenna issues with Fred's south facing short long wire ("the weenie") producing the best results. Consequently, Kris and I ran outside just before dark to erect second antennas heading south. Signals improved remarkably matching the quality of Fred's weenie. Once again, Fred's simple weenie antenna was a constant performer. Atmospheric conditions the first day produced an outstanding opening to the Indian subcontinent. The loggings from All India Radio were truly memorable. This was probably the best Indian opening we experienced in many years.

The following morning was good for Peruvians with my highlight being Reina de la Selva. Nothing heard from India although there was a brief Indonesian opening but things faded before 1200 UTC. Monday afternoon brought an exciting African opening. While Indians were good again Monday evening, they were not as prominent as the previous day. Rounding out my evening was a nice log of Radio Okapi with non-stop highlife music. It would have been nice to get a clean ID.

Later in the evening we watched Monday Night Football. Except for Fred. He managed to find the time to view a DVD. An interesting trend that highlighted our last DXpedition seems to be a regular item these days—television, DVDs and other audio/visual stimulation. Although Tuesday morning Latins were a bust, there was a nice opening to the Pacific allowing for reception of several Papua New Guinea stations.

Overall, I would say conditions were very good. Something always seems to open up and so it was this time out. Indian regional stations were as good as it gets on that Sunday evening. Peruvians were superb the following morning and Africans were excellent later that day. The "get away" morning saw a nice opening to Papua New Guinea with a number of regional stations entered into the logbook. I really can't complain about atmospherics this Dxpedition.

73, Rich

N454eb

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

Easy Listening

Richard D. Cuff • 42 North 37th Street • Allentown, PA 18104 • rdcuff@mochamail.com

Keeping Notes

It's been my observation that the shortwave/ public and international broadcast listening experience is enhanced by keeping track of the broadcasters' air times, frequencies, programming topics, and key Internet URLs for schedules, live programming, and on-demand programs. To that end, I am beginning work on a "clip & save" feature that will summarize radio broadcasts and Internet webcasts for individual broadcasters. My hope is, over time, to build up a reference tool that provides, in one listing, information that other publications tend to scatter over multiple sections of their reference books. Some of my regular note-taking will be used to build up these new features. Other aspects of note-taking come in handy this time of the year, when broadcasters' schedules change for seasonal programming. If you have specific stations you'd like to see profiled this way, please -send me a note via postal mail, e-mail or fax (+1 707 313 2458).

Christmas and New Year's Programming

Since broadcasters often have short lead times in planning programming—after Journal deadlines, we can't report holiday programming plans with certainty. Instead, we can look over prior notes and predict what will air. My fellow programming enthusiast and columnist for the Ontario DX Association, Fred Waterer, and Monitoring Times columnist and NASWA/ODXA contributor John Figliozzi have shared their notes for holiday programming, and the collective result of our notes appears below.

HCJB, WHRI, and other Evangelical broadcasters

HCJB and WHRI began their broadcasts on Christmas Days in years past, and these two stations celebrate their anniversaries on Christmas. Other evangelical broadcasters provide special programming, consistent with their doctrine, or the doctrines of the ministries who buy time on their stations. (via Fred Waterer/ODXA)

Paradoxically, some broadcasters such as WMLK and the "Overcomer Ministry" of Brother Stair (who has some legal troubles of his own to overcome) can be counted on to denounce the celebration of Christmas given the fact that Christmas as a special celebration originated in pagan winter solstice celebrations. (via Fred Waterer/ODXA)

EWTN and Vatican Radio

You can expect special Midnight Catholic masses from these stations, plus more detailed accounts of the Pope's Christmas activities than you would find elsewhere. (via Fred Waterer/ODXA)

Radio Canada International/CBC

As It Happens, especially on Christmas Eve, produces a special annual program. Each year, the program contacts members of the Canadian Armed Forces serving with the UN, NATO, NORAD and those serving in the far north. Each unit has 3 or 4 people speak for those serving with the unit. They send Christmas greetings to loved ones at home and describe how they are celebrating Christmas where they are. At the conclusion of the greetings, the units are each invited to sing a verse of a Christmas carol. In past years, the units have served in such diverse locations as Canadian Forces Base Alert (Arctic), Colorado Springs (NORAD), Germany, Cyprus, Golan Heights, Bermuda (!), the Persian Gulf, Somalia, Bosnia and Croatia, and Kosovo. No doubt there will be greetings from the task force in the Gulf. It is a really nice program. It also has its moments of humor, such as the time the Canadian naval personnel stationed in Bermuda tried to claim they missed the Canadian winter real bad! (via Fred Waterer/ODXA).

In general, As It Happens has had its own tradition of storytelling during the week or so leading up to Christmas. (via John Figliozzi)

Deutsche Welle

Last year, a Christmas special aired on December 24th in the English language editions airing from 0900 onward, and on December 25th through the 0600 English release. One version of the special aired December 24th at 09, 11, 16, and 19 UT; the second edition aired December 24th at 20, 21, and 23 UT and also December 25th hourly from 01 to 06 UT, including the North American releases at 01, 03, and 05 UT. Also, **Deutsche Welle** aired a New Year's special on December 31st and January 1st using the same approach described above.

Also, Deutsche Welle's 24 hour German language service has always programmed a wide variety of Holiday music on Christmas Eve, Christmas Day, New Years' Eve and New Years Day. With one of the most powerful signals in North America, you should have no trouble locating them on the dial. (via John Figliozzi) One doesn't need to know German to appreciate good music!

Eastern Europe (e.g. Ukraine, Russia, Bulgaria, Hungary, Czech Republic, Slovakia) The communist regimes governing these countries for most of the 1900s officially stifled the outward expression of religion, and it is interesting to see how many of these countries' broadcasters seem to be making up for lost time by including religious celebrations more overtly than their non-communist brethren. Fred Waterer recommends the shortwave services from Bulgaria, Russia, and Ukraine as likely sources for holiday music. Remember that the Orthodox Christian church celebrates Christmas on January 6th-so you'll near New Year's programming before you hear Christmas programming!

Radio Australia

As is usually the case, **Radio Australia**'s schedule will likely see significant seasonal alterations in December and January as several programs take summer breaks.

Specifically, at Christmastide, you can expect Radio Australia to link with a domestic network for most of our day—a combination of Radio National and Metropolitan networks. Expect the special programming to begin at 2100 UT on December 24 and continue until 0900 UT on December 25. Their format will be similar to previous years with religious specials, Christmas music, Christmas stories and talkback with Australians as they celebrate Christmas Day. Each Australian state will likely contribute a couple of hours to the broadcast.

Other December/January changes can be expected to include the following. The dates shown below were from last year and may be off by a day or two for 2002 and 2003:

The current affairs program PM is scaled back to 20 minutes on December 14th and from December 31st to January 18th. From December 17th to the 28th a series of current affairs specials replaces PM.

The World Today—the noontime current affairs program—is on hiatus from December 17th through January 11th.

Australia Talks Back also takes summer recess on December 17th and returns January 21st.

Correspondents' Report takes a break from December 16th and returns January 27th.

Asia Pacific is on break from December 24th and resurfaces January 14th.

Business Report is on holiday from December 22nd, returning January 19th.

Bush Telegraph leaves the scene from December 17th, and returns to air January 21st.

What isn't clear—yet—is what will replace these programs in their absence. If you're interested in the details, your best bet is to frequent one of the newsgroups or E-mail lists (such as *swprograms*) where John Figliozzi posts thrice-weekly schedule updates.

Meanwhile, *Pacific Beat* continues to air, but the features take on more of a magazine format, since hard news in the Pacific islands is hard to come by over the holidays.

Cricket will continue on selected frequencies. A series of one-day meetings between Australia, New Zealand, and South Africa will likely begin in January and run through early February.

New Zealand

Fred Waterer noted in 1999 that Radio New Zealand International featured, among other things a Maori rendition of Silent Night; a special Christmas edition of Sounds Historical; Christmas coincides with ANZAC Day and the anniversary of the foundation of the NZ Communist party.

Other broadcasters

As Fred Waterer reminded me, expect prerecorded programming to prevail over the holidays, with heavy emphasis on yearin-review programs along with special extended features that were recorded in advance. Broadcasters do this to enable their staffs to spend time with their families around the holidays.

Other examples reported by the ODXA's Harold Sellers from years past:

- RAI Italy presented an extensive report on the Pope's Christmas homily.
 - Channel Africa played a traditional African hymn during a brief tune-in.
 - AIR India (All India Radio) from 2052 to the news at 2100 played several Christmas carols, performed by a children's choir in Hindi. For example, Harold recognized Hark The Herald Angels Sing and O Come All Ye Faithful.

BBC World Service

Tuesday, December 24th, 1500 and 2230: **A** Festival of Nine Lessons and Carols is a long-standing World Service tradition from King's College, Cambridge. The 1500 airing is live. The Festival features traditional favorites like Once In Royal David's City and new music specially composed for the occasion.

Thursday, December 26th, 0105: *Her Majesty the Queen's Christmas Message* airs to the Americas.

Thursday, December 26th, 1500: A special three-hour edition of **Sportsworld** airs to all regions, though only a portion can be heard directly in the Americas. Boxing Day is a big day for Soccer in the UK, cricket, horse racing, and the annual Sydney to Hobart yacht race will be covered.

Sunday, December 29th, 1330: *In Praise Of God* airs a Christmas service from the United Reformed Church in Coventry, England.

Saturdays, December 28th and January 4th, 2330: *Pick of the World* features "the best of the best" in its final edition for 2002 and first edition of 2003. You're always welcome to nominate program segments you've particularly enjoyed; you can reach the program at pick@bbc.co.uk or by fax at 011-44-20-7557-2531.

May the Holiday season and 2002 find you in good health and spirits, cherishing family and friends. Best wishes for a happy, healthy, and prosperous New Year!

BBC World Service—70th Anniversary Programming: *Many Voices*, *One World*

The time period from December 12th through December 20th will feature special programming celebrating the 70th anniversary of the World Service—which came to life as the *Empire Service* on December 19th, 1932. Say what you will regarding the issues relating to the BBC's use of shortwave targeting North America and Australasia, there's no denying the longstanding history and continuing excellence represented by the BBC World Service and its programming.

Here are a few highlights:

Sunday, December 15th, 1700-2000 UTC: *World Service Global Party* is a live broadcast from five concerts in cities around the world.

Thursday, December 19th, 0400-1800 UTC: Live from Table Mountain originates from the top of Table Mountain near Cape Town, South Africa, Ben Malor and Heather Payton will recreate an event in 1933 when a field broadcast originated there for relay back to London, which then rebroadcast the program worldwide. A Talking Point special that day includes live on-air listener questions to Mark Byford, the current Director of the World Service. The day also will include A Day in the Life of the World. short segments which highlight the work of people who are in some way connected to the World Service—the engineer who looks after the Ascension Island transmitter to the stars of Westway.

Thursday, December 12th through Saturday, December 20th: *Listeners' Tales* is a series of five-minute stories broadcast at various points around the schedule. Stories from a mix of celebrities and other listeners whose lives have been affected by the World Service. Terry Waite, who listened during his Beirut incarceration, will be one of those with their story; rumor has it that a well-known NASWA contributor will be one of the listeners who will be telling their tale.

Monday, December 16th through Friday, December 20th, 1200-1400 UTC: *Newshour* will expand to two hours and will include a daily in-depth interview with a key cultural, international figure.

Monday through Friday 1345, 2245, repeated Tuesday through Saturday 0345 and 0445, December 16th through 21st: *This Is London* replaces *Analysis*, *Off the Shelf*,

and From Our Own Correspondent. This Is London will highlight key turning points in global events during the World Service's 70 years. The impact of the changes in the technology of conflict reporting will also be included.

Saturday, December 14th and 21st, 2330 (time tentative): On the 14th, *Pick of the World Service* is celebrating with a special one-hour version of the program highlighting the best programming of the 70-year history of the World Service. Clips from English and other language services will be included. On the 21st, *Pick* will feature highlights of the special anniversary week of programming.

Monday, December 23rd, 0206: *The World's Top Ten* is the fruition of a massive poll of World Service listeners asking them to name their favorite all-time music. That poll was ongoing as of press time at URL http://www.bbc.co.uk/worldservice/us/features/topten/, and will air in the time slot normally occupied by *Wright Round the World*.

Since I've filled my space for the month, I'll include additional 70th anniversary program highlights in upcoming NASWA e-mail Flashsheets and in the *swprograms* Internet-based discussion group (see http://www.topica.com/lists/swprograms). It would also be a good idea to check the World Service website, http://bbcworldservice.com.

73 DE Richard

CH/

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. The data is provided by NASWA Journal and Monitoring Times columnist John Figliozzi, and comes from his book, The Worldwide Shortwave Listening Guide. Visit the Guide at http://www.anarc.org/naswa/swlguide/.

Shortwave Center

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Digital Broadcasting— A Broadcaster's Perspective

By Ed Evans

Since the early to mid-1990's, Broadcasters and broadcasting enthusiasts have been bombarded with claims and revelations about exciting new "digital methods" for radio and television broadcasts. The FCC made HDTV (originally High Definition Television, now considered only to be Digital Television) a priority, and there now exists a time-line and methodology for this to occur in the United States.

For radio, the process has been quite a bit more wide open, both worldwide and in the US, as various interested parties have developed "digital techniques" for radio propagation. My purpose in writing this article is to convey, from this Broadcaster's perspective, a layman's view of these differing techniques, and what they may mean for the future of radio.

The grand idea for digital radio is threefold, in my way of considering it—first,
greatly improve the signal quality of the
reception, by eliminating fading, multipath, static, and finally improve the audio
depth of the transmission; second, provide
for spectrum efficiency; and third, provide
data to the receiver for either the user or the
receiver to interpret and use (here I mean
information on the current signal being
heard for the user, or information for the
receiver to use to adjust itself to improve the
transmission—i.e., adjusting bandwidth).

The first "successful" format for digital radio is the Eureka-147 system. Eureka-147 was developed primarily in the United Kingdom and Germany, and is now used in those countries as well as some parts of Canada. Eureka-147 (and in most cases the other digital systems discussed here) uses

audio and data encoding that essentially creates a "multiplex" channel that can carry high-quality audio, data, and multimedia to the user's receiver, where the receiver then "decodes" the desired information from the multiplex and plays it out through the speakers or outputs to a PC or other device. Eureka uses main and secondary transmitters to achieve a very optimal signal coverage, which eliminates multipath, fading, distortion, and other non-friendly broadcasting hurdles. It is spectrum efficient, in that it allows several audio signals to be broadcast in a single channel.

Unfortunately, Eureka-147 has not become a widely accepted format. One main hurdle was that the spectrum space utilized by Eureka in Europe is not available for use in the United States. The other problem has been receiver availability and pricing. While Germany and the UK do broadcast the Eureka-147 signal, the population of receivers in these countries has been dramatically low.

The next "successful" format for audio broadcasting that I would like to touch on is the new "digital satellite broadcasting" formats—xm Radio and Sirius Radio. xm uses two satellites positioned in geo-synchronous orbit over the eastern and western United States. Sirius is using 3 satellites in highly elliptical orbits that ensures that at least one of the birds is always positioned over the United States in the most favorable coverage position. Unfortunately, both systems also have to use ground-based "repeater" transmitters in or near large cities to overcome the shadowing of the tall buildings. While Sirius (previously CD-Radio) was the first system to get started, XM Radio beat them to the air. XM went on air in 2001, while Sirius did not get on air until the spring of 2002. Both systems use multiplexing technology that allows for the greater number of channels and improved audio quality, and although the coding for each is different, the chip-sets used by the two systems will allow the other system to operate.

Whether or not satellite radio will succeed will depend in large part on the automobile manufacturers. Both companies have arrangements with different automobile manufacturers to offer satellite radio. If these are marketed properly, then I feel that one or both of these systems may be able to survive. However, the true advantage of the digital audio "sound" may be lost on the mobile user of this service. Current after-market "converters" for existing cars, while less expensive than the true satellite receiver, merely convert the digital audio to either FM or cassette input to the car radio. This coupled with your every day road noise seems to me to kill the argument for the "digital quality" of the sound. The quality of the programming provided might be the argument that gets around this for the user.

The next two systems will be the "real" players in the audio digital revolution, in my opinion. These are, of course, Ibiquity's In Band On Channel (IBOC) system and the Digital Radio Mondiale DRM system. IBOC now has the strong support of the powerful National Association of Broadcasters. It is a system that does not displace or threaten the current broadcasting mainstream in the United States. It will work in the current FM band (and reportedly daytime AM) without interference to adjacent IBOC or non-IBOC (regular analog) channels. The IBOC system has been widely tested on FM, but its AM performance is still being studied. The FCC has recommended that IBOC FM be accepted as a broadcasting format in the United States and is currently developing rules for its use. The Ibiquity IBOC system is proprietary and will require licensing and user fees from the broadcasters who use the system.

DRM is a consortium among mainly European and Asian broadcasters, government entities, receiver manufacturers and other parties to develop a non-proprietary

methodology that will deliver digital audio in the existing long wave, medium wave (AM) and shortwave bands. This system will be able to deliver FM-quality sound and data over the existing bands. DRM is the only system currently endorsed by the ITU for all three broadcasting bands below 30 MHz. The DRM system has been widely tested worldwide on LW, MW, and SW bands. Receiver manufacturers have been given the requirements for the chipsets these receivers will require, and production of DRM radios is anticipated in 1994. DRM is well on its way to be a world standard for broadcasting below 30 MHz.

But there soon may be a fly in the soup and this fly may become an angel to the radio listener and broadcaster. Motorola has recently unveiled at an electronics show in Japan its "Symphony Digital Radio Chipset." Motorola's information on this development promises "existing analog radio signals to benefit from less static, fading, pops and hisses; automatic tuning to reduce adjacent station interference; extended listening range for existing signals; and overall better audio clarity and volume." Motorola says that these chip-sets will be on the market by the end of 2003, and the cost to the consumer will be comparable to existing receiver prices. The great advantage to broadcasters is that the Symphony system delivers all of its promise at the receiverthere is no investment or risk on the part of the broadcaster. As the Motorola literature states, this new Symphony system may be "a move that has significant repercussions for the digital radio industry."

In conclusion, I expect that the next three years will mark the rise of some of these systems, and the demise of others. The major players here are the US consumer market, the NAB, the DRM consortium, and last but not least, the Asian electronics manufacturers. The future of digital radio may soon be decided in a Board Room in Tokyo.

Ed Evans is the President of NASB, The National Association of Shortwave Broadcasters. Mr. Evans is also Station Manager of Shortwave Station WSHB, Cypress Creek, South Carolina. His email address is: evansc@wshb.com

Radio Broadcasting in Laos— An Overview

Magazine, September 10, 2002.)

I recently spent three weeks in South Asia, as part of an around-the-world trip which ultimately took me to Europe and Canada. I went on small-group tours for one week each in Cambodia, Laos, and Southern Thailand. Whilst in the region I gained an appreciation of current HF broadcasting there, which continues to show a continuing decline in favour of more efficient and effective delivery over medium-wave and VHF-FM facilities.

Introduction

Laos is a land-locked country with an area of about 237,000 sq. km. It is bordered by Myanmar, Thailand, China, and Vietnam. The capital is Vientienne and other major towns are Savannakhet, Paske, and Luang Prabang. The local time is UTC+7 hours.

The main language is Lao, with four ethnic categouries of Lao-Lu, Lao-Tai, Lao-Theung, and Lao-Seung, all of which are mutually understood. Laotian vocabulary is enriched by loan words from Pali, the scriptural language of Theravada Buddhism. French, English, Chinese, and Vietnamese are also spoken in the principal urban centres.

English transliteration uses the word "Lao" across a wide spectrum of understandings, meaning the language "Lao," the country "Lao," the people "Lao," etc. The word "Laotian" is vanishing, but is still used by the outside world.

Lao languages are part of the Tai family, centered on Thailand. Those not trained in linguistics may find serious difficulty in distinguishing Lao variants from Thai. In the Thai and Vietnamese border areas, a common dialect is widespread.

By Bob Padula (From The Electronic DX Press I spent several days in Laos, and I was able to recognise some differences between spoken Thai and Lao. The vowel sound we know as "a" is accentuated as a "sliding vowel" in Thai, but not so extreme in Lao. The English spoken by Thai nationals is marked by the same intonations as in the parent Thai, with little variation in stress. To many English speakers from western countries. Thai and Lao often sound very "flat" and lacking in variation of intonation.

Broadcasting

Radio broadcasting in Laos is quite basic, as compared with other countries in the region. There is one national Government network, "Lao National Radio," originating from the capital Vientienne, heard on 576 kHz medium-wave, 200 kW, 2200-0330, 0400-0730, and 0930-1500. This is also carried on shortwave, using 6130 with 50 kw, intended for Laos. Content is mainly Lao variants, with Hmong and other dialects. It is understood that educational programming in English and French are carried irregularly, but these were not located.

Mediumwave

In Vientienne, only three mediumwave transmitters were heard, carrying Lao programming:

National network 576 kHz:

702 kHz: Local/city network

810 kHz: Not identified.

In Luang Prabang, in Northern Laos, only one mediumwave station appeared to be operating in the local daytime, using the "split" frequency of 705 kHz, carrying mainly local programming, but relaying the national network from Vientienne at various

ITU allocations for Region 3 (Asia/Pacific). This operation may be intended to reduce interference effects in the secondary service area for the Vientienne high-powered transmitter using the standard allocation of 702 kHz.

FM Broadcasting

Very little activity was noted, with channel separation generally of 0.25 MHz. In Vientienne, six stations were audible: 87.5, 90.55, 91.5, 93.75, 103.75 and 105.5 MHz.

In Luang Prabang, only one FM station was audible in the local daytime, using 93.0 in parallel with the mediumwave outlet on 705 kHz, with local and national network programming.

High Frequency Operations

There are two government transmitters operating in Vientienne. One of these uses 50 kw on 6130 at 2200-0330, 0400-0730, 0930-1500. The intended target zone is "Laos." Programming is in parallel with the high-powered medium wave outlet on 576 and FM on 103.75. This transmitter was installed in 1994.

A second transmitter in Vientienne is also used on 7145 kHz at 25 kW for what is announced as the "International Service." This is registered with the ITU from 0100-1800, with the target area designated as Laos, with programming in English, Thai, Vietnamese, French, and Khmer. This transmitter originally operated on 6130 and was moved to the 41 metre band when the 50 kw facility was put on line on 6130.

The exact schedule was not confirmed, but the evening broadcasts were audible in the block 1130-1400 with 30 minutes in each of the above languages. Other services listed are 2330-0030 (a "breakfast" service) in Vietnamese and Khmer, and a midday service at 0500-0630 in French, Thai, and English. I believe the Lao segments to be relays of the domestic service.

times. This channel is not compatible with A third transmitter of 3 kw is listed in Vientienne, but unheard, on 7150 kHz. 0100-1800, also intended for "Laos." This is the transmitter which previously carried the International Service on 7112 several years ago.

> A forth transmitter is registered, with 1 kW on 3315, 0100-1800, again for "Laos," but not heard recently.

> Outside of Vientienne, the number of regional transmitters has been reduced in recent years and now appears to number only one, but it is not known whether this is an official government station. The station was noted as active on 4661 kHz. 1040-1230*, *1300-1400*, *2315-0030. The station is listed in the WRTH as being at Sam Neua, in Hua Phan Province, near the extreme north east border of Laos with Vietnam. This is a very small town, and the transmitter location is questionable. Reception in Luang Prabang was excellent and I suggest that this station is actually located in Luang Prabang and not as listed. The WRTH list Luang Prabang on 6971, but no activity was observed on that channel at any time.

> A mystery station was noted on 6765! This is a single-sideband suppressed carrier operation, and was heard with good strength from Northern Laos during the morning and evening. I do not suggest that it is located in Laos, but there is high probability that it is! It opens with a Western style musical tuning signal, with English and Lao announcements. announcing time and frequencies, including a message that the transmission was: "This is Radiobroadcasting for Western tourists." Transmissions were heard *0930-1030*, *1200-1300*, *0000-0100*, and *1330-1400*. The content was mainly in Lao with what appeared to be news, with national music.

> From a more southerly location, in Vientienne, signal strength was much reduced. Unfortunately, my Sangean radio does not have SSB capability, so it was quite frustrating.

Vietnamese Regionals

Care is needed when monitoring the 4 and 6 MHz region for South Asian regional stations. From thousands of kilometres away, Lao can sound very similar to Vietnamese! While I was in Laos, Vietnamese regional stations were noted on:

4976 kHz Son La

6380 kHz Lai Chau

6492 kHz Cao Bang

6664 kHz Lao Cai

Summary

Broadcasting in Laos is very modest, with all broadcasting operations servicing local and regional communities. Lao National Radio is a full member of the Asia-Pacific Broadcasting Union, and HF transmissions are coordinated with other members of the Union, reporting to the ITU in Berne.

More on SE Asia HF Broadcasting

(The following notes are also by Bob Padula from the EDXP Magazine, September 13, 2002).

Malaysia

RTM continues to develop its MW and VHF networks, in Eastern and Western Malaysia. The facilities used for domestic HF broadcasting will not be replaced or repaired once their useful life has been reached, and some transmitters have already been closed down in Sarawak and Sabah.

The following frequencies were observed as being active and may also be in use at other times:

4845 Kajang 24 hrs. 100 kw. Tamil, noted with phone-in programming 0430-0500.

4895 Kuching 10 kw. *2200-0100*, *0800-1000*, *1030-1500*.

5030 Kuching 10 kw. *2200-0000*, *1230-1400*.

5965 Kajang 24 hrs. 100 kw. Radio 1-Malay.

5980 Kota Kinabalu 10 kw. *2200-1500*.

6025 Kajang 100 kw. *0500-1700*, Radio 8-Malay and indigenous languages.

6050 Sibu 10 kw. *2200-1500*.

7130 Kuching 10 kw. *0400-0600*.

7270 Kuching 10 kw. *0830-1200*, *1245-1500*.

7295 Kajang 100 kw, 24 hrs. English, relays 90.3 vHF Radio 4 from Kuala Lumpur.

Actual operational times for Kota Kinabalu, Kuching, and Sibu vary within the time span indicated. Weekday schedules differ from weekends and holidays.

At 1300-1310, 5030, 4895, 5980, 6050, and 7270 carry national news in Malay from Kuala Lumpur, at 1310, local programming resumes.

Upgrading work is in progress at the Kajang site with higher power being introduced for some services.

Singapore

The Singapore Broadcasting Authority abandoned all MW broadcasting some years ago in favour of VHF. A modest HF capacity survives from Kranji, operating on this general schedule:

6000 250 kw, Mandarin: *2300-0800*, *0900-1100*, *1400-1600*.

1100*, *1400-1600*

7170 100 kw, Tamil: *2300-1600*.

7235 250 kw, Malay: *2300-0900*, *1200-1600*.

The English service consists of relays of these VHF networks: Gold 90.5, Classical 95.0, Perfect-10 98.7, News Radio 93.8, Symphony 92.4, and Passion 99.5.

The Mandarin service comprises relays of Capital Radio 95.8, Love 97.2, Y.E.S. 93.3.

The Malay service takes relays of Warna 94.2 and RIA 89.7.

The Tamil service relays OLI 96.8.

The External Service, Radio Singapore International is intended for neighbouring countries with transmitters at Kranji, cosited with the Merlin facility and sharing transmitters with the Domestic Service. The September 2002 schedule for RSI was:

1100-1400 6150 kHz 9600 kHz English

0900-1200 7235 kHz 9665 kHz Malay

1200-1400 7235 kHz 9665 kHz Indonesian

1100-1400 6000 kHz 9560 kHz Mandarin

Thailand

Domestic HF broadcasting is virtually extinct 9530 Son Tai 50 kw, *2200-1400* in Thailand, with extensive and increasing use being made of MW and VHF for local and regional services by the government broadcasting authority.

Around early 2001 HF domestic transmitters located at Bang Phun, in Pathum Thani, were closed and broadcasting ceased on 4830, 9655, 7115, 9655, and 11905. 6070 and 7115 remain in use on a very limited basis from 1100-1215, carrying relays of the I visited. External Service in Vietnamese, Khmer, Lao, Burmese, and Malay.

6150 250 kw, English: *2300-0800*, *0900- The 60 mb outlet of 4830 has been in intermittent operation since mid-2001, carrying relays of Radio Thailand's Network-3, in English in parallel with MW 918 kHz (Bangkok). This HF operation was set up to cater to the large influx of English-speaking tourists visiting areas outside of Bangkok, particularly the southern beaches at Phuket and nearby areas, and the northern cities of Chiang Mai and Chiang Rai. It may now have closed down as it was not audible at any time during my trip in July 2002.

> Only one non-governmental station was noted—this originates from the Royal Household in Bangkok, with 10 kw on 6148 kHz. This "split frequency" channel was audible at good level during local evening hours in Thailand and in nearby countries around 0930-1100. However, severe interference is caused by the Radio Singapore domestic HF service on 6150. The 2 kHz het was very annoying.

Vietnam

The Voice of Vietnam continues to use several HF channels for relaying its Domestic Service to rural areas.

5925 Xuan Mai 50 kw, *2200-1600*

5975 Son Tai 50 kw, *2200-1600*

6020 Son Tai 20 kw. *2200-1600*

7210 Son Tai 20 kw, *2200-1600*

9875 Son Tai 50 kw, *0200-1000*

At 0200 UTC, these relays all carry the same news summary from Hanoi. The Hmong Service (part of Network 4) has recently extended its transmission hours to accommodate extended broadcasts to ethnic minorities. Both new frequencies gave excellent reception in the countries 5035 Xuan Mai 15 kw, *1130-1330*, *2200-0000*

6165 Xuan Mai 50 kw, *1130-1330*, *2200-0000*

9855 Xuan Mai 50 kw, (new) *0430-0600*

9650 Xuan Mai 50 kw, (new) *0430-0600*

Summary

HF domestic broadcasting in all of the countries mentioned is declining, with the steady replacement of such facilities by MW or VHF transmitters. Modern low-power VHF transmitters can be put on line at a fraction of the cost of the replacement of antiquated,

energy-inefficient, high-maintenance, and bulky HF services. Many of the HF installations are 50 or more years old, and are being abandoned when their useful life is exceeded or major breakdowns occur. it is obvious that the various broadcasting authorities are not prepared to allocate financial or other resources to propping up "dinosaur" HF facilities, where MW and VHF systems are now the preferred technology.

Ultimately, all HF domestic broadcasting will disappear from the South East Asia Region. It has already done so in other areas of the world. International broadcasters targeting those areas on HF may have to rethink their strategies. Their HF audience may not be as great as they believe!

