

# The **NASWA** Journal

VOLUME XLI NUMBER 5

MAY 2001



North American Shortwave Association — America's Shortwave Broadcast Club

# Quality Receivers From Universal Radio

# ICOM

## R2



The ICOM R2 is a miracle of miniaturization. At only 2.3"x3.4"x1" it tunes from 500 kHz to 1310 MHz (less cellular) in AM/FM/FM-W. The R2 comes complete with two NiCad AA cells, charging tray, antenna, strap and belt clip. **\$159<sup>99</sup>**

✓FREE from Icom (USA customers only):  
CSWHHRX Software & cable (<sup>139<sup>99</sup></sup> value)



## R10

The R10 is a wideband communications receiver you can hold in your hand. It covers .5 to 1300 MHz (less cellular) with 1000 alpha memories, band-scope and SSB/CW. It comes with four AA NiCad cells, charger, belt clip, strap and flex antenna. (This, and other prices shown, are after mfg. coupons). **\$299<sup>99</sup>**

✓FREE from Icom (USA customers only):  
CSWHHRX Software & cable (<sup>139<sup>99</sup></sup> value)

✓FREE from Universal Radio:  
"Guide to Military Monitoring" (<sup>19<sup>99</sup></sup> value)

## R3



The R3 covers from .5 to 2450 MHz (less 816-902 MHz) in AM, FM wide, FM narrow and TV. Yes, the R3 has a built-in 2 inch TFT color TV screen. You can receive regular TV, and you may even be able to see certain video feeds at some sporting events and ham radio "fast scan" TV. The display can also be used as a spectrum bandscope. A second mono LCD display that can be used to conserve battery life. You get a 450 alphanumeric memories, 4-step attenuator, video and audio outputs, auto power off, a 4 position joy stick and BNC type antenna. This radio comes with BP-206 Lithium Ion battery, charger, belt clip and antenna. **\$399<sup>99</sup>**

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The ICOM PCR100 turns your Windows 95/98 PC into a wideband receiver. Coverage is 10 kHz to 1300 MHz (less cellular) in AM/FM-N/FM-W. Has Simple and Multi-Function screens. **\$189<sup>99</sup>**

## PCR1000



Hear it all with the PCR1000 Windows 3.1/95 PC receiver covering 10 kHz to 1300 MHz (less cellular) in AM/FM-N/FM-W/SSB/CW. With IF Shift, NB, CTCSS Decode, 6 Scan Modes, 3 Screens. **\$349<sup>99</sup>**

## R75



The ICOM R75 may be the best value today in a communications receiver. Has Twin Passband Tuning, Notch, Synchronous AM, Preamp, coverage to 60 MHz and 99 alpha memories. **\$569<sup>99</sup>**

✓Save \$100 on the UT-106 DSP Option:  
Normally \$139.95, only \$39.95 with R75 purchase.

✓FREE from Universal Radio:  
"Joe Carr's Receive Antenna Handbook" (<sup>19<sup>99</sup></sup> value)

◆ Visit our website or request our 100 page catalog for other ICOM products.

## R8500



The professional-grade ICOM R8500 covers 100 kHz to 1999.99 MHz (less cellular). Please see our catalog or website for the full story on this extremely versatile wideband receiver. **\$1449<sup>99</sup>**

✓FREE with your PCR1000 or R8500  
"Guide to Military Monitoring" (<sup>19<sup>99</sup></sup> value)

**TEN-TEC**  
RX-340



The Ten-Tec RX-340 is the ultimate receiver! Advanced D.S.P. technology at under \$4000. Production units started shipping in July. Please see our print catalog or online catalog at [www.universal-radio.com](http://www.universal-radio.com) for full technical details.

## YAESU VR-5000

The Yaesu VR-5000 provides sophisticated wideband reception. Coverage is from 100 kHz to 2600 MHz (less cellular), in AM, FM-N, FM-W, LSB, USB and CW. This radio features a real-time bandscope and you get 2000 alphanumeric memory channels grouped into 100 banks. Optional aids such as a DSP unit, voice synthesizer and digital voice recorder are available. Jacks on the back panel include: Mute, 13.8 VDC input, Ext. Speaker, 10.7 MHz IF Output, Antenna input A (SO-239 50 ohm) & B (Hi Z 450 ohm), CAT Interface Jack. The VR-5000 comes with the PA28B 117 VAC adapter and DC power cord. 7.1x2.75x8" 4.2 Lbs. Order #0050 **\$889<sup>99</sup>**



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# NASWA Notes

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

Because of the recent drastic changes in the International Postal Rates we are experimenting with other methods of getting the *NASWA Journal* to all our overseas members without having to raise our overseas membership rates. The rate we used for many years, AirMail Printed Matter, has been discontinued and the regular AirMail rates have been raised to the extent that US\$42.00 will no longer cover our costs of mailing the *Journal* to overseas areas.

This month's *Journal* is being mailed using a private company in New Jersey. This is the same company that handles our ISAL mailing. Please send any comments you have to **Bill Oliver** (see the next paragraph for contact addresses). Although we are not totally committed to this method of mailing at this time, we hope it proves feasible. Your feedback is important. Thanks!

Please note that the e-mail address for *NASWA* Headquarters in Levittown has changed to [naswa@earthlink.net](mailto:naswa@earthlink.net). All communications for *NASWA* Headquarters should be directed to our Publisher/Business Manger **Bill Oliver** at the new electronic address or to the familiar 45 Wildflower Road, Levittown, PA 19057 address.

Also, Company Store proprietor **Bill Bergadano KA2EMZ** has changed postal addresses. You can now order goods from the store at 32 Joysan Terrace, Freehold, NJ 07728. Note that the address on the inside back cover this month is still the old one; please disregard that and send orders to the Joysan Terrace address. His e-mail address remains the same. (Also see *Bill's Musing* in this issue for an explanation.)

Don't forget to check out two new hard copy publications offered by **Bob Padula** of the Electronic DX Press (Australia). *The Australasian Shortwave Guide* (No. 11) covers the new international shortwave radio transmission period that commenced on March 25 and concludes on 28 October (the A-01 period). It's 36 pages, A5 format, and saddle-stitched. It provides comprehensive information of English shortwave transmissions beamed to Australia and the Pacific, and for broadcasts in all languages intended for Australia, with some 1500 entries. *The Australasian Shortwave Digest* (No. 5) brings together in hard-copy format the best articles and stories which have been distributed electronically to members of the Electronic DX Press. The 28-page A5 format Digest includes a number of interesting essays on shortwave broadcasting topics (see last month's *NASWA Notes* for a complete listing). The Guide and Digest are available for A\$10 each, which includes postage to any address in Australia. Airmail to addresses outside of Australia: US\$10—international money order (or bank draft) payable at an Australian bank to yield A\$20, cash (any currency to yield A\$20), 14 IRCs. Orders should be sent to **Bob Padula**, 404 Mont Albert Rd, Surrey Hills, Victoria 3127. Payment may be by cash, or international money order, for credit of **Bob Padula**.

Also, don't forget to order your copy of *Dangerous Crossings* written by *NASWA* members **John H. Bryant** and **Harold "Dr. DX" Cones**. It is available at bookstores, online ([www.nip.org](http://www.nip.org)) or direct by calling 1-800-233-8764. Published by the Naval Institute Press in Annapolis, Maryland, the book contains 232 pages, 31 illustrations, 5 maps


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Our Motto is - "Unity and Friendship"

NASWA

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

and extended notes and bibliography and costs US\$27.95 plus shipping/handling. Also, it can be found online at Amazon.com and Borders.com. Highly recommended reading!

That's it for this month. Enjoy this month's edition of the *Journal* including a lively Musings section; it's another good one. 

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## FRENDX: Twenty Five Years Ago....

Headquarters announced that all members would be receiving a multi-page NASWA Questionnaire asking questions about listening preferences and radio hobby activities. It was announced that the Southern California Area DXers (SCADS), headed by Don Johnson, Stewart MacKenzie and John Clements, would be hosting the 1976 ANARC Convention in July. SPEEDX published a 40-page Guide to Soviet Broadcasting prepared by Bob Butterfield and Doug Snyder. It was available for US\$1.25. Kim Andrew Elliott was looking for monitors for the ANARC Frequency Recommendation Committee. In Jerry Lineback's Shortwave Center column, Larry Magne reports of the Third Meeting of the International Broadcasting Services Group (WARC-79) held in Washington, DC. Bill Oliver notes verifications from 116 countries in the QSL Report with Upper Volta, South Korea and Tadzhik SSR making their first appearances in the column. Log Report Section A editor Dan Robinson reports using a new typewriter because his old Smith-Corona broke.

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## Musings

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

**Harold O. Smith, 8604 Eastside Drive N.E., Tacoma, WA 98422**

Many years ago, I bought a German Saba radio with AM, FM and SW quite like the Grundig Classical 9600 as seen in the most recent Universal catalogue. This must have been before I even tried SW, and much before the Zenith Transoceanic.

I am a recent subscriber to NASWA having received only two copies. Following the Zenith came a Grundig 600, which broke down and was difficult to repair. Then came the Sony 2010 followed by a Lowe 225 fed by a half-wave dipole, and now the Grundig 800. I too had qualms about the latter being made in China. Possibly *Passport to World Band Radio* changed my mind; so far so good. Grundig's Hotline provides one a ready answer to stupid questions. They too upheld the Mini Windom and stressed it must be broad or wide band.

Some years ago, I climbed a ladder through the trap door into the attic, strung a wire, and snaked a lead-in down the partition, and fortunately through the partition and into our bedroom. Having done this it should not be too difficult to guide a coaxial cable for the Mini Windom providing I can find a man more agile than I. Universal have them for \$89.95. Maybe after I pay my income tax!

73, Harold

**Donna Ring <ring99@earthlink.net>**

Thanks to the kindness and good will of friends and acquaintances, I received my bags delivered to my door tonight. Your question about the buffet lunch (Rich Cuff's inquiry concerning Fest lunch arrangements) brings up a larger issue which blind people tend to disagree about. That issue is what we in government circles refer to as reasonable accommodation. Some people believe this means that sighted persons should wait on them and do for them just because they are blind, accepting the public notion that to be blind means to be nearly helpless, or that the world owes them a living, as if blindness is the result of someone's fault. I, on the other hand, with many other persons, many of whom belong to the National Federation of the Blind, believe that blindness is not a tragedy or a reason to demand special favors of our friends or pity from society, but that blindness is a major nuisance or inconvenience, requiring that we find alternative methods to get things done. Sometimes this means reasonable accommodation, with the emphasis on the word *reasonable*, but in most cases we can and should be independent and do for ourselves. Of course, if convenient and offered with good will, the help of others should be graciously accepted, but it should not be taken for granted or automatically expected. For example, the first year I attended the Fest and didn't know where anything was, I asked for a ride to the Philadelphia train station. In subsequent years, I have taken a taxi and the SEPTA train on my own, except when a couple of times someone approached me and offered a ride, because I was carrying such a heavy load. I was grateful for the help, while still ready to travel on my own. Concerning the buffet luncheon, at first I envisioned some difficulty because I was in line with someone whose first language was not English, but I asked those around me what was being offered and had no trouble obtaining two pieces of pepperoni pizza. Do I look like someone who has trouble finding enough to eat? Seriously, there was no problem at all. I was a bit late to the other room to hear the luncheon speaker, but that was my own fault for coming to lunch at the last minute after playing with radios in my room! Definitely nothing to do with blindness.

I hope this helps provide the perspective that blind persons, just like the general population, are all different. I do not travel as well as some, but I am still as independent as reasonably possible. This means usually paying for rides instead of wearing out my friends, and not having a reader as often as I might prefer, for I live alone, but my middle income job, training, and education makes this possible. I am luckier than the 70 percent of blind persons who are unemployed or under employed. I don't need to just take, but can give back to American society.

Those who know me well, know that although I rarely send in loggings, for I am a very private person, I enjoy both DXing and program listening for my own pleasure and on numerous occasions have been a shortwave radio ambassador, lending, and sometimes even giving away, portable radios to potential hobby enthusiasts. In my own quiet way, I am an SWL missionary. Of course, I often fail to make a convert, but it certainly is fun trying!

Sincerely, Donna Ring

**James Tobola, KC5LDO, 312 Ruth Drive, Hewitt, TX 76643**

I am writing to say how disappointed I am at the cancellation of the March North American DX Championships. I looked forward to this contest for most of the year. Also, I constructed a special antenna system just for this event.

I wrote Harold Cones and my letter was returned. I was told to watch the Journal for rules. Checking the website never yielded any rules either. When the February issue came and there were no rules listed I knew something was wrong.

How many participants are needed to make it worth the time to print the rules? I am sure everyone who planned to participate didn't contact Harold Cones. I feel like the members were shown a lack of interest. 73, Jim

**Harold Cones <hcones@cnu.edu>, 2 Whits Court, Newport News, VA 23606**

It takes a bit of time to get the NADXC together. The number of folks who take part has always been small, and last year very, very small. It takes a certain critical mass of people to have a valid contest and it just was not there last year. The committee decided that we perhaps should lay off for a year, think over what we are doing and come up with a better contest that receives better publicity. With so few people interested, I did not see a need to place such a statement in the *Journal*, so did not. Sorry if that created a problem.

**Bill Crookham <beritg@aol.com>, P. O. Box 520, Caldwell, ID 83606-0520**

I belong to 21 different civic, fraternal, political and professional organizations and all publish a membership list. Sure am curious why NASWA does not make a membership list available to members. Best way I know to meet folks in ones particular area. I'm sure little mini-clubs could be established on a regional basis. Kulpsville is out for us "distant ones" because of air fare and ground transportation. Oblige, Bill

**Bill Oliver <naswa@earthlink.net>, 45 Wildflower Road, Levittown, PA 19057**

In the late 1970s when we had a lot more members, Mac Leonhardt had one made up at some expense. They just didn't sell and they get outdated rather fast. We do offer to put ads in the *Journal* asking people to get in touch with someone in their area. Remember, too, that some people don't like to be bothered.

**Gene Borowski <Ejb3691@cs.com>, 139 Regan Avenue, Staten Island, NY 10310**

Hello! I hope this letter is finding you well! I'm contacting you today because I've had this idea rattling around in my head and I thought I'd better get it out before it died of loneliness. I have an idea for a possible column for the *Journal* and I thought I'd pass it along to see if you think it would work.

I would like to know if you think NASWA members would be interested in a sort of "Pen Pal" column. I had the idea of contacting other radio clubs worldwide (isn't e-mail great?). I would ask them to print my name, address, and e-mail address in their club bulletin. If any of their members would be interested in having a pen pal here in North America they could contact me. I would then pass along to NASWA their names, address's, e-mail, Ham call #'s, etc.... If any NASWA members are interested they could then contact the other club member from the UK, Australia, or wherever....

Anyway, that's about it in a nutshell. I have had some contact with Mr. Dave Kenny of the British DX Club on a different matter and I happened to mention this idea to him. He said he had no problem with printing my request in the next edition of his club's bulletin if I were to try to make a go of it.

Do you think it would be worth the effort? I've only been a member of NASWA for a little over 4 years, so I don't know if anybody tried to do this before. Maybe it would work and maybe it would be a colossal flop. Either way, I don't mind trying to do it. As we say here in my little slice of heaven: "no harm—no foul".

I appreciate your time and feedback. Thanks & 73's....

Sheryl Paszkiewicz <spaszkwicz@yahoo.com>, P.O. Box 152, Manitowoc, WI 54221-0152

A couple months ago I checked out Universal's website and saw that the ICOM R-8500 was on sale for 1/3 off. Before I could talk myself out of it, I was calling Universal and ordering the receiver. Let me tell you, it has answered my prayers regarding DXing from an apartment building. I'm not saying everybody should go out and buy a high end receiver but I wanted to tell you my observations and advantages this rig has over ones I've previously used. However, this will not be a technical review.

The audio is quite crisp and this makes identifying stations easier. There are few brands that are noted for really good audio quality. The R8500 has all the amenities you'd expect: passband tuning, filters, sideband, noise blanker, etc. It does lack a notch filter. For those of you who don't know, this is a wideband receiver, which receives 100 kHz to 2.1 GHz. I have not used the scanner portion extensively yet so my observations pertain to the AM or shortwave portion.

There are 1000 memory channels. You can name the channels too. This is very handy. When I get up at 4 a.m. to DX, I don't want to leaf through reference books to find out what I'm hearing. I pull target stations off of DX bulletins and plug them in the memory with the name of the station. I zeroed in on Diego Garcia and Radio Interoceanica within the first couple attempts. I logged a dozen new stations within the first three weeks. Some of this was because I was trying harder too in the form of getting up at 0900-1000 UTC every morning. The R8500 also looks to be a good receiver for medium wave DXing. When I lived on Green Street, I used to listen to low powered WNOV from Milwaukee. After I moved, I was unable to hear it but now I can once again.

Let me explain my antenna situation. I am only using a 60-foot random wire strung along the 4 walls of my radio shack. Imagine what could be accomplished with a decent outdoor antenna. They say you can have the best receiver and if your antenna is weak, the receiver won't help. Therefore, I was totally surprised at how much I could do with the ICOM that I couldn't do before. The radio has a good feel to me and I am comfortable using it. That means a lot. These are just my opinions. I have yet to log anything from Indonesia besides Makassar at my apartment, boo hoo. 73, Sheryl

**Bill Bergadano, 32 Joysan Terrace, Freehold, NJ, 07728, USA**

Greetings. (Okay, that sounds like a draft board notice!), If you have have not gotten to the Company Store page, please note the above address change. Due to medical reasons, I was in the hospital for 9 days and had foot surgery—so, since I can't get out of the house yet, please send all orders to my home QTH. And, its about 2 months since the last Fest, another wonderful time, but, that time just seems to fly by! Once again, it was great to see old friends, and make some new ones. The Festmeisters, John Figliozzi and Richard Cuff once again did a fantastic job; and it was great to meet Allan Graham of HCJB. With the fact I'm now out of work and disabled, sure, I'm looking foward to Fest 15, I mean really, is there anything else to surpass the town of Kulpsville in March?!:) Seriously, Kulpsville in March to me is like Cancun in July to most people. (Big difference is in Kulpsville you *can* drink the water). And I just want to mention the summer NASWA DXpedition which I am sponsoring to the Maldiv Islands, July 32-34, 2001. No expenses paid, flights are at your own cost, no meals provided, and, (who can pass this up?), a rickety card table to place your receiver on! Act now, space is limited to 409 people. As of now, no one is going. (You *think* I'm going? Hell no!:)

Lastly, thanks to all that emailed and called while I was in the hospital. Truly appreciated.