WELCOME TO THE FOLLOWING NEW MEMBERS

PAUL A. BITTNER, Huron, TN DON E. HEFNER, Lubbock, TX RON REELAND, Peru, IN TOM BENEDICT, Edgartown, MA

Well, I have finally reached the conclusion that computers were designed to either drive me insane or give me ulcers. I hope it's for the latter reason because I have a lot more room for ulcers now than I did when I was younger. In any case, I am down to two email addresses which for a while seemed to be working only when the moon was in conjunction with Saturn. I think I have everything set now. If you want to reach NASWA Headquarters by email, try <weoliver@comcast.net> or <weoliver@att.net>. Perhaps some day when my nervous tic subsides, we'll try to put up the old NASWA email address again.

Bill Oliver

Listener's Notebook

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

ANGOLA Radio Nacional de Angola had a good signal two weeks ago on 4950 kHz, when received in Namibia. On Nov. 15 only the STP-Relay of the VoA was audible at 2000 UTC. One day later RN de Angola was on again, but with a slight hum. At 0500 a program in vernacular was heard on 7217. (That fits the frequency of RN Angola as reported in spring 2002 - Passmann) (Markus Weidner, currently in South Africa, as reported to the A-DX Mailing List via Willi Passmann, Nov 18/DX Listening Digest/Hauser-OK)

ARGENTINA Latest sked for RAE, Radiodifusion Argentina al Exterior 0000-0200 Portuguese 11710 Mo-Fr 0200-0300 11710 Mo-Fr English 0300-0400 11710 Mo-Fr French 1000-1200 11710 Mo-Fr Japanese 1200-1400 Spanish 15345 Mo-Fr 1800-1900 9690 15345 Mo-English 1900-2000 Italian 9690 15345 Mo-Fr 2000-2100 French 9690 15345 Mo-Fr 6060 11710 2000-2200 Spanish 15345 9690 15345 Mo-2100-2200 German Fr 2200-2300 Spanish 6060 11710-15345 Mo-Fr 2300-2400 Spanish 6060 11710-15345 Mo-Fr (Barrera-ARG)

AUSTRALIA A license has been granted for a private, commercial shortwave broadcaster. **Station X** - formerly streaming on internetonly, has been assigned 1 kW on 2368.5 kHz. (RNMN via Kubiak-DE/EDXP)

I note discussion concerning a licence stated as having been awarded to someone in Queensland to operate on 2368.5 kHz, with 1 kW, as a NAS. As at November 25, there is no formal record of any such licence having been issued. (Bob Padula-AUS/EDXP)

AUSTRIA ORF plans to wind up Radio Austria International and to keep only two hours of ORF programming per day on shortwave; otherwise the transmitter will be leased out. Attempts are being made to convince the ORF council to reject this plan. (Kai Ludwig, Germany, Nov 8, DX Listening Digest/Cumbre DX)

 BANGLADESH Frequency Schedule B'02,

 Bangladesh
 Betar
 External Services:

 1230-1300
 English
 7185 9550

 1315-1345
 Nepali
 7185 9550

 1400-1430
 Urdu
 7185 9550

 1515-1545
 Hindi
 7185 9550

| 1600-1630 | Arabic | 7185 9550 | | |
|---|-------------|-----------------|--|--|
| 1630-1730 | Bangla | 7185 9550 | | |
| 1745-1815 | VOI | 7185 9550 15520 | | |
| 1815-1900 | English | 7185 9550 15520 | | |
| 1915-2000 | Bangla | 7185 9550 15520 | | |
| Home Service | e: | | | |
| 0030-0505 | 4880 Dhaka | A | | |
| 1200-1600 4 | 4880 Dhaka | A | | |
| 1200-1710 | 15520 Dhaka | a A | | |
| VOI=Voice of Islam (via Rifat J. Eusufzai, DX | | | | |
| Forum, Bangladesh, Nov 29/DX Listening | | | | |
| Digest/Hause | er-OK) | | | |
| - | | | | |

BOLIVIA 5927.02, Radiodif. Mineria (presumed) 2233-2304 Nov 21. Talk by a man in Spanish, with snippets of John Philip Sousa's "Stars and Stripes Forever" in between. Echo effect announcement (ID?) at 2237. (George Maroti-Maine DXpedition, Cumbre DX/DX Listening Digest/Hauser-OK)

CHINA Sked for all Taiwan services from China:

CNR-5 0055-0615, 0955-0005 9380, 11100, 11935, 15710 (all silent)

CNR-6 2055-0105, 0355-1805 (Wed 0605-0955 stop broadcast) [siesta] 9170, 11000, 15880 (all silent)

Voice of the Strait 2225-1700 (Wed 2230-1000 stop broadcast) Literature channel 7280, 5050.

News channel 11590, 4940

Amoy channel 6115, 4900

Note: first SW frequency transmits between 0000-1400, second SW frequency transmits between 2225-0000, 1400-1700

China Huayi Broadcasting Company (Wed 2225-1000 stop be) 2225-1700 6185, 4830, Note: same as Voice of the Strait

Voice of Pujian 1155-1600 3280, 4950, 5075,

Voice of Jinling 1125-1400 5860 (Miller Liu, de Taiwan, Nov 15/DX Listening Digest/Hauser-OK)

CLANDESTINE - ASIA15715 Chan Troi Mol been listening to this one *1330-1430* daily, heard with fair signals here. ID's at start and close and still opening with "My Country" song sung by woman. Discovered that they have an email address of ctm@radioctm.com Website isn't working right now, but seems to have been www.radioctm.com Don't confuse with New Horizon magazine and website which has nothing to do with this station. (Johnson Nov/Cumbre DX)

CLANDESTINE - MIDEAST 9505, Voice of Palestine, Voice of Islamic Revolution in Palestine (via VoIRI), *0330-0348+, Oct. 30, pgm in Arabic, s/on with ID "Saut Filastin, Sauti Saurati al Islamia fi Falestinia," then patriotic music. (Barrera-ARG)

CONGO - DEMOCRATIC REPUBLIC
11690 Radio Okapi 0602-0630. Program of
talk (French) by man and Afro pops. More talk
than pops. Frequent mention of "Congo" and
"Congolaise" between 0616 and 0619. (Evans,
TN, Nov 5/Cumbre DX) 6030, Radio Okapi,
2130-2150, now also hrd here in French with
local pops, few announcements, sung IDs; fair
signal, // 11690 (relatively strong but ruined by a
ute stn on freq) and 9550 (quite weak). (Vashek
Korinek-AFS/DXplorer Oct 31/Cumbre DX)
Careful, French broadcast "Radio Africa
International" via DTK occupies 11690 from
0600-0800. (Savolainen-FIN/Cumbre DX)

CYPRUS New station Radio Ibrahim, P.O.Box 56500, 3312 Limassol, Cyprus. <mail@radioibrahim.com> has this winter schedule:

0700-0715 21590 Mo-Fr 0700-0745 21590 Sa/Su 2000-2045 5935 Tu 2000-2100 5935 Su/Mo 2000-2115 2100-2115 2100-2130 5935 We-Sa 5935 Tu 12025 Th 12025 Sa/Su 2130-2200 2130-2215 12025 Mo 2145-2200 12025 Tu/We/Fr 2230-2330 2245-2315 9405 Fr-We 9405 Th Sites:

5935 kHz - IBRA Radio, Moscow, Russia 9405 kHz - IBRA Radio, Juelich, Germany 12025 kHz - HCJB, Ascension Island 21590 kHz - Voice of Hope, Juelich, Germany (Christian Guibaudo, Nice-France, DSWCI DXW/BCDX/ARDXC)

GEORGIA 11805 Radio Georgia 0635-0701. English language news by man. Frequent mention of Georgia. At end of news "This is world wide ... from T'bilisi, Republic of Georgia". (Evans, TN, Nov 11/Cumbre DX)

GUAM The special broadcast in commemoration of the 50th anniversary of Japan Short Wave Club (JSWC) will be held as follows: Station: Adventist World Radio from Agat, Guam. Language: Japanese and English

15 December 2100 11960 11980 16 December 1300 11755 11980 Program host: Masaru Kawagoe Guest: Toshimichi Ohtake (JSWC member) It is a special bi-lingual, an approximately 20 minuteslong program. A special QSL card from JSWC will be issued for correct reception reports sent to: Japan Short Wave Club (JSWC), 50th Anniversary Committee, P.O.Box 138, Yokohama Port, 231-8691 Japan. Please write your report in English and enclose 1 IRC or 1 U.S. dollar bill. (Toshimichi Ohtake/JSWC/DSWCI DX-Window)

GUATEMALA Per conversation with Wayne Berger at TGNA, Radio Cultural 3300 was taken off the air "because we haven't received any reports on it for a year. We just couldn't justify the expense of running 10 kW here with no reports. I may put it back on at 500 watts or 1 kW to occupy the frequency. We continue to run 5955 with 1 kW for DXers. We have a website in the works at www.radiocultural.com where we plan to stream our audio.

"Radio Maya 3324.8 and Radio Buenas Nuevas 4800 have FM and are putting in repeaters to cover the hard to reach areas. I wouldn't expect them to be on shortwave much longer.

"Radio Verdad 4052.4 is struggling, they have tried to get Radio Cultural to purchase time, but I already have the entire country covered on FM.

"Union Radio 5980v I believe this is strictly on FM now.

"Radio Nacional 6180 has been off for years. I put it back on for them a few times, but they really don't have any interest in having it on." (all via Johnson Nov 25/Cumbre DX)

INDIA AIR National Channel (Hindi/English) has started regular transmissions at 1320-0043 UTC as follows:

9425 Bangalore 500 kW (Regular Transmission) 9470 Khampur (Delhi) (Experimental Transmission). Back in August & September this year, tests were conducted from Bangalore on 9425 and 9450 at these timings. (Jose Jacob-IND/Cumbre DX)

Radio Kashmir, Srinagar is noted with their winter schedule now. The sign on is now at 0120 UTC on 4950 (ex Summer 0025). (Jose Jacob-IND/Cumbre DX)

INDONESIA 3325.0, RRI Palangkaraya, Talk program at 1938 including music. SCI at 2000 then followed to Jakarta news entitled "Warta Utama".Fair. (Nov 22/Jembatan DX/Yamada-JPN)

3960.4, **RRI Palu**, 2003 talk by male, 2012 bird singing which probably means sunrise, and then reading of Holy Koran. (Nov 22/Jembatan DX/Yamada-JPN)

3976.1, **RRI Pontianak**, Heard at 2040 with talk, telephone conversations, local pops, advertisements. (Nov 16/Jembatan DX/Yamada-JPN)

4753.3, **RRI Makassar**, Telephone conversations at 1908, local pops, sometimes ID was heard.Good signal. (Nov 22/Jembatan DX/Yamada-JPN)

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4925.0, **RRI Jambi**, Stronger than usual with long program of reading of Holy Koran at 1432. (Nov 6/Jembatan DX/Yamada-JPN)

6070.0v **RRI Jayapura**, Poor signal with English pops and male talks at 1315. (Nov 10/Jembatan DX/Yamada-JPN)

IVORY COAST The rebel Ivory Coast Patriotic Movement (MPCI) has begun broadcasting a station called Voix du Mutin (Voice of the Mutiny). Station broadcasts 12 hours from Katiola, in the north. (Clandestine Radio Watch/Schoech-DE) [no freq info given, sorry! -AQ]

KENYA The KBC's only remaining shortwave outlet - the Eastern Service on 4915 kHz - has extended its schedule. It's on the air Monday-Friday at 0300-0700 and 1300-1910. (Chris Greenway, Kenya, Nov BDXC-UK Communication via DXLD/Cumbre DX)

LEBANON from The Daily Star, Lebanon: The France-based Rally for Lebanon, part of the Free Patriotic Movement of former Army Commander Michel Aoun, has begun Free Voice of Lebanon. Announced sked: 17600-1700 on 11515. Email fpmradio@yahoo.com or www.radio@tayyar.org. (Cladestine Radio Watch/Schoech-DE) Via Samara, Russia (R. Bulgaria Observer/Nedjalkov-BUL)

LITHUANIA Freq change for *Radio* **Barobari** in Persian effective from Nov.25: 1700-1730 NF 7470 probably via SIT, ex 7480. (R. Bulgaria Observer/Nedjalkov-BUL)

MADAGASCAR (non) IBC Tamil Oli Radio in Tamil via MDC 1230-1330 NF 17525, ex 17495 (R. Bulgaria Observer/Nedjalkov-BUL)

MALAWI Malawi Broadcasting Corporation is currently transmitting on 3385 instead of 3380 kHz. Even in South Africa reception is not too good. (Weidner-NAM/A-DX/Passmann/Cumbre DX)

MOROCCO Winter B-02 Schedule for RTMorocco in Arabic:

0000-0500 NF 5980 MOR 0900-1500 15340 NAD 1100-1500 15335 MOR 1500-2200 15345 NAD 2200-2400 NF 7135 MOR (R. Bulgaria Observer/Nedjalkov-BUL)

NAMIBIA There is no frequency switch from 6060 to 3270 kHz at 1600 UTC. So 6060 is 24h, 3270 is inactive. The switch from 6175 to 3290 works, but there is a strong hum on 3290. Both transmitters are operated with 70 kW and the very last tubes are used to keep them on the air. (Willi Passmann/Cumbre DX)

PAKISTAN New printed schedule from Pakistan indicates home services via Islamabad as follows:

API-2 5915 0045-0215; 9645 0600-1115 [includes En nx at 0800-0803 and 1100-1104. 6065 Balti Nx 1350-1400 & Sheena Nx 1420-1428. 5965 1615-1700 [Islamabad Programme (Aaina)].

API-4 7105 Current Affairs 0200-0400 & 1300-1800 (Noel R. Green-UK, BC-DX Nov 5/Cumbre DX)

Frequency changes for **Radio Pakistan** effective from Nov. 25: 1715-1800 Persian & 1800-1900 Urdu (Islamabad program) NF 7550, ex 7555 to avoid RTTY (Ivo and Angel! Observer, Bulgaria, Nov 29/DX Listening Digest/Hauser-OK)

PERU 4627 new here is *Radio San Isidro*, Celendin, Cajamarca, Peru. Heard Nov. 1 from 0100-0300 while Radio Cosmos was off. (Carlos Maldonado-CHILE, via Mohrmann-VT/Cumbre DX)

4904.71, *Radio La Oroya*, 1009-1022, Campo mx, some really beautiful harps. M anner w/song anmnt, also gave at least 2 IDs.(Valko 29 Nov./Cumbre DX)

6193.48, Radio Cusco, 0938 LA Pop mx w/W velist at t/in, 0941 M w/TC, ID, and short tlk, then OA campo mx at very weak lvl. 0945 M anner again w/ment of "radio", then what sounded like deadair at 0946. M returned at 0949 w/ment of Cusco, and Peru. Deadair again at 0951, but the M returned once again at 0953. I'm wondering if the deadair is due to a faulty cart machine. The signal was't very strong. Another stn on 6195 that signs on around 0955 wipes them out completely. Been following this for a couple weeks but haven't been able to ID until today. (Valko 23 Oct./Cumbre DX)

Radio Willkamayu from Cusco is testing on 10354.2v kHz. Transmitter power is only 20 watts, says station manager Julio C. Tello A. The station was first logged on shortwave by Alfredo Benjamin Caote B. near Lima in Peru on October 30 and November 2 after 1100 UTC, and later already after 1000 UTC. OBX7L Radio Willkamayu also broadcasts on 940 kHz. Address: Avenida Infancia 527, Wanchaq, Cusco, Peru, tel. +51-84-246391. (DXing.info, November 3, updated November 5/Cumbre DX)

RUSSIA Voice of Russia "Sodruzhestvo" sepcial service for CIS and Baltic States, all programs in Russian: 1400-1500 6045 6185 7105 7365

1500-1600 7445 12015 1600-1700 9470 12015 1700-1800 5995 6045 6185 7170 7440 7445 5995 6045 6185 7170 7440 7445

1800-1900 5995 6045 6185 7155 7170 7445 1900-2000 6045 7170 7445 (Nikolai Rudnev-RUS)

Some interesting religious and clandestine stations using Russian sites B02:

IBRA Radio

2000-2115 5935 Samara

True Light Station/IBRA Radio 1200-1330 5895 Petropavlovsk

Voice of Hope (High Adventure Ministries) 1200-1500 7485 Novosibirsk

Fang Guang Ming Radio 2100-2200 6035 9945 Samara

Voice of Khmer Krom

1400-1500 11560 Vladivostok Tuesdays only

Herald Broadcastina

9880 Komsomolsk 1200-1300 1300-1400 7460 Irkutsk

IBC Tamil

0000-0100 7460 Novosibirsk

Voice of Biafra International

1900-2000 12125 Krasnodar Saturdays only

University Network

17765 Samara 0400-1700 (Nikolai Rudnev-RUS)

| Some freqs changes for Voice of Russia: | | | | | |
|---|---------------|----------------|--|--|--|
| 0000-0100 | Portuguese | 6185, ex-7310 | | | |
| 0100-0300 | Spanish | 6185, ex-7310 | | | |
| 1200-1500 | Úr/Hini/Urdu | 9940, ex-12025 | | | |
| 1500-1600 | Hindi/Bengali | 9940, ex-12025 | | | |
| 1500-1600 | Russian | ADD 12015 | | | |
| 1500-1700 | Persian | 7510, ex 9360 | | | |
| 1500-1700 | Persian | ADD 7155 | | | |
| 1700-1900 | Russian | ADD 7155 | | | |
| 1800-1900 | German | ADD 6235 | | | |
| 1900-2200 | English WS | ADD 6235 | | | |
| 2100-2200 | Russian WS | ADD 5975 6045 | | | |
| 7370 | | | | | |

(R. Bulgaria Observer/Nedjalkov-BUL)

SRI LANKA While checking for SLBC All Asia Service on 7115 this morning, I noticed that it was absent there and on their old frequencies of 7190 and 7440. However, shortly I was able to get them with distorted audio on 7049 in the middle of the 40 Meter Amateur Band. 11905 was in parallel. Sked is 0050-0400, 0800-1530 Indian languages. (Jose Jacob-INDIA/Cumbre DX)

TANZANIA Radio Tanzania has

reactivated the use of 7280 kHz. Unfortunately, transmissions on that frequency continue to be erratic, and it seems only to be scheduled for usage at approximately 0700-1300, restricting propagation to the region. The parallel 5050 kHz continues to be used at 0200-2100. (Chris Greenway, Kenya, Nov BDXC-UK Communication/DX Listening Digest/Cumbre DX)

TATARSTAN B-02 schedule for Radio

Tatarstan, all via Samara: 0500-0600

15105 0700-0800 15105 0900-1000 11915

(R. Bulgaria Observer/Nedjalkov-BUL)

TOGO 5047, Radio Togo (p), 2121-2201, Found this one back on w/strong signal and weak modulation, as it was when it left the air. Rapid tlk by W accompanied by M at t/in. Lowto-inaudible modulation. (Valko 9 Nov./Cumbre DX)

UKRAINE Hare Krishna station Radio Krishnaloka began test transmissions on 7415v kHz shortwave on September 1. Regular broadcasts were scheduled from the beginning of October, from 0300-0500 and 1300-1500. Postal address for the station is given as ul.
Avtozavodskaya, dom 6, kvartira 24a, Moscow.
(DXplorer via DXing.info/ARDXC)

USA 4950.00 WHKT Portsmouth VA (x3) 2032 Possible 3rd harmonic of this station with Radio Disney programming. Harmonic is intermittent, but clearer than the original on 1650 when present - enough to block VOA Sao Tome. (Fine 10 Nov)

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UZBEKISTAN Freq change for Radio Tashkent to ME, all on 5885 (ex-6025):

1630-1700 Farsi 1700-1730 Arabic 1730-1830 Uzbek (Vatandosh) 1830-1900

Farsi 1900-1930 Arabic

(R. Bulgaria Observer/Nedialkov-BUL)

YUGOSLAVIA Updated B-02 schedule for Radio Yugoslavia:

0000-0028 Spanish 9680 0030-0058 Serbian 7115 Mo-Sa 7115 Su 0030-0128 Serbian 0100-0128 English 7115 Mo-Sa 0130-0158 Serbian 7115 0200-0228 7130 English 1330-1358 English 11835 Mo-Fr 1400-1458 Serbian 11835 Mo-Fr 1500-1528 Serbian 11835 Mo-Fr 1530-1558 Arabic 11800 1600-1628 Russian 6100 1630-1643 Hungarian 6100 1645-1658 Greek 6100 1700-1728 French 6100 1730-1758 German 6100 6100 1800-1813 Albanian 1815-1828 Bulgarian 6100 1830-1858 Italian 6100 1900-1928 Russian 6100 1930-1958 English 6100 2000-2028 Spanish 7200 2030-2058 Serbian 6100 Su-Fr 2030-2128 Serbian 6100 Sa 2100-2128 2130-2158 German 6100 Su-Fr French 6100 2200-2228 English 6100 2330-2358 Chinese 9580

(R. Bulgaria Observer/Nedjalkov-BUL)



ABU DHABI: Radio Canada International
12015 via Dhabayya f/d "Sackville"
cd. in 7 wks. w/ plastic pennant,
sticker and schedule.(Barto-CT).
Radio+Japan 15165 via Dhabayya f/d
cd. w/ newsltr., schedule and booklet in 289 ds.(Glotzbach-NM).

ARMENIA: Voice of America 11790 via

Yerevan f/d cd. in 631 ds. for SASE
(Glotzbach-NM). Voice of Russia
15735 f/d "Moskva River" cd. in 5
wks.(Barto-CT).

ASIATIC RUSSIA: Radio Nederlands 17570
via Khabarovsk f/d cd. in 663 ds.
(Glotzbach-NM).

AUSTRALIA: Radio Australia 9580 and 11650 via Shepparton f/d "Kangaroo" cd. w/ rpt. forms, schedule and a DX tip sheet in 236 ds. for 2 IRCs. v/s Jan Johnson.(Barbour-NH).

STATION NOTES: Radio Santa Cruz 6135 v/s Maria Yolanda Marco Escobar, Secretaria de Direccion. Addr: Casilla 672, Santa Cruz, Bolivia. La Cruz del Sur 4875 v/s Reyes Balta-

zar Quispe, Director. Addr: Casilla 1408, La Paz, Bolivia. Radio Educacao Rural do Tefe 3385 v/s Diacono Thomas Schwamborn, Director. Addr: Praca Santa Teresa 283, CEP-69740-000 Tefe, Amazonas, Brasil. Station plans to move to 4925 kHz. Radio Tropical 6419.2 Owner, Ernesto Laverde....via PLAY DX...Sam.

AUSTRIA: Radio Austria International 9870 f/d "Schoenbrunn Palace" cd in 28 ds. for † IRC.(Broufllette-IL).

in 28 ds. for † IRC.(Brouillette-IL).

BOLIVIA: La Cruz del Sur 4875.5 cd. w/ personal ltr. and an absolutely stunning station pennant in 426 ds. (Glotzbach-NM).

BOTSWANA: Radio Botswana 4820 f/d "Bull Elephant" cd. in 158 ds. v/s Ted Makgekgenene, Chief Engineer.(D'Angelo-PA).



w/ handwritten note in 38 ds. for an EG rpt. and \$2.00 via registered mail v/s Eduardo Moura. (Barbour). CANADA: CFVP 6030 f/d ltr. in 2 mo. 100 watts v/s Lonny J. Bergen, Engineer. (Shreve-UT) Radio Korea International 9560 via Sackville "Bussan

BRASIL: Radio Can cao Nova 4825 p/d "Logo" cd.



2002 Mask" cd. w/o site in 29 ds. for 1 IRC. Schedule and rpt. forms were rcvd. (Brouillette-IL). Radio Canada International 15325 via Sackville f/d "Sackville" cd. w/ plastic pennant, schedule and sticker in 7 wks.(Barto)

CHINA, PEOPLE'S REPUBLIC OF: China Radio International 15135 and 11955 via Kunding f/d "Confucian Grove and Residence Temple in Shandong" cd. in 2½ mo. The cd. was in Indonesian. I've QSLed the PRC over a 1,000 times and this is the first QSL I've ever seen in a language other than Chinese or English. (Barto-CT).

* Societe Pour la Democratie en Asia in Belgium was returned "inconnu" or unknown in 62 ds. Hope a valid address shows up.

(D'Ang-elo-PA).

Que Huong RadRadio 9930.

STATION NOTES: Radio Cultura Do Amazonas 4845

v/s Jerusa Santos, Directora de Radio. Addr:
Rua Barcelos 25, Praca 14 de Janeiro, CEP
69020-200, Brasilia, Brasil. Radio Congonhas
4775 Addr: Praca da Basilica 130, CEP 36404-000,
* Congonhas, MG, Brasil. Radio Okapi 9550 Addr:
Fondation Hirondelle, 3 Rue Traversiere, CH-1018
* Lausanne, Switzerland. La Voz de Tu Conciencia

E Lausanne, Switzerland. La Voz de Tu Conciencia 6010 Addr: Libreria Colombia Para Cristo, Calle 44 No. 13-69, Bogota, D.C., Colombia. Radio Centro 3290 v/s Luis A. Gamboa Tello, General Manager. Addr: Castillo Entre 12 de Noviembre y Olmedo, Edificio Radio

Centro, Ambato, Ecuador...via PLAY DX...Sam.



Station pennants on this page ion. He said to use: B.P. 2241, Brazz are via PLAY DX. Dario Monferini a ville, Congo or his home address at

via KWHR f/d cd. w/ 2 business cds. in 12 ds.for:SASE
(used) and ms. Report was
mailed to the San Jose, CA
address. v/s Nguyen Khoi, General Manager.(Barbour-NH). Radio International 9940 (Moldova?)
n/d e-mail reply in 2 ds. Station
said they were pleased they could
be heard in the US.(Barbour).

CONGO (Demoratic Republic): Radio Opaki * 11690 e-mail reply to Foundation Hirondelle (Info@hirondelle.org) in 4 minutes and 33 seconds w/ "Thank you very much for your message. We shall ask for some patience from you. The colleague who deals with the QSL requests is off for 2 weeks. v/s Dominique Jaccard, Desk Officer.(D'Angelo-PA).

CONGO (Republic): Radio Congo 5985 full
* 2 page hand written ltr. in EG from
Roger Olingou in 782 ds. for a FR rpt
and \$1.00. The v/s is a 35 year old
EG language broadcaster for the station. He said to use: B.P. 2241, Brazz

13.02. Juche 91 (2002)

Verification Card

via Barbour We thank you for your reception report and keen interest in our

We are pleased to verify that you heard Voice of Korea 10. 12 to 10. 30 on 11710 kHz on Janu 13 2002. Your valuable opinions on our programmes will always be very much appreciated.

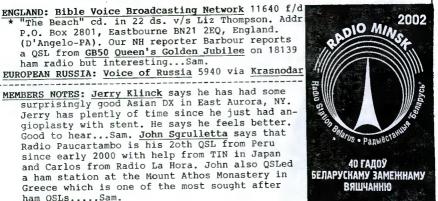
Yours sincerely,

The Radio-Television Broadcasting Committee of the DPRK, Pyongyang



B.P. 5754 Queuze, Brazzaville, Congo. The v/s needs a mobile phone. Anyone got one laying around? (D'Angelo-PA).

CZECH REPUBLIC: Radio Prague 15545 f/d "Prague Historic Center" cd in 24 ds. for 1 IRC. Sticker & schedule was rcvd. along w/ a brochure for Staropramen beer. (Brouillette). 2 f/d cds. of "Saint John Nepomuk Church" and "Litomysl Castle" in 13 ds. for 1 IRC. (Brouillette). 11600 and 13580 f/d "UNESCO World Heritage Site" cd. in 2 mo. (Barto).



a QSL from GB50 Queen's Golden Jubilee on 18139 ham radio but interesting ... Sam. EUROPEAN RUSSIA: Voice of Russia 5940 via Krasnodar MEMBERS NOTES: Jerry Klinck says he has had some surprisingly good Asian DX in East Aurora, NY. Jerry has plently of time since he just had angioplasty with stent. He says he feels better. Good to hear...Sam. John Sgrulletta says that

P.O. Box 2801, Eastbourne BN21 2EQ, England. (D'Angelo-PA). Our NH reporter Barbour reports

Radio Paucartambo is his 20th QSL from Peru since early 2000 with help from TIN in Japan and Carlos from Radio La Hora. John also QSLed a ham station at the Mount Athos Monastery in Greece which is one of the most sought after ham QSLs....Sam.

SALAMA RADIO



8th February 2002-

Scott R, BARBOUR Jr PO BOX 893 INTERVALE 03845 DISA

Dear Scott R

Thank you very much for listening to Salama Radio. We can confirm that you did tune in to Salama Radio broadcasting on the frequency you mentioned. We have been broadcasting at 12.025 MHz since December 2001, and until 31st March 2002, at 1900hrs UTC.

We have been on air since July 6th 2001, and we broadcast everyday in Hausa and English at present. Our programme is mainly Christian with about 30% of programs dedicated to moral issues, African folk songs and music.

Enclosed with this letter is a Salama Radio sticker with our new programme schedule. Do tell your family and friends about Salama Radio. We hope you will be able to tune into Salama Radio as often as you can. Please visit our website for more information about Salama Radio, hopefully the new frequency change would be 15.250 MHz on the 19 Metaband from the 1st of April. Please listen on the radio for the new frequency change in March when it will be announced. We appreciate your support and we hope that you find the program interesting.

Thank you once again for tuning in to Salama Radio.

God Bless

or AHPdall

Dr Jacob Abdalla Chairman, Salama Radio.

f/d "Kosmos Hotel" cd. in 5 wks.(Barto-CT). Radio Maryja 15455 via Samara (?) f/d ltr. w/ religious materials and station stickers in 34 ds. for 1 IRC. v/s Malgorzata Zaniewska.(Barbour). FINLAND: EDXC 2002 13720 via

* Radio Finland f/d "Log Periodic Antenna" cd. in 57 ds. for \$1.00.(Brouillette) FRANCE: TDF 25775.1 e-mail re-* ply w/ same info. as contained in replies to Kusalik and Barbour from Pierre Urcun in 6 ds. 400 watts. Transmitter is in Rennes. (D'Angelo-PA). p/d ltr. w/ explanation of broadcasts. Addr: TDF, Cesson-Sevigne, France. (Barbour-NH). Radio France International 17850 form ltr., schedule, rpt. forms and stickers in 17 ds but no QSL for \$1.00. (Brouillette-IL).11845, 15300 and 15605 p/d ltr. in 3 mo. w/ schedule.(Barto-CT). Radio Great Jamahiriyah 11635 and 11715 via Issoundun f/d cd. in 3 mo.(Barto) GERMANY (East): Deutsche Welle 9735 via Nauen f/d "DTK Nauen" cd. in 7 mo.(Barto-CT)

GERMANY (West): IBRA Radio 9425 via DTK Julich f/d

"Embrodiery from Hong Kong" cd. w/ site in 215 ds. for 1 IRC. Note on cd. says the transmission is targeted for Afghanistan. (Barbour). 9405 f/d "Copper Artwork from Zaire" cd. in 82 ds. for 1 IRC. (Barbour). Radio Free Afghanistan 12140 via Wertachtal f/d cd. in 9 ds. v/s John Vodenik. (Craighead-KS). 9615 via Biblis f/d cd. in 9 ds (Craighead-KS). Radio

HARRY THRESTO. THE THE THE PROPERTY OF THE PARTY OF THE PAR Radio Tirana, Tirana, Albania Dear Scott pleased to confirm that you have heard Radio Tirana on 6/15 kHz, date 05/05/02 Scott R. Barbourto Your valuable opinions on our pro-P.O. Box 893 grammes will always be appreciated. Intervale N.H Yours sincerely Radio Tirana Internate 03845 Correspondence Section TAKE PENS Free Iraq 12030 via
Julich f/d cd. in 3 wks.(Craighead). 13755 via Lampertheim f/d cd. in

3 wks. (Craighead-KS).

GREECE: Voice of Greece 12110 and 9420 f/d cd. in 6 wks. (Barto-CT). 12110 f/d cd. in 2 mo.(Barto). 9420, 17705 and 15630 f/d "Lefkas Beach" cd. in 5 wks. (Barto-CT). 9420 and 15630 f/d cd. w/ schedule in 5 wks.(Barto). Radio Free Iraq 9730 via Kava-la f/d cd. in 1 mo. v/s John Vodenik.(Craighead). Radio Station Makedonias 9935 f/d "Castle Logo" OSL folder in 20 ds. for 1 IRC (returned). v/s Tatiana Tsioli. (Barbour-NH).

> STATION NOTES: Radio Bhutan 5025 v/s Dorji Wangchuk, Station Engineer. Addr: P.O. Box 101, Thimphu, Bhutan. La Voz de tu Conciencia 6060 v/s Russ Stendal, General Manager. Radio Or-iental 4781 v/s Luis Enrique Espin Espinoza, Gerente General. Addr: Avenida Jumandy 536, Tena, Ecuador. Radio Tacna 9505 v/s Ing. Alfonso Caceres, Gerente. Radio L.T.C. 5005 v/s Leoncio Zacarias Torres. Radio UNAMSIL 6137 v/s Mrs. Sheila Dallas, Station Manager and Executive Producer. Addr: UNAMSIL Headquarters, c/o Hotel Mammy Yok, P.O. Box 5, Freetown, Sierra Leone...via PLAY DX...Sam.

GUINEA: Radiodif-* fusion Television Guineenne 7125 n/d e-mail in 6 ds. via Issa Conde, Directeur de RTG. V/C # 221.(D'Angelo-PA).

9730 via KWHR f/d cd. in 2 wks. v/s Nguyen Khoi. (Craighead) ... I previously listed this under Clandestine.... at least I got it in and didn't lose it on the floor...Sam.

HUNGARY: Radio Budapest 9560 f/d "Budapest" cd. w/ station seal in 205 ds. for 1 IRC. This after a f/up rpt. and a station apology. (Barbour-NH).

MALI: China Radio International 13685 & 17880 f/d "Mount Lushan, Jiangxi" cd. in 7 wks.(Barto).

MEXICO: XEQM Radio Onda Corta 6105 f/d cd. w/ brochures and stickers in 3 mo.(Barto). 6105.1 station QSLed a





GOD BLESS AMERICA

NEW ZEALAND: Radio New Zealand International 11675

f/d "Royal Albatross" cd. w/ verie stamp, schedule and a ton of station stickers in 301 ds. for 2 IRCs. I actually gave

up on this one. (Barbour-NH).

NEWFOUNDLAND: CKZN CBC Radio One 6160 f/d "CBC Newfoundland and Labra-dor" folder cd. in 2 mo. w/ sticker, station info. and schedule for other area stations. v/s Keith Durnford.(Barto-CT).

PORTUGAL: Deutsche Welle 12000 cd. in 2 mo. (Barto-CT).

SEYCHELLES: Voice of Forgiveness 15535 via FEBA rcvd. e-mail reply in 1 day from Annie Hall. My rpt was sent to Webmaster@arabicradio.org

Capitao ene Garcez 860, Sao Francisco, Boa Vista Roraima, Brasil. Radio Clube do Para 4885 v/s Camilo Centeno, Diretor Geral. Addr. Avenida Almirante Barroso 2190 1 Andar, CEP 66095-000 Belem, Para, Brasil. Radio Cultura Foz de Iguacu / Radio Filadelfia 6105 v/s Pastor Isaack de Jesus, Program Director. Radio Tupi / Radio Universo 11765 v/s Douglas Santana. Radio Yura 4716 v/s Rolando O, Cueto.....via PLAY DX....Sam.



92 reception when they used the slogan Radio Yucatan. v/s
Ing. Bernardo Laris

while the reply came from ahall@cytanet.com.cy (D'Angelo-PA). My rpt. for the VOF transmission was QSL wd by FEBA w/ cd. in 45 ds. v/s Doreen Dugathe.(D'Ang-SPANISH MOROCCO: Radio Free Afghanistan 9865 elo).

via Briech f/d cd. in 1 mo. (Craighead-KS). Radiodiffus-

ion Televisione Marocaine 7185 cd. in 3 mo.(Barto-CT).
SRI LANKA: Voice of America 9720 via Iranawila f/d "Morocco"



ria awila I/d "Morocco"
cd. in 2 mo.(Barto). Radio
Free Afghanistan 17670 via
Iranawila f/d "Sri Lanka Transmitting Station" cd. w/ personal
ltr., wall calendar and schedule
in 6 wks. v/s Walter D. Patterson,
Station Manager.(Craighead).

SYRIA: Radio Damascus 13610 f/d "Logo"

cd. w/ sticker, newspaper and schedule in 259 ds. for 1 IRC.(Barbour-NH).

TAIWAN: Radio Taipei International 7445
and 11985 f/d "Bowl with Docor of Peonies" cd. w/ schedule and 3 stickers
in 2 mo.(Barto). Voice of Asia 7445

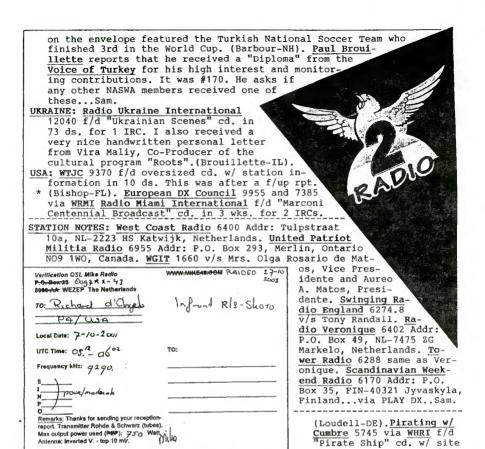
in 2 mo.(Barto). Voice of Asia 7445
via Radio Taipei International QSL cd.
w/ 2 zodiak cds. ROC flag sticker and
June schedule in 679 ds.(Glotzbach).
PHAILAND: Radio Free Afghanistan 17685
via Udorn f/d cd. in 3 wks.(Craichead)

THAILAND: Radio Free Afghanistan 17685

via Udorn f/d cd. in 3 wks.(Craighead)

BBC Asia Relay Station 11955 via Nakhon f/d "Transmitter Site" cd. in 28
ds. v/s Miss Puangtip O. Addr: P.O.
Box 20, Muang, Nakhon Sawan 60000,
Thailand.(D'Angelo-PA).

TURKEY: Voice of Turkey 11655 f/d "Flowers" cd. in 45 ds. Rcvd. a 2nd QSL cd. 3 ds. later for the same rpt. Stamps



and info. sheet in 6 ds.
and \$1.00 to the Stoneham, MA address. v/s Chris Lobdell.(Barbour-NH).

* WBOH 5920 Fundamental Broadcasting Network f/d QSL ltr. w/ religious
material in 11 ds. for SASE (used). v/s A. Robinson who says QSL cds.
will be available when the station is fully operational.(Barbour-NH).
USA (Pirates): Shadow Radio 6950 n/d e-mail reply in 2 ds. for a rpt. to
theshadow6950@hotmail.com (Barbour-NH). WMOE 6955 f/d "Stooges" cd.



in 22 mos. for 3 ms.
(Bishop-FL). Voice of
the Abnormal 6955 f/d
"Computer generated
Marijuana Leaves /
Joint" sheet in 111 ds.
for \$1.00 v/s Guy Paganus. Use the Elkhorn,

To: Samuel Barto

KIPM Official QSL #558

This is to confirm and verify your report of reception of KIPM which you received on December 30, beginning at a time of 02:57 UTC. On a frequency of 6925 kHz.

Your continued reports are of great interes

And your further comments are much appreciated!

73's MAX
Alan Maxwell

More Power from the Tower



Nebraska maildrop, (Wilkins-MO).Radio Azteca 6955 via WHYP (?) f/d orange cd. w/ paper pennant and a cd. for the "Knifeman", Chuck Bowen. This for \$1.00 and SASE to the Belfast, NY maildrop. (Barbour-NH).

12065 via Tashkent f/d cd. in 25 ds.(Glotzbach). Radio Vatican 12065 via Tashkent p/d cd. in 2 mo. Site not listed but I listed it in my rpt. and they said "OK".(Craig-VATICAN: Voice of Charity 11735 short ltr. from Father Fadi Tabet head).

* who signed and stamped my prepared cd. in 39 ds. for \$1.00. Addr: P.O. Box 850, Juniyah, Lebanon. Radio Vatican 21850 and 15595 f/d cd. in 2 mo.(Barto-CT). same freqs w/ f/d "Satellite Disk" cd. in 5 wks.(Barto) VIETNAM: Voice of Vietnam 5035 via Xuan Mai f/d "Map" cd. w/o site in 236 ds. Also rcvd. paper flag, schedule, frequency list and program guide. (D'Angelo-PA).

We also have the following

INTERNATIONAL AIRWAVES: Commando Solo II 8700 in the Afghan Theater of

STATION NOTES: Radio Likedeeler 6305 v/s Bernard Beck. Addr: P.O. Box 73, NL-7160 AB Neede, Netherlands. Radio Marabu 6210 Addr: P.O. Box 1166, DE-49187 Belm, Germany. Radio Neptune 6950 v/s Joe Mack. Addr: P.O. Box 109, Blue Ridge, PA 17214. Radio Nordsee International 6210 Addr: P.O. Box 2209, DE-

Radio Mil • XEOI Acertado Postal 21-1 04021 Mexico, D.F.

Estenado Willshaw

Por modio de la presente, acusamos recibo di /__ /__ con un valor SINPO de : correspondiente a ros UTC, en la leccuencia de los _

non de ____ er Recimemos can gran interés y agrado nuevos informes de recepción y comentarios active nuestras emisionos, que Ud. amatiemente nos haga Regar





77612 Offenburg, Germany. Radio Paradise International 6305 Addr: paradiseinter national@hot. mail.com Radio Spaceman 7500 Addr: same as Ra dio Likedeeler.

Radio Korak International 3927 Addr: P.O. Box 134, NL-3780 BC Voorthuizer, Netherlands...Via PLAY DX....Sam.

Operations (presumed) w/ n/d "Eagle and Military Insignias" cd in 304 ds. for 3 ms. A handwritten note apologized for the delay. Addr: 193rd SOW, Attn: Chief of Public Affairs, 81 Constellation Court, Middletown, PA 17057 (Wilkins-MO). same in 365 ds. w/ QSL cd. and station sticker. Very proud of this one. (Glotzback-NM).

MORE POWER FROM THE TOWER

This seems like a good place to end this months column. I must say that there were some great QSLs this time around. See you in 2003...Sam.

Net Notes

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

The Winter season is upon us. If you haven't already picked up your Passport to World Band Radio, do. There are a number of interesting feature articles in the 2003 edition.

Radio New Zealand International

Radio New Zealand
International has a second source of audio on the net. In addition to the widely-known audionet.co.nz, RNZI's audio-on-demand is carried on XtraMSN (yes, Microsoft's New Zealand portal). The audio quality is good. Pay attention to the extra commas and punctuation herein -- xtramsn.co.nz/musicandvideo/0,,6151,00.html -- and there is video from TV3.

As an aside, are you interested in sailing? Unlike the stateside portals, XtraMSN also carries a section on Team New Zealand and the Americas Cup Race (xtramsn.co.nz/teamnewzealand). Schedules

Questions have come up on sources of summary broadcast schedules available on the Internet. We've checked, and the best ones in our opinion are the following.

Mark Fine's offerings come in various flavors. I like the Javaenabled browser. Take your pick: www.fineware-swl.com/schedules.

John Figliozzi, ANARC, and NASWA have a program-oriented listing at anarc.org/naswa/swlguide.

Tomas Hood, NW7US, is expanding his amateur radio and propagation site to include shortwave at a rate faster than I can keep up with it. Fast search engines manipulate HFCC data. Check out the goodies at shortwave.hfradio.org.

All of these resources are free. We cannot recommend Bernd Friedewald's ILG service. Numerous newsgroup and mailing list complaints fall into two categories:

(1) failure to respond in a timely manner to requests for passcode access, and (2) broadcast data is very slow to be updated at the time of seasonal changes. Please research this for yourself.

FCC site access

John Neuhaus, WA2JXE, has compiled an unofficial FCC document locator Web site that purports to be easier to use than the agency's own pages. Strictly text, the site loads very guickly and may just be the answer to finding that piece of information you are looking for. Further, Neuhaus has a spectrum allocation chart and table that is a breeze to use, and numerous CFRs (Code of Federal Regulations) and links to third-party frequency charts and lists. Almost all of this is for the USA, but there are a few references for the rest of the world. It looks like this Web site should answer the incessant questions in the newsgroups of who operates on what frequency ranges. Check out www.ineuhaus.com for yourself. Aussie's R&C bye-bye?

It's now been more than a year since I last wrote a "Baudwalking" column for the Australian Radio and Communications magazine. Chris Edmondson disappeared from sight under a mountain of debt and the business manager, Trent Sampson, attempted to get the magazine restarted. One issue was published in late summer 2002, but that's been it. I can only suggest you watch the new Web site www.radiomag.com.au. for developments. Bob Padula's EDXP newsletter may also have some news

Seasons Greetings and Happy 2003!

from time to time.

Pirate Radio Report

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

Hello and welcome to the December 2002 Pirate Radio Report! Happy Hanukkah, Merry Christmas and Happy New Year to all. Lots of stuff to bring you up to date on, so let's get right to it!

Steve Anderson, Operator of KSMR, United Patriot Radio apprehended!

You knew it had to happen sooner or later. Here is the info as reported in the *Courier-Journal* newspaper based in Louisville, KY.

Steve Anderson, a white supremacist who operated an illegal radio station from his home in Pulaski County, KY was arrested in the mountains of southwestern North Carolina on October 22nd, 2002 by the ATF and the North Carolina State Bureau of Investigation, acting on a tip received from the America's Most Wanted TV program. Anderson had been on the loose since October 14th, 2001 when he opened fire on a sheriff's deputy when he was stopped for a traffic violation.

Readers of this column will remember his radio station KSMR/Kentucky State Militia Radio, later changed to UPR/United Patriot Radio which operated from February until October of 2001. Is failure to QSL a federal offense?

Lots of logs, so let's get to 'em!

Many thanks to Ralph Brandi-NJ, Ross Comeau-MA, Rich D'Angelo-PA, Bill Winkins-MO and Joe Wood-TN.

Betty Boo Radio, a Halloween station was noted on October 25th at 0105 UTC on 6925 kHz, AM mode with good signals in TN. Announcer Kiel Ovranddy presenting the Halloween show. Uses the interval signal of "Boop Boop de Boop" followed by a pipe organ fanfare. Songs included "I'm The Bogeyman", "Skeleton In The Closet" and others. Uses Box 28413, Providence, RI 02908 as a maildrop. [Wood-TN]

KIPM, Alan Maxwell's "Illumati" Station was noted on October 27th at 0231 with a scary story, announcing the Elkhorn, NE maildrop. [Box 69, Elkhorn, NE 68022].

Melvin Malfunction Radio [tentative]. Heard on October 31st on 6950 kHz USB at 0318 by 0320 UTC. Just heard a possible ID and unreadable email address, then gone into the mud. [Wood-TN]

Radio Azteca, logged on October 18th at 0039 on 6952 kHz AM discussing a list of possible new names for the station. Reception was very good. [Wilkins-MO]

Radio Casanova, the Dutch Europirate, was heard from 2214-2226 in Dutch & English with IDs and pop music programming on 6260 kHz on November 15th. [Comeau-Maine DXpedition]

Radio Skyline, another Europirate was logged on November 17th at 0716 playing the instrumental "Popcorn" and other disco mx on 6298.8 kHz. [Comeau-Maine DXpedition]

ROZ/Radio Omroep Zuid, the Dutch Europirate was logged on 21890 kHz October 27th at 1420 UTC past 1510 playing pop music, giving IDs and an e-mail address. [Brandi-NJ]

Voice Of The Abnormal was noted with their Yukon Jack Halloween special On October 26th at 0042 UTC on 6952.5 kHz USB. [Wilkins-Mo]

WHYP, logged on October 31st at 0238 with poor reception on 6950 kHz USB with their Halloween program. Mentions of Mt. Kisco and JTA. [Wood-TN]

WJFK, Noted here while typing this column on 6953 kHz USB at 0037 UTC on 29 November with "Abraham, Martin and John" by Dion, "Sunny" by Bobby Hebb. WJFK ID by man several times at 0046 s/off. This station only operates on or near the anniversary of JFK's assassination.

WMOE, noted on October 18th at 0005 UTC with pop music on 6955 kHz AM. Fair to good reception. [Wilkins-Mo]

WMPR, noted on 6955 kHz at 0110 UTC on November 17th. Not the usual techno-pop music they usually play. Also logged on Nov. 8th at 2332 UTC. [Wood-TN]

Unidentified. 27105 kHz, noted from 0205 to 0245 s/off and from 2335-2342 UTC on November 8th. Most of the music was c&w influenced gospel type music. The transmitter seemed to switch off between songs. Does anyone have any ideas on the ID of this station? [Joe Wood, 124 Brittany Dr., Gray, TN 37615]

Until next month, Happy Pirate DX!

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Contributors' Page

Bob Montgomery • P.O. Box 1458 • Levittown, PA 19058 • RMonty3@worldnet.att.net

NRD-545 AOR AR-7030 100' LW

DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA Scott BARBOUR, Intervale, NH John BEATTIE, Ventura, CA Jerry BERG, Lexington, MA Ralph BRANDI, Tinton Falls, NJ Paul BROUILLETTE, Geneva, IL Rich D'ANGELO, Wyomissing, PA Jill DYBKA, Kingston Springs, TN Kris FIELD, Horsham, PA Mark FINE, Remington, VA Bob FRASER, Cohasset, MA Joe HANLON, Phila, PA Fred KOHLBRENNER, Lansdowne, PA Jerry LINEBACK, Scranton, KS George MAROTI, Mt. Kisco, NY William McGUIRE, Cheverly, MD Bob MONTGOMERY, Levittown, PA

Ed NEWBURY, Kimball, NE
Tim O'HARE, Spokane, WA
Juan V. SALINAS, San Antonio, TX
Nobuo TAKENO, Kawasaki, JAPAN
Tom WILLIAMSON, Peterborough, ONT
Steven WISEBLOOD, Brownsville, TX
Joe WOOD, Gray, TN

ATS 818, RS antenna system no equipment listed R8A 165' LW AOR7030, R8, 250' longwire Drake R8, ICF2010, 60' long wire Drake R8B, Lowe HF-150, DX Sloper DX-440, G5RV Drake R8, long wire Drake R8A, 150' longwire Sony ICF-2003 ICF-SW100s 2m LW SW8, EMF ant., ICF-SW7600G w/active ant. Drake R8 Icom 746 beverage antennas R8B, 2010, 30/45 m. dipoles DX-380 NRD535D, R390A, RX32O, HF15O, SE3, active antenna WJ-1000, R8, 60' sloper, 20' loop R8, SPR-4, 2010, 66' Windom, 25' whip Drake sw8, built telescopic whip NRD-535D with 10 m wire HF-225, R-1000,60 m.Delta loop, 80' inverted V

DX-390, Grundig Mini 100 PE, whip antenna

Nice turn out this month. Lots of good DX catches even with such poor conditions this month. I am certain conditions will improve this month. Hard to believe but the end of another year. Not sure where it went. Merry Christmas and a very Happy New Year!

DX160, 100' long wire

73

Bob Montgomery

94/

Tropical Band Loggings

Dan Ferguson • 12053 Kahns Road • Manassas, VA 20112 • troplogs@zerobeat.org

Deadline to the Distribution Editor is the 10th. Deadlines to TropLogs@zerobeat.org are December 22 and January 26.

- 2310 AUSTRALIA ABC 1207 EE pops //2325 & 2485, both very poor 10/26.(Lineback-KS)
- 3220 NEW GUINEA R.Morobe 1143 EE pops, poor 10/20.(Lineback-KS) 1130-1203* M in EE w/mx px featuring pop tunes, C&W and island music. Announcements about tomorrow's events. Off with news 1200, followed by ID and orchestra national anthem. Poor to fair 11/5. (D'Angelo/FCDX-PA)
- 3230 SOUTH AFRICA WYFR Meyerton 2054 EE tlk, mx, 2058 schedule info and ID. Fair 11/2. (Takeno-JPN)
- NEW BRITAIN R. West New Britain 1142 10/20, Vern singing, M in Vern, poor; still going with Vern pops at 1211 recheck. And 1157 10/26 M in Vern, very poor but no UTE. (Lineback-KS) 0859 ID, NBC nx, fair 11/2. (Takeno-JPN)
- 3250 HONDURAS R.Luz y Vida 0140 SS, lite pop mx, M w/comunicados, then rustic CAm style music, 10/19. (Brouillette-IL)
- 3260 NEW GUINEA R. Madang 1141 M in Vern, insls, poor 10/20. (Lineback-KS)
- 3266.5 SULAWESI RRI Gorontalo 1155 Indo pops, poor 10/26. (Lineback-KS)
- PAPUA R.Southern Highlands 1156 Vern pops, poor but still going at 1210 recheck, 10/26. (Lineback-KS) 1131-1213 island music, man w/ EE wx, TC and general chatter. Brief news 1200; back to music. Poor 11/5. (D'Angelo/FCDX-PA)
- 3279.55 **ECUADOR** *LV del Napo* 0820-0935+ tune-in to SS rel pgming. NA 0900, back to lcl rel pgming with choral mx. IDs at 0909 & into Andean mx. Good 10/12. A regular lately. Interesting they would play NA at 0900 even though they were not signing on or signing off. (Alexander-PA)
- 3290 GUYANA Vo Guyana 0322 EE; oldies w/Roy Orbison; the Platters; YL ID; wak but in the clear 10/25. (Barbour-NH) 3291.2 (TENT) EE 0200, bit of steel drum mx, other Caribbean mx; M annor w/Caribbean accent. Very weak and noisy. Still no solid ID, but getting closer! 10/19 (Brouillette-IL) 3291.3 0155-0220 M EE, EE pops, ads, YL EE, reggae, poor 10/20; occ. fade, het. Also 0800 M EE ID, nx, followed by M speech in EE, fair 10/20. (Lineback-KS) 0200 YL with nx and SA music; very faint 10/19&23. (Wood-TN)
- 3315 ADMIRALTY IS R. Manus 1131 M in Vern, Vern pops, poor but still going at 1213 recheck, 10/20. (Lineback-KS)
- 3315 INDIA AIR Bhopal 0054-0118 f/o mix of Hindi vocals & M talk. Fair at tune in but slowly fading beginning at 0115, 11/4. (D'Angelo/FCDX-PA) (p) 0053 OM sings; poor 11/4. (Field/FCDX)
- 3325 KALIMANTAN RRI Palangkaraya 1215 M in Indo talk; over Guatamala, poor to fair 10/20. (Lineback-KS)
- NIGERIA R. Nigeria Lagos; 2047 mx & EE tlk. 2100 ID as Radio Nigeria Lagos, but Non IS of Drums. Audible-Fair 11/2, (Takeno-JPN)
- 3345 MOLUCCAS RRI Ternate 1158-1203 SCI into RRI nx a little late, poor 10/26. (Lineback-KS)
- 3345 NEW GUINEA R. Northern 1132-1202* YL in vern, vern pops, anmts and off w/GSTQ, no RRI, poor 10/20. (Lineback-KS)
- COSTA RICA REE 0223 SS pop vocals, good 10/20.(Lineback-KS) SS 0210 end of nx, ID, REE features. Solid S9+10 signal 10/19. Heard only occasionally, but can't be missed when it's there. (Brouillette-IL)
- 3360 GUATEMALA LV de Nahuala 0215 MSS t1k, TC, CAm style music. Weak and noisy 10/19. (Brouillette-IL)
- 3366 GHANA Ghana B.C. 2100 ID and EE nx. Good signal. Also heard it's spurs 3285.65kHz and 3346.35kHz, fair condx. 11/2 (Takeno-JPN)
- 3375 NEW GUINEA R. W. Highlands 1138 M in EE/Vern, Vern singing, poor 10/20. (Lineback-KS)
- NEW IRELAND RNI 1137 YL in Vern, Vern pops, poor 10/20. (Lineback-KS) 1155-1202* island music with M ancr w/ID, promo anmts and TC in English. Poor to fair after overcoming ARO QRM 11/5. (D'Angelo/FCDX-PA)
- 3955 U.K. R. Korea Int, Skelton, 2134 German talk, ID 2147, fair 11/2. (Takeno-JPN)
- 3976 KALIMANTAN RRI Pontianak 1206 RRI nx by M, poor 10/26. (Lineback-KS)
- 4000.1 SULAWESI RRI Kendari 1148 Oct 20, Indo pops, poor (Lineback-KS)

- 4388.9 PERU R. Imperio 1005-1025 w/live rel px M&W in responsive church service in SS, crowd noise; break for ID by M 1017, also mentions 92.1 FM in Chiclayo, then back into pgm. ann'd as "La Hora de Salvacion." 10/27. (Newman-IN) 4388.91 1006 rel sermon and vocals 1006. Fair 11/4. (Kohlbrenner FCDX/PA) 1012-1021 Nov 4, vocals, man with ID and TC. Fair to good 11/4. (D'Angelo/FCDX-PA)
- 4606.6 IRIAN JAYA RRI Serui 1147 Indo pops, poor rising to fair by 1227 recheck, 10/20. (Lineback-KS)
 4753.3 SULAWESI RRI Makassar 1208 RRI nx by M, good 10/26. (Lineback-KS) 4753.38 2120-2130, Indo pops and chatter by M&W; 11/3. (Kohlbrenner FCDX/PA) 2130-2202 M long Indo talk till SCI, then Jakarta news. Fair level but deteriorating badly by top of the hour, 11/3. (D'Angelo/FCDX-PA)
- 4760 LIBERIA ELWA 2132 EE rel pxm with gospel music 11/4. (Kohlbrenner FCDX/PA) 2140 Christian hymns, W w/freqs, NA 2158; strong 11/4.(K Field FCDX 4 Nov 2002) 2104-2115 EE; M w/mx request program; ID, Ment of "Monrovia". Poor, weak 11/14. (Barbour-NH)
- 4760 TAĴIKISTAN Radio Liberty 10/13 0124 talk in presumed Tajik, music @ 0130; // 9760 via Lampertheim, Germany, but about a half second behind; Dan Ferguson tells me this is 100 kW. (Brandi-NJ)
- GUATEMALA Radio Cultural Coatan 1057-1126 M hosting morning mx px w/frequent IDs and TCs. Fair with swisher QRM 11/4.(D'Angelo-PA) 4779v 1036-1058 M in SS tlk over organ mx; instl "There's no place like home"(?) 1054; then canned ID and freq anmt; more tlk over mx. Fair 10/30. (Barbour-NH) 4780.1 at 1221 rancheras, M in SS, fair fading to poor, swisher QRM 10/20. (Lineback-KS)
- 4781.36 ECUADOR Radio Oriental 1034 M SS ID, Andean vocals; 11/4. (Kohlbrenner FCDX/PA) 4781.38 10/31 1005 local music, a couple of IDs as "Oriental" @ 1008, more music; hit by the swooper, but not too badly (Brandi-NJ)
- 4790 INDIA AIR Chennai 0039-0045* caught final vocal Hindi selection prior to M ID & s/off anmts; fair to good signal 11/4. And *0000-0045* 11/5, s/on ID and anmts; then nx & mx. M w/long talks in Tamil. (D'Angelo/FCDX-PA)
- 4800 INDIA AIR Hyderabad *0024-0100 flute IS; M&W singing, then M tlk in Hindi; sitar mx; M EE ID 0035: "This is All India Radio, the news."; then EE nx, return to vocals at 0040. Good signal 11/4. (D'Angelo, Field & Kohlbrenner/FCDX-PA)
- 4815 ECUADOR R.El Buen Pastor, good the last few mornings, carrier coming on arnd 0955, px starting at 1000 with NA, long HC instl selection, opening anmt in Quechua w/fqy and m.b., some SS after that but no SS ID as such noted; px cont with HC mx, anmts. (Berg-MA)
- 4820 BOTSWANA *Radio Botswana* 2138-2200* pop vocal program to ID and close down anmts. Fair 11/4. (D'Angelo/FCDX-PA)
- 4820 CHINA Xizang PBS 1143-1154 CC. M w/mx & tlk. Poor, unusable by 1154; 10/28. (Barbour-NH)
 4820 CHINA (TIBET) Xizang PBS, 0005-0050 CC talk by M&W w/mx segments. Fair and clear
 reception until India commenced flute music IS at 0024; 11/4. (D'Angelo/FCDX-PA) 0010 0M &
 YL alternate in CC. Moderate signal. 0016 co-channel tx (p) from India, 11/4. (Field/FCDX-PA)
- 4820 INDIA AIR Kolkata *0024-0050 while listening to China surprised to hear flute IS poked through followed by group vocals and other Hindi musical selections. Generally poor with a few fair peaks but eventually faded under the Chinese station. 11/4. (D'Angelo/FCDX-PA)
- VENEZUELA R. Tachira, San Cristobal; 0253 Very nice mx at tune in; Slight het from R. Litoral, 4832 but best in lsb. S10 signal level with slight fades. Continous mx thru TOH. M ID 0302 and back to more fantastic mx. Excellent audio quality 11/9. (Montgomery-PA)
- 4832 HONDURAS R.Lotoral, La Ceiba; 0031 Vy nice copy; Tent ID 0032 by W & back to mx. S7 levels with some fades but fairly clear reception of very nice mx. M SS ID again 0033. (Montgomery, PA)
- 4840 INDIA AIR Mumbai 0036-0043 W w/Hindi nx; ID and music program. Poor 11/5. (D'Angelo/FCDX-PA)
 4845 GUATEMALA R.Kekchi 0250-0303* Rel pgming with talk in lcl lang. SS s/off anmts 0258 with
 call letters, R.Kekchi ID & mention of freq. s/off with NA. Fair 10/19. (Alexander-PA)
- MAURITANIA Radio Mauritanie 0410-0440 M non-stop AA talk complete with coughing to clear his throat when necessary. Running extended hours for Ramadan. Good 11/13. (D'Angelo-PA)
- INDIA AIR Delhi *0025-0038 caught flute music IS and vocals prior to EE ID & nx by M. Then female vocals selection. Fair 11/4. (D'Angelo/FCDX-PA) (p). 0023 Flute mx same as //4820; 11/4. (Field/FCDX) 1230 time pips into EE nx by YL, vy pr //4760 vy pr, and 4920 under China; 10/20. (Lineback-KS) 0056 ID is tent. with lots of Indian style mx. Nice copy, S6 lvls with fades and some static problems. But is audible. M ancr TOH with short tlks & back to mx. Fade to mostly noise at 0112 with occ fade ups. 10/12. (Montgomery, PA)
- 4885 BRAZIL Radio Clube Do Para 0226-0235 OM animated PP tlk. Jingles/ads w/telephone ringing, Phone #, ID & fgy 0234. More tlk. Good 11/6. (Barbour-NH)
- 4890 PAPUA Nat R 1144 EE pops, fair to good 10/20. (Lineback-KS)