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## Contribute!

Send your loggings and QSL information off to our Distributing Editor, **Bob Montgomery** (Address: P  
O Box 1458, Levittown, PA 19058). He will forward them to the appropriate editor. Remember, Bob also distributes QSL report information and totals for the **Scoreboard** column. He can also be reached through the Internet at: [RMonty3@worldnet.att.net](mailto:RMonty3@worldnet.att.net).

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## Calendar Of Events

- May 12 Annual General Meeting.** The **Danish Shortwave Club International** will hold its AGM at the Restaurant Grantoppen, Grandtoftestraede 11, DK-2750 Ballerup, Denmark (telephone +45 44 97 59 26 for reservations) on Saturday, May 12th. Scheduled activities include a visit to the Radio Museum of Denmark with 250 receivers on display and a lecture by Sonja Persson about her 40 years working for HCJB.
- May 18 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: [dscckp@aol.com](mailto:dscckp@aol.com).
- May 18 Meeting. Boston Area NASWA Chapter.** The Lexington Club, Rts. 4 & 225, Lexington, MA at 7:30 PM. The location is 1/4 mile west of Rt. 128, Exit 31. For more information contact Paul Graveline at 978-470-1971 or Internet: [74007.3434@compuserve.com](mailto:74007.3434@compuserve.com). The URL for the BADX guys is <http://www.anarc.org/naswa/badx/>.
- Jun 8 Meeting. The Cincinnati/Dayton Monitoring Exchange (MONIX)** meet at the Lebanon Citizens National Bank on U.S. Route 42 in Mason at 7:00 PM. For more information contact Mark Meece at 513-743-8089 or e-mail at [mmeece@siscom.net](mailto:mmeece@siscom.net). For additional information about MONIX, check out their web site at <http://www.siscom.net/~mmeece/monix.html>
- Jul 27-29 Convention. The 2001 WFDFA Convention** will be held in Boise, Idaho at the Super 8 Motel (2772 Elder Street, Boise, ID 83704) from 27-29 July. A double room is \$62.10. When calling the motel (208-344-8871) mention Frank Aden while making your reservation in your name for the convention room rate. Convention fee is \$20.00 with the banquet at a nearby Perkins being an extra charge. Featured activities include station tours, DXpedition, TV history quiz, auction and DX seminars. Inquires can be sent to Frank Aden, 4096 Marcia Place, Boise, ID 83704 or by e-mail at [WFDFA@aol.com](mailto:WFDFA@aol.com).
- Aug 24-27 Conference.** The annual **EDXC Conference** is scheduled to be held from 24-27 August 2001 in Budapest, Hungary. All DXers, shortwave listeners, international broadcasters and other radio enthusiasts are cordially invited to attend. Additional information is available from [risto.vahakainu@helsinki.fi](mailto:risto.vahakainu@helsinki.fi).
- Mar 8-9, 2002 Convention.** The **15th 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 8th and 9th March 2002. Richard Cuff and John Figliozzi co-chair the organizational committee. It's never too early to begin planning. See you there!

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

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# Easy Listening

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

## Variety—The Spice of Life

I suspect most of us are creatures of habit, listening to the same roster of programs from day to day from our favorite broadcasters. I know I'm that way. But, from time to time, sometimes driven by news events, sometimes driven by a taste for something different, I'll wander around the dials and listen to something different. That difference might be manifest in program subject, or might be manifest in broadcaster location. Not every broadcaster offers the same depth or quality as, say, the BBC or Radio Netherlands, but that's OK—it's worth tuning into something different just for difference's sake. Here are some ideas to ponder as you're making the rounds:

### Radio Prague

Of all the former Warsaw Pact countries, I enjoy **Radio Prague** the most. Program production quality is quite high, and Radio Prague focuses on Czech matters, quite often in the context of the Czech Republic's ongoing adjustment to a market-based economy. The subject matter generally doesn't seem as "heavy" as is found on its peers. Radio Prague's announcers sound like they enjoy their work, and their English language pronunciation doesn't require intense concentration to understand.

### UAE Radio

Here in the Northeastern US, **UAE Radio** is now reasonably reliable many evenings. One of the features of UAE Radio I particularly enjoy is its treatment of Islam as a source of culture, not exclusively a religion. It's a pleasing mix of regional news and culture at 0330 UTC.

### Radio Korea International

The Far East is providing a fair share of international news and current affairs, but **China Radio International** and **Radio Japan** generally come first to mind for the region. Thanks to its 1130 UTC relay via Radio Canada International, **Radio Korea**

**International** is an easy catch. On average, it appears to me that the English language proficiency of Radio Korea International is better than Radio Japan. One quibble, though—each weekday generally includes a "News Commentary" which would be called an editorial, likely reflecting official policy, if it aired on the Voice of America.

### Radio New Zealand International

Having English as the principal domestic language enables **RNZI** to utilize substantial content produced primarily for a domestic audience, allowing them to offer a diversity and quality in excess of its size and economic might. **RNZI** is also one of the stations for which John Figliozzi provides regular advance program information in various shortwave and international broadcasting newsgroups (including *swprograms*). The arrival of spring and summer in North America increases the number of hours **RNZI** can be heard, as the frequencies in use in the overnight hours propagate more reliably. Here are a few general program suggestions:

Tuesdays–Fridays, 0330: A variety of **RNZI**-produced programs are offered, including *Tradewinds* (Wednesday), focusing on Pacific business; *The World in Sport* (Thursday), and *Pacific Correspondent* (Friday), with correspondents based elsewhere in the Pacific reporting on stories of interest.

Weekdays, 0500: *Checkpoint* is the evening news and current affairs magazine, with a mix of domestic and international content. While it helps to be up to speed with New Zealand current affairs, it isn't a requirement.

Tuesdays, 0730: *Spectrum* is a domestically produced documentary focusing on New Zealand people, places, and events. Other subjects, including science and sport, are featured in reports airing on other days.

Weekdays, 0800: *Kim Hill* is an accomplished interviewer; this time slot features an edited version of the program airing earlier in the New Zealand day.

### Radio Australia

I have been watching the ABC's **Radio National** web pages more closely recently, as an increasing number of Radio National programs are made available for on-demand listening. Radio National has launched their new fall program schedule, and it appears a couple of the new programs may be aired on **Radio Australia**. One of these is *Bush Telegraph*, on rural affairs, which will likely be aired in abridged form in the time slot previously occupied by the since-cancelled *In Conversation—Rural Edition*. *Bush Telegraph* is also available on-demand via the web. Also, the replacement for the fine media education series *On the Record* will be a repeat of the equally fine *Globally Speaking*, on the politics of globalization.

### Radio Austria International ("ORF")

I know some folks consider **Radio Austria International's** programming to be rather dry, especially when comparing their programming to **Deutsche Welle**, but if you want to know what's what in Austria, and what's on the minds of Austrians, this is your best source. I hadn't visited the ORF website in quite a while, but was pleasantly surprised to see that a Sunday-to-Saturday programming preview is now available. Now all they have to do is create an E-mail list to distribute these programming highlights. I made that suggestion; let's see if they'll take it. The URL for Radio Austria International is [http://roi.orf.at/en\\_infocenter.asp](http://roi.orf.at/en_infocenter.asp), the main page for their English language services.

### If you don't like the programming, produce your own!

If your wallet is deep enough, or if you can cajole a sponsor to part with the money, you, too can produce a program for airing on **WBCQ** or **WRMI**. At the Winter SWL Fest, Allan Weiner and Jeff White both stated

that program slots were available on their respective stations for purchase. You could join the ranks of non-religious, non-survivalist programs that make for interesting listening on these stations. Some **WBCQ** examples: Big Steve Cole, host of *A Different Kind Of Oldies Show*, airing Sundays 0000 UT on 7415, has long been a fixture at the Kulpsville SWL Fest. *Radio Timtron Worldwide*, airing Saturdays 2200 and Sundays 0500 on 7415, also has an enthusiastic following. Allan himself hosts *Allan Weiner Worldwide* Saturdays 0000, also on 7415 kHz.

I had a chance to meet some of the **WBCQ** program producers at the 'Fest, and I was impressed with their interest in shortwave and enthusiasm for crafting interesting programs. You can contact **WBCQ** at [wbcq@gwi.net](mailto:wbcq@gwi.net) for more details, or **WRMI** at [info@wrmi.net](mailto:info@wrmi.net).

### Radio for Peace International

Since **Radio for Peace International** (RFPI) first hit the airwaves, I've always considered themselves "the little station that could", first with 10 kw on 1 frequency, with higher power added later. That moniker might soon no longer apply, if RFPI is successful in implementing its new strategic plan as described in its quarterly *Vista* newsletter. RFPI's analysis suggests that "hate radio" is more prevalent now than when RFPI was founded, so RFPI considers the need for a more powerful counterprogrammed voice to be even more urgent. RFPI's math states that 1990 saw 5 hours of hate radio per week via shortwave, but 2000 closed out with more than 175 hours per week. Quoting from the newsletter, "...We have, therefore, made the commitment to develop RFPI into the major international voice of accurate information which we always envisioned."

RFPI has established an Office of Development to focus on securing the necessary funding to realize this vision, and my mailbox was recently graced with a letter announcing RFPI's "Stop Hate on Radio"

campaign. A "Stop Hate Radio" sticker was included with the letter, along with a note asking for instances of hate broadcasts to be documented for inclusion in a database RFPI is developing. The form also included a solicitation for funds to cover the cost of this campaign. If you're interested in this effort, you can contact the station via its website, <http://www.rfpi.org> or E-mail at [info@rfpi.org](mailto:info@rfpi.org) or via postal mail at RFPI, PO Box 1094, Eugene, OR 97440.

As for RFPI programming, *Global Community Forum* is getting a makeover and a new co-host, Susan Hall Liang. Two live weekly shows are planned, at 0230 UTC Thursday and Sunday. Among upcoming guests: Dr. Rodrigo Carazo, past President of Costa Rica, and Noam Chomsky, world-renowned professor of linguistics at MIT.

## BBC World Service Highlights

Things must not be altogether rosy at Bush House these days, especially concerning the production of *BBC On Air*, the monthly program guide. Several discrepancies within the program guide itself, and also in comparison with the actual program air times, have been noted by eagle-eyed listeners in recent months and dutifully chronicled by Glenn Hauser in his *DX Listening Digest*. I apologize if any of the schedule information provided here—which I derive mostly from *BBC On Air*—propagates errors contained in the guide.

### Popular Music

One of the most frequent lamentations about shortwave listening clubs and gatherings is that young participants are not entering the hobby as quickly as older persons are leaving the hobby. If you know a young person fond of club music you might want to loan them a portable shortwave receiver for *Club Culture*, a new three-part series described in more detail below.

Mondays, 1430, Tuesdays, 0030, and Fridays, 0530 beginning May 28<sup>th</sup>: Claire Smith, a veteran of Ibiza's club scene, hosts *Club Culture*, a weekly, 30-minute in-depth look at the world of dance music from

the perspectives of producers, DJs, and 'backroom boys', whatever they are.

Thursdays, 1430, Fridays, 0030, and Saturdays 0530; *World of Music*, hosted by Charlie Gillett, features the best of folk, non-Western classical and non-Western popular music.

Wednesdays, 0305: For an eclectic music mix, don't forget *The Alternative/John Peel*. You never know quite what will be next; I know several BBC fans consider this their favorite program.

### Iran in Focus

Several World Service programs share modern-day Iran as subject matter as elections approach on June 8<sup>th</sup>. *Everywoman, Outlook, Omnibus, Focus on Faith, Analysis, and Talking Point* all will feature special programming. What strikes me is the capability of the BBC to cover this single theme through a variety of lenses. I've provided the following list to showcase the diversity of programming featured on the World Service and indicate the special features relevant to this close-in view.

Sundays, 0030 and 1130: *Arts in Action* will report on the Iranian book scene as the elections draw near.

Saturday, May 26<sup>th</sup>, 0805 to Europe, 0905 to West Africa, and 1805 (webcast/FM only) to the Americas: *The Edge*, a magazine program for young people, features a special on dating in Iran.

Tuesdays, 1405, Wednesdays 0005, and Thursdays 0505: *On Screen* heads to the Cannes film festival, which has long embraced Iranian moviemaking even though it is censored back home.

Saturday, 0430, and Monday, 0230, beginning May 19<sup>th</sup>: *Assignment* gets into the Iranian act with a special report on the duality of Islamic strictness and its competition with more relaxed, reformist attitudes selectively tolerated in unpredictable ways. The program is presented by Jim Muir, the BBC's Tehran correspondent.

Tuesday 0130 and Wednesday 1530: **Every-woman** features a special on how women's lives have changed since the overthrow of the Shah, including recent reforms under President Khatami, both with the rigors of an Islamic system and new educational and career opportunities that didn't exist before.

Wednesday, 2345, and Friday, 0330, beginning May 23<sup>rd</sup>: **Heart and Soul** features *Hafez*, a program on the greatest lyrical poet of Iran, as seen through the eyes of Iranians who feel inspired by his verse.

Thursday, 1405, Friday, 0005, and Saturday, 0505, beginning May 24<sup>th</sup>: **Omnibus** features *The Iranians* exploring Iranian identity through today's domination of Islam in governments and schools versus past secular ways.

Weekdays, 1305 and 2305: **Outlook** devotes a week to Iranian life and culture beginning May 28<sup>th</sup>, including a day in the life of a Mullah, a look at the Gabbeth—a distinctive Iranian carpet type—and conversations with Tehran's traffic police.

Monday, 1405, Tuesday, 0005, and Wednesday, 0505, beginning May 28<sup>th</sup>: **Meridian—Masterpiece** looks at the traditional arts of Iran, especially the passion plays and fertility rites still captivating Iranians in towns and villages today. Today's religious form of the passion play, the Ta'azia, used for comparison. **Meridian—Writing**, three days later in the same time slots, features modern Persian poetry.

#### Other Features

Saturdays, 0105, and Tuesdays, 1505: **Discovery**, the applied science and technology program, celebrates a new season by featuring a subject matter of personal interest: shape memory metals. Other topics include ergonomics research and the use of artificial intelligence to aid the effectiveness of medical scanners.

Tuesdays, 0105, and Thursdays, 1505, beginning May 15<sup>th</sup>: **Health Matters** features a special three-part series, *A Century of Psychology*, celebrating the 100<sup>th</sup> anniversary

of the founding of the British Psychological Society, considered the first time the study of human behavior was considered a science in its own right. Childhood education, occupational psychology, and mental health are all featured.

Saturdays, May 19<sup>th</sup> and 26<sup>th</sup>, 2301, repeated Mondays, 0505: **Play of the Week** features Ernest Hemingway's *A Farewell To Arms*, based on Hemingway's experiences as an ambulance driver for the Red Cross in Italy during World War I. The production stars Michael Neill and Tracy Ann Oberman.

Fridays, 0105, and Mondays, 1505, beginning May 25<sup>th</sup>: Max Pearson (often heard hosting *Newshour* and *World Today*) presents three special editions of **One Planet** focusing on how Britain's changing environmental policies affect individuals and communities.

Saturdays, 0130, and Tuesdays, 1530, beginning May 26<sup>th</sup>: The **Essential Guide** series features *Block on Block*, as Roger Fenby explores the ingenuity of the builders of great structures—walls, tunnels, towers, and bridges. The practicality of construction techniques is contrasted with the symbolism embodied in the structures themselves.

#### And in conclusion...

I know those of you without Internet access must get tired of references to the *swprograms* E-mail based discussion group. However, one reason I enjoy participating in the group is the give-and-take discussion we often have on programming subjects and broadcaster strategies. By comparison, editing this column often feels like I am shouting into empty space, as I receive less feedback on *Easy Listening* in a year than I receive in a day from a post to the *swprograms* list. What would you like to see discussed here? Do you disagree with my perspectives? Please—take the time to pen me a quick note. It would be sincerely appreciated.

Until next month, 73 DE Richard



# Shortwave Center

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## Views on Views

By Jerry A. Lineback, Editor

Boy, did old Sol ever make a liar out of your editor. Just as I was putting my comments of last month into *SWC*, the sun decided to go ape with the highest solar flux readings of the cycle, record sun spots, solar flares, aurora, absorption events, geomagnetic storms, and some good reception to Australo-Asia in the mornings. It has been a blast. But my point was demonstrated. The dull reception conditions I was complaining about were the result of the lack of solar activity and changed completely when activity suddenly increased. A few mornings this past month exhibited poor propagation conditions with weak signals, while most mornings showed strong reception from Papua/New Guinea and Indonesia, often at arm-chair levels. It is easy to pick out the English

words in the P/NG Vernacular under such conditions.

Radio Enga, 2410, has been a regular and Radio Western apparently made an appearance on 3305 for a few days. Radio Sepik has been missing on 3335 this spring with only Taiwan being heard there. R. Maya was absent for a while from 3325 but is back and mixes with Bouganville and Palangkaraya. The RRI station generally dominates by 1200 UT. R New Ireland is sometimes heard on 3905 along with RRI Merauke (which you will note that Passport moved to Papua, hihi). Among the Indonesians, RRI Kendari is apparently the one back on 4000.1 with strong signals some days.

Anyway, enjoy the conditions while they last.

## Is Your Coaxial Lead-In Actually an Antenna???

By John H. Bryant with Bill Bowers, February 2001

Like most SWBC and MW DXers, I've used coax cable "lead-ins" since such cable became commonly available in the 1960s. My main purpose was to shield the actual signal carrying conductor from as much noise as possible—mostly noise generated in and around my own home or that of neighbors'. Because my shack seems to always end up on the second floor, I've been far too informal about providing either RF grounds for the shield of the coax or electrical grounds for the equipment. In recent years, I've used only Beverage antennas for SWBC or MW DXing. I've sometimes worried that my lead-ins were not "sanitary" enough; that I was sacrificing some of the antennas' directivity through my slovenly behavior. But, hey!