- 4895 SARAWAK RM 1255 lang pops, good 10/20. (Lineback-KS)
- 4904.9 CHINA? unid 1235-1243 M in lang speaking over classical instrumental, lang singing //4920, fair; 1301 OM in CC w/nx; 10/20. (Lineback-KS)
- 4915 BRAZIL R. CBN Anhanguera in PP 0215; M ancr w/phone ins, TC's, ID; many ments of Goias. 10/9. (Brouillette-IL)
- 4915 GHANA R. Ghana Accra; 2023-2032 EE/Vern. Alt M&W EE w/nx re \$ aid to schools. ID as "R.Ghana" and "Ghana B.C." TC and into Vern. Very Good 11/14! (Barbour-NH)
- 4925 INDONESIA RRI Jambi *2155-2205 s/on w/fanfare mx, W ancr w/several mentions of Jambi, M w/RRI Jambi ID; into SCI 2159, 11/4. (Kohlbrenner/ FCDX-PA) 2156-2223 instl mx to local ID by W; then SCI 2159; into Jakarta news. Back to local program 2215 with vocal selection. Poor but clear, 11/4. (D'Angelo/FCDX-PA) 2152 weak signal, mx, tlk, SCI 2159. 11/4. (Field/FCDX-PA) 1238 Indo pops, poor-fair, fading, 10/26. (Lineback-KS)
- 4939.65 VENEZUELA Radio Amazonas 0923 SS vocals, ID & TC's. Fair 11/4. (Kohlbrenner/FCDX-PA)
 4939.66 presumed. I wish they would do something about their audio. Carrier at *1000 is pretty
 good, but audio is way, way down there, basically unuseable. Opening anmt hrd 10/26 & other
 days, but can't make anything of it; then mx. (Berg-MA) 4940 VENEZUELA R.Amazonas 08450904 10/23 SS, choral mx and ballads. M ID at 0903, signal dropped off at this point; antenna
 switch? Fair-poor 10/23. (Scott R Barbour Jr NH)
- 4950h USA WHKT Portsmouth VA (x3) 2032 poss 3rd harmonic w/ Radio Disney programming. Harmonic is intermittent, but clearer than the original on 1650 when present enough to block VOA Sao Tome; 11/10. (Fine-VA)
- 4959.8 DOMINICAN REP R. Villa / Cima Cien, SS 0230, bachata mx, liquor ads complete w/"alcohol is bad for your health" disclaimer, ad for a local news magazine. Jingle ID's for "Radio Cima Cien." Very solid signal and punchy audio; 10/9. (Brouillette-IL) Radio Cima at 0017 with almost non-stop music, slick "Cima" IDs sung by Wl 10/28. (Dybka-TN)
- 4960 ECUADOR R.Federacion 1033-1055 lively vocal Andean mx, really nice sig and audio, M ancr in vern (Shuar?) 10/27 (Newman-IN)
- 4965 ZAMBIA Christian Voice 2136-2142 Afr rel vcls, M EE ID 2142. (Kohlbrenner/FCDX-PA) Voice International, 2142-2210 instl mx; W EE ID & features about friendship. Nx at 2200. Poor to fair 11/4. (D'Angelo/FCDX-PA)
- 4976 UGANDA R. Uganda Kampala 2033-2101* cont hi-life mx in Vern. (Swahili?) w/W tlk and IDs during mx. Presumed production credits at 2052 by M, names and "Engineer" ment. NA at s/off. Very good, clear signal 11/14! (Scott R Barbour Jr-NH)
- 4980 VENEZUELA Ecos del Torbes SS 0245 very old romantic songs, canned ID's as "Esta noche recuerdas. Unas predilectas de la cancion romantica de ayer por Ecos del Torbes." Strong, but bad hum; 10/9. (Brouillette-IL)
- 5005 NEPAL Radio Nepal 0040-0050 presumed the one here with lcl mx, W ancr 0045. Poor 11/5. (Kohlbrenner FCDX/PA)
- 5009.6 PERU Radio Altura 0930 Andean vcls, ad string, several ID's. Poor 11/4. (Kohlbrenner FCDX/PA) 1002-1025 lot's of lively OA vcls hosted by a man with frequent TCs and IDs. Fair 11/4. (D'Angelo/FCDX-PA)
- 5010 INDIA AIR Thiruvanantapuram 0058-0132 long Hindi talk by M; mx & tlkby W. ID 0130, then nx. Good 11/5. (D'Angelo/FCDX-PA) (p) 0051 YL sings, sitar & other IN instruments; excelent 11/4. (Field/FCDX-PA)
- 5015 TURKMENISTAN R.Bakhara presumed 0055-0110 local AA sounding vcls & instls, five "bells" at 0100 with talk in presumed Turkman but no ID heard. 11/5. (Kohlbrenner FCDX/PA)
- 5025 UZBEKISTAN R. Tashkent Surprised to run across this one at 2145, C.Asian female vocalizing, then EE talk about diplomatic relations, brief closing anmt at 2157 ending with "... goodbye everyone from R. Tashkent." Carrier stayed on until 2159. Not a bad signal 10/19. (Berg-MA)
- 5030 BURKINA FASO Radio Burkina 10/13 2135 Radio drama in French, ending with gunshots and a murder, credits, then African music from 2145, ID @ 2153 and again @ 2200 (Brandi-NJ) 2220 FF, Afro pop and reggae, Rather weak & noisy 10/15. (Brouillette-IL)
- 5035.1 BRAZIL R. Aparecida 2330 PP, lite orch music, "Ave Maria", We ancr w/poor studio audio. Ments of Aparecida. 10/12. (Brouillette-IL)
- 5040 INDIA AIR Jeypore 0051-0058 nice selection of Hindi vocals w/M ancr. Fair 11/4. (D'Angelo/FCDX-PA) (p) 0052 IN mx. Moderate 11/4. (Field/FCDX-PA)
- 5085 USA WWRB 0219 Tom Valentine stuff, ads for gold investments also //5050 (10/28 Dybka-TN)

5100 LIBERIA R.Liberia Intern. Monrovia; 2310 - S8 carrier level noted and some very weak audio. First time hrd in some time now due to war in Liberia. Carrier first noted at 2245 but no audio till 2310 or so. Modulation at less than 10% at this time but improving as time goes by. Audio improving by 2325 but still very weak. Id is tentive. 10/20. (Montgomery, PA)

5384.3 PERU Radio Huarmaca 1047-1056 fade out; group vocals px hosted by M ancr w/SS talk, TC

and ID. Poor 11/4. (D'Angelo/FCDX-PA)

5678

LIBERIA R. Veritas from 2210 Nov 2 with Afropop & hi-life style mx, much talkover by M ancr, definite "R. Veritas, your . . . " at 2220. Building to arnd 2230, then leveled off. ID 2255, TC for 5 mins to 11, seeming rel msg (but very low audio), 2201 closing anmt and off without NA. Mx audio was better than voice, and signal was better in LSB than USB, though some ute QRM on the low side. Poor-fair overall 11/2. (Berg-MA) 2249-2302* gospel mx px w/occ comments over the music; prayer 2255, then closing anmts & ID. 11/3. (Kohlbrenner/FCDX-PA) 2242-2303* vcls w/M tlk over mentioning w/ID & TC: "voice of truth, Radio Veritas. it's 5 minutes to eleven." Fair to good signal. (D'Angelo/FCDX-PA) 2123-2137+ 11/03 EE. Rel. promos with mx. IDs, "Radio Veritas, your...(?)...station" and another at 2130 ment. "VO Hope". Program, "Time for Peace" re peace in Liberia and young people. Fair-poor, choppy, fading after 2137; 11/3. (Barbour-NH) 2251 OM singing. 2253 OM with eg ID "Radio Veritas Monrovia, Liberia, then M preaching in EE. 2258 the Our Father is recited. 2301 signal disappears suddenly. 11/3. (Field/FCDX-PA)

5486.75 PERU Reina de la Selva 1018-1032 rustic vcls, crowing roosters, ID's 1027 & 1031. Poor 11/4. (Kohlbrenner FCDX/PA) 1023-1047 M ancr frequent IDs and TCs ("5 y 39 minutos de la mañana . Este es Reina de la Selva.) & SS chatter hosting program of OA music. Weak but clear. Thanks to the ever alert Fred Kohlbrenner for this one. 11/4 (D'Angelo/FCDX-PA)

PERU R. Ilucan 0145-0245* SS talk, OA folk mx. ID. Anmts by M/W. Abrupt s/off. Weak 10/5. (Alexander-PA)

For Sale: British Racal RA-17 receiver and rare RA 237-B long wave converter. Total coverage is 10 kHz to 30 MHz. Mounted in four-foot equipment bay on wheels. Complete set of spare tubes. Also includes British and American manuals. Works well. Price \$800.00, trades considered. Local pickup advised as shipping would be very costly! Tim O'Hare, 1217 W. Decatur, Spokane, WA 99205. Phone 509-325-4338 anytime.

If you live in the Spokane, WA area and would like to help form a local chapter of NASWA, please contact Tim O'Hare at the address above.

International Band Loggings

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5930 SLOVAKIA R Slovakia Int in EG 0107, interviewing quest about Malta, q (Wood TN 10/19) UZBEKISTAN R Tashkent in EG 1220, Mideast style mx pgm, ID, //6025, 9715, f (Fine VA 11/9) 5975 PERU R Melodia Arequipa in SP 0850, continuous SP tlk, ID's, promos, ads, brief musical segments, 59967 poor reception (Alexander PA 10/26, Kohlbrenner FCDX/PA 10/26) GERMANY Deutschland R Berlin in GM 2350, techno mx bumpers, QRM Cuba, p (Dybka TN 10/28) 6005 COLOMBIA LV de tu Conciencia in SP 0815-1035, ID's, reliq sermon, SP mx, anomt that station now 60109v has their QSL's, difficult copy (Alexander PA, Brandi NJ, D'Angelo PA, Berg MA, Montgomery PA) 6040 ROMANIA RRI Galbeni in RM 0040, lots of great mx, long tlks, ID, fair until DW s/on in EG 0100 (Montgomery PA 11/6) 6050 NIGERIA RN Ibadan in EG 2104, nx re Nigerian Nat'l Assembly, ID (Barbour NH 10/29) GERMANY Mitteldeutscher Rundfunk Munich in GM 0100-0230, nx items, fire rptd on Paris-6085 Munich train w/several dead, ID's, traffic rpt, current affairs, station scheduled to close down at end of year, (Montgomery PA 11/7, Brouillette IL 10/4, D'Angelo PA 10/16) SINGAPORE R Singapore Int in EG 1150, US pops, ID, poor but better on 9600 (Kohlbrenner 11/4) 6150 6155 UNITED KINGDOM R Telefis Eireann relay in EG *0130, nx, sports, wx, traffic, xmsn started and ended at 0200 w/o any announcements, q (Wood TN 10/23) CANADA CKZN St Johns Newfoundland in EG 0826, NA, CBC ID, weekend AM pgm, nx, Air Lab-6160 orador skeds, wx for Davis Inlet (Dybka TN10/20, Williamson ONT 10/23) CHAD R Dif Nat N'Djamena in FR 2159, mx sel prior to 2203 s/off, orch NA (D'Angelo FCDX 11/4) 6165 CANADA V of Vietnam relay in EG 0109, Vietnam endorses childrens' rights (Newbury NE 10/17) 6175 6180 BRAZIL RN da Amazonia Brasilia in PT 2324, ID, lots of pgm info, lite QRM, g (Montgomery PA) MEXICO R Educacion in SP 0135, song abt Pancho Lopez sung to the tune of "Davey Crockett", ID 6185 in EG 0200, exc (O'Hare WA 11/9) in SP 0525, classical mx by Russian composer (Newbury NE 10/4) PERU R Cuzco in SP 0940, Latin American vocals, nice ID 0945 (Kohlbrenner FCDX-PA 11/4) 61935 ALBANIA R Tirana in EG 0347, nx, items re literature & Mother Teresa, ID, f (Wood TN 11/9) 6195 6235 RUSSIA VOR St. Petersburg in EG 2105, nx to 2110, into classical mx (Berg MA 10/27) ZAMBIA ZNBC Lusaka in Vern *0243-0321, famous Fish Eagle IS, tribal vocals, drums, ID in EG, f 6265 (D'Angelo PA 10/14) in Vern 0250, IS, hymn, drums, rustic local mx (Brouillette IL 10/30) ITALY IRRS Amisnet News Agency in FR/SP/EG *2059, pgm re European Social Forum in Florence -6280nf FR ID 2101, into SP segment, EG ID 2117, E-mail addr, agenda, UN Radio nx, operatic mx, request reports, choral mx, choppy signal, s/off 2200 (Berg MA 11/9, Barbour NH 11/8) CANARY ISLANDS Full Gospel Las Palmas Church in KR 2253, sermon, relig vocals, hymns, piano 6175usb mx, RTTY QRM, xmsn aimed at KR fishermen (D'Angelo PA 11/15, Berg MA 11/1) PERU LV de las Huaringas in SP 0200, ancmts, OA folk mx, ID, promos, weak (Alexander PA 10/19) 61896 PERU R San Miguel in SP 0145-0230+, echo ancmts, ID, OA folk mx, ads, f (Alexander PA 10/6) 68954 ETHIOPIA R Fana in Amheric 0327, Horn of Africa mx, IS, tlk, nx, p, //6210 (D'Angelo FCDX 11/4) 6940 ISRAEL Galei Zahal in HB 0240-0359*, local pop mx, ID, tlks, q (Alexander PA, Brouillette IL) 6973 GUINEA R Conakry in FR 2258, Afro mx, ID, lcl nx, stinger mx (Montgomery PA, Brandi NJ 11/9) 7125 7200 RUSSIA R Sakha Yakutsk in RS 0810, IS, R Rossii nx, upbeat ads, tlk, mx, pips, f (Berg MA 10/23) SOUTH AFRICA R Ecclesia Angola relay via Meyerton in PT 1934-2000*, political tlk, field reports, 7205nf Radio Nacional, Angola ID, classical piano mx until s/off, g (Barbour NH 11/6) BENIN R Dif du Benin Cotonou in FR 2248, western pop mx, phone requests, hilife vocals, ID 72103 2259 and s/off ancmts prior to 2300 s/off, NA, ham QRM (D'Angelo PA 10/17, Brandi NJ 10/13) GERMANY R Liberty relay in RS 0031, nice jazz mx, IS, nx, ID, exc signal (Montgomery PA 11/11) 7220 TAJIKISTAN RT Dushanbe in Dari? *0100, tuning melody on marimba, ID, fqy, nx, occasional mx 7245 bridges, brief EG recording of Kofi Annan during nx, first time heard (Berg MA 10/22) MOROCCO R Sawa via VOA relay in AR/EG 0429, pop mx, ID's, concert promo (Barbour 10/15) 7255 SÃO TOME VOA relay in EG 0307, "Daybreak Africa", "VOA News Now" (D'Angelo PA 10/18) 7290

rorism in the Philippines, pop mx, promo (Kohlbrenner FCDX-PA, D'Angelo PA 11/4)

7295

MALAYSIA RTM Radio 4 Kuala Lumpur in EG 1057, instrum mx, pips, ID 1100, nx, item on ter-

- 7300 TURKEY V of Turkey in TK 0210, local TK mx, ID, YL vocals, strong signal until WYFR splatter at 0229 spoiled xmsn (Montgomery PA 11/3)
- 7380 RUSSIA R Maryja via Samara relay in PL 2125, classical mx, tlks, g (Williamson ONT 10/23)
- 7400nf RUSSIA R Maryja via Armavir relay in PL 2117, YL ment Presidente and Poland several times, ID, classical piano mx, f-g (Barbour NH 11/10) ED: Apparently replacing 7380 for B02 season.
- 9435 ISRAEL VO Israel Tel Aviv in EG 0403, nx re Palestine and Iraq, pips, into FR 0415 (Dybka TN 10/6)
- 9515 BRAZIL *R Novas de Paz* Curitiba in PT 2350, vcls, ID's, TC's, relig preaching (D'Angelo PA 10/29, Williamson ONT 10/11)
- 95249 INDONESIA V of Indonesia in EG 2105*, nx, ID 2102, pgm sked, Love Ambon IS (D'Angelo 10/27) 9570 ROMANIA RRI in EG 2319, nx, tourist info, ID's, fqy ancmt, s/off 2355, g (Wood TN 10/22)
- 9570 ROMANIA KKI IN EG 2319, hx, tourist into, ib's, iqy artiflet, sy oir 2553, g (wood in 16) 22/
 9580 BOSNIA R Yugoslavia relay in Serbian *2330, IS, ID, fqys, pgm sked, folk mx, nx (Brouillette 10/27)
- 9580 IRAN *VOIRI* in EG 0046, nx re the IRA, dismantling and cease fire, political cmntry, Pres of Iran back home from trip to Spain, exc including audio quality (Montgomery PA 11/1)
- 9610 IRAN VOIRI Kamalabad in EG 0100, rpt on America's interest in Islam, //11970, g (Fraser MA 10/17)
- 9665 MOROCCO R Sawa via VOA relay in AR *0400, IS, ID, AR mx, tlks, song, g (McGuire MD 10/29)
 9675 ITALY RAI Rome in EG 0100, tlk on dangers of tobacco use, nx, Italy's Interior Minister warns that
- 9675 ITALY RAI Rome in EG 0100, tlk on dangers of tobacco use, nx, Italy's Interior Minister Warns that Europe is prime target for terrorism (Wood TN 10/19, Newbury NE 10/17)
- 9705 NIGER Le voix du Sahel in FR 2133, nice Afro mx, nx?, clear ID 2200, g (Takeno JAPAN 11/2)
- 9750 MALAYSIA V of Malaysia in IN 1043, local ballad and instrum'ls, YL DJ, ID "Saura Malaysia", mentioned "Kuala Lumpur" (Barbour NH 11/13)
- 9760 PHILIPPINES VOA relay in EG 1540, "Education Report" in special EG on how to apply to a US university (Brouillette IL 10/31) in EG 1245, tlk on the Iraq situation (Newbury NE 10/6)
- 9770 SRI LANKA SLBC in EG 0032, nx, ID, pgm of old mx including the Beatles, Doris Day etc., fair reception until Deut Welle s/on at 0100 on 9765 (D'Angelo PA 11/16)
- 97796v YEMEN Republic of Yemen Radio in AR/EG 1803, ments of Europe and Sana'a, nx in EG re Iraq and GW Bush, Palestine govt. and RS hostage crisis, ID in EG 1841, cmntry, NA 1900, into AR, f-p (Barbour NH 10/29) US pop mx, EG nx 1841, ID, NA 1859, muddy audio (Alexander PA 11/2)
- 9840 VIETNAM V of Vietnam Hanoi in EG 1233, mx pgm at tune-in, by 1250 signal became inaudible, noted //12020 w/equal signal but slightly more audible, best hrd in LSB (Montgomery PA 10/13)
- 9875 LITHUANIA R Vilnius in EG 2342, health rpt, drugs & AIDS major problems, g (Fraser MA 10/16) 9925 GERMANY V of Croatia relay via Juelich in EG 0200, nx abt Croat armed forces, ID's in several langs,
- 9925 GERMANY V of Croatia relay via Juelich in EG 0200, nx apt croat armed forces, ID sin several rangs, into CR 0215, vg (Wood TN 10/30) in EG 0011, kickboxing tournam't, ID (Newbury NE 10/28)

 9965 PALAU T8BZ Koror V of Hope in CH 1239, continuous tlk over acoustic guitar, ballad, ID and
- 9965 PALAU TBBZ Koror V of Hope in CH 1239, continuous tik over acoustic guitar, bailed, 1D and new? call letters over upbeat instrum'l mx, f/o 1305, f-p (Barbour NH 11/14)
- EGYPT R Cairo in EG 2200, nx, western mx bridges, fairly clean audio but fades (Fraser MA 10/18)
 NORTH KOREA V of Korea Kujang in SP 2206, OM & YL w/nx, solid ID, f-g (Barbour NH 11/5)
- 11335 NORTH KOREA V of Korea Kujang in SP 2206, OM & YL w/nx, solid ID, t-g (Barbour NH 11/5)

 AUSTRALIA RA in EG 1533, tlk re expiration of Australian broadcasting regulations, //9580, 11660 (Brouillette IL 10/31)
- 11665 RUSSIA V of Tatarstan via Samara relay in Tataric 0458*, tlk, ID, ment "Tatarstan", opera-like mx at 0455 until s/off, NA? (Barbour NH 10/17)
- 11690 JORDAN R Jordan in EG 1700, "Jordan Weekly", nx, ID, rap mx, RTTY noise (Alexander PA 11/2) in EG 1550, call-in pgm, ID at 1600, nx, RTTY noise (O'Hare WA 10/21)
- 11690 TURKEY V of Turkey in SP *1730, nx, tlks, local mx, RTTY noise, s/off 1754 (Alexander PA 11/2)
 11710 NORTH KOREA V of Korea Kujang in EG 1552, lite classical mx, ID, EG sked (Brouillette IL 10/31)
- in EG 1502, ID, NA, local nx by YL, garbled signal (Newbury NE 10/16)
- MOLDAVIA V of Russia relay in EG 0318, nx re ongoing theater hostage crisis (Dybka TN 10/26)
 MEXICO R Mexico Int in EG 2320, interview on East European folk mx, ID's, fqys in EG and SP,
- 11770 MEXICO R Mexico Int in EG 2320, interview on East European rolk mx, 1D s, 1qys in EG and SP into DX pgm, poor modulation but strong signal (Brouillette IL 10/27)
- 11815 BRAZIL R Brasil Central Goiania in PT 0824, Latin American mx, jingle, ID (Takeno JAPAN 11/2)
- 11820 PHILIPPINES R Veritas Asia in IN *2300, ID, into Indo pgm, lite mx, relig tlks (Brouillette 10/26)
 11830 BRAZIL R Anhanguera Goiania in PT 2309, nx, ID, tlks, ad string (D'Angelo PA, Brouillette IL)
- 11840 GERMANY R Reveils relay via Juelich in FR 1850, tlk, ballads, ID 1859, QRM splash from 11835, heard on Thursdays only (Barbour NH 11//7)
- 11845 CYPRUS BBC relay in RS *0200, Big Ben chimes, ID, tlks, s/off 0230 (Dybka TN 10/7)
- 11850 GUAM KSDA Adventist World R in EG *2128, ID, "Network 7", relig nx, g (Brouillette IL 10/26)
- BULGARIA R Bulgaria in EG 2105, nx, tlk of anti-inflation measures, p, QRM (Brouillette 10/26)
- 11910 CHINA REE Spain relay Xi'an in SP 1245, political nx, clear ID 1252, f (Barbour NH 10/24)

- 11915 BRAZIL R Gaucha Porto Alegre in PT 0850, tlk over mx, ID, call-ins, pips, vp (Barbour NH 11/6)
- 11920 MOROCCO RTV Marocaine in AR 0305, PSA w/sound of squealing tires, car crash, and emergency sirens, into fast-paced N African style mx, vq (Brouillette IL 10/22)
- 119558 ANGOLA RN Angola in PT 0139, long tlks, mx, fair sig w/fades, //4950 poor (Montgomery PA 11/8)
- 11960 TURKEY V of Turkey in EG 2200, nx, into pgm on Turkish history, s/off 2250, g (O'Hare WA 10/22)
 11990 FINLAND RF in FN 0145-0157*, reliq service, choral mx, ID, fqys, nx, NA, vq (Brouillette IL 10/22)
- 12005 UNITED ARAB EMIRATES R Dubai in EG/AR 03433, prayers, fqys in AR, ID (Dybka TN 10/6)
- 12060 MADAGASCAR *R Voice of Hope* relay in EG 0433, interview re Congo refugees, into Sudanese lang at 0456 (Dybka TN 10/6)
- 12080 MADAGASCAR R Nederland relay in EG *1430, nx w/items about Indonesia and China, several definite ID's, vg (Wood TN 11/8)
- 12140 SRI LANKA VOA relay in Dari 0045, ID, US pop mx, powerful signal w/flutter (Montgomery 10/30)-
- 13630 MALI China R Int relay Bamako in EG 2114, nx, tlk on solar energy research, f (Muehling NH 10/26)
- 13645 SWITZERLAND SRI Sottens in EG 1934, "Newsnet", pgm re unusual artist (Dybka TN 10/6)
- 13655 CANADA RCI Sackville in EG 1500, nx re tainted lollipops, "Vinyl Café" pgm (Wood TN 11/8)
- 13695 THAILAND NBS of Thailand in EG 0030, ID, nx items, business opportunities for locals, phone no., annual book fair ancmts, sports tlk re Volvo golf tourn, wx rpt, IS, TC, NA (Montgomery PA 11/10)
- 13840 ITALY IRRS Milano in EG 0800-0831+, UN prgming, environmental nx re Greenpeace operations, pop mx, IRRS address, f, reduced carrier USB (Alexander PA 10/12)
- 15075 INDIA AIR Bangalore in HD *0314, IS, ID, ancmts, local mx, nx?, f-p audio (Montgomery PA 11/12)
- 15105 RUSSIA V of Tatarstan relay Samara in Tatar *0501, mx, tlks, ID's, ballads, p-f (Barbour NH 11/16)
- 15190 ANTIGUA BBC relay in EG 1510, rugby game-New Zealand vs UK, g (Wood TN 11/8)
- 15190 PHILIPPINES R Pilipinas in EG 1915, radio drama, ID, s/off anmt 1928, vp (D'Angelo FCDX-PA)
- 15205 GREECE R Sawa via VOA relay in AR 0756, ID, into "Wind Beneath My Wings", vg (Dybka TN)
- 15265 GERMANY R Africa Int relay Juelich in EG 1840, tlks re food shortages and corrupt governments, ID fqys, QTH, g (Wood TN 10/13)
- 15295 MALAYSIA V of Malaysia Kajang in Malay/CH(t) 1007, tlk, pop ballads, ment Islam, ID 1029, into CH 1031, f-p with f/out during NH sunrise (Barbour NH 10/18)
- 15345 MOROCCO RTV Marocaine Nador in AR 2105, AR mx, apparent nx, vg S-9+ (Muehling NH 10/26)
- 15475v ANTARCTICA R Nacional LRA36 in SP 2102, fading up to audible level during vocal sel, brief anmt short instrum'l mx segment, s/off w/ID 2106, o/c for 2 mins, p (D'Angelo PA 11/8)
- 15555 IRAN *VOIRI* Sirjan in JP *1300, usual fanfare at s/on, ID, into Qu'ran, nx, f-p, QRM from BBC in AR //15235 also f-p (Hanlon PA 10/13)
- 15640 ISRAEL Kol Israel Jerusalem in HB 2150, nice Israel pop mx w/DJ, few low key comments, pips, ID, FM fqys at TOH, into nx, vg (Brouillette IL 10/12)
- 157856 ISRAEL Galet Zahal Jerusalem in HB 0414, Israeli pop mx, tlks, weak signal (Alexander PA 11/2)
- 15820 lsb ARGENTINA R Continental in SP 0100, tlks, mx breaks, ID's, soccer game, g (Alexander PA-10/20)
- 17510 HAWAII KWHR Naalehu in EG 0342, ID, QTH for sked, Bible Prophecy, p-f (D'Angelo PA 10/22)
- 17605 FRANCE RFI Issoudon in EG *1600, world nx, "Crosswords", pop mx, slow deep fades, //15605 (O'Hare WA 10/22, Fraser MA 10/14)
- 17630 GABON Africa #1 Moyabi in FR 1533, futbol game Burkina Faso v. Mauritaine, xmsn terminated while match still in progress, g (Barbour NH 10/13)
- 17705 USA Voice of Greece relay via Delano, CA in GK 1700-2043, soccer match, GK mx, ID, website, nx Muehling NH 10/26, Dybka TN 10/6, McGuire MD 10/29)
- 17850 FRANCE RFI Issoudon in EG 1605, very detailed African nx pgm, ID's, p (Brouillette IL 10/31)
- 17860 RWANDA Deut Welle relay in GM 1900, ID, IS, rpt on hostages in Russia (McGuire MD 10/25)
- 17895 MOROCCO VOA relay in EG 1600, IS, ID, prgm sked, rpt on Chechnya, q (McGuire MD 10/25)
- 21455 ECUADOR HCJB Quito in EG 2150, "What Is Faith" series, low audio, //17660 (Fraser MA 10/18)
- 21590 NETHERLANDS ANTILLES *R Nederland* via Bonaire relay in EG 1930, pgm of African mx, 1939 version of "The Lion Sleeps Tonight", nx at 2000, strong signal (Muehling NH 10/26)
- 21630 ASCENSION ISLAND R Telefis Eireann relay in EG/Gaelic 1852, sports interview at t/in, insurance ads, into Gaelic 1856 (Dybka TN 10/27)
- 21660 CHINA CNR-1 Xi'an in CH 1230-1300*, usual tlks, some pop mx, good signal strength but QRM on low side from Portugal at 21655 (Hanlon PA 10/13)
- 21700 SPAIN REE Noblejas in SP 1436, ezl/adult contemporary mx in SP, ID, f (Wood TN 10/26)