There were still very clear directional distinctions between my three or four semi-permanent Beverages, so why worry???

In recent months, I've fallen in love with the version of the K9AY antenna produced by Wellbrook Communications of Great Britain. It is highly directional and I've been having a blast on MW using its very cardioid pattern. Again, there was this niggling feeling of shame that my coaxes were not "sanitary." How much directivity was I losing, etc.? It wasn't an idle worry because the distance to the K9AY is about 100' and the distance to the confluence of the Beverages is over 250' from the shack!

Then I went DXing in the Pacific Northwest with Don Nelson of Beaverton, OR. When I inspected his beverages, I found that he was

using a special configuration of RF chokes on the braid of the coax with a separate ground for the coax braid. He related that he had just read about this approach to sanitizing lead-ins in John Devoldere's *Low Band DXing* and had tried it on his last DXpedition. There, he had been able to do one A-B experiment where, without Devoldere's choke arrangement, all he heard on 5025 kHz. was the semi-local pest R. Rebelde. With the chokes in the lead-in, he was able to log the Australian on that frequency quite handily. Without the chokes, it seemed that energy from powerhouse Rebelde was either leaking into the coax by capacitive coupling between the outer braid and the central conductor, or that the somewhat lossy local ground wasn't working well enough to keep the lead-in "sanitary."

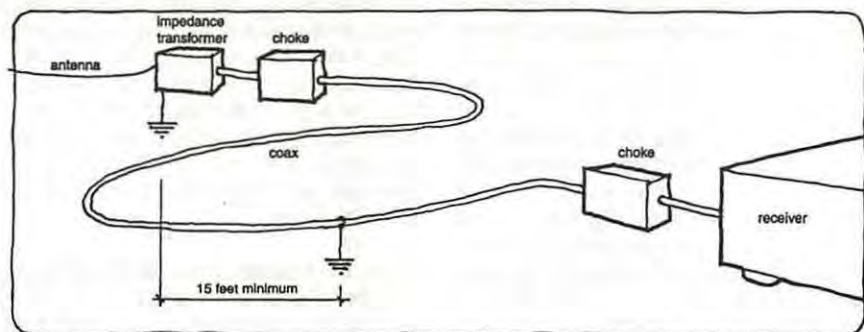
Another upshot of my conversation with Don was that I realized that Devoldere has completed a third edition of his book. I now know that John has retired and spent almost a year, full-time, rewriting and expanding his marvelous book. The Third Edition was published by ARRL in 1999. I was really impressed with the result of John's dedication: almost double the size of the second edition and with *much* more insight into antennas, etc. through extensive use of computer modeling. Further, John has written the most extensive and thorough discussion of Beverages and arrays of Beverages that I've ever read. Over 50% of the book is oriented to reception, so this *Low Band "bible"* is really useful to Tropical Band and MW DXers, too. Midway through Chapter 7, "Special Receiving Antennas," John wrote a section titled "Is Your Coaxial Cable a 'Snake

Antenna?" where he discussed the various causes of unwanted signals getting to the center conductor of cable and proposed the voltage-divider choke and ground arrangement that Don was using. (cf. Devoldere pp. 7-18 to 7-21).

## Typical Choke Installation

John used two chokes, one near the antenna/lead-in juncture and the other near the receiver, each made from 100 ferrite beads strung on the outside of the coax. The ferrite beads are each the size of a thick, large wedding band. The 100 bead chokes each provided the desired 1500 ohms of impedance at his frequency of interest, 1800 kHz. The impedance increases from there as frequency increases and decreases with lower frequency, proportionally, as well. The lead-in braid is grounded somewhere between the two chokes. I might note that John's illustration of the placement of the "receiver choke" is open to several interpretations in his drawing in the referenced section. This placement of the second choke as near the receiver as possible is what was intended.

The design of the choke that John uses, employing 100 ferrite beads, makes sense for someone interested in DXing only frequencies of 1800 kHz. and above. However, since I wanted to be able to DX down to the lower end of the LW broadcast band, say 150 kHz. Using John's design, I would need several hundred beads for each choke! Amidon currently sells the beads for just under 40 cents each, in one-dozen lots, or for 14 cents each if you purchase them in 1000 bead lots. Obviously, for LW and MW



DXing, the choke design based on ferrite beads would be both very large and very expensive. Luckily, there is a rather obvious alternative design, also covered in *Low Band*: a choke wound from RG-174 mini-coax on a ferrite toroid core. The ferrite toroids cost less than \$4.00 each and a 100' reel of RG-174 is less than \$15. This was a much less expensive alternative for my needs.

At this point, I had just three questions: "Does my coax act like a 'Snake'?" "Are the choke design formulae to be trusted in this application?" and "What is the insertion loss of these chokes on the center lead-in itself?"

## Snake Hunting

The 250-foot run of coax to the apex of my half-wagon wheel of beverages is particularly vulnerable to picking up unwanted signals. It runs through an unused pasture which sports waist high grass for half the year. Several years ago, I noticed that field rats had begun to feast on the covering of the coax, then lying on the ground. I decided to elevate the coax about three feet out of harms way rather than bury it, a configuration that invites picking up unwanted signals (and noise) on the coax. John Devoldere suggests testing for unwanted signal pick-up by leaving all grounds in place, removing the matching transformer from the far end of the coax and connecting the shield and the center conductor together at the far end. What you then hear at the receiver is the unwanted signal pick-up of your lead-in and grounding system. Checking this on the broadcast band is especially encouraged. I decided to run a test that seemed even more relevant to me: I simply removed the beverage antenna from the matching transformer and left the matching transformer and grounds in place, as well.

This is embarrassing, but I must report that my 250-foot coax lead-in to the beverages flunked this test, badly! On MW, I could make out programming on almost every channel, though most of the signals were weak, around S-2 or below. The three 50 kw. stations in the state were about S-6. On the lower half of MW, I was also picking up a lot of 60-cycle hash. On long wave, the 60-cycle

hash was even worse, of course. On the Tropical Bands, I only heard a few of the strongest signals, but on the 6 MHz. SWBC band, I could hear at least 20 signals. On all frequencies, I could hear lightning crashes. What does this all mean: at least on MW, the directional characteristics of my beverages were being compromised, more so on the channels with stronger semi-local stations. On all bands, the signal-to-noise ratio was being compromised rather badly, with the lead-ins picking up a good deal of 60-cycle hash and boosting the levels of lightning crashes. Poo!

I did not test my 80 to 100 foot lead-ins to the K9AY antenna because it is already packed away for transport to our summer place in the NW. I presume that the situation with it was not quite so bad, since the lead-ins were shorter and mostly lay directly on the ground.

Clearly, it was long past time to get serious about sanitizing my coax!

## Choke Design and Testing

The design of ferrite toroid-based RF chokes of the type needed for this application is fairly straightforward. For my own DXing interests, it seemed to make sense to provide 1500 ohms of impedance (the minimum that Devoldere recommended) at 150 kHz. This would give me sanitary lead-ins from below the bottom of the long wave broadcast band upwards in frequency until the choke "ran out of legs" well above the Tropical Bands.

Before you can determine the number of turns needed for a particular choke design, you have to determine the inductance necessary to create the desired 1500 ohms of impedance at 150 kHz.

The formula for the inductance needed is:

$$X = 2\pi fL$$

where  $X$ =Reactance in ohms  $f$ =Frequency in kilohertz  $L$ = Inductance in millihenries

solving for  $L = X/2\pi f = 1500/6.28 \times 150 = 1.6$  millihenries

So, the inductance needed to produce 1500 ohms impedance at 150 kHz. is **1.6 millihenries**.

From there, you must turn to the technical data sheet provided by the ferrite toroid manufacturer, in this case, Amidon. Their data indicates that the number of turns through the toroid necessary to produce the proper impedance is:

$$N = 1000 \sqrt{L/A}$$

In narrative, this formula should be read: Number of turns required (**N**) is equal to 1000 times the **square root** ( $\sqrt{\quad}$ ) of the Inductance (**L**) divided by the constant **A**.

I decided to use Type 75 ferrite material (the one recommended by Devoldere, also) and selected the size FT-140. The toroid is 1.4 inches in diameter, with the toroid wall being about .5 inches wide by .25 inches thick. The **A** figure for this toroid in Type 75 material is **6736**. This figure is found in a table contained in the Amidon technical sheet, as well. The turns count comes out to be 16:

$$N = 1000 \sqrt{1.6/6736} = 15.4 \text{ turns, use 16 turns}$$

After fabricating a number of these, I'm happy to report that 16 or 17 turns is about as much RG-174 coax as you can close wind in a single layer on the FT-140 toroid. It makes a neat installation.

Here are three designs using popular toroids:

Toroid	Turns
FT-140-75	16
FT-114-75	22 (Not sure that this is physically possible with RG-174 coax)
FT-114-43	52 (Physically impossible with RG-174 coax)

## Testing Impedance

Testing was done at Bill Bowers' workbench, using a HP Variable Frequency Impedance Bridge for impedance measurements and a laboratory-grade signal generator and voltmeter to measure insertion loss of the chokes.

### FT-140-75 with 19 turns of RG-174

Bill had designed this choke to serve his interests in long wave DXing. Therefore the lowest frequency, used for the design, was 100 kHz. The results:

#### Frequency Impedance

100 kHz	1500 ohms @ +89 deg.
250 kHz	4200 ohms @ -80 deg.
500 kHz	10,000 ohms @ +60 deg.
1000 kHz	15,800 ohms
2000 kHz	6700 ohms
5000 kHz	4100 ohms

#### Comment:

Bill was able to perform impedance tests above the frequency range (500 kHz and below) of his HP Impedance Bridge on this core in a less sophisticated but accurate way. The impedance of the choke peaking near 1000 kHz (in this case) and then slowly decreasing is related to the magnetic properties of the ferrite ( $\mu$ , eddy currents, etc.) interacting in rather complex ways. However, since the impedance curve of this choke measured about as expected, Bill felt it was unnecessary to perform the rather cumbersome tests above 500 kHz. on similar chokes. Note: This design would be very satisfactory for DXers who listen to LF broadcasters, MW and tropical SWBC bands.

### FT-140-75 with 16 turns of RG-174

We then tested the same toroid with 16 turns as in the design example above. The results were very similar to Bill's 19-turn choke.

## FT-140-75 with approximately 32 turns of RG-174

Finally, we tested an FT-140 with as many turns as it is possible to put through the center of the toroid, approximately 32. The results:

Freq	Impedance
100 kHz	4000 ohms @ +90 deg.
250 kHz	20,000 ohms @ +65 deg.
500 kHz	17,000 ohms @ -60 deg.

Z(maximum) was at 350 kHz where  $z=40,000$  ohms

### Comment:

Technically, the 32-turn choke was "too many turns" resulting in the core becoming saturated. However, the practical effect of the saturation is nil, since the purpose of a choke is to be "lossy." Impedance would continue downwards with frequency, but should be far above the required 1500 ohms at even 10 MHz.

### Insertion Loss

Bill and I checked the insertion loss of each of these chokes at 1 MHz. and 5 MHz. Happily, the insertion loss of each of them, along with two bead chokes that we checked, fell in the 0.2 to 0.3 dB range, probably attributable to the BNC connectors on the coaxial cable. Thus, the insertion loss of these devices may be ignored.

### Are the Snakes Out of the Antenna?

Well, mostly! With the same set-up of lead-ins but with the two chokes and a new shield ground in place, the 60-cycle hash was completely gone (hallelujah!) and the lightning crashes seem reduced by 90 percent, or so, tho' that is very hard to judge. The

signals that were formerly present on MW are simply gone from the lower 2/3 of the band, except for my local 250 watt daytimer on 780 kHz. which is located less than 1/2 mile from me. Its signal had been reduced from about s-6 to around s-2. There are still a few of the strongest signals present at very low levels above 1200 kHz. and on Tropical Bands. This may be the result of a less than perfect ground on the coax braid. I used a single 18 inch long rod into somewhat moist soil. I'm eventually going to significantly improve the grounds of the impedance transformers and the coax shield ground, too... maybe I can drive the last few snakes outta my coax.

Still, the improvement with the two chokes and the simplest grounding of the coax shield is tremendous! I look forward to much quieter and more effective antennas for an investment of under \$20.00 per antenna.

### Overall Remarks

If one is interested in DXing the Tropical Bands and or the 160 Meter amateur radio band or above, exclusively, the multiple ferrite bead design is probably a bit superior to the choke wound on a ferrite toroid. However, if the intent is to DX frequencies as low as medium wave or long wave, then the ferrite beads design would require several hundred beads per lead-in. This would be prohibitive both physically and financially. Amidon charges 14 cents per bead, if bought in 1000 bead lots.

For the generalized case extending to the lower reaches of long wave, an approach based on for the generalized case starting at the lower end of the long wave band and extending to 6 or 7 MHz, an approach based on ferrite toroids, each costing about \$4.00, wound with RG-174 coax seems by far the most practical.

Personally, I'm using toroid-based chokes with 15 to 20 turns of RG-174 on them and they work just fine!

# Adrian Peterson's Diary

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## Tribute to Rimavska Sobota

The central European lands of Bohemia, Moldavia, Moravia, Czechia and Slovakia have featured significantly in political history during the Middle Ages and beyond. The people of these areas were also involved in the events associated with the Protestant Reformation, and at the end of World War I, a new nation was formed, Czechoslovakia. This country was again bifurcated, quite peacefully, on January 1, 1993, and two nations were formed, Czechia and Slovakia, with Prague and Bratislava as their respective capital cities.

Radio broadcasting began in the combined Czechoslovakia in 1923 when a Morse telegraphy transmitter was modified for use as a broadcast unit. In 1934, an imported Marconi transmitter from England was installed at Podebrady near Prague, and this new shortwave facility was inaugurated on August 31, 1936 under the callsign OKI. Three omni-directional antennas were in use at the time, according to antenna beam and frequency.

Construction on the large shortwave facility located near Rimavska Sobota in Slovakia began in 1956 with the installation of two transmitters at 100 kw. Over a period of time, several additional transmitters were installed here, as well as a bevy of curtain antennas.

Then, beginning in the year 1982, the entire station at Rimavska Sobota was rebuilt, and two Russian-made transmitters at 250 kw were installed. Two more units of a similar design were subsequently installed

On January 1, 1994, test broadcasts on behalf of Adventist World Radio commenced from this high powered shortwave station located at Rimavska Sobota in Slovakia. During the first week, these test broadcasts

on transmitter RS10 consisted mainly of recorded music, with occasional test announcements in English.

One week later, on Saturday January 8, a day long series of meetings in the large Seventh-day Adventist Church building in Bratislava officially launched the new awr Slovakia. Part of the afternoon program was a live broadcast from the church, with music and official speeches in the Czech language.

Interestingly, the name "Rimavska Sobota" means "Romanian Sabbath." The station is located near a small village, a little beyond the town of Rimavska Sobota some four hours by car from Bratislava.

During the past eight years, AWR has been on the air from three of the four shortwave transmitters at Rimavska Sobota, designated as RS08, RS09 and RS10.

During this same time period, untold hundreds of QSL cards have been issued to listeners throughout the world, verifying the reception of AWR programming from these three transmitters. Currently, the three awr QSL offices at London, Forli and Indianapolis are processing the "Last Week" QSL cards honoring the final broadcasts of awr via Rimavska Sobota.

As we sometimes say in our modern world, time moves on, and AWR moves on also. The new shortwave transmitter relay base taken out for AWR programming is now the ORF-ROI facility at Moosbrunn near Vienna in Austria.

Rimavska Sobota has served awr well during these past eight years, and as we say "goodbye," we here at Adventist World Radio would also like to say "thank you."

# Unusual Time Zones

When the New Year began in Australia, there was a majestic fireworks display on the Sydney Harbour Bridge, quite reminiscent of a similar spectacular event during the recent Olympic Games over there. In Tokyo, Japan they rang a bell 108 times to ring in the New Year. In Beijing, China there was a fireworks display and a computer-controlled display of dancing lights. Moscow celebrated in a similar way in Red Square, and in New York, the globe lit up and dropped, right on time.

All of these spectacular New Year events were filmed and presented worldwide on TV, and they remind us quite clearly once again that we live on a round world and that time as we measure it moves progressively with the movement of the sun through the sky. These days there are just 24 major time zones around the world, each at one hour difference from its neighbor.

However, it has not always been this way. Originally, every locality observed its own local time which may or may not have been related to any other nearby time zone. When railways began to span across continental North America, there was a literal multitude of time zones, even more than 100 at one stage, and, as can be imagined, this caused a lot of confusion.

In the year 1884, the United States established just four time zones nationwide, each one hour apart, though with some local variations. For example, at the time of the annual change for summer and winter, the city of Indianapolis and nearby country areas make no time zone change and remain always at UTC minus five.

In the same year 1884, an international conference established just 24 major time zones around the world, each just one hour apart. In the international radio scene this procedure is very useful today, and international radio time is described in terms of UTC, initials for a French term meaning, in English, Co-ordinated Universal Time.

However, because of differing geography and political circumstances, there are some unusual time zones, even to this day. As mentioned previously, most of the world observes local time expressed in time zones in increments of one hour duration. For example, all of the large island of Greenland observes time as UTC minus four, except for the eastern tip at minus three, and the western tip at minus five.

However, there are many countries that operate on a standard half hour. For example, India is UTC plus 5½ hours; South Australia is at UTC plus 9½ hours; Afghanistan is at UTC plus 4½ hours; Myanmar is at UTC plus 6½ hours; and there are half a dozen others as well.

This half hour difference produces some interesting anomalies. The small French colony off the coast of Newfoundland, St Pierre & Miquelon, is at UTC minus 3, yet it is sandwiched in between Canadian Quebec at minus 4 and Newfoundland at minus 3½. If you visualize a world map and travel in a straight line, Calcutta is at UTC plus 5½, Bangladesh is at plus 6½, and Assam reverts back to plus 5½.

There are two more strange time zone anomalies. These days Nepal operates on a quarter hour, though some years back it was on a 10 minute variation. All of India is at UTC plus 5½ hours, and Nepal, just to the north in the Himalayas, is at plus 5¾ hours.

Out in the Pacific, the islands of Tonga have adopted the strange time zone of UTC plus 13 hours, which in reality places them in the previous day. Because of this curious circumstance in local time keeping, the Protestant Christians observe Sunday and the Adventist Christians observe Sabbath both on the same day.

The international broadcasting stations all announce time in some form of UTC, be it UTC, UT, GMT or MEZ, depending on the language. To convert to your own local time, you just need to know what is the difference in hours between UTC and your own local time. *SA*

# Listener's Notebook

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Due to a tight page count this month, this will be an abbreviated column with some additions to the summer schedules. Will fill in all the rest of the data on hand next month! -AQ

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<b>CHINA China Radio International</b> uses relay stations in Canada, France, French Guiana, Russia, Spain, Cuba and Mali.				1200-1300 English	9715 9760 11675 11855 11980 15415
0000-0100 Russian	7110 9725			1200-1300 Mongolian	4883 5145 5850 9725
0000-0100 Spanish	11880 17720			1200-1230 Tagalog	11700 12110
0000-0030 Portuguese	11850			1200-1300 Cantonese	9590
0000-0030 Hakka	6140 9460 9550 11945 15100 15260 15400			1230-1330 Lao	6140 7360 9785
				1230-1330 Malay	11955 15135
0030-0100 Portuguese	11650 11680 11850			1300-1330 Esperanto	11650 15210
0030-0100 Chaozhou	6140 9460 9550 11945 15100 15260 15400			1300-1400 Burmese	9880 11780
				1300-1400 English	7405 9570 11675 11900 11980 13650 15180
0100-0200 Spanish	9665 11880 17720			1300-1400 French	9890 13685
0200-0300 Mandarin	9690 15435			1300-1400 Russian	4815 4883 5145 5850 7820
0200-0300 Spanish	11650 13685 17720			1300-1500 Korean	5965
0300-0400 English	9690			1330-1430 Indonesian	11955 15135
0300-0400 Russian	15435 17710 17740			1330-1430 Thai	6140 7360 9785
0300-0400 Spanish	9560 11765			1400-1500 Amoy	7335 9715 11650 15340
0300-0400 Mandarin	9720			1400-1500 Cambodian	15180 17710
0400-0500 English	9730			1400-1500 English	7405 9700 11675 11825 13685 15110 15125 17720
0500-0600 English	9560			1400-1500 Mongolian	4815 4883
0830-0900 Hausa	7170			1400-1500 Sinhala	11900 15145
0830-0930 Indonesian	15135 17735			1400-1430 Turkish	6165 9535
0900-1000 Mandarin	7360 9550 11700 11875 15110 15250 15340 15440 17785			1400-1430 Tamil	9590 11575 15210
				1430-1500 Tamil	9590 11575 15165 15210
0900-1100 English	11730 15210			1430-1530 Lao	6140 7360 9730
0930-1530 Japanese	7190 9855			1430-1500 Tagalog	12210
0930-1030 Malay	15135 17680			1500-1600 English	7160 9785 13685 15125
1000-1100 Cantonese	0702 11875 11915 15440 17755			1500-1600 Bengali	11810 15300
				1500-1600 Nepali	7215 9535
1000-1100 Mandarin	7360 12015 15340 17785			1500-1600 Pashto	9570 9665 11880
1000-1100 Russian	5145 7110 7820 9695 9725			1500-1530 Persian	9570 11750
				1500-1600 Russian	4815 4883 9765 11650 11790
1030-1130 Cambodian	15165 17680			1500-1600 Mandarin	11760 11825
1030-1130 Indonesian	11955 15135			1500-1700 Hindi	9690 11675
1100-1600 Vietnamese	9550			1600-1700 Swahili	11600 12000
1100-1200 Cantonese	7335 9590 11875 15340 17785			1600-1700 English	9565 9870
				1600-1700 Hakka	11825 15580
1100-1130 Esperanto	7170 11925			1600-1700 Vietnamese	6010 7360
1100-1300 Korean	5965			1600-1630 Turkish	9570 11685
1100-1200 Mongolian	5145 5850			1600-1700 Arabic	11750 13685 15490 17580 17880
1100-1200 Russian	7110 7820 9725			1600-1700 Russian	9765 9885 11780 11875 11945 13655
1130-1200 Burmese	9880 11825				
1130-1200 Tagalog	11700			1600-1700 Urdu	7175
1130-1230 Thai	6010 7360 9785			1700-1800 Russian	9765 9795 9885 11650 11685 11780 11875 11945 13655
1200-1300 Cambodian	9440 9870				
1200-1300 Mandarin	11875 15260 15340 17785				
1300-1400 Mandarin	9440 11875 15260 15340 17785				

1700-1800	Cantonese	9770 15580	2130-2200	Hungarian	6150 9570
1700-1730	Swahili	11970 12000 15125	2130-2200	English	11650 15110
1700-1800	English	9570 9670 9695 11920	2200-2300	Spanish	9515 9640 11690 11775
1730-1830	Mandarin	9645 9685 9730 9745 11660 11760 11835	2200-2300	English	9880
1730-1800	Hausa	9890 15550	2200-2230	Portuguese	11650 15110
1800-1900	Russian	9535 9765 9795 11650 11685 11875 11945	2230-2300	Esperanto	9860 11700
1800-1830	Hungarian	9860 11775 13655	2230-2300	Mandarin	6140 9460 9550 11945 11975 15100 15110
1800-1830	Persian	7140 9670 11750 15595- r	2300-2330	Mandarin	15260 15400 15500 6140 7170 9460 9550 11945 11975 15100 15260 15400
1800-1830	Hausa	7215 13685 15550	2300-2359	Russian	7110 9725
1800-1900	German	11980 15130	2300-2359	Spanish	11650 11880
1830-1930	French	9645 9730 11660 11760	2330-2359	Cantonese	6140 9460 9550 11945 15100 15260 15400
1830-1900	Bulgarian	9860 11775 11810	2330-2359	Mandarin	7170 11975
1830-1900	Persian	9670 9785 11740 11750	(BBCM)		
1830-1930	Arabic	11835 12035 13685 15550			
1830-1900	Italian	9965 11850			
1900-1930	Czech	9585 11775			
1930-2000	Czech	7305 9585			
1900-2000	German	11650 15130			
1900-2000	Cantonese	9765 11895			
1900-1930	Albanian	9965 11810			
1930-2000	Albanian	9965 11730			
1900-1930	Portuguese	9535 9685 11825			
1900-1930	Romanian	7305 13650			
1930-2000	Romanian	11775 13650			
1900-1930	Turkish	9785 11790			
1900-2000	English	9440 9865 11750			
1900-2000	Russian	9795 11630 11685 11945			
1930-2030	French	9645 9730 11660 11760 11835			
1930-2000	Portuguese	11735 11810 13775 15500			
1930-2000	Turkish	9680			
2000-2100	Mandarin	7660 9685 9765 9865 11650 11750 11870 13775			
2000-2030	Polish	6150 9585 11775			
2000-2100	English	9440 11735 11790 13640 15110			
2000-2030	Serbo- croatian	11680 13650			
2000-2030	Esperanto	9965 11730 11810			
2000-2100	Russian	9795 11630 11945			
2030-2100	Hungarian	11685 11775			
2030-2100	Bulgarian	6150 13650			
2030-2100	Polish	9585 11850			
2030-2130	French	9560 9730 11660 11760 12010			
2030-2100	Italian	9965 11810			
2100-2200	Spanish	9515 11775			
2100-2130	Serbo- croatian	9550 13650			
2100-2130	Albanian	6150			
2100-2200	Arabic	9685 9765 11750 11965			
2100-2130	English	7150 11735 13640			
2100-2130	Italian	9610 9965 11680			
2130-2230	French	9560 11610 11660 11760 11975 15500			
2130-2200	Hungarian				
2130-2200	English				
2200-2300	Spanish				
2200-2300	English				
2200-2230	Portuguese				
2230-2300	Esperanto				
2230-2300	Mandarin				
2300-2330	Mandarin				
2300-2359	Russian				
2300-2359	Spanish				
2330-2359	Cantonese				
2330-2359	Mandarin				
<b>CZECH REPUBLIC Radio Prague External Service</b>					
0000-0027	English	7345 11615			
0030-0057	Spanish	7345 11615			
0100-0127	English	5915 7345			
0130-0157	Czech	5915 7345			
0200-0227	Spanish	5915 7345 7385w			
0230-0257	Czech	7345 9870			
0300-0327	English	7345 7385w 9870			
0330-0357	English	11600 15470			
0400-0427	Russian	9865 11600			
0600-0627	French	5930 7345			
0630-0657	German	5930 7345			
0700-0727	English	9880 11600			
0730-0757	Spanish	9880 11600			
0800-0827	French	9880 11600			
0830-0857	Czech	11600 21745			
0900-0929	English	21745			
0930-0957	Czech	21745			
1000-1027	German	6055 9880			
1030-1057	English	9880 11615			
1100-1127	Czech	11615 21745			
1130-1157	Russian	6055 15675s 21745			
1200-1229	German	6055 7345			
1230-1257	Czech	6055 7345			
1300-1329	English	13580 21745			
1330-1357	Czech	13580 21745			
1400-1427	Spanish	11990 13580			
1430-1457	Russian	9790s 11990 13580			
1500-1527	German	5930			
1530-1557	Russian	7235s			
1530-1557	Czech	5930 21745			
1600-1627	English	5930 21745			
1630-1657	German	5990s			
1630-1657	French	5930 21745			
1700-1727	English	5930 21745			
1730-1757	Czech	5930 21745			
1800-1827	Spanish	5930 13580			
1830-1857	French	5930 13580			
1900-1927	Spanish	5930 13580			
1930-1957	Czech	5930 11600			
2000-2027	English	5930 11600			
2030-2057	Spanish	5930 11600			

2100-2127	Czech	11600 15545
2130-2157	English	11600 15545
2200-2227	French	11600 15545
2230-2257	English	11600 15545
2300-2327	Spanish	11615 13580
2330-2357	Czech	11615 13580

s=via Rimavsk Sobota in Slovakia

w=via WRMI in Miami, Florida

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**DENMARK Radio Denmark;** All shortwave frequencies are relayed from transmitters in Norway.

0030-0055	Danish	9935 9985 11635
0130-0155	Danish	9985 11635 12090
0230-0255	Danish	13800
0330-0355	Danish	9960 11635 13800
0430-0455	Danish	7465 9475 11635 13800
0530-0555	Danish	7465 9590 11615
0630-0655	Danish	7180 9590 11600 13800
0730-0755	Danish	9590 13800
0830-0855	Danish	15705 15735
0930-0955	Danish	15705 17505
1030-1055	Danish	9590 21745
1130-1155	Danish	9590 18950
1230-1255	Danish	15705 15735 18950 21755
1330-1355	Danish	9590 15705 15735 21755
1430-1455	Danish	15735 17525
1530-1555	Danish	13800 15735 17525
1630-1655	Danish	9595 13800 15735 17525
1730-1755	Danish	11615 13800 15705 17505
1830-1855	Danish	1062 7490 13800 15705
1930-1955	Danish	7490 13800 15705 17505
2030-2055	Danish	7490 9985
2130-2155	Danish	9510
2230-2255	Danish	11600 13800
2330-2355	Danish	9935 9945 13765 13800

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**EGYPT Radio Cairo**

0100-0250	Arabic-1	12050
0250-0600	Arabic-1	9620 9770 9800 12050
0600-1000	Arabic-1	9800 11785 12050 15115
1000-1100	Arabic-1	9800 9850 11785 12050
1100-1200	Arabic-1	9850 11785 12050
1200-1400	Arabic-1	9850 11785 12050 17670
1400-1700	Arabic-1	9850 12050 17670
1700-2300	Arabic-1	9850 12050
0030-0430	Arabic-2	9900
0045-0200	Spanish	9475-v 9740 11715
0200-0330	English	9475
1015-1215	Arabic-2	17745
1100-1130	Arabic-2	17800
1115-1215	Thai	17665
1215-1330	English	17595
1215-1315	Malay	17665
1230-1330	Persian	15160
1300-1600	Arabic-2	15220
1320-1450	Indonesian	17665
1330-1530	Persian	11560
1330-1430	Bengali	17595

1430-1530	Azeri	9780
1500-1600	Hindi	17690
1500-1600	Pashto	17710
1500-1600	Russian	9730
1530-1630	Afar	15155
1530-1730	Swahili	11975
1530-1630	Uzbek	9620
1600-1800	Albanian	9950
1600-1800	Turkish	6230
1600-1800	Urdu	17690
1600-1645	Zulu	11875
1630-1830	English	15255
1630-1730	Somali	15155
1645-1730	Shona	11875
1730-1900	Amharic	15155
1730-1815	Ndebele	11875
1800-2100	Hausa	15210
1800-1900	Italian	9988
1830-1915	Lingala	15255
1830-1930	Wolof	15375
1900-2000	German	9990
1915-2030	Fulani	17840
1930-2030	Bambara	15375
2000-2200	Arabic-2	11990
2000-2115	French	9990
2030-2200	English	15375
2030-2230	French	15335
2100-2200	Yoruba	15210
2115-2245	English	9990
2215-2330	Portuguese	15420
2300-0030	English	9900
2330-0045	Arabic-2	15590 17770
0300-0600	Arabic-3	9855v 15285
0600-1400	Arabic-3	11980 15285
1400-1800	Arabic-3	15285
1800-1900	Arabic-3	9700 15285
1900-0030	Arabic-3	9700 11665 15285

Arabic-1 is Arab Republic of Egypt Radio General Service

This service identifies itself as "Arab Republic of Egypt Radio from Cairo" (Arabic: "Idha'at Jumhuriyat Misr al-Arabiyyah min al-Qahirah").

Arabic-2 is Radio Cairo External Service.

Arabic-3 is Voice of the Arabs

(BBCM)

**HUNGARY Radio Budapest**

0000-0100	Hungarian	9800
0100-0130	English	9560
0130-0230	Hungarian	9570
0230-0300	English	9570
0300-0330	Russian	3975 6025
0330-0400	Ukrainian	3975 6025
0400-0430	Romanian	3975 6025
0430-0500	Croatian	3975 6025
0500-0530	Slovak	6025
0530-0600	Serbian	6025
0600-0630	Croatian	6025

0630-0700	Serbian	6025	0430-0530	English	6165b 9590b
0700-0730	Slovak	6025	0500-0600	Dutch	1512g 5955f 7125f 9895f
0730-0800	Romanian	6025	0600-0700	Dutch	5955f 6020f 9895f 11935f 13720j
0800-1000	Hungarian	6025	0700-0800	Dutch	5955f 9895f 11935f
1000-1100	Hungarian	6025 21560	0700-0800	Dutch	9820b 11655b
1100-1200	Hungarian	6025 21560-(Su only)	0800-1700	Dutch	5955f 9895f 13700f
1200-1300	German	6025 7220 Su	0930-1015	Dutch	6020b MoSa
1200-1300	Hungarian	6025 Mo-Sa	0930-1130	English	9790b 12065p 13710i
1300-1400	German	6025 Fr	1030-1125	Dutch	9720b 13820k 17575m 21480m
1300-1400	Hungarian	6025 Mo/Tu/We/Th/Sa	1030-1225	English	6045j 9860w
1400-1430	Hungarian	6025 Mo-Sa	1100-1125	Spanish	15450b
1400-1430	German	6025 Su	1130-1325	Indonesian	11690s 17580m 21480m
1430-1500	Russian	6025 9530	1130-1155	Spanish	6020b 9715b
1500-1530	Croatian	6025	1200-1225	Spanish	6020b 9715b
1530-1600	Romanian	6025	1330-1425	Dutch	9890p 12065t 13695k 17580m 21480m
1600-1630	Ukrainian	3975 6025	1430-1625	English	9890m 11835m 12075t
1630-1700	Slovak	6025	1630-1725	Dutch	6020m 11655m
1700-1730	German	3975 6025 Su	1730-1825	Dutch	9895f 11695f 13700f
1700-1730	Serbian	6025 Mo-Sa	1730-1825	English	5955f 11695f 13700f
1730-1800	German	3975 6025	1830-1925	Dutch	11695f 15315f 21590b
1800-1900	Hungarian	3975 6025	1830-2025	English	6020m 7120m 11655f
1900-1930	English	6025 7130			11695f 15315f 21590b
1930-2000	Serbian	6025			6020m 7120m 9895f
1930-2000	German	3975 6025 Mo-Sa			11655m 13700f 17605b 21590b
2000-2100	Hungarian	3975 6025 17690	2030-2125	Dutch	5835d 6015m 6020f 7120m 9895f 11655f 15315b 17605b 21590b
2100-2200	Hungarian	11890	2130-2225	Dutch	6020b 9895f 13700f 15155b 15315b
2100-2130	English	6025	2130-2325	Indonesian	6120s 7285m 9590m
2130-2200	English	3975	2230-0125	Spanish	9895f 11715b (to 2325) 11715f (2325-0025) 15315b
2200-2300	Hungarian	11870 15455	2330-0025	Dutch	7280m 9590s 17590k
2300-2359	Hungarian	11870 15455 Su	2330-0125	English	6165b 9845b

**KOREA-NORTH** *Korean Central Broadcasting Station* Provincial stations relay programmes from the KCBS in Pyongyang when not carrying local programmes. Local programmes are carried weekdays at 0500-0600 approx:

Chongjin, North Hamgyong 3940v

Hamhung, South Hamgyong 3220

Hyesan, Yanggang 3920

Kangaye, Chugong 3960

Pyeongsong, South Pyongan 3350

Sariwon, North Hwanghae 2350

Wonsan, Kangwong 3970v

Station identification: "choson chungang pangsong"

0000-1800 Korean 2850 3220 3350 3970 3980  
6100 9665 11680

2000-2359 Korean 2850 3220 3350 3970 3980  
6100 9665 11680

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**NETHERLANDS** *Radio Netherlands*

0130-0225 Dutch 6010c 11730f 15315b

0130-0325 Spanish 6165b 9845b

0330-0425 Dutch 6165b 9590b 9845m  
15560m

f=Flevo

b=Bonaire

m=Madagascar

t=Tashkent

j=Juelich

w=Wertachtal

I=Irkutsk

k=Khabarovsk

d=Kaliningrad

p=Petrovavlovsk-Kamchatskiy

g=Wolvertem (Belgium)

s=Singapore

(BBCM)