- 21730 IRAN VOIRI Sirjan in EG 1221, NA, ID, nx, tlks re Iraq, sports, fqys, postal address, love song, DJ talking re records just played, US mx from the 40's/50's, weak, poor modulation (Montgomery 10/13)
- 21790 SRI LANKA Deut Welle relay in GM 1202, xmsn to Asia, ment some GM cities, g (Hanlon PA 11/8)
- 21840 **GERMANY** *Deut Welle* Wertachtel in EG 1600, nx, feature on Frankfurt book fair, discussion on Tibetan Buddhism, ID, nx, vg (Wood TN 10/21)

Clandestine, Tentative, Presumed, or Unknown

- 5935 LATVIA(t) Laser Radio Riga(t) in EG? 2048-2100*, Beatles mx, anomats too weak to be understood, frequent ments of 5935 SW, postal address, URL, ment R Karolina-576, p-vp (Berq MA 10/27)
- 59699 BRAZIL(t) R Itatiaia in PT 2345, several ments of Itatiaia but no ID as such, tlk by 2 0M's, YL w/nx? fairly heavy QRM (Berg MA 10/10)
- 6035 COLOMBIA(p) LV del Guaviare(p) in SP 0030-0100, soccer match w/animated play-by-play and cmntry by 2 OM's, canned ID sounded like "Caracol", splatter from R Marti and 0100 s/on by Deut Welle swamped both of them out, p (Maroti NY 11/6)
- 6155 INDIA(p) AIR Delhi(p) in Urdu? 0100-0130, devotional type SC vocals for entire half-hour, brief tlk, USB+sync required, wiped out at 0130 by R Telefis Eireann s/on (Maroti NY 11/6)
- 6350 CLANDESTINE V of Tigrey Revolution Eritrea in Tigrigna *0357, IS, ID, anmts, nx, RTTY QRM, (D'Angelo PA 11/4)
- 6925 UNIDENTIFIED 0112-0119*, playing rock mx with a "devil" theme, abrupt s/off, p (D'Angelo 11/3)
- 7100 CLANDESTINE VO Islamic Revolution in Iraq (via Iran?) in AR? 0408-0421, end of NA?, OM tlking over mx, f-p with piercing QRM, jamming? (Barbour NH 11/5)
- 7205nf SOUTH AFRICA(p) *R Ecclesia* Angola(p) relay via SENTECH in PT 1915-1958*, political tlk, ments of Luanda and Angola but no ID, classical sel 1955, abruptly off 1958, f-g (Berg MA 10/26)
- 7245 MAURITANIA(p) R Mauritanie Nouakchott(p) in AR? 0820-0900, no ID hrd, AR singing, drums, few ancmts, in AR-sounding lang, male singing, g-f (Berg MA 10/26)
- 9565 BRAZIL(p) R Tupi Curitiba(p) in PT 0010-0032, lots of tlk and mx, "Christo" and "Maria", never any solid ID heard, g (Barbour NH 11/5)
- 11570 CLANDESTINE IBC Tamil via Novosibirsk, Russia relay in Tamil/EG *2356-0045, familiar xmtr test tones, instrum'l mx, ID, into EG 0045, QRM from R Marti, p (D'Angelo PA 10/25, Dybka TN 10/28)
- 11690 CONGO(t) R Okapi Kinshasa(p) in FR 0422-0502, continuous FR lang African vcls, possible ID over the mx, vp-f (D'Angelo FCDX-PA 11/4)
- 12070 CLANDESTINE Hmong Lao Radio Laos in lang 0132-0200*, pgm of traditional mx, brief tlk between selections, apparent ID and s/off ancmt 0159, IS of flute mx, p-f but in the clear (D'Angelo PA 11/15)
- 12115nf CLANDESTINE V of Mesopotamia relay via Samara, Russia(p) in Kurdish *1650-1735, Russian test tones until instrum'l mx opening, ID, s/on ancmts, regional vcls, f (D'Angelo PA 10/23)
- 12125 CLANDESTINE V of Biafra Int'l via Krasnodar, Russia relay in EG 1915-2000*, mostly tlk re Biafra and Nigeria, some mx, non-EG segment for a few mins, UTE QRM low side (Berg MA 11/2)
- 13695 UNIDENTIFIED Continuous mx 1709-1730 & 1847-1850 that could be Oriental or Arabic, no anomts (Wood TN 11/10) ED: Most likely Radio Free Asia from Tinian Island relay in CH from 1500-2000.
- 13735 UNITED ARAB EMIRATES(t) Radio UNMEE via Al Dabbiya relay in Amheric?/EG *1857, mostly talk, occasional pop mx, hard to distinguish pgm details until 1945 when EG pgming started, improved signal by 1951, gave Asmara and Addis Ababa QTH's, discussion on the need to use care in going thru areas with mines and unexploded ordnance, good ID 1954 "That ends today's prgm from R UNMEE, the Voice of the United Nations Peacekeeping Mission in Ethiopia and Eritrea, brief lang tlk, then vocal mx to 2000* (Berg MA 10/11) ED: Great catch aired only on Fridays each week.
- 15275nf CLANDESTINE Radio Solidarity Ethiopia via Juelich, Germany relay *1600 in Tigrean, brief musical opening, ID, nx, flute mx, long tlk, vocal sel, off 1629* in mid-song, p-f, Wednesday and Saturdays only (D'Angelo PA 11/13)
- 15280 lsb ARGENTINA(p) Radio La Plata(p) in SP 2215-0005, futbol match, sports rpt, ment La Plata on few occasions, ID?, f (D'Angelo PA 11/3)
- 15670 CLANDESTINE VO Democratic Eritrea via DTK Juelich, Germany in Amheric 1728-1750, long tlks, with several ments "Sudan" and "Eritrea", native mx, ID 1730, vg, Mon-Thu only (Barbour NH 10/17)

English Schedules

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| Prepared 27 | November : | 2002. | | | | | | |
|------------------------|------------|---|-----------------------|--|------------------------|---|-----------|-----------|
| | | CLDC Class Lases | 3316.0do | | | | | |
| 0000-0007 | | SLBS, Slerra Leone | 11940.4as | | | | | |
| 0000-0015 | | V. of Cambodia | | 13650.0as | 17810.0as | | | |
| 0000-0015 | | Radio Japan | 6145.0na | 2300011000 | | | | 22775 0 |
| 0000-0030 | | Radio Australia | 9660.0pa | 12080.0pa | 1524U.Upa | 15415.Uas | 17580.0pa | 1///5.Uas |
| | | | 17795.0pa | 21/25.0as | | | | |
| 0000-0030 | | Radio Cairo | 9900.0am | | | | | |
| 0000-0030 | | Sri Lanka B'casting Corp. | 4940.0in | | | | | |
| 0000-0030 | | Radio Thailand | 9680.0af | | | | | |
| 0000-0030 | | BBC World Service | 3915.0as | 5970.0as | 5975.0ca | 6195.0as | 7105.0as | 9410.0as |
| | | | 9825.0sa | 11945.0as 17615.0as | 11955.0as 17790.0as | 12095.0sa | 15280.0as | 15510.0as |
| | | DDG W. LLC | 15360.0as | 17615.085 | 17/90.085 | | | |
| 0000-0300 | twh | BBC World Service | 17640.0eu | 0000 0 | 337/0000 | 3 5 3 0 5 Oos | 15200 025 | 17740.000 |
| 0000-0030 | | VOA | 7215.0as 17820.0as | 9890.0as | 11/60.085 | 13105.0as | 15290.0as | 17740.0as |
| | twhfa | 1/0.8 | 5995.0am | 6130.0am | 7405 0am | 9455.0am | 9775 0am | 11695.0am |
| 0000-0100 | twnra | VUA | 13790.0am | | 7403.0am | 74JJ,0am | 7475,0am | 11075.0am |
| 0000-0045 | | All India Radio, Delhi | 9705.0as | 9950.0as | 11620.0as | 13405 025 | | |
| | | Radio Exterior de Espena | 6055.0na | 7750.0as | 11020.005 | 13003.083 | | |
| 0000-0055 | | | 6090.0am | | | | | |
| 0000-1000 | | Caribbean Beacon | 2310.0ir | 4835.0do | | | | |
| 0000-0830 | | ABC Alice Springs | | 4835.000 | | | | |
| 0000-0830 | | ABC Katherine | 5025.0do 4910.0da | | | | | |
| 0000-0830 | | ABC Tennant Creek | | 0400 0 | | | | |
| 0000-0100 | | Radio Bulgaria | 7400.0na 9625.0do | 9400.0na | | | | |
| 0000-0600 | | CBC Northern Service | | 9590.0na | 0755 0 | 11895.0as | | |
| 0000-0100 | | Radio Canada Int'l | 5960.0na | | 9/55.0as | 11895.085 | | |
| 0000-0500 | | R. for Peace Int'l | 7445.1va | 15038.7va | | | | |
| 0000-0200 | | HCJB Quito Ecuador | 9745.0na | 21455.0uf | | | | |
| 0000-0500 | a | Scandinavian Weekend R. | 5980.0va | 11720.0va 5949.4do | | | | |
| 0000-1000 | | Voice of Guyana | 3291.3do 6025.0as | 5949,400 | | | | |
| 0000-0130 | | Voice of Hope, Lebanon RTM Radio 4, Malaysia | 7295.0do | | | | | |
| 0000-0100 | | NBC Windhoek, Namibia | 7295.000 3270.1in | 3290.1af | 6060.0af | | | |
| 0000-0500 | | Radio Netherlands | 6165.0na | 9845.0na | 0000.0ai | | | |
| 0000-0125 | | Radio New Zealand Int'l | 17675.0pa | 7042.011a | | | | |
| 0000-0500 | | Nat'l BC, Papua NG | 9675.0do | 11880.0ir | | | | |
| | | SBC Radio 1, Singapore | 6150.0do | 11000.011 | | | | |
| 0000-1100 | | SIBC Solomon Islands | 5019.9do | 9545.0do | | | | |
| 0000-1100 | | KAIJ Dallas TX | 5755.0va | 7545.000 | | | | |
| 0000-1400 | | KIMF Pinon NM | 5835.0am | | | | | |
| 0000-1800 | | KTBN Salt Lake City UT | 7505.0am | | | | | |
| | | KWHR Naalehu HI | 17510.0as | | | | | |
| 0000-0400 | | University Network | 9890.0as | | | | | |
| 0000-0400 | | WBCQ Monticello ME | 7415.0na | 9335.0na | | | | |
| 0000-0500 | | WEWN Birmingham AL | 5825.0na | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | |
| 0000-1000 | | WHRA Greenbush ME | 7580.0eu | | | | | |
| | | WHRI Noblesville IN | 5745.0va | 7315.0am | | | | |
| 0000-1000 | | WINB Red Lion PA | 12159.9am | | | | | |
| 0000-0200 | sm | WRMI Miami FL | 9955.0am | | | | | |
| 0000-0300 | | WRMI Miami FL | 7385.0na | | | | | |
| 0000-0300 | LWILL | WRNO New Orleans LA | 7355.0va | | | | | |
| 0000-0300 | | WSHB Cypress Creek SC | 9430,0am | 15285.0sa | | | | |
| | sm. | WWBS Macon GA | 11900.0uf | 15205.030 | | | | |
| 0000-0200 0000-0500 | 3 IN | WWCR Nashville TN | 3210.0na | 5070.0na | 5935.0na | 7465.0na | | |
| 0000-0500 | | WWRB Manchester TN | 5050.0na | 5085.0na | 6890.0na | , | | |
| 0000-000 | | WYFR Okeechobee FL | 6085.0na | 9505.0na | 11720.0sa | | | |
| 0000-0100 | | Radio Vanuatu | 3945.0al | 7260.0do | | | | |
| 0000-0300 | | Christian Voice, Zambia | 4965.0do | | | | | |
| 0005-0012 | | Croatian Radio, Zagreb | 9925.0sa | | | | | |
| 0005-0012 | | Radio Japan | 6145.0na | | | | | |
| 0030-0130 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 17580.0pa | 17750.0as |
| 3020 0130 | | | 17775.0as | 17795.0pa | 21725.0as | | | |
| 0030-0130 | | VOIRI Teheran | 6015.0am | 6135.0am | 9580.0am | 1 | | |
| 0030-0100 | | Radio Vilnius, Lithuania | 7325.0na | | | | | |
| 0030-0130 | s a | Bible Voice BC, Russia | 12035.0as | | | | | |
| 0030-0200 | | Sri Lanka B'casting Corp. | 4940.0in | 6005.0as | 6075.0as | 9770.0as | 15745.0as | |
| 0030-0100 | | Radio Thailand | 13695.0na | | | | | |
| 0030-0100 | | AWR Africa, UAE | 6035.0as | 6055.0as | | | | |
| 0030-0100 | | BBC English Teaching | 9580.0as | 17615.0as | | | | |
| 0030-0100 | | BBC World Service | 5970.0as | 5975.0ca | 6195.0as | 7105.0as | 9410.0as | 9825.0sa |
| | | | 11955.0as | 12095.0sa | 15280.0as | 15310.0as | 15360.0as | 17790.0as |
| | | | | | | | | |

| 0030-0100 | | VOA Special English | 7215.0as | 9890.0as | 11760.0as | 15185 Age | 15200 025 | 17740 025 |
|------------|---------|---------------------------|-------------------|-------------------|-----------|------------------|--------------------|-----------|
| | | Torropeoral English | 17820.0as | ,0,0.003 | 11/00:003 | 13103.083 | 13270.003 | 17740.003 |
| 0045-0115 | | Radio Pakistan | | 15455.7as | | | | |
| 0050-0056 | | Int'l BC Tamil | 7460.0as | 13433.743 | | | | |
| 0055-0115 | | RAI, Rome | 9675.0na | 11800.0na | | | | |
| | | | | | | | | |
| 0100-0120 | | Kyrghyz Radio, Bishkek | 4010.0as | 47 9 5.0as | | | | |
| 0100-0127 | | Radio Prague Int'l | 6200.0na | 7345.0na | | | | |
| 0100-0127 | | Voice of Vietnam | 6175.0na | | | | | |
| 0100-0130 | | AWR Europe, Austria | 9835.0me | | | | | |
| 0100-0130 | s | Universal Life, Germany | 9435.0as | | | | | |
| 0100-0130 | | Radio Slovakia Int'I | 5930.0na | 7230.0ca | 9440.0sa | | | |
| 0100-0200 | | BBC World Service | 5975.0ca | 6195.0as | 9410.0as | 9525.0ca | 9825.0sa | 11955.0as |
| | | | | 15280.0as | | 15360.0as | 177 9 0.0as | |
| 0100-0300 | | VOA | 7200.0as | 7255.0as | | 11705.0as | 11820.0as | 15250.0as |
| | | | | 17740.0as | 17820.0as | | | |
| 0100-0130 | twhfa | | 5995.0am | 6130.0am | | | 9775.0am | 13790.0am |
| 0100-0130 | | Radio Tashkent | 5955.0as | 5975.0as | 7135.0as | 7215.0as | | |
| 0100-0130 | mtwhfa | Radio Yugoslavia | 7115.0na | | 5 | | | |
| 0100-0145 | | Deutsche Weile | 6040.0am | 6145.0na | 9640.0am | 9 700.0na | 9765.0na | |
| 0100-0156 | | China Radio Int'l | 9580.0na | 9790.0na | | | | |
| 0100-0156 | | Voice of Korea | 3560.0as | 6195.0as | 6520.0am | 7140.0as | 7580.0am | 9345.0as |
| | | | 11735.1am | | | | | |
| 0100-0500 | | Radio Havana Cuba | 6000.0na | 9820.0na | 11705.0in | | | |
| 0100-0200 | | Voice of Indonesia | 9525.0as | 11785.0as | | | | |
| 0100-0200 | | Radio Japan | 11860.0as | | 11880.0me | 15325.0as | 17560.0me | 17685.0pa |
| | | | 17810.0as | | 17845.0as | | | |
| 0100-0200 | | Radio Ukraine Int'l | 5905.0eu | 9610.0eu | 9810.0na | | | |
| 0100-0200 | | WSHB Cypress Creek SC | 9430.0na | 15285.0sa | | | | |
| 0100-0200 | | WYFR Okeechobee FL | 6065.0na | 9505.0na | 15060.0as | | | |
| 0130-0140 | | Voice of Africa, Libya | 15435.0ir | 21695.0ir | | | | |
| 0130-0200 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 17580.0pa | 17750.0as |
| | | | 17795 .0pa | 21725.0as | | | | |
| 0130-0200 | | Voice Int'l, Australia | 17775.0as | | | | | |
| 0130-0230 | | VOIRI Teheran | 6135.0na | 9580.0na | | | | |
| 0130-0200 | | Radio Telefis Eireann | 6155.0ca | | | | | |
| 0130-0200 | | Radio Sweden | 9495.0as | | | | | |
| 0130-0200 | twhfa | VOA | 5995.0am | 6130.0am | 9455.0am | | | |
| 0130-0200 | twhfa | VOA Special English | 7405.0am | 9775.0am | 13740.0am | | | |
| 0138-0150 | | Croatian Radio, Zagreb | 9925.0sa | | | | | |
| 0140-0200 | | Vatican Radio | 7335.0as | 9865.0as | | | | |
| 0200-0210 | | Radio Bangladesh | 4882.0as | | | | | |
| 0200-0227 | | Radio Prague Int'i | 6200.0na | 7345.0na | | | | |
| 0200-0230 | | Radio Budapest | 9835.0na | | | | | |
| 0200-0230 | | Voice of Hope, Lebanon | 9615.0as | | | | | |
| 0200-0300 | | BBC World Service | 5975.0ca | 9410.0me | 9525.0ca | 9825.0sa | 11760.0as | 11955.0as |
| | | | 12035.0af | 12095.0sa | 15280.0as | 15310.0as | 15360.0as | 17790.0as |
| 0200-0230 | | Radio Yugoslavia | 7130.0na | | | | | |
| 0200-0245 | | Deutsche Welle | 7285.0as | 9765.0as | 11965.0as | 13605.0as | | |
| .0200-0256 | | Voice of Korea | 4405.0as | 9325.0as | 11335.1as | | | |
| 0200-0256 | | Radio Romania Int'i | 9 550.0na | 9625.0as | 11740.0as | 11830.0na | 11940.0au | 15370.0au |
| 0200-0257 | | Radio Canada Int'l | 6040.0am | 9755.0am | 11725.0am | 15150.0as | 17860.0as | |
| 0200-0300 | twhfa | RAE Buenos Aires | 11710.0am | | | | | |
| 0200-0400 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 15515.0pa | 17580.0pa |
| | | | 17750.0as | | | | | |
| 0200-0400 | | HCJB Quito Ecuador | 9745.0na | 12040.0as | 21455.0uf | | | |
| 0200-0330 | | Radio Cairo | 9475.0am | | | | | |
| 0200-2400 | | RTM Radio 4, Malaysia | 7295.0do | | | | | |
| 0200-0300 | | Radio Myanmar | 7185.0do | | | | | |
| 0200-0330 | s a | Radio Pilipinas, Manila | 12015.0me | 15120.0me | 15270.0me | | | |
| 0200-0300 | | Voice of Russia | 6 155.0na | 7180.0na | 9765.0na | 12020.0na | 13665.0na | 15445.0na |
| 0200-0300 | | Radio Korea | 9560.0na | 11810.0as | 15575.0na | | | |
| 0200-0430 | | Sri Lanka B'casting Corp. | 6005.0as | 6075.0as | 6130.0do | 9770.0as | 15745.0as | |
| 0200-0300 | | Radio Taipei Int'l | 5950.0na | 9680.0na | 11740.0ca | 15320.0as | 15465.0as | |
| 0200-0330 | | KJES Vado NM | 7555.0na | | | | | |
| 0200-0400 | | WINB Red Lion PA | 9319.9am | | | | | |
| 0200-0300 | | WSHB Cypress Creek SC | 7535.0na | 9430.0na | | | | |
| 0200-0300 | | WYFR Okeechobee FL | 6065.0na | 9505.0na | | | | |
| 0205-0212 | | Croatian Radio, Zagreb | 9925.0na | | | | | |
| 0215-0220 | | Radio Nepal, Katmandu | 3230.0as | 5005.0as | 6100.0as | 7164.4as | | |
| 0230-0257 | | Voice of Vietnam | 6175.0na | | | | | |
| 0230-0300 | | ORF Vienna | 7325.0na | | | | | |
| 0230-0300 | | Radio Iraq Int'l | 9687.0in | 11787.0ir | | | | |
| 0230-0300 | | Radio Sweden | 9495.0na | | | | | |
| 0245-0300 | | Radio Tirana, Albania | 6115,0na | 7160.1na | | | | |
| 0245-0300 | | BBC English Teaching | 9610.0af | | | | | |
| 0250-0300 | | Vatican Radio | 7305.0am | 9605,0am | | | | |
| 0300-0310 | | Vatican Radio | 7305.0am | 9605.0am | | | | |
| 0300-0330 | sm w fa | Radio Minsk, Belarus | 5970.0eu | 7210.0eu | | | | |
| 0300-0330 | | Channel Africa, S. Africa | 9525.0af | _ | | | | |
| 0300-0330 | | Radio Thailand | 15460.0na | | | | | |
| | | | | | | | | |

| 0300-0330 | | BBC World Service | 3255.0af | 5975.0ca | 6005.0af | 6190.0af | 6195.0eu | 7160.0af |
|-----------|---------|--|----------------------|----------------------|-----------------------|--------------------|------------|--------------------|
| 0300-0330 | | BBB World Service | 9410.0eu | 9525.0ca | | 11760.0me | | |
| | | | | 15280.0as | | 15360.0as | 15575.0me | |
| | | | 17760.0as | 17790.0as | | 2000000 | | 2.0.0000 |
| 0300-0330 | а | Wales Radio Int'i | 9735.0na | | | | | |
| 0300-0330 | | VOA | 4960.0af | 6035.0af | 6080.0af | 7265.0af | 7290.0af | 7340.0af |
| ***** | | | 7415.0af | 9575.0af | 9885.0af | | | |
| 0300-0345 | | Deutsche Welle | 6020.0na | 6045.0na | 9640.0am | 9700.0na | 11985.0na | |
| 0300-0356 | | China Radio Int'i | 9690.0na | 9790.0 | | | | |
| 0300-0356 | | Voice of Korea | 3560.0as | 6195.0as | 7140.0as | 9345.0as | | |
| 0300-1000 | | Radio Botswana | 3356.0in | 4820.0do | 7255.0do | | | |
| 0300-0400 | | Radio Bulgaria | 7400.0na | 9400.0na | | | | |
| 0300-0430 | | Radio Cultural, Guatemala | | 5955.0in | | | | |
| 0300-0400 | sm | R. Luz y Vida, Honduras | 3250.0ca | | | | | |
| 0300-0400 | | Radio Japan | 17825.0ca | 21610.0pa | | | | |
| 0300-0600 | | Voice of Islam, Malaysia | 6175.0as | 9750.0as | 15295.0au | | | |
| 0300-0400 | | Radio Sultanate Oman | 15355.0af | | | | | |
| 0300-0400 | | Voice of Russia | 6155.0na | 7180.0na | 12020.0na | 13665.0na | 15445.0na | |
| 0300-0400 | | Radio Taipei Int'l | 5950.0na | 9680.0na | 11875.0pa | | | |
| 0300-0600 | | Radio Uganda | 4976.0do | 5026.0do | 7196.0do | | | |
| 0300-1000 | | WRMI Miami FL | 7385.0na | | | | | |
| 0300-1500 | | WRNO New Orleans LA | 7395.0am | | | | | |
| 0300-0400 | | WSHB Cypress Creek SC | 5850.0eu | 7535.0eu | | | | |
| 0300-0400 | | WYFR Okeechobee FL | 5985.0sa | 6065.0na | 9505 Ona | 11855.05a | | |
| 0300-0600 | | Christian Voice, Zambia | 6065.0do | 0003.0114 | ,505.0114 | 110000.000 | | |
| 0310-0330 | | Vatican Radio | 9660.0af | | | | | |
| 0330-0340 | | Voice of Africa, Libya | 15435.0ir | 21695.0ir | | | | |
| | | Voice of Vietnam | | 21075.011 | | | | |
| 0330-0357 | | Radio Tirana, Albania | 6175.0na 6115.0na | 7160.1na | | | | |
| 0330-0400 | _ | | | /100.111a | | | | |
| 0330-0400 | m | La Voz Evangelica, Hend. Radio Budapest | 4819.2do 9835.0na | | | | | |
| 0330-0400 | | Radio Sweden | 9495.0na | | | | | |
| 0330-0400 | | | | 13675.0na | 15400 0 | | | |
| 0330-0400 | | Radio Dubai, UAE | | | 15400.0na 6005.0af | 6190,0af | 6195.0eu | 7160.0af |
| 0330-0400 | | BBC World Service | 3255.0af 9410.0eu | 5975.0ca 9525.0ca | | 11760.0me | | |
| | | | | 15280.0as | | 15360.0as | | 15575.0me |
| | | | | 17760.0as | 17790.0as | | 15 120.001 | 23373101110 |
| 0330-0400 | | VOA | 4960.0af | 6035.0af | 6080.0af | 7265.0af | 7290.0af | 7415.0af |
| 0330 0100 | | | 9575.0af | 9885.0af | | | | |
| 0338-0350 | | Croatian Radio, Zagrel | 9925.0na | | | | | |
| 0345-0400 | s hf | FEBA Seychelles | 11885.0af | | | | | |
| 0345-0400 | - | Radio Tajikistan | 7245.0 | | | | | |
| 0400-0427 | | Radio Prague Int'l | 7345.0na | 7385.0na | 9435.0na | | | |
| 0400-0429 | | R. Vlaanderen Int'l | 11985.0na | | | | | |
| 0400-0430 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 15515.0pa | 17580.0pa |
| 0.0000.00 | | | 21725.0as | | | | | |
| 0400-0430 | | Radio France Int'l | 11910.0af | 11995.0af | | | | |
| 0400-0430 | s twhfa | Radio Mexico Int'I | 9705.lam | 11770.lam | | | | |
| 0400-0430 | | AWR Africa, Meyerton | 9650.0af | | | | | |
| 0400-0430 | | Channel Africa, S. Africa | 5955.0af | | | | | |
| 0400-0500 | | BBC World Service | 3255.0af | 5975.0am | 6005.0af | 6135.0ca | 6190.0af | 6195.0eu |
| | | | 7160.0af | 9410.0eu | 11760.0me | 11765.0af | 12035.0af | 12 0 95.0as |
| | | | 15280.0as | 15310.0as | 15360.0as | 15420.0af | 15575.0me | 17640.0eu |
| | | | 17760.0as | 17790.0as | 21660.0as | | | |
| 0400-0430 | | VOA | 4960.0af | 6080.0af | 7170.0eu | 7290.0af | 7415.0af | 9575.0af |
| | | | 9775.0af | 9885.0af | 15205. 0 eu | | | |
| 0400-0445 | | Deutsche Welle | 6180.0af | 7195.0af | 9565.0af | 9710.0af | | |
| 0400-0456 | | China Radio Int'i | 9730.0na | | | | | |
| 0400-0456 | | Radio Romania Int'i | 9550.0na | 11830.0na | 15335.0as | 177 3 5.0as | | |
| 0400-2400 | | Cameroon Radio TV | 4850.0in | | | | | |
| 0400-0600 | | HCJB Quito Ecuador | 9745.0na | 21455.0uf | | | | |
| 0400-0500 | | Voice of Russia | 7125.0na | | 12020.0na | 1 366 5.0na | 15445.0na | 15595.0na |
| | | | 17595.0na | | | | | |
| 0400-0600 | mtwhfa | Voice of Russia | 12010.0na | | | | | |
| 0400-0500 | | Voice of Turkey | 6020.0va | 7240.0af | | | | |
| 0400-0500 | | Radio Ukraine Int'i | 6020.0eu | 7285.0eu | 9810.0na | | | |
| 0400-0700 | | KWHR Naalehu HI | 17780.0as | | | | | |
| 0400-1700 | | University Network | 17765.0as | | | | | |
| 0400-0900 | smtwhf | WMLK Bethel PA | 9465.0ln | | | | | |
| 0400-0600 | | WSHB Cypress Creek SC | 7535.0eu | 12020.0af | | | | |
| 0400-0500 | | WYFR Okeechobee FL | 6065.0na | 9505.0na | 9715.0na | 9985.0eu | 11530.0eu | |
| 0405-0412 | | Croatian Radio, Zagreb | 9925.0na | | | | | |
| 0427-0500 | smt a | Radio Voice of Hope | 12060.0af | | | | | |
| 0430-0457 | | Radio Prague Int'l | 9865.0as | 11600.0as | | | | |
| 0430-0500 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 15515.0pa | 17580.0pa |
| | | | 17750.0as | 21725.0as | | | | |
| 0430-0530 | | Radio Netherlands | 6165.0na | 9590.0na | | | | |
| 0430-2305 | | Radio Nigeria, Abuja | 7275.0do | | | | | |
| 0430-2305 | | Radio Nigerla, Enugu | 4775.0do | 6025.0do | | | | |
| 0430-2305 | | Radio Nigeria, Ibadan | 6050.0do | | | | | |
| 0430-2305 | | Radio Nigeria, Kaduna | 4770.0do | 6090.0do | | | | |
| 0430-1000 | | Radio Nigerla, Lagos | 3326.0do | 4990.0do | | | | |
| 0430-1000 | | Sri Lanka B'casting Corp. | 6130.0do | | | | | |
| | | | | | | | | |