**NORTHERN MARIANA ISLANDS** *KFBS-Far East Broadcasting Company, Saipan*

0800-0830 Banjar 15380

0830-0900 Gorontalo 15380

0855-1200 Russian 11650

0900-0930 Makasar 15380

0930-1000 Bugis 15380

0955-1600 Mandarin 11580

1000-1030 Sundanese 15380



1300-1330	Hmong	12095
1300-1330	Hre	7480 Tu
1300-1330	Jarai	7480 Mo/Fr
1300-1330	Rade	7480 We/Sa
1315-1330	Chin-daai	15095
1330-1400	Khmu	12095
1330-1345	Chin-asho	15095 Su-We
1330-1345	Chin-khumi	15095 Th-Sa
1345-1400	Karen-sgaw	15095
1345-1400	Mien	7480
1345-1400	Chin-tidim	15095 Th-Sa
1400-1430	Lisu	15095
1430-1530	Burmese	12120
1500-1600	Cantonese	9420
2200-2359	Mandarin	9405
2200-2300	Vietnamese	11640
2230-2315	Cambodian	7480
2230-2330	Indonesian	12065
2230-2300	Lao	9790
2300-2330	Hmong	9485 Th/Sa
2300-2330	Hmong	9790 Su/Mo/Tu/We/Fr
2330-0100	Burmese	15465

(BBCM)

#### POLAND *Radio Polonia*

1000-1030	Slovak	5965 7285 Mo
1000-1030	Czech	5965 7285 Tu-Su
1030-1100	Polish	5965 7285
1100-1125	Polish	7270 7285
1100-1130	Russian	6095 9540
1130-1155	Belarusian	5995 7285
1130-1200	German	6095 9525
1200-1300	English	6095 7270 9525 11820
1300-1325	Lithuanian	6095 7275
1300-1330	Russian	7285 9540
1330-1430	Belarusian	5995 7180
1330-1355	Esperanto	7275 7285
1400-1425	German	6095 7285
1430-1455	Russian	7180 7285
1430-1500	Ukrainian	6035 7285
1500-1530	Lithuanian	5970 7180
1500-1530	Ukrainian	6015 7130
1530-1630	Polish	6035 7285
1530-1600	Ukrainian	6015 7180
1600-1630	Slovak	6095 7215 Su
1600-1625	Czech	6095 7215 Mo-Sa
1630-1755	Belarusian	5995 7285
1630-1700	Ukrainian	6035 7270
1700-1800	English	5995 7285
1800-1830	German	7285
1800-1825	Esperanto	7130
1800-1830	Russian	5995 7180
1800-1855	Belarusian	6050 7180
1830-1900	Ukrainian	5995 6035 7130 7295
1900-1925	Russian	6095 7165 7180 7210
1930-2030	English	6030 7165 7265 9540
2030-2055	Belarusian	6040 7165
2030-2100	Ukrainian	6000 7180
2100-2200	Polish	6040 7165 7180

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#### RUSSIA *Voice of Russia*

0100-0200	Russian	9480 11640 11750 12060 12070 17565 17620 17660 17690
0100-0200	English	9665 9725 11825 12000 17595
0100-0200	Spanish	7330 9450 9470 9810 9830 9860 9945 9965 12010
0200-0300	Russian	7330 9480 11750 12060 12070 17565 17620 17650 17660 17690
0200-0300	English	9665 9725 17595
0300-0400	English	9665 11750 17565 17650 17660 17690
0400-0500	English	9665 11750 12000 17565 17650 17660 17690
0500-0600	English	17635 17685 21790
0600-0700	English	15490 17635 17685 21790
0700-0800	English	15490 17495 17635 17685
0800-0900	English	15490 17495 17525 17635 17685
0900-1000	German	7330 9795 15455
1000-1100	Korean	7305 7315 7490-usb 9490 12055 13640 15470
1000-1100	Mandarin	5940 7400 9480 12000 15490
1100-1200	Mandarin	5940 7305 7315 7400 9470-(from 1130) 9480 9490 12000 15490
1200-1300	Russian	7315 9920 15460 15510
1200-1300	Japanese	7330 9490 11755
1200-1300	Korean	7305 7340
1200-1300	Vietnamese	12055 17570
1200-1300	Mandarin	9480 12000
1230-1300	Mongolian	4850-(Su) 9470 15490
1300-1400	Dari	4940 4975 15550 17610
1300-1400	Russian	7330 9495 11640 15510
1300-1330	Mongolian	9470 15490
1300-1400	Hindi	11500 15460 17570 17675
1300-1400	Japanese	7315 9490 11755 15580
1300-1400	Mandarin	7305 9470-(from 1330) 9480 12000
1400-1500	Russian	9820 9920 11695
1400-1500	English	9495 12055 15510
1400-1500	Turkish	11985 15540
1400-1500	Urdu	15460 15550 17570
1430-1600	Persian	7305 9835 9975 12015
1500-1600	Russian	9820 11695 12055 15540
1500-1530	Hindi	9495 9875 11720 15460 17570
1500-1530	Albanian	9450 12060 15290 17725
1500-1600	English	4940 4965 4975 7325 9730 11500 11985
1500-1600	German	7300 7330 9685 9795 12030 12040 15455
1530-1700	Serbo-croatian	9450 15290 17725
1530-1600	Bengali	9495 9875 11720 11870 15460 17570
1600-1700	English	9730 9875 11985 12055 15540

1600-1700	Romanian	9470 15125 15350
1600-1700	Russian	7315 9820 11695 12030
1600-1700	French	9495 9810 9865 11510 11630 11870 12035 12040
1600-1700	Arabic	7305 7325 9835 9975 12000 12015 12060
1600-1700	German	7300 7430 9685 9795 12030 15455
1700-1800	Russian	7300 7420 9820 11630 11695 15540
1700-1800	English	9490 9495 9685 9775 9890 11510 11985
1700-1730	Finnish	9480 11675
1700-1800	Arabic	7305 9975 12000 12060 15595-(from 1730)
1700-1800	Bulgarian	9470 15125 15290
1700-1800	English	7420 9480 9490 9685 9775 9820 9890 11510 11675 11985
1700-1800	French	7310 9810 9865 11870 12035 12040
1700-1800	German	7330 9495 12030 15455
1700-1745	Hungarian	7400 11745 15350
1700-1800	Italian	9450 11920 12020 17725
1700-1800	Polish	11930 11980
1730-1800	Swedish	9480 11675
1730-1800	Norwegian	9480 11675
1745-1830	Czech	7400 11745 15350
1800-1900	Greek	9470 11985 12015 15125 17725
1800-1900	Arabic	7305 9835 9975 12000 12060 15595-(from 1830)
1800-1900	English	7300 9480 9495 9685 9775 9890 11630 11675 11695 11870 11980
1800-1900	French	7310 7420 9450 9810 9865 11930 15535
1800-1900	German	7330 9795 11980 12030 15455
1830-1900	Slovak	7400 11745 15350
1900-1930	Albanian	9470 11630 11930 12020
1900-2000	Russian	11630 11745 12020-(from 1930) 15350 17725
1900-2000	English	9480 9685 9775 9890 11675 12070
1900-2000	French	7310 7420 9450 9810 9865 11930-(from 1930) 12000 15455 15535
1930-2000	Bulgarian	9470
2000-2130	Serbo- croatian	9470
2000-2100	Russian	9450 9685 11630 11695 12000
2000-2030	Portuguese	7440 12020
2000-2100	English	9480 9775 9890 11675 12070 15455
2030-2100	Spanish	7440 12020
2100-2200	French	9495-(vat)
2300-0000	Portuguese	7330 9450 9810 9860 9965 12010 12060

(BBCM)

**Radio Studio Gardarika**

1900-2100 Russian 6230  
(BBCM)

**SEYCHELLES FEBA Radio**

0030-0100	Hindi	7265
0045-0100	Punjabi	9465 Fr
0045-0100	Assamese	9465 Sa
0045-0100	Bengali	9465 Su-Th
0100-0115	Punjabi	7265 Sa
0100-0200	Tamil	9465
0100-0115	Dzonkha	7265 Fr
0100-0115	Marathi	7265 Su-We
0115-0145	Telugu	7265 Sa-Th
0115-0200	Telugu	7265 Fr
0145-0200	Malayalam	7265 Su
0145-0200	Kannada	7265 Mo/Tu/We/Th/Sa
0145-0200	Azeri	11610 Fr-Su
0200-0215	Hindko	9465 Mo/Tu
0200-0215	Siraiki	9465 Fr-Su
0200-0215	Urdu	11640
0215-0230	Punjabi	11640 Sa-We
0215-0230	Sindhi	9465
0230-0245	Baluchi	9465 Th-Su
0230-0245	Pashto	11640 15555
0230-0245	Brahui	9465 Mo/Tu
0245-0330	Dari	15555 Fr
0245-0300	Dari	11640 15555-(Sa/Su only)
0245-0315	Dari	15555 Mo-Th
0300-0315	Hazaragi	15555 Sa/Su
0300-0330	Persian	11640
0315-0345	Swahili	11885 Su/Tu/Th/Fr
0315-0400	Swahili	11885 Mo/We/Sa
0345-0400	English	11885 Fr
0345-0445	Arabic	15535
0400-0430	Portuguese	9455 Fr-We
0530-0600	Sinhala	15555 Fr
0815-0830	Malayalam	15460 Su
0815-0900	Hindi	15460 Th
0815-0845	English	15460 Fr
0815-0830	Telugu	15460 Sa
0830-0845	Tamil	15460 Su
0915-0930	French	15430
1100-1245	Arabic	15535 Sa
1100-1300	Arabic	15535 Su-Fr
1145-1200	Tsangla	15445 Sa/Su
1200-1230	Tibetan	15445
1230-1245	Nagpuria	15445 Th
1230-1245	Mundari	15445 Mo/Tu
1230-1245	Bhojpuri	15445 Fr/Sa
1230-1245	Marwari	15445 We
1230-1245	Bhili	15445 Su
1245-1300	English	15535 Sa
1245-1315	Bengali	15445 Fr/Sa
1245-1300	Marathi	15445 Su
1245-1300	Punjabi	15445 Tu-Th
1300-1315	Oriya	15445 Mo/We/Th
1315-1345	Gujarati	15445 Fr
1315-1330	Gujarati	15445 Sa-Th
1330-1345	Magahi	15445 Sa

1330-1345	Nepali	15445 Su/Mo
1330-1345	Chattisgarhi	15445 Tu-Th
1330-1400	Sinhala	9805
1330-1345	Badaga	11885 Su/Mo
1330-1400	Tamil	11885 Tu-Sa
1345-1400	Tamil	11885 Su/Mo
1345-1415	Malayalam	15445 Tu-Su
1400-1445	Hindi	11600 Fr
1400-1415	Malayalam	15445 Mo
1400-1415	Urdu	11600 Su-Th
1400-1430	Hindi	11600 Sa
1400-1443	Urdu	9805
1415-1500	Hindi	11600 Su-Th
1415-1445	Bengali	15445
1443-1458	Punjabi	9805 Tu
1443-1458	Urdu	9805 Th
1443-1458	Hindko	9805 We-Sa
1445-1500	Malayalam	15445 We
1445-1500	English	11600 Fr
1445-1500	Telugu	15445 Th-Tu
1458-1513	Balti	9805 Sa/Su
1500-1600	English	11600 Sa
1500-1530	Kannada	11600 Su
1500-1515	Tulu	11600 Tu
1500-1515	Konkani	11600 Th
1500-1515	Kannada	11600 Mo/We/Fr
1515-1530	Nuer	11885
1530-1545	Uzbek	9485 Sa/Su
1530-1545	English	11600 Th/Fr
1530-1600	English	11600 Su-We
1530-1545	Dinka	11885
1545-1615	Makonde	11885 Sa
1545-1600	Hazaragi	9485
1600-1645	Dari	9485 Mo-Th
1600-1630	Amharic	11640 Fr-Su
1600-1615	Makonde	11885 Su-Fr
1600-1630	Dari	9485 Fr-Su
1615-1645	Swahili	11885 Th
1615-1630	Guragena	11640 Mo-We
1615-1700	Swahili	11885 Fr-We
1630-1700	English	11605 Su
1630-1700	Dhivehi	11605 Fr
1630-1700	Amharic	11640
1700-1730	Oromo	11640 Su/Fr
1700-1745	Somali	9485 11885-(to 1730)
1730-1800	Tigrinya	11640 Su
1730-1745	Tigrinya	11640 Mo-Sa
1745-1900	Malayalam	11600 Fr
1747-1803	Azeri	9485 15430 Fr-Su
1803-1833	Persian	9485 15430 Sa/Su
1830-1845	French	9485 Tu/We
1830-1900	French	9485 Th-Mo

**SLOVAKIA** *Radio Slovakia International*

0100-0130	English	5930 6190 9440
0130-0200	Slovak	5930 6190 9440
0200-0230	French	5930 6190 9440
0700-0730	English	9440 15460 17550
0730-0800	Slovak	9440 15460 17550
0800-0830	German	5915 6055 7345
1300-1330	Russian	9440 11990 13715

1330-1400	German	6055 7345 9450
1500-1530	Russian	5920 9535 11715
1530-1600	Slovak	5920 6055 7345
1600-1630	German	5920 6055 7345
1630-1700	English	5920 6055 7345
1700-1730	French	5920 6055 7345
1730-1800	Russian	5920 7345 9485
1800-1830	German	5920 6055 7345
1830-1900	English	5920 6055 7345
1900-1930	Slovak	5920 6055 7345
1930-2000	French	5920 6055 7345

**SOUTH KOREA** *Radio Korea International*

0000-0100	Japanese	11810
0000-0100	Korean	15575
0100-0200	Korean	7275 11725
0100-0200	Spanish	11810 15575
0200-0300	English	7275 11725 11810 15575
0300-0400	Korean	7275 11725
0700-0800	Korean	7550 9535u 9570
0800-0900	English	9570 13670
0800-0900	Japanese	5975 7275
0900-1100	Korean	5975 7275 9570 13670
0900-1000	Korean	7550
1000-1100	Spanish	7550 9580 11715c
1100-1130	Korean	9580 9650c
1100-1200	Russian	5975 6135 7275
1130-1200	English	9650c
1130-1230	Mandarin	6045
1200-1300	Indonesian	9570 13670
1200-1300	Japanese	5975 6135
1200-1300	Korean	7285
1300-1400	English	9570 13670
1300-1400	Mandarin	5975 6135 7285
1400-1500	Indonesian	9570 13670
1400-1500	Japanese	5975 7275
1600-1700	Arabic	7275 7550
1600-1700	English	5975 6150 9515 9870
1600-1700	Russian	15575
1700-1800	French	7275 9515 9870
1700-1900	Korean	5975 7550 15575
1800-1900	German	6480 7275
1800-1900	Russian	15360u
1800-1900	Spanish	9515 9870
1900-2000	Arabic	6480 7550 9515 15575
1900-2000	English	5975 7275
1900-2000	French	6145u 9870
2000-2100	Mandarin	5975
2000-2100	German	3955u 7550 15575
2000-2100	Spanish	7275 9870
2100-2130	English	3975u
2100-2200	English	15575
2100-2300	Korean	5975
2200-2300	Indonesian	7275 9640s
2300-2359	Mandarin	5975 7275
2300-2359	Korean	15575

c=via Sackville  
u=via Merlin UK  
s=via Merlin Singapore  
(BBCM)

**SWEDEN Radio Sweden**

0000-0030	Swedish	13625	0100-0200	English	9885
0100-0130	Swedish	13625 13640	0200-0230	French	9885
0130-0200	English	13625	0230-0300	English	9885
0200-0230	Swedish	9495	0300-0330	Italian	9885
0230-0300	English	9495	0330-0400	German	9885
0300-0330	Swedish	9495 15425-alt	0400-0430	English	9610g
0330-0400	English	9495 15245-alt	0400-0500	English	9885
0400-0430	Swedish	9495 15245-alt	0430-0500	French	9610g
0400-0600	Swedish	6065 9495 17505 Mo-Fr	0500-0530	English	9610g
0600-0700	Swedish	9495 Mo-Fr	0500-0530	French	9885
0600-0800	Swedish	9495 17505 Sa	0530-0600	German	9610g
0700-0900	Swedish	9495 17505 Su	0530-0545	Italian	9885
1000-1010	Swedish	9495 21530 21810	0600-0630	Italian	9610g
1010-1030	Swedish	9495 21530 21810 Sa/Su	0600-0630	French	15545g 17685g 21750
1030-1040	Swedish	18960 21530 21810 Mo-Fr	0630-0700	German	15545g 17685g 21750
1030-1100	Swedish	18960 21530 Sa/Su	0700-0730	Italian	15545g 17685g 21750
1130-1200	English	17505 18960	0730-0800	English	15545g 17685g 21750
1200-1230	Russian	15725-alt 17490	0830-0900	English	21770
1200-1230	Swedish	17505 18960	0900-0930	Italian	21770
1230-1300	English	17505 18960	0930-1000	German	21770
1300-1330	Russian	15245	1000-1030	English	15315g
1300-1330	Swedish	17505-(not Sa/Su) 18960	1000-1030	French	21770
1330-1400	English	17505 18960	1030-1100	German	15315g
1400-1430	Russian	1179	1100-1130	French	15315g
1400-1430	Swedish	17505 18960	1100-1200	English	13735s 21770
1445-1500	Swedish	6065 18960	1130-1200	Italian	15315g
1500-1530	Swedish	13580	1200-1230	English	15315g
1500-1545	Swedish	6065	1200-1230	German	13735s 21770
1545-1600	Swedish	6065 13580 17485	1230-1300	French	13735s 21770
1600-1615	Swedish	6065 13580 17485 Mo-Fr	1300-1330	Italian	13735s 21770
1600-1615	Estonian	6065 Sa/Su	1400-1500	English	9575s 17680
1615-1630	Latvian	5840 6065	1500-1530	German	9575s 17680
1630-1645	Estonian	6065	1530-1600	French	9575s 17680
1630-1700	Russian	11680	1630-1700	Italian	15520g 17640g 21720
1645-1700	Latvian	6065	1700-1730	Arabic	15220g 17640g 21720
1700-1715	Estonian	6065 Mo-Fr	1730-1800	German	6110g
1715-1730	Latvian	6065 Mo-Fr	1730-1800	English	15220 17640g 21720
1730-1800	English	6065 13580-(Su only)	1800-1830	Italian	6110g
1800-1830	Swedish	6065 11905 17505	1800-1815	French	15220g 17640g 21720
1830-1900	German	6065	1830-1900	French	6110g
1900-1930	German	6065 Su	1830-1900	Italian	13770 15220g 17580g
1900-1930	Russian	6065-(not Su) 9590			17735f
1930-2000	English	6065	1900-1930	English	6110-v
2000-2100	Swedish	6065 13580	1900-1930	Arabic	13770 15220g 17580g
2100-2130	Swedish	6065 9435 15255			17735f
2130-2200	English	6065 15255	1930-2030	English	13770 15220g 17580g
(BBCM)					17735f
			2030-2100	German	13770 15220g 17580g
					17735f
			2100-2130	French	13770 15220g 17580g
					17735f
			2200-2230	French	9885 11905f
			2230-2300	German	9885 11905f
			2300-2330	Italian	9885 11905f
			2330-2359	English	9885 11905f

**SWITZERLAND Swiss Radio International** has announced that it is discontinuing all shortwave broadcasts according to the following timetable:

24 March 2001: Broadcasts to Western North and Central America and Australia.

27 October 2001: Broadcasts to Europe, Asia, remainder of North America.

End of 2004: All remaining SW broadcasts to the Middle East, Asia and South America.

0030-0100 German 9885

f=Montsinery, French Guiana  
s=Singapore  
g=Juelich, Germany  
(BBCM)

# Pirate Radio Report

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

Hello and welcome to the May 2001 edition of the **Pirate Radio Report**. Now that the winter that wouldn't quit is finally over, it's time to do those antenna repairs before it gets too hot.

## It's Pirate Radio Poll Time!

Don't forget it's time for our annual pirate radio poll. Please vote for your favorite and least favorite pirate station that has been active during the past year. Last year's winner was **WLIS**. Voting ends in June, so vote early and vote often. My choices for the year. Best: **WHYP-James Brownyard Memorial Station**. Worst: **KSMR/UPR**.

## United Patriot Radio is *ex-KSMR*

The so-called "clandestine" station **KSMR/Kentucky State Militia Radio** was told to stop broadcasting by the head of the KSM, Charlie Puckett. But Steve Anderson, the obedient soldier that he is, refused and returned to the airwaves independent of The Kentucky State Militia and now calling himself **United Patriot Radio**. So if you need something to put you to sleep, look for them on 3260 kHz, USB between 0200-0300 UTC. They don't QSL, so who cares?

## Loggings...

**Blind Faith Radio** was logged on 6955 kHz USB from 1525 until sign off at 1543. This April 15<sup>th</sup> logging featured Dr. Napalm with his usual classic rock program, including apologies for his relative lack of activity lately. Announced an email address [blindfaithradio@yahoo.com](mailto:blindfaithradio@yahoo.com) for reception reports. [Zeller-OH]

**KHJ** featuring a z100 like format was noted on 6950 kHz USB from 0033-0104\* UTC on April 16<sup>th</sup> with an SIO rating of 242+. Program of rock music with frequent **KHJ** jingles between songs. Part of the genre of commercial FM station imitations. Gave no address, and except for the jingles, I heard no talk. [Zeller-OH]

**Take It Easy Radio** was heard a couple of times on 6955U from 0337-0438 sign off on

April 21<sup>st</sup> and again on 6950U from 0202-0237 UTC on April 22<sup>nd</sup>. Both programs with **Take It Easy Radio** IDs at open and close, but most of show was a very long tribute to **Armed Forces Radio Vietnam**, including rock music of the Vietnam war period that was played on the station. Kudos to pirates and pirate DXers who are military veterans. Belfast address [Zeller-OH]

The Dutch **Europirate Tower Radio** was noted on April 21<sup>st</sup> at 0230 to 0330 UTC with pop music, including **Roxy Music**, "Vienna" by **Ultravox**, **Crowded House** "Don't Dream It's Over", e-mail address of [radiotower@netmail.nl](mailto:radiotower@netmail.nl) given at 0321, Then ID as "Tower Radio" @ 0322 and again at 0323, **Queen's** "Bohemian Rhapsody"; signal tough to copy through major static [Brandi-NJ]

**The Voice Of The Runaway Maharishi** was logged 6949.93 kHz on April 5<sup>th</sup> at 0140 UTC. Played the song "Stinky Skunk-Butt Weed", ID @ 0144, odd "The Shadow" piece, more marijuana-oriented music sung by His Holiness, Providence mail-drop, "Sexy Sadie" 15 to close; drifts signal, up to 6949.99 over course of broadcast. [Brandi-NJ]

**WBNY/The Voice Of The Rodent Revolution!** was logged on 6950.5 kHz from 2310-1215\* on April 15<sup>th</sup>. Commander Bunny from the People's Committee for Rodent Freedom Fighters, returning with this classic Easter holiday clandestine parody. Syrupy Easter songs. Probably the best signal I ever had for this one, and I've seldom heard it. Gave old address of PO Box 40554, Washington, DC 20016 which has been invalid for years. [Zeller-OH]

**Z-100FM** was heard on 6955 kHz USB from 0043 until 0231 sign off on April 21<sup>st</sup> and from 0047-0157 sign off on April 22<sup>nd</sup>. Both very long transmissions of oldies rock, with IDs and jingles between most songs. Gave email address of [bigz100fm@yahoo.com](mailto:bigz100fm@yahoo.com) that was good. [Zeller-OH]

Many thanks to Ralph Brandi and George Zeller for this month's logs!

Happy Pirate DX!



# Net Notes

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

There are two major issues confronting domestic broadcasters Web-casting on the Internet. Now that Napster has been brought to its knees, the RIAA is turning its attention to streamed music and seeking compensation. And the actors' union AFTRA is seeking compensation for advertisements aired via the Web. Read Andy Sennitt's balanced perspective on the R Netherlands' Media Network site at [www.rnw.nl/realradio/features/html/webcasting010412.html](http://www.rnw.nl/realradio/features/html/webcasting010412.html).

Two of the more interesting Web sites these days during the peak of the solar cycle are Spaceweather ([www.space.com](http://www.space.com)) and Space ([www.space.com](http://www.space.com)). The flares and aurora and geomagnetic storms of late March and April have been record setting. Read "Blackout!" on the RN Media Network site for one methodology of tracking the impact of a flare as it happens. Incredible stuff, indeed.

It was good to meet Allan Graham in Kulpville, and we found he has on the HCJB Web site a useful page listing virtually all the shortwave listener gatherings. Dial into [www.hcjb.org/english/dxpl.php?subject=events](http://www.hcjb.org/english/dxpl.php?subject=events) and have a read.

Do you listen to the Voice of Russia?

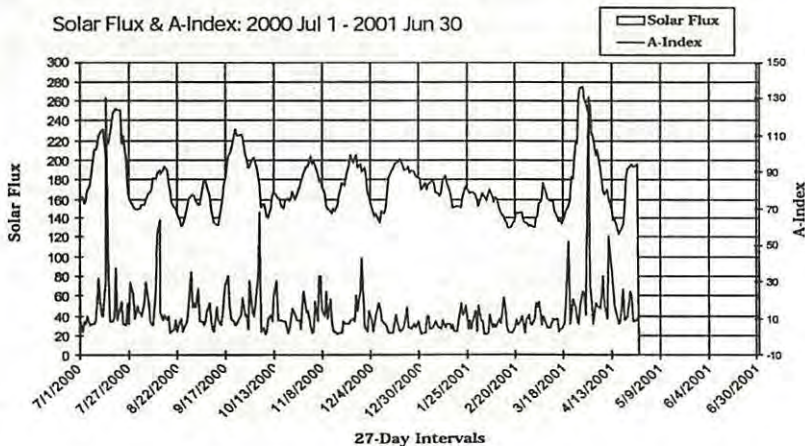
There is a new set of photos on the VOR web site at <http://www.vor.ru/>. Go to "English" and then click on the section entitled 'Our Narrators' or enter this URL: <http://www.vor.ru/English/Narrators/narrators.html>. It's nice to see the faces behind the voices, and we finally have the correct spelling of names.

Radio Exterior de Espana has a new email address for DX and reception reports. Send your reception reports and DX-related letters to [dxree.rne@rtve.es](mailto:dxree.rne@rtve.es).

Beware of the new European DX Council Web site at [www.edxc.org](http://www.edxc.org), as it is loaded with Java and Javascript. Windows pop open full screen without reason, and unfortunately the site is structured so that it cannot be indexed by the major search engines. Close and save important files in case your browser and computer cease working.

In closing, if you have an amateur radio license and would like to chat with me — W2XQ — take a look at [w2xq.com](http://w2xq.com) and click on the first link on that page for more information. An "interlink" allows us to chat with hams around the world as we drive to and from the office. We've chatted with hams in about 30 countries to date.

Solar Flux & A-Index: 2000 Jul 1 - 2001 Jun 30



# QSL Report

Sam Barto • 47 Prospect Place • Bristol, CT 06010

I believe we have a very special QSL Column this month. Lets get right into it with a great QSL...Sam.



**ABKHAZIA REPUBLIC: Radio Abkhazia** 9489.8 two f/d \* prepared cds., signed and stamped, w/ a typed personal ltr. in RS from Zurab Argun, Director. Also rcvd. 3 postcds. for this June 98 reception. Zurab says that reception rpts. should be sent to: National Library of Abkhazia, Krasnodar District, P.O. Box 964, 354000 Sochi, Russia. I had previously mailed the station taped rpts. from the USA and Hungary. My last f/u, along w/ John Sgrulletta's, was hand delivered to Zurab in August 2000 by the Plenipotentiary of Abkhazia for western Europe.

(I had to look that \$5.00 word up...Sam.) What's interesting is that I only enclosed one prepared cd. in my last f/up rpt., yet I rcvd. 2 of my personally designed prepared cds. in return -

**VERIFICATION SIGNERS: Radio Lesotho**

4800 Addr: P.O. Box 552, Maseru. ORB -  
**Radio Fritz** 13810/5965 Addr: P.O.Box 90  
 90 00, DE-14439 Postdam, Germany. **Lutherische Stunde** 7330 Addr: Postfach 11 62, DE-27363  
 Sottrum, Germany. **Radio Horeb** 6015/6045 via Jul-  
 ich v/s Barbara Pflug. Addr: P.O. Box 1165, DE-  
 87501, Immenstadt, Germany. **Radio RSG** 6015 via Jul-  
 ich Addr: Alleestrasse 1, DE-42653 Solingen, Germany.  
**Radio Vilnius** 9855 via Julich Addr: Konarskio 49, LT-  
 2674 Vilnius, Lithuania. **Radio Luz y Vida** 3250 v/s Ubal-  
 do Zaldivar Lopez.....via PLAY DX.....Sam.

with slightly different designs. What this means is that one of my previous rpts. had been received by the station despite the embargo. (Maroti-NY). 9494.8 two f/d prepared cds for 1998 receptions after trying various routes. Looks like my contact with George Maroti worked. Thanks George. C/V #239.

**ALGERIA: Radiodiffusion Television Algerienne**

11715 and 15160 via **Boujadi** f/d "Archery Figures"

(Sgrulletta-NY) in 83 ds. w/ schedule, station sticker and report forms. (Humenyuk-ONT).

**ANGUILLA: Caribbean**

**Beacon** f/d "Building/Antenna" cd. in 1 mo. Addr: B. Monsell Hazell, Chief Engineer, PO Box 690, Anguilla. Tnx to Rich D'Angelo for the QTH. I enclosed \$2.00, used stamps, local postcard and WDX/SWL cd. (Lawrenson-RI).



**CADENA CARACOL**

Hemos recibido su amable reporte de sintonía; nuestras emisoras de onda corta en las bandas Tropical e internacional de 49 y 62 Mts. son:

Freq. Khz Reportada	Potencia Kilovatios	Ident.	Ciudad	Ubicación		Operación Horas
				Longitud	Latitud	
6.150	10	HJOR	Bogotá	75° 17'	2° 56'	24
5.075	50	HJGC	Bogotá	74° 5'	4° 41'	24

**CARACOL S. A.**

Apartado Aéreo 9291  
 Santafé de Bogotá, D.C.  
 COLOMBIA - Sur América  
 QSL o reporte de sintonía  
 Fecha 9/12/97

Nombre JERRY KLINCV  
 País USA  
 Dirección 11943B16 Telle Rd  
 Apdo. Aéreo 8, Dupont, NY 14056

Close to Hilversum's Wasmeer  
 Junto al Wasmeer en Hilversum

via Willshaw

**ASCENSION ISLAND: Voice of America** 17745 via English Bay f/d "Morocco Site" cd. w/ sticker, VOA Guide and a station ruler. (Humenyk).

**ASIATIC RUSSIA: IBC Relay**  
 \* 11570 via **Novosibirsk** f/d ltr. in 152 ds. v/s K. Pillai, IBC Tamil. (Humenyk). **Voice of Russia** 9490 via **Novosibirsk** cd. w/ personal ltr and calendar in 84 ds.  
 \* (Glotzbach-NM). **Democratic Voice of Burma** 5945

**NOTES: Paul Brouillette** says his QSL returns may be looking up a bit. He is very pleased with the Qatar QSL. It took almost two years to obtain. **Jerry Klinck** says the winter seemed long and very cold - it still does as I'm typing this...Sam. Jerry says the DX has been very spotty especially with some extremely serious family illness. Without going any further Jerry, you and your wife keep your health the best you can. Its the only one you have...Sam. **Wendel Craighead** says hello to everyone and hopes the DX has been kind to everyone.



**РАДИО МОСКВА**

Dear Mr. Willshaw,  
 This verifies your report on the reception of Radio Moscow's broadcast in English  
 Date September 14, 2000  
 Time 0210 UTC  
 Frequency 7180 kHz via Kishinyov

Best wishes from Radio Moscow

via **Vladivostok** ltr. in 18 ds. (Glotzbach-NM). **Voice of America** 12065 via **Petrovlovsk** f/d "Saipan Site" cd. in 48 ds. (Neal-TX).

**AUSTRALIA: Radio Rum Jungle**

\* 5025 via **VL8K Katherine** cd. w/ Map of Australia in 274 ds. (Glotzbach).

**BELARUS: Radio Minsk** 7210 via **Kalodziscy** cd. w/ station history, schedule and a 2000

calendar in 324 ds. via surface mail. (Glotzbach-NM).

**BOLIVIA: Radio Yura** 4716.7 ltr. in SP in 1 mo. thanks to Nozaki who was visiting Bolivia. 1000 watts. v/s Rolando Cueto F., Director. (D'Angelo-PA). "Certificado de Sintonia" ltr. w/ color banner in 5 mos. signed by the above v/s. Thanks to Nozaki who delivered my report and tape to the station. Use Casilla 326 in PWBR-2001 address.

(Sgrulletta). **Radio Fides** 4845 station signed and stamped my prepared cd. in 1921 ds. from my last rpt. Thanks to a visit by Nozaki. (D'Angelo-PA). **Radio Metropolitana** 6195 ltr. in 1921 ds. thanks to a Nozaki station visit. v/s Juan Carlos Oblitas, Responsable de alta Frecuencia RTP. (D'Angelo-PA).

**BONAIRE: Radio Vlaanderen International** 13660 f/d "Gasbeek Castle" cd. in 21 ds. for 1 IRC. (Brouillette IL).

**BRASIL: Radio Difusora Tauhate** 4925 f/d prepared cd. w/ p/d personal ltr. in 3 wks. for \$2.00. I received a package via International Express Mail which

**SWR >>>**

Ein Subskriptions- oder ein Anzeigen-Konto  
 ist erforderlich, um den SWR zu abonnieren oder  
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SWR-Verlag, D-42699 Solingen

Mr.  
 Fred Willshaw  
 3483 Waterside Drive  
 Charlotte, NC 28278-7355  
 USA

**SWR QSL-Karte**

Wir bestätigen den Empfang eines  
 Senders des Südwestrundfunks.  
 Sie hören am: 05.11.2000  
 Empfangszeit UTC: 02:30  
 den Sender: Eisdorfer  
 Sendefrequenz: 7185 kHz  
 mit dem Radioprogramm SWR3

Wir bitten guten Empfang wünscht Ihnen  
**Südwestrundfunk**  
 Technische Information

**SWR >>>**  
 SÜDWESTRUNDFUNK

**QSL**



THE RADIO EAST COAST  
HOLLAND  
AND  
THE VOICE OF THE  
NETHERLANDS

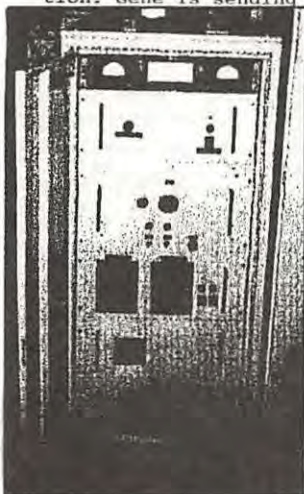
via Sgrulletta



S.W. 7480/7490Khz.  
 62.0's  
 41Metre / yd

their first day broadcast from  
 Canada. (Glotzbach). Radio Korea

**NOTES:** George Maroti says that the QSLs have been few and far between; however, the ones that have arrived are quality QSLs. Gene Borokowski says he's back in the groove with DXing. In an effort to expand his QSL collection. Gene is sending audio re-



To Mr. J. Sgrulletta.....  
 Date 31-12-2000.....  
 Freq 6285 kHz in 74ds.....  
 TIME Feb 20 - 0706 utc.....  
 Sinfo 21.2.2.....  
 Remarks Thank for the QSL

contained a coverage map, promo materials, 2 pens, keychain, 8 stickers, 2 rulers and a T-shirt that my wife is eyeing as a potential nightshirt. (Sgrulletta). date only ltr. via registered mail w/ a terrific package of goodies in 25 ds. v/s Emilio Amadei Beringsh, Director Superintendente who returned my \$1.00. Received "FM99" T-shirt, numerous pens and stickers, 3 rulers, a pen/pencil case and a handful of key rings. This is one of the nicest package I've ever received from LA in a verie long time. (D'Angelo-PA).