| 0430-0500 | | AWR Africa, Meyerton | 12000 0=6 | | | | | |
|-------------------------------------|---------|------------------------------------|----------------------|-----------------------|-----------|------------|------------------|------------|
| | | | 12080.0af | | | | | |
| 0430-0500 | | AWR Africa, UAE | 15160.0as | | | | | |
| 0430-0500 | | TWR Swaziland | 4775.0af | 6120.0af | | | | |
| 0430-0500 | | VOA | 4960.0af | 6080.0af | 7170.0eu | 7290.0af | 7415.0 af | 9575.0af |
| | | | 9775.0af | 15205.0eu | | | | |
| 0445-0500 | | RAI, Rome | 5965.0af | 6100.0af | 7235.0af | | | |
| 0500-0515 | | Kol Israel | 6280.0va | 9435.0va | 17600.0va | | | |
| 0500-0530 | | BBC World Service | 6005.0af | 6135.0ca | 6190.0af | 6195.0eu | 7160.0af | 9410.0eu |
| | | | 11760.0me | 11765.0af | 11940.0af | 11955.0as | 15280.0as | |
| | | | 15360.0as | 15420.0af | | 15575.0as | | 17760.0as |
| | | | 17790.0as | 17885.0af | 21660.0as | | | |
| 0500-0530 | | Radio Australia | 9660.0pa | 12080.0pa | | 15415.0as | 15515.0na | 17580 Ona |
| | | | 21725.0as | • | | | | |
| 0500-0530 | | Radio France Int'l | | 15155.0af | | | | |
| 0500-0530 | s twhfa | Radio Mexico Int'i | 9705.1am | 11770.1am | | | | |
| 0500-0530 | | AWR Africa, Meyerton | 6015,0af | | | | | |
| 0500-0530 | | Channel Africa, S. Africa | 11710.0af | | | | | |
| | | VOA | | / 000 0=f | (105.0-5 | 73.70.0 | 7005 0-6 | |
| 0500-0600 | | VOA | 6035.0af | 6080.0af | 6105.0af | 7170.0eu | 7295.0af | 9700.0eu |
| 0500 0530 | | Vatican Radio | | 11835.0af | | 15205.0eu | | |
| 0500-0530 | | | 9660.0af | 11625.0af | 15570.0af | | | |
| 0500-0545 | | Deutsche Welle | 5960.0na | 6120.0na | 9670.0na | 11795.0na | | |
| 0500-0556 | | China Radio Int'l | 9560.0na | | | | | |
| 0500-0600 | mtwhf | BBS, Bhutan | 5030.0al | 6035.0do | | | | |
| 0500-0800 | | R. for Peace Int'l | 7445.1va | 15038.7lr | | | | |
| 0500-0700 | | Radio Havana Cuba | 6180.0na | 9665.0in | 9820.0na | | | |
| 0500-0800 | a | Scandinavian Weekend R. | 6170.0va | 11720.0va | | | | |
| 0500-0600 | | Radio Japan | 5975.0eu | 6110.0na | 7230.0eu | 9835.0na | 11715.0as | 11760.0as |
| | | | 15195.0as | | 21755.0pa | | | |
| 0500-0800 | | Radio Kuwait | 15110.0as | | | | | |
| 0500-1600 | | NBC Windhoek, Namibia | 6060.0af | 6175.0af | | | | |
| 0500-0700 | | Radio New Zealand Int'l | 15340.0pa | | | | | |
| 0500-0800 | | Voice of Nigeria | 7255.0af | 15120.0af | | | | |
| 0500-0600 | | Voice of Russia | 7125.0na | 7180.0na | 12020 002 | 13665.0na | 15445 Ona | 16505 Opp |
| 0500-0750 | | TWR Swaziland | 6120.0af | 7205.0af | 9500.0af | 13003.011a | 15445.011a | 15575.01la |
| 0500-1100 | | WBCQ Monticello ME | 7415.0na | 72051041 | 7500.041 | | | |
| 0500-0600 | tubfo | WBCQ Monticello ME | 9335.0na | | | | | |
| | CWIII a | WHRA Greenbush ME | | | | | | |
| 0500-1000 | | | 7580.0af | 5070 0 | | | | |
| 0500-1000 | | WWCR Nashville TN | 3210.0na | 5070.0na | 5935.0na | 7560.0na | | |
| 0500-0600 | | WYFR Okeechobee FL | 5810.0eu | | | | | |
| 0515-0525 | | Radio Rwanda | 6055.0do | | | | | |
| 0525-0915 | | Ghana Broadcasting Corp. | | 4915.0do | | | | |
| 0530-0545 | | BBC English Teaching | 6010.0eu | 9865.0eu | | | | |
| 0530-0550 | | Radio Dubai, UAE | 15435.0au | 17829.9au | 21695.2au | | | |
| 0530-0700 | | Radio Australia | 9660.0pa | 12080.0pa | 15240.0pa | 15415.0as | 15515.0pa | 17580.0pa |
| | | | 17750.0as | 21725.0as | | | | |
| 0530-0630 | | AWR Africa, Meyerton | 15345.0af | | | | | |
| 0530-0600 | | Radio Thailand | 13780.0eu | | | | | |
| 0530-0600 | | BBC World Service | 6005.0af | 6135.0ca | 6190.0af | 6195.0eu | 7160.0af | 9410.0eu |
| | | | 11760.0me | 11765.0af | 11940.0af | 11955.0as | 15310.0as | |
| | | | 15420.0af | 15565.0eu | 15575.0as | 17640.0af | 17760.0as | 17790.0as |
| | | | 21660.0as | | | | | |
| 0530-0600 | mtwhf | BBC World Service | 17885.0af | | | | | |
| 0538-0550 | | Croatian Radio, Zagreb | 9925.0na | | | | | |
| 0600-0615 | | TWR Meyerton | 11640.0af | | | | | |
| 0600-0620 | | Vatican Radio | 4005.0eu | 5890.0eu | 7250.0eu | | | |
| 0600-0630 | | Radio France Int'l | 11710.0af | 15155.0af | 17800.0af | | | |
| 0600-0630 | | Channel Africa, S. Africa | 15215.0af | | | | \ \ | |
| 0600-0630 | | VOA | 5995.0eu | 6035.0af | 6080.0af | 6105.0af | 7170.0eu | 7295.0af |
| 2000 0000 | | | 11825.0eu | | | 11995.0af | 13710.0ed | |
| 0600-0637 | | Radio Romania Int'l | 9530.0na | 11829.9na | | | | |
| 0600-0645 | | Deutsche Welle | 6140.0eu | 7225.0af | 9565 026 | 11785.0af | | |
| 0600-0700 | | Radio Japan | 7230.0eu | 9835.0na | 11740.0as | | 17870.0pa | 21755 000 |
| | | ELWA Monrovia, Liberia | | 7023.0Hd | 11/7U.UdS | 13172, 105 | 1,0,0.0pa | ~11,00,0pd |
| 0600-1300 | | Radio Liberia Int'l | 4760.0do | | | | | |
| 0600-1800 | | | 6100.0do 5470.0af | | | | | |
| 0600-1000 | | R. Veritas, Liberia | | 0750 0- | 15205.0- | | | |
| 0600-0825 | | Voice of Malaysia | 6175.0as | 9750.0as | 15295.0au | 17//5 5 | 21702.2 | |
| 0600-0700 | | Voice of Russia | | 15275.0au | 1/655.0au | 17665.0au | 21/90.0au | |
| 0600-2400 | | SLBS, Sierra Leone | 3316.0do | | | | | |
| 0600-1300 | | Radio Uganda | 5026.0do | 7110.0do | 7196.0do | | | |
| 0600-0700 | | BBC World Service | 6005.0af | 6190.0af | 6195.0eu | 7160.0af | | 11765.0af |
| | | | 11940.0af | | | 15310.0as | | 15565.0eu |
| | | PPG W -116 : | 15575.0as | 17640.0af | 17760.0as | 17790.0as | 21660.0as | |
| 0600-0800 | s a | BBC World Service | 17885.0af | | | | | |
| 0600-0800 | | WSHB Cypress Creek SC | 7535.0af | | | | | |
| 0600-0700 | | WYFR Okeechobee FL | 7355.0eu | 11530.0eu | | | | |
| 0600-1000 | | Radio Vanuatu | 3945.0al | 4960.0do | | | | |
| 0600-0700 | | Republic of Yemen Radio | 9780.4me | | | | | |
| | | Christian Voice, Zambia | 9865.0do | | | | | |
| 0600-1500 | | | 9470.0pa | | | | | |
| 0600-1500 0605-0612 | | Croatian Radio, Zagreb | | | | | | |
| 0605-0612 | s a | | | 9875.0eu | | | | |
| 0605-0612 0630-0645 | s a | BBC English Teaching | 5875.0eu | 9875.0eu 13730.0eu | 17870.0me | | | |
| 0605-0612 0630-0645 0630-0700 | s a | BBC English Teaching ORF Vienna | 5875.0eu 6155.0eu | | 17870.0me | | | |
| 0605-0612 0630-0645 | | BBC English Teaching | 5875.0eu | | 17870.0me | | | |

| 0630-0700 0630-0700 | | VOA VOA | 5995.0eu 6035.0af 13710.0af | 7170.0eu 6080.0af | 11825.0eu 6105.0af | 11930.0eu 7295.0af | 15205.0eu 11835.0af | 11995.0af | |
|------------------------|---------|---|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| 0630-0700 | | Vatican Radio Radio Romania Int'i | 11625.0af 9510.0eu | 13765.0af 9530.0na | 15570.0af 9570.0eu | 9625.0eu | 11790.0eu | 11829.9na | |
| 0637-0700 | | | 11940.0eu | ,550.011 a | ,5,0,000 | 70251044 | | | |
| 0645-0900 | | Deutsche Welle | 6140.0eu | | | 337/00 | 33775 0-5 | 33040 0ef | |
| 0700-0730 | | BBC World Service | 6190.0af | 6195.0eu 12095.0eu | | 11760.0me 15360.0as | | | |
| | | | 155 6 5.0eu | | 17640.0eu | 17760.0as | 17790.0as | 21660.0as | |
| 0700-0730 | | Radio Slovakia Int'l | | 15460.0au | 17550.0au | | | | |
| 0700-0756 | | Radio Romania Int'l | 17720.0af | | 15040.0 | 35435 000 | 17500 000 | 3.7750.026 | |
| 0700-0800 | | Radio Australia | 9660.0pa 21725.0as | 12080.0pa | 15240.0pa | 15415.0as | 17500.0pa | 17730.085 | |
| 0700-0900 | | HCJB Quito Ecuador | 5965.0eu | 11755.0pa | 21455.0uf | | | | |
| 0700-1100 | | Radio Africa, Eq. Guinea | 15184.6af | | | | | | |
| 0700-0800 0700-0830 | | Radio France Int'l Radio Myanmar | 15605.0af 9730.8do | | | | | | |
| 0700-0830 | 1 | Radio New Zealand Int'l | 11675.0pa | | | | | | |
| 0700-0800 | | Voice of Russia | 11820.0eu | 12010.0eu | 15275.0au | 17655.0au | 17665.0au | 21790.0au | |
| 0700-0800 | | Radio Taipei Int'l | 5950.0na | 17700 026 | | | | | |
| 0700-0800 0700-0800 | | KWHR Naalehu HI WYFR Okeechobee FL | 7355.0eu | 17780.0as 9985.0af | 11580.0af | | | | |
| 0705-0720 | | BBC English Teaching | 6005.0af | | | | | | |
| 0715-0745 | | KTWR Guam | 15215.0as | F000 0 | 1705 0 | 7250 000 | 04.45.000 | 3.3.740 Cour | |
| 0730-0745 | mtwhf | Vatican Radio | 4005.0eu 15595.0eu | 5890.0eu | 6185.0eu | 7250.0eu | 7645.UEU | 11740.0eu | |
| 0730-0800 | | Radio Bulgaria | | 13600.0eu | | | | | |
| 0730-1400 | | R. E. Highlands, Papua NG | | | | | | | |
| 0730-1400 0730-1400 | | R. Milne Bay, Papua NG R. S. Highlands, Papua NG | 3365.0do | | | | | | |
| 0730-1400 | | Swiss Radio Int'l | 9885.0af | 13790.0af | 17665.0af | | | | |
| 0730-0800 | | BBC World Service | 6190.0af | 6195.0eu | | 11760.0me | | | |
| | | | | 12095.0eu 17640.0eu | | 15360.0as 17790.0as | | 15485.0eu | |
| 0738-0750 | | Croatian Radio, Zagreb | 9470.0pa | | | | | | |
| 0745-0755 | | TWR Tirana | 12070.0eu | | | | | | |
| 0745-0755 | | TWR Monte Carlo KTWR Guam | 9870.0eu | 15330.0as | | | | | |
| 0745-0800 0755-0850 | INCMILI | TWR Tirana | 12070.0eu | 13330.003 | | | | | |
| 0755-0850 | | TWR Monte Carlo | 9870.0eu | | | | | | |
| 0800-0804 | | Radio Pakistan | | 21465.0eu 15255.0eu | | | | | |
| 0800-0827 0800-0829 | | Radio Prague Int'l R. Vlaanderen Int'l | 5985.0eu | 15255.0eu | | | | | |
| 0800-0827 | | Radio Australia | 5995.0pa | 9580.0pa | 9710.0pa | 11880.0as | 12080.0pa | 15240.0as | |
| | | | | 21725.0as | | | | | |
| 0800-0900 | mtwhf | BBS, Bhutan R. for Peace Int'l | 5030.0al 7445.1ir | 6035.0da 15038.7ir | | | | | |
| 0800-0900 0800-1100 | a | Scandinavian Weekend R. | 6170.0va | 11690.0va | | | | | |
| 0800-0930 | | KTWR Guam | 15 3 30.0as | | | | | | |
| 0800-0900 | mtwhf | KTWR Guam Voice of Indonesia | 15215.0as 9525.0pa | 11785.0pa | | | | | |
| 0800-0900 0800-0900 | | Voice of Russia | | 12010.0eu | 15275.0au | 17495.0au | 17525.0au | 17655.0au | |
| | | 1 | 17665.0au | 21540 0-5 | | | | | |
| 0800-0900 0800-0900 | 5 | Amateur Radio League, SA Radio Korea | 9570.0ar | 21560.0af 13670.0eu | | | | | |
| 0800-0900 | | BBC World Service | 6190.0af | 9410.0eu | | 11940.0af | | 12095.0eu | |
| | | | 15310.0as 17760.0as | | 15400.0af 17885.0af | 15485.0eu 21470.0af | | 17640.0eu 21830.0as | |
| 0800-0900 | s a | BBC World Service | 15575.0as | | | | | | |
| 0800-0900 | | KNLS Anchor Point AK | 9615.0as | | | | | | |
| 0800-1045 | | KWHR Naalehu HI VOA | 9930.0as 11995.0as | 11565.0pa 13605.0as | 15150.0as | | | | |
| 0800-1000 | | WSHB Cypress Creek SC | 7535.0eu | 9845.0au | | | | | |
| 0800-0900 | | WYFR Okeechobee FL | 11580.0af | | | | | | |
| 0805-0812 | | Croatian Radio, Zagreb | 13820.0au 9660.0eu | 17820.0af | | | | | |
| 0830-0900 0830-2130 | | AWR Europe, Austria ABC Alice Springs | 2310.0do | 4835.0ir | | | | | |
| 0830-2130 | | ABC Katherine | 2485.0do | | | | | | |
| 0830-2130 | | ABC Tennant Creek | 2325.0do | 0500.000 | 9710 0 | 11880.0as | 12080 003 | 15240 025 | |
| 0830-0900 | | Radio Australia | 5995.0pa 15415.0as | 9580.0pa 17750.0as | | +1000.0as | 12000.0pa | 436-10.0d3 | |
| 0830-0900 | | Georgian Radio, Tbilisi | 11910.0eu | | | | | | |
| 0830-0900 | | Swiss Radio Int'l | 21770.0af 4930.0do | | | | | | |
| 0840-0850 0850-0920 | smtwhf | Turkmen Radio, Asgabat TWR Tirana | 4930.000 12070.0eu | | | | | | |
| 0850-0920 | smtwhf | TWR Monte Carlo | 9870.0eu | | | | | ****** | |
| 0900-1000 | | BBC World Service | 6190.0af | 6195.0as 15190.0sa | | 9740.0as 15360.0as | | | |
| | | | | 15575.0as | 17640.0eu | 17760.0as | | | |
| | | - " • • • " | 17885.0af | | | | | | |
| 0900-0930 | | Radio Australia AWR Europe, Austria | 9580.0pa 17670.0af | 11880.0as | 13240.08S | 21820.0as | | | |
| 0900- 09 30 | | A.t. Europe, Austria | 2. 2. 0.001 | | | | | | |

| | 0000 0045 | | Deutsche Welle | 63.40 Oau | 6160 000 | 0510 000 | 0770.020 | 1170E 0sf | 15410 Oof |
|---|---|--------------------------------------|--|--|--|--|--|--|---|
| | 0900-0945 | | nentzeue Mene | 6140.0eu | 6160.0pa | 9510.0va | | 11785.0af | 15410.0ai |
| | | | | 17800.0af | 17820.0as | 17845.0as | 17860.0at | 21560.0af | |
| | 0900-0956 | | China Radio Int'l | 11730.0pa | 15210.0pa | | | | |
| | 0900-1300 | | Voice Int'l, Australia | 13685.0as | | | | | |
| | | | | | | | | | |
| | 0900-1200 | | R. for Peace Int'i | 15038.7ir | | | | | |
| | 0900-1100 | | HCJB Quito Ecuador | 11755.0pa | 21455.0uf | | | | |
| | 0900-1400 | s a | Italian Radio Relay Svc | 13840.0uf | | | | | |
| | | | | | | | | | |
| | 0900-1000 | 5 | V. of the Mediterranean | 9630.0eu | | | | | |
| | 0900-1000 | | Voice of Nigeria | 7255.0af | 15120.0af | | | | |
| | | | KHBN Palau | 15725.0as | | | | | |
| | 0900-1100 | | | | | | | | |
| | 0900-1400 | | Nat'l BC, Papua NG | 4890.0do | 9675.0ir | | | | |
| | 0900-1000 | | Voice of Russia | 11820.0eu | 15275.0au | 17495.0au | 17525.0au | 17665.0au | |
| | | - | R. UNMEE, UAE | | | | | | |
| | 0900-1000 | 5 | | 21715.0af | | | | | |
| | 0900-1000 | | WSHB Cypress Creek SC | 7535.0eu | 9455.0sa | | | | |
| | 0910-0930 | \$ | Voice of Armenia, Yerevan | 4810.0eu | 15270.0eu | | | | |
| | | - | | | | | | | |
| | 0915-1200 | | Ghana Broadcasting Corp. | | | | | | |
| | 0915-1200 | s a | Ghana Broadcasting Corp. | 4915.0da | | | | | |
| | 0930-1000 | | Radio Australia | 9580.0pa | 11880.0as | 15240.0as | 17750.0as | 21820.0as | |
| | | | Georgian Radio, Tbilisi | | | | | | |
| | 0930-1000 | | | 11910.0me | | | | | |
| | 0930-1000 | | Voice of Greece | 9420.0eu | 15630.0eu | | | | |
| | 0930-1000 | | Radio Vilnius, Lithuania | 9710.0eu | | | | | |
| | 0930-1125 | | Radio Netherlands | 7260.0as | 9790.0pa | 12065 026 | | | |
| | | | | | 77 70.0pa | 12005.085 | | | |
| | 0938-0950 | | Croatian Radio, Zagreb | 13820.0au | | | | | |
| | 0945-1100 | | Deutsche Welle | 6140.0eu | | | | | |
| | 1000-1027 | | Voice of Vietnam | 9840.0au | 12020.0au | | | | |
| | | | | | | | | | |
| | 1000-1029 | | Radio Prague Int'i | 21745.0va | | | | | |
| | 1000-1030 | | KSDA Guam | 11705.0as | 11900.0as | | | | |
| | 1000-1030 | | Radlo Telefis Eireann | 15280.0au | | | | | |
| | | | | | | | | | |
| | 1000-1030 | | Voice of Mongolia | 12085.0as | | | | | |
| | 1000-1030 | | Sri Lanka B'casting Corp. | 4940.0in | | | | | |
| | 1000-1030 | | BBC World Service | 6190.0af | 6195.0va | 9605.0as | 9740.0as | 11760.0me | 11940.0af |
| | 1000 1000 | | 220 1101111 00111100 | 12095.0eu | | | 15485.0eu | 15565.0eu | |
| | | | | | | | | | |
| | | | | 17640.0eu | | | 17885.0af | 21470.0af | 21000.0as |
| | 1000-1100 | s a | BBC World Service | 15190.0sa | 15400.0at | 17830.0af | | | |
| | 1000-1056 | | China Radio Int'l | 11730.0pa | 15210.0pa | | | | |
| | 1000-1056 | | Voice of Korea | 3560.0as | 9335.0am | 0840 000 | 11710.1am | 11735 lac | |
| | | | | | 7333.0am | 7047.743 | 11/10/14/11 | 11/22/143 | |
| | 1000-2200 | | Caribbean Beacon | 11775.0am | | | | | |
| | 1000-1100 | | Radio Australia | 9580.0va | 11880.0as | 15240.0as | 17750.0as | 21820.0as | |
| | 1000-1130 | s a | BBS, Bhutan | 5030.0al | 6035.0do | | | | |
| | | J 4 | | | | 0505.01- | | | |
| | 1000-1730 | | Radio Botswana | 4820.0do | 7255.0do | 9595.0in | | | |
| | 1000-2200 | | Voice of Guyana | 5949.4do | | | | | |
| | 1000-1100 | | All India Radio, Delhi | 13710.0as | 15020.0as | 15235.0as | 15260.0as | 17510.0au | 17800.0as |
| | 2000 1100 | | , z.i.a.a (i.a.a.a, z.a.ii. | 17895.0au | | | | | |
| | | | D 12 1 | | | | | | |
| | 1000-1100 | | Radio Japan | 9695.0as | 15590.0as | 21755.0pa | | | |
| | | | | | | | | | |
| | 1000-1600 | | Radio Nigeria, Lagos | 4990.0do | 7285.0do | | | | |
| | 1000-1600 | | Radio Nigeria, Lagos | 4990.0do | | | | | |
| | 1000-1200 | | Voice of Nigeria | 4990.0do 7255.0af | | | | | |
| | 1000-1200 1000-1100 | | Voice of Nigeria R. Veritas, South Africa | 4990.0do 7255.0af 7240.0af | 7285.0do | | | | |
| | 1000-1200 | | Voice of Nigeria | 4990.0do 7255.0af | | 7370.0am | 9590.0am | 11720.0as | 15250.0as |
| | 1000-1200 1000-1100 | | Voice of Nigeria R. Veritas, South Africa | 4990.0do 7255.0af 7240.0af 5745.0am | 7285.0do | 7 370.0am | 9590.0am | 11720.0as | 15250.0as |
| | 1000-1200 1000-1100 1000-1100 | | Volce of Nigeria R. Veritas, South Africa VOA | 4990.0do 7255.0af 7240.0af 5745.0am 15425.0as | 7285.0do 5985.0as | 7370.0am | 9590.0am | 11720.0as | 15250.0as |
| | 1000-1200 1000-1100 1000-1100 | | Voice of Nigeria R. Veritas, South Africa VOA WEWN Birmingham AL | 4990.0do 7255.0af 7240.0af 5745.0am 15425.0as 5825.0na | 7285.0do 5985.0as 15745.0eu | 7370.0am | 9590.0am | 11720.0as | 15250.0as |
| | 1000-1200 1000-1100 1000-1100 1000-1300 1000-1300 | | Voice of Nigeria R. Veritas, South Africa VOA WEWN Birmingham AL WHRI Noblesville IN | 4990.0do 7255.0af 7240.0af 5745.0am 15425.0as 5825.0na 9495.0am | 7285.0do 5985.0as | 7370.0am | 9590.0am | 11720.0as | 15250.0as |
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| | 1000-1200 1000-1100 1000-1100 1000-1300 1000-1300 1000-1300 | | Voice of Nigeria R. Veritas, South Africa VOA WEWN Birmingham AL WHRI Noblesville IN WRMI Miami FL | 4990.0do 7255.0af 7240.0af 5745.0am 15425.0as 5825.0na 9495.0am | 7285.0do 5985.0as 15745.0eu | 7370.0am | 9590.0am | 11720.0as | 15250.0as |
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| • | 1000-1200 1000-1100 1000-1100 1000-1300 1000-1300 1000-1300 1000-1100 1000-1100 1000-1100 1000-1115 1000-1101 1030-1045 1030-1100 1030-1300 1030-1300 1030-1100 1030-1100 1045-2200 1045-1300 1100-1130 1100-1130 1100-1130 | mt hfa mtwhf t s a mtwhf | Volce of Nigeria R. Veritas, South Africa VOA WEWN Birmingham AL WHRI Noblesville IN WRMI Miami FL WSHB Cypress Creek SC WWCR Nashville TN WYFR Okeechobee FL Radio Vanuatu Vatican Radio Radio Ethiopia KSDA Guam VOIRI Teheran Sri Lanka B'casting Corp. Radio Dubai, UAE R. UNMEE, UAE BBC English Teaching BBC World Service KWHR Naalehu HI Radio Pakistan Volce of Vietnam Radio Australia BBC Caribbean Report BBC World Service | 4990.0do 7255.0af 7240.0af 5745.0am 15425.0as 5825.0na 9495.0am 90955.0am 6095.0am 5070.0na 5990.0do 11900.0as 15215.0as 4940.0in 13675.0eu 21550.0af 15310.0as 17790.0as 930.0as 11565.0pa 17835.0eu 7285.0as 12080.0pa 6195.0ca 6190.0af 15310.0as 17760.0as | 7285.0do 5985.0as 15745.0eu 9840.0na 9455.0sa 5935.0na 4960.0do 7110.0do 15375.0as 11835.0as 15370.0eu 11945.0as 6195.0va 15485.0eu 6020.0pa 15240.0as 15190.0ca 6195.0as 15190.0ca 6195.0as 15190.0ca 6195.0as | 11780.0as 7560.0na 9704.2do 15480.0as 15120.0as 15400.0eu 15285.0as 9740.0as 15565.0eu 21470.0af 9475.0as 21820.0as 9740.0as 15485.0eu 17830.0af 9645.0as | 9475.0na 21470.0as 17850.0as 21597.6eu 21660.0as 11760.0me 15575.0as 9580.0pa 11760.0me 15565.0eu 17885.0af 9760.0as | 21730.0as 11940.0af 17640.0eu 11650.0pa 11940.0af 15575.0as 21470.0af 11705.0as | 12095.0eu 17760.0as 11880.0as 12095.0eu 17640.0eu |