BULGARIA: Radio Bulgaria 9900 cd. w/ sked. and a New Year's greetings in 132 ds. (Glotzbach). 7500 f/d "Roman Theatre at Plovdiv" cd. in 58 ds. for 1 IRC. Also rcvd. schedule. (Brouillette-IL).

CANADA: Voice of Vietnam 9525 via Sackville f/d cd. w/ schedule and pennant \* in 61 ds. (Glotzbach). Radio Sweden 9560 via Sackville schedule and QSL for

**Station KNLS - Verification of Reception**  
 Spring To Fall Broadcast Season 2000

Card # 113 of 200

For the broadcast:

QSL is issued to:

Frequency 9615kHz  
 UTC Time 1300  
 UTC Date 06/29/2000

Mr. Mark Humenyk  
 26 Crestridge Hts.  
 Weston, ONTARIO  
 CANADA M9P 1A4

cordings w/ reception reports to some of his reluctant verifiers. Let us know what happens...Sam.

International 11715 via Sackville f/d cd. w/ newsltr. and schedule in 66 ds. v/s Anna Park. (Humenyk). Radio Canada International 5960 f/d cd. in 26 ds. w/ sticker and station pennant. My 2 IRCs were returned. (Griffin-VA). Radio Telefis Eireann 13640 via Sackville f/d cd. "Landscape/Riverbank" in 30 ds. (Humenyk-ONT).

CHINA, PEOPLES REPUBLIC OF: China Radio International 11900 and 11980 via Jinhua f/d "Mogao Grottoes in Dunhuang" cd in 36 ds. w/ schedule. (Glotzbach-NM). 11650 via Xian f/d "CRI 2001" cd. w/ "Serpent among Foliage" paper cut in 34 ds. w/ schedule. (Glotzbach-NM).

CLANDESTINE: Voice of the Democratic Path \* of Ethiopian Unity 15175 via Julich ltr. rcvd. from the Holland address in 47 ds \* (Kusalik-ALB). Voice of Iraqi Kurdistan 5860 f/d prepared cd. for SASE (used) in 2 wks. The station listed the transmitter site as "Erbil-Kurdistan of Iraq" which is a province east of Sulaimaniya Province. v/s Farhad Barzani, KDP Representative in Washington. Use the PWBR 2001 address. (Sgrulletta-NY).

CROATIA: Radio Croatia 9925 f/d cd. in 392 ds. w/ schedule. (Griffin-VA).



**CYPRUS: Cyprus Broadcasting Corporation** 9760 f/d "Broadcasting Compound" cd. in 3 yrs. for a 98 reception. I think this is the 3rd QSL I've received for this reception. (Brouillette-IL).

**DIEGO GARCIA: AFRTS/Armed Forces Radio** 12579 p/d ltr. in 5 wks. for SASE. (Klinck-NY).

**ENGLAND: Globe Sound Kitchen** 7325 via **Skeleton** e-mail reply in 70 ds. for an e-mail rpt. (Kusalik-ALB).

**EUROPEAN RUSSIA: Voice of Vietnam** 7250 via **Armavir** cd. w/ paper pennant in 631 ds. after 2 f/up rpts. and a FAX. (Glotzbach)

**QSL Offer:** Only 1 report per month over a 12 month period and Miss Radio Belarus will hand deliver your QSL along with a DX Club certificate suitable for framing... You gotta stand in line and take a number for this one... Sam.

**\* RWM Time Signal Station** 4996 f/d "Transmitter Tower/Clock" cd. in 140 ds. for \$1.00 and rp. (D'Angelo-PA).  
**EUROPEAN RUSSIA: Radio Cupido** 21890 f/d cd. w/ info. sheet, postcard

\* and a very friendly ltr. in 11 ds. for ms. and a Real Audio clip posted via e-mail. (Maroti) f/d ltr. in 21 ds. w/ information sheet. 50 watts. First rpt

\* from Alberta. (Kusalik). **Radio Alfa Lima International** 21889.7 f/d cd. in 43 ds. for a test

\* broadcast to NA. (Kusalik). **Union Radio** 6210 f/d mimeo ltr. in 2 mo. w/ station history and station photos. 150 watts. Also rcvd. IRC from another country and a 1976 Russian stamp. (Sgrulletta-NY).

\* **Radio East Coast Holland** 6285 f/d poster in 1 mo w/ color picture of the transmitter, rcvr. and antenna. 100 watts. (Sgrulletta).

\* **Tower Radio** 6306.4 p/d computer generated ltr. in 2 wks. for \$1.00. Also rcvd. local postcard of Markelo and FM sticker. (Sgrulletta-NY)..... Very nice reports guys... Sam.

**FINLAND: YLE Radio Finland** 15400 p/d "Shortwave Centre of Finland" cd. in 39 ds. w/ schedule. v/s R. Makela. (Brown-IL).

**GERMANY: Global Ministries of the United Methodist Church** 15485 f/d ltr. in 14 ds. for ms. v/s Donna Niemann, Program Director. (Kusalik). 13685 f/d ltr. in 22 ds. for SASE. (Glotzbach). 15485 and

13810 n/d ltr. in 15 ds. (D'Angelo-PA).

\* **WYFR** 15775 and 13855 via **Julich** personal ltr. w/ schedule in 8 ds. This was for their first day test transmission. (Glotzbach-NM).

**GOA: All India Radio**

\* 11715 via **Panaji** f/d cd. in 102 ds. from Delhi. v/s A.K. Bhatnagar, Director of Frequency Assignment Interesting that I reported on their EG

Minsk  
 Minsk Centre of Voice  
 21 Street & Near Cathedral  
 Minsk, Minsk Province  
 220000 Belarus

Dear Mr. Barto,  
 we verify your reception report  
 Date : 07.06.2000 Time : 2.58-3.07 UTC  
 Frequency : 4982 kHz Language : Russian

Sincerely,  
 (Radio Minsk logo) **DX**  
 Radio Minsk

Radio-Minsk \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Radio Spaceman**

D.J. Major Tom

P.O. Box 73, 7160 AB Neele, The Netherlands

Name: Samuel Barto  
 Date: march 04, 2001  
 Time: 02.18-02.27 UTC  
 SINPO: fair to good  
 Frequency: 6306 kHz  
 Remarks:

Keep listening to our broadcastings on  
 48 and 76 meters!!

e-mail: komopdehand@hotmail.com

language transmission to get a QSL. I've sent 3 taped rpts for receptions in other languages over the past several years with no results from Goa. Not one word. This time I didn't even send rp. Something worked. (Stewart-MO).

**GREECE: Voice of Greece 7475 via Kavala**  
f/d cd. w/ personal note, schedule and tourist brochures in 21 ds. (Glotzbach-NM).

**GUAM: AFRTS/Armed Forces Radio**  
13362 p/d e-mail reply in 4 ds. for an e-mail rpt. (Neal-TX).

**Adventist World Radio 15195 via Agat** f/d "Canterbury Cathedral" cd. in 22 ds. w/ report forms and schedule. v/s Narine West, AWR QSL Section.

**GUATEMALA: Radio Verdad 4052.5** (Humenyk). n/d personal ltr. w/ schedule, station history in EG, paper pennant in 38 ds. (Glotzbach-NM). p/d "Logo" cd. w/ paper pennant

**Rec.**

computer generated calendar and a thank you ltr. in 1 mo. for a taped rpt. and \$2.00 (receipt rcvd). v/s Dr. Edgar Amilecar Madrid Morales, Gerente. (Sgrulletta-NY). f/d cd. w/ prepared

**RADIO EXTERIOR DE ESPAÑA**

cd., paper pennant and station information in 40 ds. same v/s as above. (Kusalik-ALB).

**GUINEA REPUBLIC: Radio Nationale du Guinee 7125 p/d ltr.** via their Embassy in Washington along w/ info. sheet and request form for a visa to travel to their country. All this for a SASE and a taped rpt. (Klinck). date only "thank you for your interest in our station" form ltr. in FR w/ a New Years cd. in 63 ds. for a FR rpt, tape and \$2.00. v/s Issa Conde, Le Directeur de la Radio-diffusion Nationale. (Stewart-MO).

**HAWAII: AFRTS/Armed Forces Radio 6350** p/d e-mail in 4 ds. for an e-mail rpt. v/s Jennifer Gray, Broadcast Operations Specialist, who says that Iceland does not have SW capabilities. (Neal-TX).



**RADIO "JATUN AYLLU YURA"**

*La voz de los Ayllus*

**CERTIFICADO DE SINTONIA**

Al Señor: RICHARD A. D'ANGELO

Muchas gracias por su informe de recepción de nuestra emisora en Wyomissing, Estados Unidos.

Tenemos el gusto de confirmar su control de nuestra emisión en 4.716.7 KHz de onda corta, de fecha 15 de diciembre de 2000 a horas 23:07 a 23:36 GMT.

Transmitimos en la frecuencia de 4.715 Kilocertz en la banda internacional de 60 metros onda corta, con 1.000 vatios de potencia.

Potosí, Bolivia, enero de 2001

Rolando Castro F.  
DIRECTOR

Tel. 391-413318  
Calle 14 N° 326  
Localidad Yura, Provincia Quejaro - Potosí - Bolivia



**HOLLAND: Radio Canada International 15360 via Flevo** f/d "1973 World Friendship Year" cd. in 3 wks. (Craighead-KS).

**HONDURAS: Radio Costena 4930 p/d** ltr. in 126 ds. for a SP rpt. and \$1.00. Sticker was rcvd. v/s Ricardo E. Hedman T., Dpto. de Radio. Addr: Ap. 2024, San Pedro Sula. (Brouillette-IL).

**ISRAEL: Galei Zahal 15785 f/d cd.** in 6 wks. for a taped rpt. and \$1.00. (Sgrulletta-NY). same in 44 ds. (Glotzbach).

**ITALY: Radio Europe 7106 via Pioltello** f/d sheet in 77 ds. for Lira 3000. Rcvd. station pin, cards and stickers. 500 watts. Heard while in Rome. (Neal-TX).

**RAI International** f/d "Manifesto of RAI International" cd. in 1 mo. (Humenyk).

**JAPAN: Radio Canada International 11955 via Yamata** f/d "Challenges VI Montreal 2000" cd. w/ stickers and schedule in 9 ds. (Humenyk-ONT).

QSL Verification

Radio Republik Indonesia Biak

Kepada Yth. Tuan Richard A. D'Angelo

Ini membenarkan laporan tuan dari Radio Biak siaran pada gelombang 48.7488 meter atau frekuensi 6.153.7 kHz, pada 25 Maret, 2000 19 dari 20.24 sampai 21.03 waktu Indonesia Bagian Timur Penerima kuasa studio kami 0.75 kw. dengan DELTA antena. Penerima kuasa studio Banyak terima kasih untuk laporan tuan.



**KALININGRAD: Voice of Russia**

5950 f/d "Moskva River" cd. in 26 ds. for an e-mail rpt C/V#217 (D'Angelo-PA).  
**Radio Nederlands** 5835 f/d "Nature" cd. in 9 wks. (Klinck-NY).

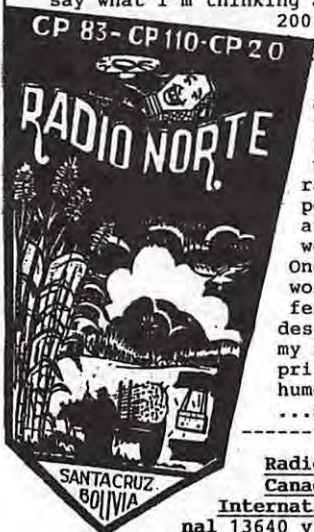
**MALAGASY REPUBLIC: China Radio**

**International** 7170 via **Bamako** f/d "Mogao Grottoes in Dunhuang" cd. in 47 ds. v/s Ying Lian. Paper cuts rcvd. (Humenyk). 15500 f/d "Great Wall" cd. in 45 ds. (Humenyk)

**THANK YOU:** I'm having a hard time composing this statement because I want to be

sincere and say the right thing. I guess the best thing is just to say what I'm thinking and feeling. Thank you so very much for the

2001 Eddings Award. It means much more than I am truly capable of expressing. First, I want to thank the NASWA Executive Council for their support and for allowing me to function as the QSL Editor for such a long period of time. Secondly, I want to thank all of our contributors. There wouldn't be a monthly column without your support. The hobby has changed radically from the 50s and 60s. Changes in QSL policies, economics and the internet have had an effect upon our hobby. I'm not sure where we are headed but I hope I'm along for the ride. Once again, thank you for your support and kind words. John Sgrulletta, who attended the Winterfest, wrote to me and said that I must really deserve this award because when they announced my name no one booed. Hi. Actually I'm quite surprised. Keep contributing and keep a sense of humor...  
 ...Sam.



**Radio Canada**

**International**

13640 via

**Talata** f/d "1973

World Friendship" cd. in

3 wks. (Craighead-KS).

**MOZAMBIQUE: Radio Mozambique**

\* 3210 p/d cd. in 5 wks. for a PT rpt. and 1 IRC. (Maroti)

**NICARAGUA: Radio Miskut 5770**

f/d ltr. in 46 ds. for a SP rpt. and \$2.00. (Neal-TX).

**POLAND: Radio Racja 6035 via**

\* **Warsaw-Leszczynka** f/d cd. in 72 ds. after an e-mail rpt. and a f/up rpt. v/s Zmicer Novikau, Executive Director. Schedule and stic-ker rcvd. (Kusalik-ALB).

**Polskie Radio 9525** f/d "Szczecin Then and Now" cd. in 63 ds. w/ schedule and ltr. (Humenyk-ONT).

**QATAR: OBS 7210** f/d cd. in 44 ds. w/ schedule. (Neal-TX).



**RADYO PILIPINAS**

Office of the Press Secretary  
 PHILIPPINE BROADCASTING SERVICE  
 (Bureau of Broadcast Services)

4<sup>th</sup> FLR, MEDIA CENTER BLDG., VIRAYAS AVE., QUEZON CITY, METRO MANILA, PHILIPPINES, ZIP CODE 1102

TEL. NO.: 828282; TEL.FAX: 82254611 - E-MAIL ADDRESS: tbsa@ops.gov.ph

28 January 2000

MR. RICHARD A. D'ANGELO  
 2216 Burkey Drive  
 Wyomissing, PA 19810  
 USA

Dear Sir:

This is to acknowledge your letter sent to us. We highly appreciate your time listening to our programs over Radyo Pilipinas. Much more, we treasure your letter which specifies a reception report. We are therefore confirming your programs monitored on that day to you.

Attached is a copy of our program guide. Right now, we are continuously re-programming our station and please be assured that we will send you regularly a copy of our programs if there will be some changes. We have included you in our mailing list, so please be assured that we have opened our communication line with you.

Please keep the assurances of our highest esteem as I remain

Very truly yours,  
  
 TAWRY V. RODRIGUEZ  
 Station Manager

**QSL****Certificado de Sintonia**Emisora Radio Fides (CP72), La Paz, BoliviaA Sr. Richard A. D'AngeloMuchas gracias por su informe de recepcion. Tenemos el gusto de confirmar su control de nuestra emision en 4.845 kHz. de fecha 7 de Enero de 1994a las 23.30 a 00.04 horas de UTC con        vatios de potencia.

firma y sello oficial

- SEYCHELLES:** FEBA 11885 f/d "Control Room" cd. w/ info. sheet in 50 ds. v/s Doreen Dugette, QSL Secretary.
- SICILY:** AFRTS/Armed Forces Radio 10940.5 via Sigonella f/d ltr. in 68 ds for ms. v/s Michael Foutch.(Clement).
- SINGAPORE:** Radio Singapore International 9590 via Kranji f/d "Raffles Place" cd in 49 ds. w/ schedule, stickers and a note pad.(Humenyk).
- SOMALILAND REPUBLIC:** Radio Hargeisa 7530 p/d "Studio" cd. w/ f/d prepared cd., signed and stamped, in 6 ds. for 2 IRCs from the Somaliland Consulate in Germany. I also sent along a taped rpt.(Maroti-NY).
- SOUTH AFRICA:** Radio Canada International 11850 via Meyerton f/d "1973 World Friendship Year" cd. in 3 wks.(Craighead-KS). United Nations Radio 21490

**RIO MUNI:** Radio Africa 15185 f/d cd. in 1 mo. for SASE to the CA addr. (Glottzbach)...I've seen this as Bata and Malabo. Anyone got anything definite?...Sam.

**ROMANIA:** Radio Romania International 15390 f/d "Emil Cioran" cd. in 56 ds. w/ schedule.(Humenyk-ONT). 11830 f/d cd. w/ personal ltr., schedule and sticker in 54 ds.(Glottzbach).

**RUSSIA:** Radiostantsya Chechnya Svo-bodnaya 12045 very professional looking numbered rpt. rcvd. in response to an e-mail rpt. v/s Mikhail Timofeyev. This took 10 ds.(Martin-GA).

**SAIPAN:** Voice of America 13625 f/d "Morocco Site" cd. in 48 ds. (Neal-TX). (D'Angelo-PA)

*Henry Weissbarn*

WE ARE PLEASED TO VERIFY YOUR RECEPTION OF OUR STATION

ON January 1, 1997 (DATE)AT 2322-2856 GMTIN THE 31 METER BANDON THE FREQUENCY OF 9.725 MHz

WE THANK YOU FOR YOUR INTEREST IN OUR AND YOUR CONTINUED GOVERNMENTING RADIO

PROF. FASANO 3379 - 878 - 8159  
ADVISED BY 332312125 - 12  
P.O. BOX 1177, ALABAMA, COASTAL AREA  
CENTRAL AMERICAN  
PAN AMERICAN



QSL

**Certificado de Sintonia**Emisora Radio Metropolitana (cp 145), La Paz, BoliviaA Sr. Richard A. D'AngeloMuchas gracias por su informe de recepcion. Tenemos el gusto de confirmar su control de nuestra emision en 8.195 Kc de fecha 20 de marzo de 1993a las 09:06 a 09:45 horas de UTC con 10,000 vatios de potencia.

La Paz Enero 04 de 2001.