| 1100-1600 | a Scandinavian Weekend R. | 5990.0va | 11720.0va | | | | |
|------------------------|--|------------------------|---|------------|-----------|------------|--------------|
| 1100-1200 | Radio Japan | 6120.0na | | 15590.0as | | | |
| | Radio Jordan | 11690.0eu | , | | | | |
| 1100-1300 | Radio Singapore Int'i | 6150.0as | 9600.0as | | | | |
| 1100-1400 | | | | | | | |
| 1100-1400 | SIBC Solomon Islands | 5019.9ir | 9545.0ir | | | | |
| 1100-1200 | Radio Taipei Int'l | | 11985.0as | | | | |
| 1100-2400 | WINB Red Lion PA | 13570.0am | | | | | |
| 1100-1200 | WSHB Cypress Creek SC | 6095.0am | 9455.0am | | | | |
| 1100-1300 | WWCR Nashville TN | 5070.0na | 5935.0na | 7560.0na | 15825.Ona | | |
| 1100-1200 | WYFR Okeechobee FL | 5950.0na | 11725.0sa | 11830.0na | | | |
| 1105-1305 | Radio New Zealand Int'l | 15175.0pa | | | | | |
| 1115-1130 | Kol Israel | 15640.0va | 17545.0va | | | | |
| 1115-1130 | BBC English Teaching | 11680.0eu | 13745.0eu | 15325.0eu | 17625.0eu | | |
| 1115-1145 | Radio Nepal, Katmandu | 3230.0as | 5005.0as | 6100.0as | 7164.4as | | |
| 1130-1140 | Voice of Africa, Libya | | 21695.0ir | | | | |
| | Radio Prague Int'l | 11640.0eu | | | | | |
| 1130-1157 1130-1159 | R. Vlaanderen Int'l | 7390.0as | 21745.000 | | | | |
| | Radio Australia | 5995.0pa | 6020.0pa | 9475.0as | 0500 003 | 11650.0pa | 11000 Das |
| 1130-1200 | Radio Australia | 12080.0pa | | 74/3.043 | 7300.0pa | 11050.004 | 11000.003 |
| | Dadia Madhadanda | | 6045.0eu | 9860.0eu | | | |
| 1130-1325 | Radio Netherlands | 5965.0na | 6045.060 | 9000.000 | | | |
| 1130-1230 | Radio Korea | 9650.0na | | | | | |
| 1130-1230 | Sri Lanka B'casting Corp. | 4940.0in | | | | 33040 0-6 | 30005 0-11 |
| 1130-1200 | BBC World Service | 6190.0af | 6195.0va | 9/40.0as | 11760.0me | 11940.0ar | 12095.0eu |
| | | 15190.0am | | | 15565.0eu | | 1/04U,UeU |
| | | 17760.0as | 17/90.0as | 17830.0at | 17885.0af | 214/0.Vat | |
| 1130-1200 | a Wales Radio Int'l | 17625.0au | | | | | |
| 1130-1200 | f Vatican Radio | 15595.0va | 17515.0va | | | | |
| 1145-1155 | Radio Rwanda | 6055.0do | | | | | |
| 1145-1600 | Deutsche Welle | 6140.0eu | | | | | |
| 1200-1215 | V. of Cambodia | 11940.4as | | | | | |
| 1200-1215 | BBC English Teaching | 7135.0as | 11835.0as | | | | |
| 1200-1230 | Radio France Int'l | 15540.0af | 25820.0af | | | | |
| 1200-1230 | mtwhf BBC Caribbean Report | 6195.0ca | 15190.0ca | | | | |
| 1200-1230 | BBC World Service | 6190.0af | 6195.0as | 9740.0as | 11760.0me | 11940.0af | 12095.0eu |
| 1200 1250 | | 15310.0as | 15485.0eu | 15565.0eu | 15575.0me | 17640.0eu | 17760.0as |
| | | 17790.0as | | 17885.0af | 21470.0af | | |
| 1200-1230 | s a BBC World Service | 6195.0ca | 15190.0am | | | | |
| 1200-1300 | VOA | 6110.0as | 9645.0as | 9760.0as | 11705.0as | 11715.0as | 15250,0as |
| 1200-1300 | ••• | 15425.0as | | | | | |
| 1200-1230 | Radio Tashkent | 5060.0as | 5975.0as | 6025.0as | 9715.0as | | |
| 1200-1256 | China Radio Int'l | 9730.0as | 9760.0pa | | 11980.0as | 15415.0pa | |
| | Radio Australia | 5995.0pa | 6020.0pa | 9475.0as | | 11650.0pa | 11880 Oas |
| 1200-1300 | Kaulo Australia | 21820.0as | 0020.0pa | 7475.005 | /20010pa | 1105010pu | 22000.740 |
| | CBC Northern Service | 9625.0do | | | | | |
| 1200-2400 | | | 11720 000 | | | | |
| 1200-1300 | Radio Canada Int'l | 9660.0as | 11730.0as | | | | |
| 1200-1400 | Voice of Hope, China | 7485.0as | | | | | |
| 1200-2100 | R. for Peace Int'l | 15038.7ir | 21815.0uf | | | | |
| 1200-1700 | Ghana Broadcasting Corp. | | 6130.0do | | | | |
| 1200-1300 | Voice of Hope, Russia | 1 359 0.0as | | | | | |
| 1200-1300 | Radio Taipel Int'l | 7129.9as | 9610.0au | | | | |
| 1200-1300 | Radio Ukraine Int'l | 11825.0as | 11840.0ец | 13590.0eu | 17760.0eu | | |
| 1200-1300 | Overcomer Ministries | 5975.0eu | | | | | |
| 1200-1300 | WSHB Cypress Creek SC | 6095.0am | 945 5 .0am | 9880.0as | | | |
| 1200-1300 | WYFR Okeechobee FL | 5950.0na | 11830.0na | 11970.0na | 13695.0na | | |
| 1215-1330 | Radio Cairo | 17775.0as | | | | | |
| 1230-1245 | BBC English Teaching | 15105.0af | 17780.0af | 21640.0af | | | |
| 1230-1257 | Voice of Vietnam | 9840.0as | 12019.9as | | | | |
| 1230-1300 | ORF Vienna | 6155.0eu | 13730.0eu | | | | |
| 1230-1300 | Radio Bangladesh | 7185.0as | 9550.0as | | | | |
| 1230-1300 | Radio Bulgaria | | 15700.0eu | | | | |
| 1230-1300 | Voice of Hope, Lebanon | 17795.0as | | | | | |
| | Sri Lanka B'casting Corp. | 4940.0in | 6005.0as | 6075.0as | 9770.0as | 15745.0as | |
| 1230-1600 | Radio Sweden | | 18960.0na | | 0.000 | | |
| 1230-1300 | Radio Thailand | 9810.0as | 10700.0114 | | | | |
| 1230-1300 | BBC World Service | 6190.0af | 6195.0va | 9740 025 | 11760.0me | 11940 0af | 12095 Oeti |
| 1230-1300 | BBC Mount Straics | | 15310.0as | 15485 Oeu | 15565.0eu | 15575.0me | 17640.0eu |
| | | | 17790.0as | | 17885.0af | | . 170 101000 |
| 2045 2000 | hes EERA Souchalles | 15535.0me | _,,,0.003 | _, 550.041 | | | |
| 1245-1300 | hfa FEBA Seychelles | 5015.0do | | | | | |
| 1300-1310 | mtwhfa Turkmen Radio, Asgabat | | / 105 Our | 0740 025 | 11760.0me | 11940 0af | 12095 Oeu |
| 1300-1400 | BBC World Service | 6190.0af | 6195.0va 15310.0as | | | | |
| | | 17440.0em | 17760.0as | 17790 0ac | 17830 0af | 17885 0af | 21470 Daf |
| | madia Amada-II- | | | 0500 000 | 11650.0pa | 11880 000 | 21820 026 |
| 1300-1330 | Radio Australia | 5995.0pa | 6020.0pa | 7500.0pa | 21000.0pa | , 1000.0as | _1020.003 |
| 1300-1330 | AWR Africa, UAE | 17870.0as | 0525.0- | | | | |
| 1300-1355 | Radio Polonia, Warsaw | 6095.0eu | 9525.0eu | 11000 0 | 11000 00- | 15100 0 | |
| 1300-1356 | China Radio Int'l | 9570.0na | | | 11980.0as | | |
| 1300-1356 | Voice of Korea | 4405.0as | 7505.0eu | 9335.1na | 11335.0eu | 11/10.0an | 1 |
| 1300-1630 | Voice Int'l, Australia | 13690.0as | | | | | |
| 1000 2000 | | | | | | | |
| 1300-1400 | mtwhf Radio Canada Int'l | | 13655.0am | 17710.0an | n | | |
| | mtwhf Radio Canada Int'l Radio Jordan | 11690.0na | | | | | |
| 1300-1400 | mtwhf Radio Canada Int'l Radio Jordan | 11690.0na | 13655.0am | | | | |
| 1300-1400 1300-1730 | mtwhf Radio Canada Int'l Radio Jordan | 11690.0na 11710.0af | | 21760.0af | | | |

| 1300-2100 | | Radio Uganda | 4976.0do | 5026.0do | 7196.0do | | | |
|-------------------------------------|--------|-------------------------------------|------------------------------------|---|------------------|----------------|----------------|----------|
| 1300-1400 | | KNLS Anchor Point AK | 9615.0as | | | | | |
| | | | | | | | | |
| 1300-1600 | | Overcomer Ministries | 13810.0me | | | | | |
| 1300-1400 | | VOA | 6110.0as | 9645.0as | 9760.0as | 11705.0as | 15425.0as | |
| 1300-1400 | mtwhf | WBCQ Monticello ME | 17494.9na | | | | | |
| 1300-1600 | | WEWN Birmingham AL | 9955.0na | 15745.0eu | | | | |
| 1300-1600 | | WHRA Greenbush ME | 17560.0af | | | | | |
| | | | | 15105 0 | | | | |
| 1300-1600 | | WHRI Noblesville IN | 9840.0na | 15105.0am | | | | |
| 1300-2400 | | WRMI Miami FL | 15725.0na | | | | | |
| 1300-1400 | | WSHB Cypress Creek SC | 7460.0as | 9430.0na | 9455.0na | | | |
| 1300-1400 | | WWCR Nashville TN | 5935.0na | 7560.0na | | 15825.0na | | |
| | | | | | | | 37530 0 37 | 1575 O |
| 1300-1400 | | WYFR Okeechobee FL | | 11740.0na | 11830.Una | 11970.0na | 17510.0sa 17 | 5/5.0sa |
| 1305-1650 | | Radio New Zealand Int'l | 6095.0oc | | | | | |
| 1330-1345 | | BBC English Teaching | 15105.0af | 21640.0af | | | | |
| 1330-1350 | | Radio Dubai, UAE | 13630.0eu | 13675.0eu | 15395.0eu | 21597.5eu | | |
| 1330-1357 | | Voice of Vietnam | 7145.0eu | 9730.0eu | | | | |
| | | | | | 0500 0 | 77/50 0 | 77//0 0 01 | 000 000 |
| 1330-1400 | | Radio Australia | 5995.0pa | 6020.0pa | 9580.0pa | 11650.0pa | 11660.0as 21 | 1820.0as |
| 1330-1400 | | ORF Vienna | 17855.0au | | | | | |
| 1330-1430 | | Voice of Hope, Germany | 15775.0as | | | | | |
| 1330-1400 | | KSDA Guam | 11755.0as | 15660.0as | | | | |
| 1330-1500 | | All India Radio, Delhi | 9690.0as | 11620.0as | 13710 025 | | | |
| | | | | 11020.003 | 17/10.003 | | | |
| 1330-1400 | | Lao Nat'l Radio | 7145.0do | | | | | |
| 1330-1400 | | Radio Sweden | 9430.0as | 18960.0na | | | | |
| 1330-1430 | | Voice of Turkey | 17690.0as | 17815.0eu | | | | |
| 1330-1400 | | AWR Africa, UAE | 15385.0as | | | | | |
| 1330-1400 | | Radio Tashkent | 5060.0as | 5975.0as | 6025.0as | 9715.0as | | |
| | | | | 3773.003 | 0025.083 | 7713.003 | | |
| 1330-1400 | | Radio Yugoslavia | 11835.0au | | | | | |
| 1400-1415 | mtw | BBC English Teaching | 11860.0af | 15420.0af | 21490.0af | | | |
| 1400-1429 | | Radio Prague Int'l | 21745.0va | | | | | |
| 1400-1430 | | Radio Australia | 5995.0pa | 9580.0pa | 11650.0pa | 11660.0as | | |
| | | Radio Thailand | 9530.0as | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 22050.000 | 220001000 | | |
| 1400-1430 | | | | 0700 0 | 11/75 0 | 117/5 0 | 10/05 0 / 15 | 3050.5 |
| 1400-1456 | | China Radio Int'i | 7405.0na | 9700.0as | 11675.0as | 11765.0as | 13685.0af 15 | 125.0at |
| | | | 17720.0na | | | | | |
| 1400-1456 | | Radio Romania Int'I | 15365.0eu | 17790.0eu | | | | |
| 1400-1500 | | Radio Canada Int'l | 9515.0am | 13655.0am | 17710.0am | 1 | | |
| 1400-1500 | | Radio France Int'i | 7175.0as | 9580.0as | 17620.0as | | | |
| 1400-1500 | | Radio Japan | 7200.0as | 9505.0na | | 17755.0me | | |
| | | | | 7505.011a | 7043.083 | 17755.01116 | | |
| 1400-1500 | | Radio Sultanate Oman | 15140.0eu | | | | | |
| 1400-1600 | | SBC Radio 1, Singapore | 6150.0do | | | | | |
| 1400-1500 | | Radio Taipei Int'l | 15265.0as | | | | | |
| 1400-1500 | | BBC World Service | 6190.0af | 6195.0as | 7160.0as | 9740.0as | 11940.0af 12 | 2095.0eu |
| 1.00 1000 | | | | 15310.0as | | 15565.0eu | | |
| | | | | 17830.0af | | 21660.0af | 20070111110 27 | |
| | | MATI D. II. TV | | 17050.041 | 21470.0ai | 21000.001 | | |
| 1400-2409 | | KAIJ Dallas TX | 13815.0va | | | | | |
| 1400-1600 | | KJES Vado NM | 11715.0na | | | | | |
| 1400-1500 | | VOA | 6110.0as | 7125.0as | 9645.0as | 9760.0as | 11705.0as 15 | 205.0eu |
| | | | 15395.0as | 15425.0as | | | | |
| 1400-2100 | | WBCQ Monticello ME | 17494.9na | | | | | |
| 1400-2100 | | WWCR Nashville TN | 9475.0па | 12160.0na | 13845 Ona | 15825.0na | | |
| | | | | | | | 17575 Acc 17 | 7740.000 |
| 1400-1500 | | WYFR Okeechobee FL | | 11740.0na | | | 17575.0sa 17 | 760.Una |
| - 1415-1420 | | Radio Nepal, Katmandu | 3230.0as | 5005.0as | 6100.0as | 7164.4as | | |
| 1430-1700 | | Radio Australia | 5995.0pa | 9475.0as | 9580.0pa | 11650.0pa | 11660.0as | |
| 1430-1500 | | ORF Vienna | 6155.0eu | 13730.0eu | | | | |
| 1430-1600 | | Radio Myanmar | 5040.6do | 5985.9do | | | | |
| | | | | | 15220 002 | 3 5 5 0 5 0 ac | | |
| 1430-1625 | | Radio Netherlands | | 12080.0as | 1322U.Una | 15595.0as | | |
| 1430-1500 | | Radio Sweden | | 18960.0na | | | | |
| 1445-1545 | | KTWR Guam | 15330.0as | | | | | |
| 1445-1500 | mtwhfa | BBC English Teaching | 7205.0as | 15245.0as | | | | |
| 1500-1515 | whf | FEBA Seychelles | 15445.0as | | | | | |
| | ****** | Radio Mexico Int'l | 9705.1am | 11770.2am | | | | |
| 1500-1530 | | | | | | | | |
| 1500-1530 | | Voice of Mongolia | 12015.0as | | | | | |
| 1500-1530 | | Channel Africa, S. Africa | 17725.0af | | | | | |
| 1500-1530 | | BBC World Service | 5975.0as | 6190.0af | 6195.0as | 7160.0as | | 9740.0as |
| | | | | 11940.0af | | | 15310.0as 15 | |
| | | | 15420.0af | 15485.0eu | 15565.0eu | 17790.0as | 17830.0af 21 | 1470.0af |
| | | | | 21660.0af | | | | |
| 1500-1600 | | VOA Special English | 6110.0as | 9760.0as | 9795.0as | 11995.0as | 15460.0as | |
| | | China Radio Int'l | 7405.0na | 7160.0as | | | 15125.0af 17 | 7720.0na |
| 1500-1556 | | | | | | | | |
| 1500-1556 | | Voice of Korea | 4405.0as | 7505.0eu | | 11335.2eu | | |
| 1500-1600 | | Radio Canada Int'l | 9515.0am | 13655,0am | | | 17820.0as | |
| 1500-2230 | s | Reflections Europe, Ire. | 3910.0eu | 6295.0eu | 12255.0eu | | | |
| 1500-1600 | | Radio Japan | 7200.0as | 9750.0as | 9845.0as | | | |
| | | Voice of Russia | 6205.0as | 7315.0as | 7350.0as | 9590.0as | 9875.0as 11 | 500.025 |
| 1500-1600 | | | | 1213.0as | , , , , o., o.as | ,5,0.0as | , | 00,003 |
| 1500-1800 | ā | Overcomer Ministries | 6110.0eu | | | | | |
| 1500-1600 | | VOA | 7125.0as | 9575.0eu | 9645.0as | 15205.0eu | 15395.0as | |
| 1500-2300 | | WRNO New Orleans LA | 7395.0am | 15420.0al | | | | |
| | | WYFR Okeechobee FL | 6280.0as | | 15520.0as | 17760.0na | | |
| | | IN OUTCOMEE I F | | | | | | |
| 1500-1600 | | Christian Volce Zambia | | | | | | |
| 1500-2400 | | Christian Voice, Zambia | 4965.0do | | | | | |
| 1500-2400 1515-1530 | mtwhf | FEBA Seychelles | 11600.0as | | | | | |
| 1500-2400 | mtwhf | FEBA Seychelles Radio Bangladesh | | 15520.0as | | | | |
| 1500-2400 1515-1530 | mtwhf | FEBA Seychelles | 11600.0as | 15520.0as | | | | |
| 1500-2400 1515-1530 1530-1545 | mtwhf | FEBA Seychelles Radio Bangladesh | 11600.0as 4882.0as 11600.0as | 15520.0as 15545.0as | | | | |

| 1530-1615 | | Voice of Hope, Germany | 9860.0me | | | | | |
|------------------------|------------|--|------------------------|-----------------------|--------------------|-----------------------|-----------------|-----------|
| 1530-1630 | | VOIRI Teheran | 7115.0as | 7195.0as | 0610.025 | 11640.0as | 11775 026 | 11835.0as |
| | | BBC World Service | | | | | | |
| 1530-1600 | | BBC MOLIG SELAICS | 5975.0as | 6190.0af 12095.0eu | 6195.0as | 7160.0as 15310.0as | 9410.0eu | 9740.0as |
| | | | 11940.0af 15565.0eu | | | 21470.0af | 21660.0af | 15485.0eu |
| 1530-1600 | | Vatican Radio | 9865.0af | 13765.0af | 15235.0af | 21470.0ai | 21000.001 | |
| 1540-1550 | | Turkmen Radio, Asgabat | 4930.0do | 13703.0ai | 13233.Vai | | | |
| | - h | Radio Bangladesh | | 15520.0as | | | | |
| 1545-1600 | s h | | 4882.0as | 15520.0as | | | | |
| 1545-1600 | SHIL HIA | FEBA Seychelles | 11600.0as | 15070 0 | 35530.0-6 | 17705 0-6 | | |
| 1600-1615 | | Radio Pakistan | | 15070.0me | | | | |
| 1600-1630 | | BBC World Service | 3915.0as | 5975.0as | 6190.0af | 6195.0as | 7160.0as | 9410.0eu |
| | | | 9510.0as | 11940.0af | | 15190.0am | | 15400.0af |
| 1/00 1/27 | | Voice of Vietnam | 15565.0eu | | 17030.041 | 21470.0af | 21660.0af | |
| 1600-1627 | | KSDA Guam | 7145.0eu | 9730.0eu 15495.0as | 37/30 0 | | | |
| 1600-1630 | | | 11560.0as | 15495.Uas | 1 76 30.0as | | | |
| 1600-1630 | | Voice of Hope, Lebanon | 11705.0as | | | | | |
| 1600-1630 | | Radio Mexico Int'l | 9705.1am | 11770.2am | | | | |
| 1600-1630 | | Channel Africa, S. Africa | 9525.0af | | | | | |
| 1600-1700 | | VOA | 6035.0af | 6110.0as | 7125.0as | 9575.0eu | 9645.0as | 9760.0as |
| | | | 13710.0af | 15 205.0eu | 15240.0at | 15395.0as | 15485.0af | 17715.0af |
| | | | 17895.0af | | | | | |
| 1600-1635 | | Radio Dubai, UAE | 13630.0eu | | 15395.0eu | | | |
| 1600-1645 | | Deutsche Welle | 6140.0eu | 6170.0as | 7225.0as | 9735.0af | 11695.0as | 13605.0as |
| | | | 15445.0af | 21840.0af | | | | |
| 1600-1656 | | China Radio Int'l | 7190.0af | 13650.0af | | | | |
| 1600-1656 | | Voice of Korea | 3560.0as | 9975.0af | 11735.2af | | | |
| 1600-1700 | | Radio Algiers | 11715.0in | 15160.0in | | | | |
| 1600-1700 | s a | Radio Canada Int'I | 9515.0am | | 17710.0am | | | |
| 1600-1700 | | Radio Ethiopia | 5990.0af | 7110.0af | 7165.0af | 9560.2af | 9704.2af | 11800.0af |
| 1600-2000 | a | Scandinavian Weekend R. | 6170.0va | 1 17 20.0va | | | | |
| 1600-1700 | | Radio France Int'l | 11615.0af | 11995.0af | 12015.0af | 15605.0af | 17850.0af | |
| 1600-2400 | | NBC Windhoek, Namibia | 3270.1in | 3290.1af | 6060.0af | | | |
| 1600-2305 | | Radio Nigeria, Lagos | 3326.0do | 4990.0do | | | | |
| 1600-1700 | | Voice of Russia | 4940.0as | 4965.0as | 4975.0as | 6005.0me | 7305.0as | 9590.0as |
| | | | 9830.0me | | | | | |
| 1600-1900 | | R. Veritas, South Africa | 3230.0af | | | | | |
| 1600-1700 | | Radio Korea | 5975.0om | 9515.0af | 9 870.0af | | | |
| 1600-2400 | | Sri Lanka B'casting Corp. | 4940.0in | | | | | |
| 1600-1800 | | Radio Taipei Int'l | 11560.0as | | | | | |
| 1600-2400 | | KTBN Salt Lake City UT | 15590.0na | | | | | |
| 1600-1700 | | VOA Special English | 13600.0as | 15445.0af | 17640.0af | | | |
| 1600-1700 | | WEWN Birmingham AL | 13615.0na | 15745.0eu | | | | |
| 1600-2300 | | WHRA Greenbush ME | 17650.0af | | | | | |
| 1600-1800 | | WHRI Noblesville IN | | 15105.0am | | | | |
| 1600-2100 | smtwhf | WMLK Bethel PA | 9465.0eu | | | | | |
| 1600-1800 | | WSHB Cypress Creek SC | 18910.0af | | | | | |
| 1600-2300 | | WWRB Manchester TN | 9320.0na | 12172.0na | | | | |
| 1600-1700 | | WYFR Okeechobee FL | 11830.0na | | 17760.0na | 17790.0af | 18980.0eu | 21455.0eu |
| 1600-1900 | | SWR Africa, Zimbabwe | 6145.0af | 100201000 | 2110010110 | , | | |
| 1615-1630 | s a | BBC World Service | 11860.0af | 15420 0af | 21490.0af | | | |
| 1630-1900 | , , | Voice Int'l, Australia | 11685.0as | 15 120.001 | 22.70.001 | | | |
| 1630-1700 | | AWR Europe, Austria | 9850.0eu | | | | | |
| | | ORF Vienna | 17865.0na | | | | | |
| 1630-1700 1630-1830 | | Radio Cairo | 15255.0af | | | | | |
| | | Georgian Radio, Tbilisi | 6180.0me | | | | | |
| 1630-1700 | | KSDA Guam | 11560.0me | 11000 000 | 15495.0as | 17630 03- | | |
| 1630-1700 | | AWR Africa, UAE | 9890.0as | 11400.085 | 13473.045 | 1,030.0dS | | |
| 1630-1700 | | BBC World Service | 3915.0as | 5975.0as | 6190.0af | 6195.0as | 7160.0as | 9410.0eu |
| 1630-1700 | | BBS WILL SELVICE | 9510.0as | 11940.0af | | 15190.0am | | |
| | | | 15420.0af | 15565.0eu | | 17830.0af | | |
| 1630-1700 | s a | BBC World Service | 11860.0af | 21490.0af | _,,,,,,,,,,, | 2,000000 | 0.041 | |
| | , a | Deutsche Welle | 6140.0eu | ,,,,,, | | | | |
| 1645-1800 1645-1700 | | Radio Tajikistan | 7245.0 | | | | | |
| | mtwhf | Radio New Zealand Int'l | 11980.0pa | | | | | |
| 1650-1750 1700-1715 | IN CALL | Radio Galkayo, Somalia | 6985.0va | | | | | |
| | | | 5930.0eu | 17485.0af | | | | |
| 1700-1727 | | Radio Prague Int'l Radio France Int'l | 11615.0af | | | | | |
| 1700-1730 | eh - | | | 10000.0al | | | | |
| 1700-1730 | s wn a | Bible Voice BC, Russia | 7435.0me | | | | | |
| 1700-1730 | | Channel Africa, S. Africa VOA | 17870.0af 6040.0eu | 6110.0as | 7125.0as | 9645.0as | 9760 000 | 13710.0af |
| 1700-1800 | | TVA | | 15240.0af | | 15445.0af | 17895.0af | 19/10.0ai |
| 1700-1800 | mtwhf | VOA | 5990.0as | 6045.0as | 9525.0as | | 11955.0as | 12005 020 |
| 1700-1800 | III C WITT | | 15255.0as | 00-J.085 | /JaJ.045 | ,, ,J.uas | ~ x / > > . Od3 | 25003.003 |
| 1700-1745 | | BBC World Service | 3255.0af | 3915.0as | 5975.0as | 6005.0af | 6190.0af | 6195.0eu |
| 1700-1743 | | | 7160.0as | 9410.0eu | 9510.0as | 9630.0af | | 15310.0as |
| | | | | 15420.0af | | 17830.0af | 21470.0af | |
| 1700-1756 | | China Radio Int'l | 7150.0af | 9570.0af | | 11910.0af | | |
| 1700-1756 | | Radio Romania Int'i | 7155.0eu | 9625.0eu | | 11940.0eu | | |
| 1700-1800 | | Radio Australia | 5995.0pa | 9475.0as | 9580.0pa | | 11880.0pa | |
| 1700-2300 | | Radio Africa, Eq. Guinea | 7189.7af | 15184.6al | | | | |
| 1700-2900 | | Radio Africa Int'l | | 13820.0af | | | | |
| 1700-1400 | | Ghana Broadcasting Corp. | | 4915.0do | | | | |
| 1700-2400 | | Voice of Greece | 9420.0eu | 15725.0eu | 17705.0na | | | |
| 1100-1000 | • | , | . 120.000 | 23,23,000 | | | | |

| 1700 | -1800 | | Radio Japan | 9505.0na | 11970.0eu | 15355.0af | | | |
|------|--------------------------|--------|---|-----------------------|----------------------|-----------|------------------|-----------|-----------|
| 1700 | -1800 | | Voice of Russia | 9470.0me | 9590.0as | 9830.0me | | | |
| 1700 | -2000 | | WEWN Birmingham AL | 13615.0na | | | | | |
| | -1800 | | WYFR Okeechobee FL | 18980.0eu | 21455.0eu | 21680.0af | | | |
| | -1730 | | Vatican Radio | 4005.0eu | 5890.0eu | 7250.0eu | 9645.0eu | 15595.0eu | |
| | -1740 | | Voice of Africa, Libya | 15435.0ir | 21695.0ir | | | | |
| | -1745 | | Kol Israel | 11605.0va | 17545.0va | | | | |
| | -1745 | | BBC English Teaching | 3390.0af | 5875.0eu | 7230.0af | 7295.0eu | 9525.0af | 9530.0eu |
| 1730 | -1745 | mtwhf | United Nations Radio | 7170.0af | 15495.0me | 17580.0af | | | |
| 1730 | -2200 | | Radio Botswana | 3356.0in | 4820.0do | 7255.0do | | | |
| 1730 | -1800 | | KSDA Guam | 9385.0me | | | | | |
| | -2200 | | ELWA Monrovia, Liberia | 4760.0do | | | | | |
| 1730 | -1800 | mtwhfa | V. of the Mediterranean | 9850.0eu | | | | | |
| 1730 | -1830 | | Radio Netherlands | 6020.0af | 11655.0af | | | | |
| 1730 | -1930 | | Radio Pilipinas, Manila | 11730.0me | 11890.0me | 15190.0me | | | |
| 1730 | -1800 | s whfa | Bible Voice BC, Russia | 7435.0me | | | | | |
| 1730 | -1800 | | Radio Slovakia Int'l | 5915.0eu | 6055.0eu | 7345.0eu | | | |
| 1730 | -1900 | | TWR Swaziland | 3200.0af | 9500.0af | | | | |
| 1730 | -1800 | | Swiss Radio Int'l | 9755.0af | 13790.0af | 15555.0af | | | |
| 1730 | -1800 | | Vatican Radio | 13765.0af | 15570.0af | 17515.0af | | | |
| 1745 | -1900 | | Radio Bangladesh | 7185.0eu | 9550.0eu | 15520.0eu | | | |
| 1745 | -1945 | | All India Radio, Delhi | 7410.0eu | 9445.0af | 9950.0eu | 11620.0eu | 11925.0af | 13605.0af |
| | | | | 15075.0 af | | 17670.0af | | | |
| 1745 | -1800 | | BBC English Teaching | 5875.0eu | 7295.0eu | 9530.0eu | | | |
| 1745 | -1800 | | BBC World Service | 3255.0af | 3915.0as | 5975.0as | 6190.0af | 6195.0eu | 7160.0as |
| | | | | 9410.0eu | 9510.0as | 12095.0eu | 15310.0as | 15400.0af | 15420.0at |
| | | | Dadia Nam 7 -1 - 47-24 | | 17830.0af | 21470.0af | | | |
| | -2050 | | Radio New Zealand Int'l | 15265.0pa | | | | | |
| | -1815 | _ | Bible Voice BC, Russia | 7435.0me | | | | | |
| | -1815 | S | Bible Voice BC, Russia | 5880.0me | 7235 0 | | | | |
| | -1827 | | Radio Prague Int'l | 5930.0eu | 7315.0va | 0720 0 | | | |
| | 0-1827 | | Voice of Vietnam Voice of Azerbaijan | 5955.0eu | 7145.0eu 9155.0in | 9730.0eu | | | |
| |)-1830 | | | 6110.8eu | | | | | |
| |)-1830 | _ | Deutsche Welle Universal Life, Germany | 3995.0eu 11840.0af | 6140.0eu | | | | |
| |)-1830 | 5 | Radio Telefis Eireann | 9895.0me | | | | | |
| |)-1830 | | AWR Africa, Meyerton | 5960.0af | 6095.0af | 11985.0af | | | |
| |)-1830 | | Channel Africa, S. Africa | 17870.0af | 0075.021 | 11703.001 | | | |
| |)-1830 | | BBC World Service | 3255.0af | 5975.0as | 6190.0af | 6195.0eu | 9410.0eu | 9510.0as |
| 1000 |)-1830 | | BBO World Service | | 15400.0af | | 17830.0af | 21470.0af | 73 20.003 |
| 1800 | -1900 | | VOA | 6035.0af | 6040.0eu | 9760.0eu | | 11975.0af | 13710.0af |
| 1000 | ,-1,00 | | | | 15580.0af | 17895.0af | | | |
| 1800 | -1855 | | Radio Polonia, Warsaw | 5995.0eu | 7285.0eu | | | | |
| | 0-1900 | mtwhf | RAE Buenos Aires | 9690.0eu | 15345.0eu | | | | |
| | -1900 | | Radio Australia | 6080.0pa | 72 4 0.0pa | 9475.0as | 9 580.0pa | 9815.0pa | 11880.0pa |
| | -2100 | | Radio Kuwait | 11990.0va | | | | | |
| 1800 | -2200 | | Radio Liberia Int'l | 5100.0do | | | | | |
| 1800 | -2200 | | R. Veritas, Liberia | 5470.0af | | | | | |
| 1800 | 0-1900 | | Voice of Russia | 7290.0eu | 7335.0af | 7340.0eu | 9590.0as | 9830.0af | 11510.0af |
| 1800 | 0-1900 | s a | Voice of Russia | 5950.0eu | 6175.0eu | | | | |
| 1800 | 0-1 9 00 | m | Amateur Radio League, SA | f3215.0af | | | | | |
| 1800 | 0-1900 | s a | Radio Lusofonia, S.Afr. | 3345.0af | | | | | |
| 1800 | 0-1900 | | R. Omdurman, Sudan | 7200.0do | 9505.0do | | | | |
| 1800 | 0-1900 | | Radio Taipel Int'l | 3955.0eu | | | | | |
| 1800 | 0-2400 | | KIMF Pinon NM | 11885.0am | ı | | | | |
| 1800 | 0-2400 | | University Network | 9890.0as | | | | | |
| | 0-2000 | | WHRI Noblesville IN | 9495.0am | 13760.0va | | | | |
| | 0-2000 | | WSHB Cypress Creek SC | 15665.0eu | 18910.0af | | | | |
| | 0-1900 | | WYFR Okeechobee FL | 18980.0eu | | | | | |
| | 0-1900 | | Republic of Yemen Radio | 9779.6me | | | | | |
| | 5-1830 | 5 | Bible Voice BC, Russia | 5880.0eu | | | | | |
| | 5-1845 | | Blble Voice BC, Russia | 7435.0me 6050.0eu | 7105 00 | 9685.0eu | | | |
| | 0-1845 | an w | BBC English Teaching | | 7105.0eu | 13685.0eu | | | |
| | 0-1859 | | R. Vlaanderen Int'l | 7465.0eu 5800.0eu | 7500.0me | 1,000,000 | | | |
| | 0-1900 | | Radio Bulgaria Georgian Radio, Tbilisi | 11910.0eu | , 500.080 | | | | |
| | 0-1900 | | Deutsche Weile | 6140.0eu | | | | | |
| | 0-1900 0-190 0 | | Radio Telefis Eireann | | 21630.0af | | | | |
| | 0-1900 | | Radio Netherlands | 6020.0af | 9895.0af | 11655.0af | 13700.0af | 17605.0af | |
| | | | AWR Africa, Meyerton | 11985.0af | ,0,3.00. | 11000100 | | | |
| | 0-1900 0-1900 | mtwhfs | Radio Sweden | 6065.0eu | | | | | |
| | 0-1900 | 5 | Radio Sweden | 5840.0eu | | | | | |
| | | , | BBC World Service | 3255.0af | 6005.0af | 6190.0af | 6195.0eu | 9410.0eu | 9630.0af |
| 183 | 0-1900 | | DEC HOUSE SELVICE | | 15400.0af | | 17830.0af | | |
| 194 | 5-1915 | | RTVC Brazzaville, Congo | 4765.0af | 5985.0af | | | | |
| | 5-2000 | s | Bible Voice BC, Russia | 7435.0me | | | | | |
| | 5-1900 | | Bible Voice BC, Russia | 5880.0eu | | | | | |
| | 0-1927 | | Voice of Vietnam | 7145.0eu | 9730.0eu | | | | |
| | 0-1930 | | Deutsche Welle | 3995.0eu | 11765.0af | 13780.0af | 15275.0af | 17560.0af | 17810.0af |
| 2.0 | | | | 21780.0af | | | | | |
| 190 | 0-1930 | 5 | Universal Life, Germany | 9470.0me | | | | | |
| | 0-1930 | 5 | Vaice of Greece | 7475.0eu | 9420.0eu | 17705.0na | | | |
| | | | | | | | | | |

| 1900-200 | 00 | VOA | 4950.0af | 6035.0af | 7415.0af | 9525.0as | 9690.0eu | 9760.0eu |
|--------------------|----------|---|-----------------------|------------------------|-----------|--------------------|-----------|-----------|
| | | | 11870.0as | 11975.0af | 13710.0af | 15180.0as | 15240.0af | 15580.0af |
| | | | 17895.0af | | | | | |
| 1900-200 | 00 mtwhf | VOA | 5965.0me | 9840.0as | 11720.0as | 11 9 70.0as | 13725.0af | 15205.0me |
| 1000 101 | E 4 | China Radio Int'l | 15410.0as | 9585.0af | | | | |
| 1900-195 | | Voice of Korea | 9440.0af 4405.0as | 7505.0eu | 11335.leu | | | |
| 1900-195 | | Radio Australia | 6080.0pa | 7240.0pa | 9500.0as | 9580.0pa | 9815 Ona | 11880.0pa |
| 1900-200 | | Voice Int'i, Australia | 13770.0as | 7240.0pa | 7500.0as | 4300.0pa | 7015.0pa | 11000.004 |
| 1900-200 | | a Voice of Biafra Int'l | 12125.0af | | | | | |
| 1900-210 | - | Voice of Nigeria | 7255.0af | 15120.0af | | | | |
| 1900-200 | | R. Central, Papua NG | 3290.0ir | | | | | |
| 1900-200 | 00 | Voice of Russia | 5950.0eu | 6175.0eu | 6235.0eu | 7290.0eu | 7335.0af | 7340.0eu |
| | | | 7360.0eu | 7440.0af | 9875.0af | 11510.0af | | |
| 1900-240 | 00 | SIBC Solomon Islands | 5019.9do | 9545.0do | | | | |
| 1900-200 | | Radio Korea | 5975.0om | 7275.0eu | | | | |
| 1900-200 | | a Sri Lanka B'casting Corp. | 6010.0eu | | | | | |
| 1900-200 | | TWR Swaziland | 3200.0af | | | | | |
| 1900-200 | | Radio Thailand | 9535.0eu | | | | | |
| 1900-200 | 00 | BBC World Service | 3255.0af | 6005.0af | 6190.0af | 6195.0eu | 9410.0eu | 9630.0af |
| | | MITE Was NA | 12095.0af | 15310.0me | 15400.0af | 17830.0at | | |
| 1900-200 | | KJES Vado NM | 15385.0na | 12016 0ma | 12640 0ma | | | |
| 1900-200 | | VOA Special English WBCQ Monticello ME | 9785.0me 7415.0па | 12015.0me | 13640.0me | | | |
| 1900-210 | | | 9335.0na | | | | | |
| 1900-220 | | WYFR Okeechobee FL | 3230.0af | 151 15 .0af | 15565.0eu | 18980 080 | | |
| 1900-200 | | Radio Vanuatu | 3945.0al | 7260.0do | 2000.000 | 20,00.000 | | |
| 1915-192 | | Radio Rwanda | 6055.0do | , 200.000 | | | | |
| 1915-192 | | BBC English Teaching | 15105.0af | 17885.0af | | | | |
| 1915-200 | | Salamaa Radio | 13855.0af | _, 000,001 | | | | |
| 1930-194 | | Deutsche Weile | 11765.0af | 13780.0af | 15275.0af | 17560.0af | 17810.0af | 21780.0af |
| 1930-200 | | ORF Vienna | 5945.0eu | 6155.0eu | | | | |
| 1930-200 | | Georgian Radio, Tbilisi | 11760.0eu | | | | | |
| 1930-200 | | Voice of Greece | 7475.0eu | | | | | |
| 1930-200 | | Voice of Greece | 9420.0eu | 17705.0na | | | | |
| 1930-203 | | VOIRI Teheran | 6110.0eu | 7215.0eu | 7320.0eu | 11695.0af | 15140.0af | |
| 1930-223 | 30 | Nat'l BC, Papua NG | 4890.0do | 9675.0ir | | | | |
| 1930-223 | 30 | R. E. Highlands, Papua NG | 3395.0do | | | | | |
| 1930-223 | 30 | R. Milne Bay, Papua NG | 3365.0do | | | | | |
| 1930-22 | 30 | R. S. Highlands, Papua NG | 3275.0do | | | | | |
| 1930-200 | | Radio Slovakia Int'i | 5915.0eu | 6055.0eu | 7345.0eu | | | |
| 1930-20 | | Swiss Radio Int'l | 9755.0af | 13660.0af | 15485.0af | 17660.0af | | |
| 1930-20 | | Voice of Turkey | 9890.0eu | | | | | |
| 1930-200 | | Radio Yugoslavia | 6100.0eu | 0745 0 | | | | |
| 1935-19 | | RAI, Rome | 5970.0eu | 9745.0eu | | | | |
| 1940-194 | | Turkmen Radio, Asgabat | 4930.0as | 0530 000 | | | | |
| 1945-200 | | Radio Tirana, Albania Radio Budapest | 7210.0eu 6025.0eu | 9510.0eu 7135.0eu | | | | |
| 2000-201 | | Kot Israel | 6280.0va | 9435.0af | 13720 0va | 15640.0va | | |
| 2000-203 | | Voice of Mongolia | 12015.0as | 7433.0ai | 13720.044 | 15040.014 | | |
| 2000-20 | | VOA | 4950.0af | 6035.0af | 6095.0eu | 7415.0af | 9690.0eu | 9760.0eu |
| 2000 20. | | | 11855.0af | 11975.0af | 13710.0af | 15240.0af | 15580.0af | 17885.0af |
| | | | 17895.0af | | | | | |
| 2000-20 | | Vatican Radio | 7365.0af | 9660.0af | 11625.0af | | | |
| 2000-204 | 45 | Deutsche Welle | 6180.0eu | | | | | |
| 2000-204 | | Radio Iraq Int'l | 9687.0in | 11787.0ir | 00455 | 13/400 | 127000 | 32/20 2:1 |
| 2000-20 | | China Radio Int'i | 5965.0eu | 9440.0af | 9840.0eu | 11640.0at | 11790.0eu | 13630.0at |
| 2000-210 | | Radio Alglers | 11715.0in | 15160.0in | 0815 00- | 11990 0 | 12000 000 | |
| 2000-210 | | Radio Australia HCJB Quito Ecuador | 9500.0as | 9580.0pa | 7010.Upa | 11880.0pa | 12000.upa | |
| 2000-220 | | a Scandinavian Weekend R. | 11895.0eu 5990.0va | 11720.0va | | | | |
| 2000-210 | | a Scandinavian Weekend K. KSDA Guam | 7160.0va | 11720.0va 11700.0as | | | | |
| 2000-21 | | Voice of Indonesia | 11784.9eu | 15150.0in | | | | |
| | | a V. of the Mediterranean | 7445.0eu | 1313010111 | | | | |
| 2000-21 | | R. Central, Papua NG | 3290.0do | | | | | |
| 2000-22 | | a Bible Voice BC, Russia | 7380.0eu | | | | | |
| 2000-21 | | Voice of Russia | 5950.0eu | 6175.0eu | 6235.0eu | 7290.0eu | 7340.0eu | 7390.0eu |
| 2000-21 | | | 15735.0am | | | | | |
| 2000-21 | 00 | AWR Africa, Meyerton | 15295.0af | | | | | |
| 2000-21 | | | 9595.0af | 9680.0eu | | | | |
| 2000-21 | | Radio Damascus | 12085.0eu | 13610.0eu | | | | |
| 2000-21 | | BBC World Service | 3255.0af | 6005.0af | 6190.0af | 6195.0eu | 9410.0eu | 9630.0af |
| | | | | 15400.0af | 17830.0af | | | |
| 2000-24 | | BBC World Service | 17640.0eu | | | | | |
| 2000-22 | | WEWN Birmingham AL | | 17595.0af | | | | |
| 2000-24 | | WHRI Noblesville IN | 5745.0va | 9495.0am | | | | |
| 2000-22 | | WSHB Cypress Creek SC | | 15665.0eu 7580.0eu | 35105.0-4 | 17575.0sa | | |
| 2000-21 | | WYFR Okeechobee FL | 3230.0af 6010.0af | 9710.0af | 15195.0at | ./3/3.0sa | | |
| 2025-20 | | RAI, Rome Voice of Africa, Libya | 15435.0ir | 21695.0ir | 11000.081 | | | |
| 2030-20 | | Radio Thailand | 9535.0eu | 21075.00 | | | | |
| 2030-20 2030-20 | | Voice of Vietnam | 7145.0eu | 9730.0eu | | | | |
| 2030-20 | | | | | | | | |

| 2030-2059 | | R. Vlaanderen Int'l | 7465.0eu | | | | | |
|------------------------|--------|---|-----------|-----------|-----------|-----------|-----------|-----------|
| 2030-2100 | t h | Radio Minsk, Belarus | 7105.0eu | 7210.0eu | | | | |
| 2030-2130 | | Radio Havana Cuba | 11670.0eu | 13660.0in | | | | |
| 2030-2115 | | Radio Cairo | 15375.0af | | | | | |
| 2030-2100 | | AWR Europe, Slovakia | 5955.0eu | | | | | |
| 2030-2100 | | Radio Sweden | 6065.0eu | 9445.0eu | 9490.0as | | | |
| 2030-2100 | | VOA | 6035.0af | 6095.0eu | 7415.0af | 9690.0eu | 9760.0eu | 11975.0af |
| | | | 13710.0af | 15240.0af | 15580.0af | 17885.0af | 17895.0af | |
| 2030-2100 | s a | VOA | 4950.0af | | | | | |
| 2030-2100 | | Radio Tashkent | 5025.0eu | 7185.0eu | 11905.0eu | | | |
| 2040-2100 | mtwhfa | Voice of Armenia, Yerevan | | 9960.0eu | | | | |
| 2045-2230 | | All India Radio, Delhi | 7410.0eu | 9445.0eu | 9575.0au | 9910.0au | 9950.0eu | 11620.0va |
| 24.0 | | | 11715.0au | | | | | |
| 2050-2400 | | Radio New Zealand Int'l | 17675.0pa | | | | | |
| 2050-2110 | | Vatican Radio | 4005.0eu | 5890.0eu | 7250.0eu | | | |
| 2100-2115 | mtwhf | BBC Caribbean Report | 5975.0ca | | | | | |
| 2100-2127 | | Radio Prague Int'l | 5930.0eu | 9430.0as | | | | |
| 2100-2127 | | Voice of Vietnam | 7145.0eu | 9730.0eu | | | | |
| 2100-2130 | | Radio Australia | 7240.0pa | 9500.0as | 9580.0pa | 9660.0na | 11880.0pa | 12080.0pa |
| 2100 2130 | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 17715.0pa | | | ,,. | | |
| 2100-2130 | | China Radio Int'l | 5965.0eu | 9840.0eu | 11640.0af | 11790.0eu | 13630.0af | |
| 2100-2130 | | BBC World Service | 3255.0af | 3915.0as | 5965.0as | 6005.0af | 6110.0as | 6190.0af |
| 2100 2150 | | DDO WONE OCCINIC | 6195.0va | 9410.0eu | 12095.0sa | | 17830.0af | 02701041 |
| 2100-2130 | s a | BBC World Service | 5975.0ca | | | | | |
| 2100-2130 | _ 0 | Deutsche Welle | 9615.0af | 9765.0as | 11645.0af | 11890.0as | 15275.0as | 15410.0af |
| JAV- 6413 | | | 17765.0af | | | | | |
| 2100-2156 | | Voice of Korea | 4405.0as | 7505.leu | 11335.2eu | | | |
| 2100-2156 | | Radio Romania Int'i | 5955.0eu | 7105.0eu | 7215.0eu | 9690.0eu | | |
| 2100-2200 | | R. Nacional de Angola | 3374.9va | 7216.8va | | | | |
| 2100-2200 | | AWR Europe, Austria | 9660.0af | | | | | |
| 2100-2200 | | Radio Canada Int'l | 5850.0va | 5995.0va | 7235.0va | 7425.0va | 9770.0va | 9805.0va |
| EXOU EEOO | | ((4410 | 13650.0va | .,,,,,,,, | ,, | | | |
| 2100-2200 | | R. for Peace Int'l | 15038.7va | 21815.0uf | | | | |
| 2100-2300 | f | Scandinavian Weekend R. | 6170.0va | 11690.0va | | | | |
| 2100-2200 | | Radio Japan | 6090.0eu | 6180.0eu | 11830.0eu | 11850.0pa | 11855.0af | 11920.0pa |
| | | | | 21670.0pa | | | | |
| 2100-2200 | | Voice of Russia | 5950.0eu | 6175.0eu | 6235.0eu | 7300.0eu | 7340.0eu | 7390.0eu |
| | | | 15735.0am | | | | | |
| 2100-2200 | | Radio Korea | 15575.0eu | | | | | |
| 2100-2200 | | Radio Damascus | 12085.0na | 13610.0na | | | | |
| 2100-2200 | | VOA | 6035.0af | 6040.0eu | 6095.0eu | 7415.0af | 9595.0eu | 9670.0as |
| | | | 9760.0eu | 11870.0as | | 13710.0af | 15185.0as | 15240.0af |
| | | | 15580.0af | 17735.0as | 17820.0as | | | |
| 2100-2200 | | WBCQ Monticello ME | 7415.0na | 17494.9na | | | | |
| 2100-2200 | | WWCR Nashville TN | 7465.0na | 9475.0na | 12160.0na | 13845.0na | | |
| 2100-2200 | | WYFR Okeechobee FL | 7580.0eu | 15565.0af | 17575.0sa | | | |
| 2115-2130 | mtwhf | BBC Caribbean Report | 5975.0ca | 11675.0ca | 15390.0ca | | | |
| 2115-2200 | | Radio Cairo | 9990.0eu | 15375.0af | | | | |
| 2130-2145 | t f | BBC Calling Falklands | 11680.0sa | | | | | 1 |
| 2130-2156 | | China Radio Int'l | 5965.0eu | 9840.0eu | 11790.0eu | | | 1 |
| 2130-2400 | | ABC Alice Springs | 2310.0ir | 4835.0do | | | | |
| 2130-2400 | | ABC Katherine | 5025.0do | | | | | |
| 2130-2400 | | ABC Tennant Creek | 4910.0do | | | | | |
| 2130-2200 | | Radio Australia | 7240.0pa | 9660.0pa | 11880.0pa | 12080.0pa | 17715.0pa | 21740.0pa |
| 2130-2200 | t h | Radio Minsk, Belarus | 7105.0eu | 7210.0eu | | | | |
| 2130-2200 | | KSDA Guam | | 11980.0as | | | | |
| | | VOIRI Teheran | 9780.0au | 11740.0au | | | | |
| 2130-2230 2130-2230 | | Voice of Turkey | 9525.0as | | | | | |
| 2130-2200 | | BBC World Service | 3255.0af | 3915.0as | 5965.0as | 5975.0ca | 6005.0af | 6110.0as |
| 2130-2200 | | | 6190.0af | 6195.0va | | 12095.0sa | | 17830.0af |
| 2130-2200 | f | Wales Radio Int'l | 7325.0eu | | | | | |
| 2130-2200 | • | Radio Tashkent | 5025.0eu | 7185.0eu | 11905.0eu | | | |
| 2200-2230 | | Radio Canada Int'l | 5850.0va | 6045.0va | 9770.0va | 9805.0va | | |
| 2200-2230 | | Radio Budapest | 3975.0eu | 6025.0eu | | | | |
| 2200-2230 | | Radio Mexico Int'l | 9705.1am | 11770.2am | | | | |
| 2200-2230 | | Radio Korea | 3955.0eu | | | | | |
| 2200-2300 | | BBC World Service | 5965.0as | 5975.0ca | 6195.0va | 7105.0as | 11685.0as | 12095.0sa |
| E200-E300 | | | | 17830.0af | | | | |
| 2200-2400 | | VOA | 7215.0as | 9770.0as | 9890.0as | 11760.0as | 15185.0as | 15290.0as |
| | | | 15305.0as | 17735.0as | 17820.0as | | | |
| 2200-2230 | mtwhf | VOA | 6035.0af | 7415.0af | 11655.0af | 11975.0af | 13710.0af | |
| 2200-2230 | | Radio Yugoslavia | 6100.0eu | | | | | |
| 2200-2245 | | Radio Cairo | 9990.0eu | | | | | |
| 2200-2256 | | China Radio Int'l | 7170.0eu | | | | | |
| 2200-2400 | | Caribbean Beacon | 6090.0am | | | | | |
| 2200-2300 | | Radio Australia | 13620.0as | 15230.0as | 17715.0pa | 17795.0pa | 21740.0pa | |
| 2200-2300 | | Radio Bulgaria | 5800.0eu | 7500.0eu | | · · | | |
| 2200-2300 | | R. for Peace Int'l | 7445.1ir | 15038.7va | 21815.0uf | | | |
| 2200-2400 | | Voice of Guyana | 3291.3do | 5949.4do | | | | |
| 2200-2300 | | Voice of Nigeria | 7255.0af | 15120.0af | | | | |
| 2200-2300 | 5 8 | Radio Exterior de Espana | 9595.0af | 9680.0eu | | | | |
| 2200-2300 | • | Radio Taipei Int'l | 9355.0eu | | | | | |
| 2200-2300 | | Radio Ukraine Int'i | 5905.0eu | 6020.0eu | 7240.0eu | 9560.0eu | | |
| | | | | | | | | |

| | | | | | uf - Upp | er Sideband |
|------------------------|--------|---|-----------------------|------------------------|--|---------------------|
| | | pa - Pa | | | lf - Low | er Sideband |
| | | as - As | ia | | al - Alt | ernate |
| a - Sa | aturda | ıy me-Mi | ddle Ea | st | oc - Occ | |
| | riday | af - Af | | | ir - Irr | |
| h - Th | | | | | in - Ina | |
| | | , | | | in I | ctivo |
| w - We | | | | , ica | Oili - Oiliti | Tarrectionat |
| t - Tu | | | | | | idirectional |
| | onday | ca - Ce | | | do - Dom | estic |
| 5 - St | ındav | na - No | | rica | va - Var | |
| Days: | | Target Ar | eas: | | Other Note | 5: |
| Key: | | | | | | |
| 2-1/II- | | nempers ne | | | | |
| 24hr- 24hr- | | WTJC Newport NC | 9370.0am | 1110,656 | | |
| 24hr- 24hr- | | WJIE Louisville KY | 5920.0am 7490.0am | 13595.0in | | |
| 2.4 h | | WBOH Newport NC | 10320.0uf | 12579.0uf | 12689.5uf 13362.0uf | |
| 24hr- | | AFRTS | 3903.0uf | 4278.5uf | 4319.0uf 4993.0uf | 6350.0uf 6458.5uf |
| 24hr- | | University Network | 5029.1am | 6150.0am | 7375.0am 9724.9sa | 11869.9am 13749.9na |
| 24hr- | | R. UNAMSIL, Sierra Leone | | | | |
| 24hr- | | ZLXA New Zealand | 3935.0do | | | |
| 24hr- | | CKZU Vancouver BC | 6160.0do | | | |
| 24hr- | | CKZN Saint John's NL | 6160.0do | | | |
| 24hr- | | CFVP Calgary AB | 6030.0do | | | |
| 24hr- | | CFRX Toronto ON | 6070.0do | | | |
| 2330-2400 | | VOA Special English | 6180.0as 11805.0as | 6130.0as 13640.0as | 7205.0as 9620.0as 15135.0as 15205.0as | 9780.0as 11735.0as |
| 0220 0400 | | VOA Canalal Facilish | | 11945.0as | 11955.0as 12095.0sa 7205.0as 9620.0as | 15280.0as |
| 2330-2400 | | BBC World Service | 3915.0as | 5965.0as | 5975.0ca 6035.0as | 6195.0va 7105.0as |
| 2330-2400 | | Swiss Radio Int'l | 9885.0sa | 11660.0sa | | |
| 2330-2400 | | Radio Netherlands | 6165.0na | 9845.0na | | |
| 2330-2400 | | Radio Vilnius, Lithuania | 9875.0na | | | |
| 2330-2400 | | Voice of Hope, Lebanon | 6025.0as | | | * |
| 2330-2400 | | Radio Canada Int'l | 5960.0na | 9590.0na | -1. тогори | |
| 2330-2400 | | Naulu Mustialia | | 17795.0pa | 21740.0pa 13620.0as | 15250.003 15415.003 |
| 2330-2357 | | Voice of Vietnam Radio Australia | 9840.0as 9660.0pa | 12019.9as 11695.0as | 12080.0pa 13620.0as | 15230 Oas 15415 Oas |
| 2330-2357 | | Radio Prague Int'l | 7345.0na | 9435.0na | | |
| 2330-2340 | | Voice of Africa, Libya | 15435.0ir | 21695.0ir | | |
| 2320-2330 | | Kyrghyz Radio, Bishkek | 4010.0as | 4795.0as | | |
| 2300-2400 | | WYFR Okeechobee FL | 5985.0sa | 11740.0na | 11855.0sa 15170.0sa | 15400.0sa |
| 2300-2400 | | WWRB Manchester TN | 5050.0na | 5085.0na | 6890.0na | |
| 2300-2400 | | WWCR Nashville TN | 3210.0na | 5070.0na | 7465,0na 13845.0na | |
| 2300-2400 | | WRNO New Orleans LA | 7355.0va | | | |
| 2300-2400 | | WHRA Greenbush ME | 7580.0eu | 7000.UVA | | |
| 2300-2400 2300-2400 | | Voice of Turkey | 6020.000 | 9655.0va | | |
| 2300-2400 | T | Scandinavian Weekend R. SBC Radio 1. Singapore | 5980.0va 6150.0do | 11690.0va | | |
| 2300-2400 | | Radio Cairo Scandinavian Weekend R. | 9900.0am | 11400 000 | | |
| 2300-2356 | | Radio Romania Int'l | 7195.0eu | 9510.0na | 9570.0eu 11940.0na | |
| 2300-2345 | | Deutsche Welle | 9470.0as | 9815.0as | 13690.0as 21790.0as | |
| 2300-2330 | | VOA Special English | 6180.0as | 7205.0as | 9780.0as 11735.0as | 15135.0as |
| 2300-2330 | | DOO MOIIN SELVICE | 3915.0as 11945.0as | | 12095.0sa 15280.0as | ,100.0a5 11000,0d5 |
| 2300-2330 | mtwhf | Radio Mexico Int'l BBC World Service | 9705.1am 3915.0as | 11770.2am 5965.0as | 5975.0ca 6195.0va | 7105.0as 11685.0as |
| 2300-2356 | | China Radio Int'l | 5990.0na | 13680.0na | | |
| 2300-2330 | | Radio Canada Int'i | 5960.0am | | 11865.0am | |
| | | | 21740.0pa | | | |
| 2300-2330 | | Radio Australia | 9660.0pa | 12080.0pa | 13620.0as 15230.0as | 17715.0pa 17795.0pa |
| 2245-2400 | | All India Radio, Delhi | 9705.0as | 9950.0as | 11620.0as 13605.0as | |
| 2230-2400 2230-2300 | | Nat'l BC, Papua NG Radio Sweden | 9675.0do 6065.0eu | 11880.0ir | | |
| 2230-2330 | | Radio Havana Cuba | 6180.0am | 11990 06 | | |
| | smtwhf | ORF Vienna | 5945.0eu | 6155.0eu | | |
| 2230-2300 | | Radio Tirana, Albania | 7130.0eu | 9540.0eu | | |
| 2230-2259 | | R. Vlaanderen Int'l | 13700.0na | | | |
| 2230-2257 | | Radio Prague Int'i | 7345.0na | 9435.0af | | |
| 2200-2300 2205-2230 | | RAI, Rome | 7580.0eu 11895.0as | 11740.0na | 15565.0af | |
| 2200-2300 | | WWCR Nashville TN WYFR Okeechobee FL | 5070.0na | 7465.0na | 9475,0na 13845.0na | |
| 2200-2400 | | WSHB Cypress Creek SC | 7510.0eu | 15285.0sa | | |
| 2200-2400 | | WEWN Birmingham AL | 9975.0na | 17595.0af | | |
| 2200-2400 | | WBCQ Monticello ME | 7415.0na | 9335.0na | 17494.9na | |
| 2200-2400 | | KWHR Naalehu HI | 17510.0as | | | |
| | | | | | | |

16th Annual

Winter SWL Fest Sponsored by N4544

March 7-8, 2003

Best Western—The Inn at Towamencin (formerly Holiday Inn), Sumneytown Pike, Kulpsville, Penna. 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!

Plan to attend your favorite forums Friday and

No frills; just shottwave, longwave, mediumwave, pirates, and scanning. Ónce again you will enjoy the camaraderié 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 6th. If you choose not to participate in the meals, the hotel has a restaurant, and there are other restaurants nearby.

Early Registration (rec'd by March 2, 2003)
Full registration: \$43
Two-day Partial (no meals): \$17
One-day Partial (no meals): \$9
Full spouse/son/daughter: \$28
Banquet only spouse/son/daughter: \$16
Student (w/ valid ID, no meals): \$5
Many things, like the raffle, remain the same:

Late or On-Site Registration
Full registration: \$50
Two-day Partial (no meals): \$20
One-day Partial (no meals): \$10
Full spouse/son/daughter: \$35
Banquet only spouse/son/daughter: \$20

Student (w/ valid ID, no meals): \$5

GRAND PRIZE To be announced

SPECIAL Register early to win a sw portable! One free entry for an early-bird registration received by February 12, 2003.

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 Holiday Inn at (215) 368-3800. For 2003, one special rate \$75 single or double! Tell the hotel staff you're with the WINTER SWL FEST to receive this special room rate. You must make your reservation directly with the hotel to receive this rate; reservations via the Best Western 800 number or web site are not eligible for this rate. Up to the minute info. can be found on the Winter SWL Fest Web Page at http://www.swlfest.com/ or from http://www.anarc.org/naswa/.

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

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

swl winterfest P.O. Box 4153 Clifton Park, NY 12065

| NAME: | (spouse's name) |) | |
|--|--|---|--|
| ADDRESS: | | | |
| CITY: | E-MAIL: | (REQ. FOR REG. CONFIRMATION) | |
| REGISTRATION: Full (\$43) Two-Day Partial (\$17) | BANQUET: Roast Beef Chicken | Registration Fee Enclosed \$ Raffle Tickets Fee Enclosed \$ Total Check/Money Order \$ | |
| One-Day Partial (\$9) Spouse (\$28) Banquet only (Spouse) (\$16) Student (\$5) | RAFFLE TICKETS: raffle tickets, please (\$1 ea./ 6 for \$5/ 13 for \$10) | Registration cancellations after 2/28/ 2003 cannot be refunded, however we will refund raffle ticket money if you have to cancel | |

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All s/h charges for the following items are included unless otherwise noted.

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|---|---|
| Shortwave Listening Guidebook by Harry Helms. Covers equipment, antennas, propagation, station profiles, utilities, clandestines, QSL'ing, etc. 315 pages. | \$18.50 +2.00 s/h US/CA +3.00 s/h world |
| Underground Frequency Guide by Donald W. Schimmel. An in-depth look at illegal radio communications; pirate, spies and so much more! Lists hundreds of frequencies. A book no pirate or clanny fan should be without! | \$17.50 +2.00 s/h NAm +3.00 s/h world |
| Joe Carr's Loop Antenna Handbook Comprehensive but readable guide to understanding and building loops for LW, MW, SW and VHF. Non-technical, has many diagrams. | \$16.50 +1.25 s/h US/CA +2.00 s/h world |
| The Vacumn Tube Era Reviews the golden years of vacumn tube receivers, 1932-1981. If you feel real radios glow in the dark, this is for you!141 pages. | \$15.00 +1.50 s/h worldwide |
| Shortwave Receivers, Past & Present by Fred Osterman. A comprehensive guide to over 770 shortwave, amateur and commercial communications receivers produced in the last 55 years! Over 800 photos. 473 pages. | \$21.00 +2.00 s/h US/CA +3.50 s/h world |
| Confidential Frequency List This book, which details frequencies, callsigns and data for the non-broadcast stations on 2–30 MHz, has just been released (12th edition). Ships December 15th. | \$24.50 +4.00 s/h NAm +8.00 world |
| Inside the Mission Control Center by R.H. Nicholson. This is your personal tour of the former mission control center at the Johnson Space Center! A great book for the space or radio communicatios enthusiast! | \$7.00 +1.50 s/h NAm +2.00 world |
| NASWA Country List and Awards Program Booklet | \$3.00 PP US/CA \$5.50 elsewhere |
| QSL Signers by Al Quaglieri. The most comprehensive and up-to-date list of verification signers names, titles, and addresses available anywhere! | \$2.50 PP US/CA \$4.50 elsewhere |

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