*[Signature]*  
Juan Carlos Obitias  
Membres del personal de frecuencia MT

*Metropolitana*

via Meyerton f/d "UN Logo" green cd. in 25 ds. w/ schedule.(Humenyk-ONT). African Beacon 11640 via SENTECH in Meyerton f/d cd. w/ schedule in 123 ds. v/s Kathy Otto (Glottzbach-NM).

**SOUTH AMERICAN (Pirate):** Radio Torenvalk 11440 via Radio Cochiquaz f/d "Comic" sheet QSL w/ station sticker in 44 ds.(Kusalik-ALB).

**SPAIN:** Radio Exterior de Espana 15160 via Noblejas f/d "Logo" cd. in 32 ds. w/ sticker and schedule.(Humenyk).

**SRI LANKA:** Voice of America 17685 via Iranawila f/d "Morocco" cd. in 80 ds.(D'Angelo). 15250 same cd. in 53 ds. for an e-mail rpt.(Stewart-MO). 15305 f/d "Rigger on the Thai Antenna Site" cd. in 35 ds.(Brouillette-IL). 7115 f/d cd. in 327 ds.(Glottzbach). Deutsche Welle 17810 via Trincomalee f/d "Potsdamer Place" cd. in 135 ds.(Humenyk-ONT).

**SWEDEN:** Radio Sweden / TERACOM 9495 and 15245 via Horby f/d cd. in 6 mo. after a f/up rpt. Schedule & a TERACOM T-shirt was rcvd. v/s Magnus Nilsson.(Kusalik). 9495 f/d cd. w/ personal note w/ sked. in 116 ds.(Glottzbach). 17505 and 17870 f/d "Warship Wasa" cd. w/

**RADIO AFRICA**  
P.O. BOX 851  
MALABO  
EQUATORIAL GUINEA



QSL CARD

George L. Glotzbach  
5 Herzada Court  
Santa FE, NM  
87505  
USA

schedule in 16 ds. v/s  
C. Adler. (Humenyk).

**TAIWAN:** WSHB 9875 f/d cd.  
in 93 ds. (Glotzbach-NM).  
WYFR 9955 f/d cd. w/  
schedule, calendar, news  
ltr. and bookmark in 25  
ds. (Glotzbach).

**THAILAND:** Radio Thailand  
13695 via Udorn Thani  
f/d "Vase" cd. in 47 ds.  
for 1 IRC. This and Sri  
Lanka makes two new C/V  
for me. (Brouillette-IL).  
13695 same cd. in 37 ds.  
(Borokowski-NY).

**TURKEY:** Voice of Turkey 6020 via Emirler f/d "Ram's Head" cd. in 37  
ds. w/ schedule and sticker. (Humenyk). 17815 f/d "Turkish Souvenir"  
cd. in 5 wks. for \$1.00. Schedule and sticker rcvd. (Sgrulletta-NY)

**USA:** Voice of Greece 17565 via Greenville f/d cd. w/ schedule in 49  
ds. (Glotzbach-NM).

THANK YOU FOR YOUR RECEPTION REPORT OF:  
Frequency/Meter Band: 15185 kHz  
Date: December 26, 2000  
Time: 2025 UTC



**RADIO AFRICA:** 7190kHz & 15190kHz / Daily 1700-2300 UTC  
**RADIO EAST AFRICA:** 15190kHz / Sat & Sun 0700-1600 UTC  
**RADIO AFRICA #2:** 15190kHz / Mon - Fri 0800-1300 UTC

FOR INFORMATION AND PROGRAM SCHEDULE  
WRITE:

PAN AMERICAN BROADCASTING  
20410 TOWN CENTER LANE, SUITE 200  
CUPERTINO, CALIFORNIA 95014 USA



**WWBS** 11900 personal  
ltr. and certificate  
in 487 ds. (Glotzbach).  
**Pirating with Cumbre**  
5745 via WHRI f/d cd.  
in 1 mo. v/s Chris  
Lobdell. (Field-MI).  
**BBC** 9590 via WYFR f/d  
"Logo" cd. in 13 ds.  
for \$1.00. (Borokow-  
ski-NY).

**UZBEKISTAN:** Radio Neder-  
lands 12070 via Tash-  
kent f/d "Deer Close

to Hilversum's Wasmeer" cd. in 33 ds. (Humenyk). Radio Tashkent 9715  
cd. w/ schedule and a personal ltr. in 303 ds. (Glotzbach-NM).

**VATICAN:** Radio Vatican 5880 f/d "Marconi w/ Pope Pius XI" cd. w/ sked.  
and stickers in 55 ds. (Glotzbach-NM).

**VENEZUELA:** Radio Nacional de Venezuela 9540 cd. in SP w/ schedule, in-  
fo history sheet and station greetings in 231 ds. (Glotzbach-NM).

**VIETNAM:** Yen Bai Broadcasting  
Station 6346 f/d cd. w/ greet-  
ing cd., frequency list and  
program guide in 94 ds. (Glot-  
zbach-NM).

**ZANZIBAR:** Radio Tanzania Zanzi-  
\* bar 11734.1 f/d prepared cd.  
in 41 ds. after a f/up rpt.  
in 1 yr. My rpt. was sent  
by a contact in Zanzibar to  
and from the station. (Kusa-  
lik-ALB).

**TOWER RADIO**  
the biggest pirate  
station  
via  
Sgrulletta

HELLO WE ARE TOWER RADIO FROM HOLLAND. WE STARTED ON DECEMBER  
3000 WITH A TESTPROGRAM ON 6295 KHZ AND 80 WATT FOR 3 YEARS WE  
WERE BROADCASTING ON FM BUT IT'S DIFFICULT WITH THE LOCAL POLICE  
SO NOW WE CHANGED TO A DIFFERENT FREQ. THE SHORT WAVE.  
OUR NAMES ARE: ROBBIE, RENE, LITTLE RICKY AND HAROLD. WE LIVE IN A  
SMALL FARMER CITY CALLED MARKELO. IT'S VERY NICE HERE. MANY  
TOURISME IN THE HOLIDAYS. WE HAVE MANY FORREST AND CAMPINGS. WE  
LIVE HERE WITH 7500 PEOPLE. MARKELO HAS A BIG TV AND RADIOTOWER  
ABOUT 150 M HIGH FOR THE LEGAL TV AND RADIO FREQ. SO OUR NAME:  
"TOWER RADIO".  
TAKE CARE 73'S ROBBIE, RENE, LITTLE RICKY, HAROLD. TOWER RADIO

TX: RHOCE EU SOLAR SK 10  
ANT: 1/2 WAVELET V  
POWER: 1500  
AMPLIFIER: 1 X Q.B. 3.200  
MODULATOR: 2 X Q.B. 4/1100

Thanks everyone.  
So far its been  
one heck of a ride.  
Sam

# Contributors' Page

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

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DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA	NRD-545 AOR AR-7030 100' LW
Ralph BRANDI, Tinton Falls, NJ	AOR AR-7030, R8, 250' longwire
Paul BROUILLETTE, Geneva, IL	Drake R8, ICF2010, 60' long wire
Peter COSTELLO, Matawan, NJ	AR3030 DX-390 YB400 70' LW Tun-4A
Wendel CRAIGHEAD, Prarie Village, KS	Drake SPR4, Sloper
Rich D'ANGELO, Wyomissing, PA	Drake R8B, Lowe HF-150, DX Sloper
Marlin FIELD, Hillsdale, MI	NRD-535D, Eavesdropper ant
Mark FINE, Remington, VA	Drake R8A, 150' longwire
Bob FRASER, Cohasset, MA	Sony ICF-2003 ICF-SW100S 2m LW
Mark HUMENYK, Weston ONT	Magnavox D-2935 AN-60 DX SWL sloper
Fred KOHLBRENNER, Lansdowne, PA	Drake R8
Brian LIMBACH, Pittsburgh, PA	Kenwood R-5000, ATS-909, Sony AN1 ant
Jerry LINEBACK, Scranton, KS	Icom 746 beverage antennas
David M MARTIN, MD, Atlanta, GS	RX-320, Eavesdropper trap dipole
Bob MONTGOMERY, Levittown, PS	NRD535D, R390A, T2FD and active antennas
Gary NEAL, Sugarland, TX	Grundig YB-400
Ed NEWBURY, Kimball, NE	WJ-1000, R8, 60' sloper, 20' loop
Takayuki Inoue NOZAKI, Tokyo, JAPAN	NRD515 NRD535 FRG7000
Mike PACE, Tipton, IA	Drake SW2, MFJ1022
Sheryl PASZKIEWICZ, Manitowoc, WI	Sony 2010
Wally RHYNE, Gastonia, NC	R8B, ICOM71A, ICF2010, longwire ant.
George UHLER, Brookings, OR	DX440, 330' loop ant. on ground

Tax season over and now for spring time, fishing, and baseball. Nice warm weather around the corner. Still some good DX there if the sun would calm down. Some major solar flares this month really put a dent in DXing. Keep the loggings coming.

73

Bob Montgomery




# Tropical Band Loggings

Sheryl Paszkiewicz • 314 Riverview Drive, Apt 16 • Manitowoc, WI 54220 • spaszkievicz@yahoo.com

- 2310 AUSTRALIA ABC 3/28 1215 EG pops, poor (Line-KS)  
 2325 AUSTRALIA ABC 4/8 1208 EG pops, fair (Line-KS)  
 2410 NEW GUINEA Radio Enga 4/8 1159 local mx, poor (Line-KS)  
 2485 AUSTRALIA ABC 4/8 1208 EG pops, poor (Line-KS)  
 3172.6 PERU R Municipal 4/8 1056 Andean ballads, fair (Line-KS)  
 3205 NEW GUINEA R Sandaun 4/8 1158 OM in lang w/closing anmts, good (Line-KS)  
 3215 SULAWESI RRI Manado 3/27 1157 Indo pops, poor (Line-KS)  
 3220 ECUADOR HCJB 4/6 1025 Andean music, good (Line-KS)  
 3220 NEW GUINEA Radio Morobe 4/8 1157 lang pops, fair (Line-KS)  
 3235 NEW BRITAIN Radio West 4/8 1200 lang singing under ute (Line-KS)  
 \*3260 USA United Patriot Radio 3/31 0408\* Steve Anderson with Kentucky State Militia contact info, asked for donations (D'An-PA) Kentucky State Militia R, 3/17 0404\* info abt training sessions, militia lists, ID (D'An-PA)  
 3265 SULAWESI RRI Gorontalo 4/6 1146 YL in IN, fair (Line-KS)  
 3275 PAPUA R S Highlands 1201 local mx, fair (Line-KS)  
 3279.6 ECUADOR LV del Napo 4/6 \*0901 lively vocals, ID, anmts, long talk (D'An-PA)  
 3290 PAPUA R Central 3/28 1148 EG pops, EG nx 1200, C&W (Line-KS)  
 3300 GUATEMALA R Cultural 3/22 0420 EG Insight for Living pgm, ID, into SP (Kohl-PA)  
 3315 ADMIRALTY ISL R Manus 4/6 1156 lang pops, good (Line-KS)  
 3325 GUATEMALA R Maya 4/6 1024 ID, SP talk, ballads (Line-KS)  
 3325 KALIMANTAN RRI Palangkaraya 4/8 1207 RRI nx //others (Line-KS)  
 3335 TAIWAN CBS 4/5 1155 YL in CH, poor (Line-KS)  
 3345 MOLUCCAS RRI Ternate 4/8 1205 RRI nx, fair (Line-KS)  
 3355 NEW GUINEA R Simbu 4/5 1155 lang pops, good (Line-KS)  
 3365 NEW GUINEA R Milne Bay 4/5 1154 YL in lang (Line-KS)  
 3375 NEW GUINEA R W Highlands 4/5 1153 EG pops, good (Line-KS)  
 3375.1t PERU R San Antonio 4/10 0940 jingles, Peruvian mx, noisy, talks (Mont)  
 3385 NEW BRITAIN Radio East 4/2 1147 OM in lang, poor (Line-KS)  
 3905 NEW IRELAND R New Ireland 3/28 1153 lang pops, (Line-KS)  
 3959 SULAWESI RRI Palu 4/2 1155 Indo pops, poor (Line-KS)  
 3976 KALIMANTAN RRI Pontianak 4/2 1154 Indo pops, poor (Line-KS)  
 4000.1 SULAWESI RRI Kendari 4/2 1154 Indo pops, good (Line-KS)  
 4052.5 GUATEMALA R Verdad 4/01 0042 anmts, soft mx, poss organ mx, anmts & NA (Mont-PA)  
 4388.9 PERU R Imperio 3/20 0915 sev Tcs, seemed to be rel sermon (Kohl-PA)  
 4421 PERU R Frecuencia Lider 3/28 1015 continuous Andean vocals, brief talk by child, ID 1031, back to mx (Kohl-PA)  
 4606 IRIAN JAYA RRI Serui 4/5 1205 RRI nx, good (Line-KS)  
 4716.7 BOLIVIA Radio Yura 4/13 0032 mentions Yura, lots of talk, ID 0044 (Bran-NJ)  
 4725 MYANMAR R Myanmar 4/5 1203 YL in pres Burmese (Bamar) (Line-KS)  
 4753.3 SULAWESI RRI Makassar 4/8 1205 RRI nx, good (Line-KS)  
 4760 KASHMIR AIR Leh 4/6 1214 subcont mx, poor (Line-KS)  
 4760 LIBERIA ELWA 4/6 0645 Back to the Bible, TC, ad for Microsoft software from computer store in Monrovia (Bran-NJ) 3/23 0606 EG rel pgm with an Afr accented preacher. 0630 Back to the Bible (Kohl-PA)  
 4775 PERU R Tarma 3/28 1005 Andean vocals, man with ID 1008 (Kohl-PA)

- 4775 SWAZILAND TWR 3/22 0337 IS, IDs in EG, into lang (Bran-NJ) 4/9 0410 GM rel pgm & music (Mart-GA)
- 4789 IRIAN JAYA RRI *Fak-Fak* 4/8 1204 RRI nx, good (Line-KS)
- 4820 BOTSWANA R *Botswana* 3/20 0404 EG W reading nx, 0407 nx in Setswana by OM //7255 (Kohl-PA)
- 4824.4 PERU *LV de la Selva* 3/28 \*0955 chirping bird IS, Olympic movie fanfare mx, SP ID, anmts, NA, prayer, Andean mx (Kohl-PA)
- 4832 HONDURAS R *Litoral* 4/13 0010 great music, almost African sounding in spots, multiple IDs (Bran-NJ) I thot I hrd this too but couldn't ID-sp
- 4835 AUSTRALIA ABC 3/28 1103 pop mx, C&W, some EG talk (Kohl-PA)
- 4866.2 BRAZIL R *Missoes da Amazonia* 3/22 0848 rel pgm in PT, hymns, kids praying, poor (Kohl-PA)
- 4890 PAPUA *Karai* R 4/5 EG pops, good (Line-KS)
- 4895 SARAWAK R *Malaysia* 4/5 1215 local pops, poor (Line-KS)
- 4915 GHANA GBC 4/6 2245 talk in EG/Hausa, calypso mx (Mart-GA)
- 4925 SUMATRA RRI *Jambi* 4/8 1204 RRI nx, poor (Line-KS)
- 4950 ANGOLA R *Nacional* 4/12 0458 PT nx, Ids, music, canned ID with ment Angola (Bran-NJ)
- 4955 PERU R *Cultural* 4/6 1003 rooster crowing, rustic vocals, ID (D'An-PA)
- 4965 ZAMBIA *Christian Voice* 4/8 2340 weak, speech poor but mx audible, upbeat rel mx & EG anmts (Mart-GA)
- 5005 CUBA R *Rebelde* 3/26 0302 Cuban music, IDs for Rebelde, Progreso & Taino, back on 5025 at 0520 recheck (Bran-NJ) 3/26 0452 mx & talks switched to 5025 at 0501 (D'An-PA)
- 5010 HONDURAS R *MI* 3/21 0432\* man w/IMF World Mission pgm (D'An-PA)
- 5015 BRAZIL *unid* 3/23 0437 PT rel pgm, soft vocals, echo anmt, hrd "Radio..." But rest was inaudible, mx from The Mission movie, ment Brazil (Kohl PA)
- 5025 BENIN R *Parakou* 3/21 2130 FR radio drama, Afr pop mx, ID 2238, NA (Bran-NJ)
- 5100 LIBERIA R *Liberia* 4/6 2245 regional mx, EG nx 2230 (Mart-GA)

Going back a couple months, I remember we listed 4800 Radio Oriental as Peru. This should, of course, be Ecuador. Sorry about the confusion—I'm supposed to catch this stuff! 

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**FOR SALE:** "Passport to World Band Radio" '97, \$7. WRTH '97, \$10, 2000 \$18. Complete NASWA Journals '99 \$15; 2000 \$17. Perry Ferrell's Guides: RTTY Freqs. 2nd Edit. \$5; Confidential Freq. Lists, 5th edit. \$5; 6th edit. \$10; 7th edit. \$12. All items include shipping (overseas shipping extra). Cashiers check or money order only, please. Al Drehmann 389 Laurel Heights Lane, Tryon, NC 28782. E-mail <Adrehman@juno.com> Phone 828 894-3398. No collect calls, please

# International Band Loggings


Wallace C. Treibel • 357 N.E. 149th Street • Seattle, WA 98155 • nwhikers@uwest.net

- 5930 SLOVAKIA R *Slovakia Int* in EG 0100, ID, political nx, rpt on Macedonia, g (McGuire MD 3/21)
- 59539 COSTA RICA R *Casino* in SP 1050, LA mx, ID 1100, p w/splatter from WYFR (Alexander PA 3/18)
- 5985 CONGO RTV *Congo Brazzaville* in FR 2249\*, Afro vcls, ID's at s/off, f (Kohlbrener PA 4/3)
- 60499 NIGERIA R *Nigeria Ibadan* in EG 2115, tlk, nx, IS, multiple ID's (Brandi NJ 4/13)
- 6055 RWANDA R *Rwanda* in EG/FR 2045-2059\*, western pops, ID's, fqys, NA, test tone (Brandi 4/13)
- 6060 ARGENTINA R *Nacional* in SP 0953, ID by children at t/in, TC's, nx, p (Kohlbrener PA 3/20)
- 60899 CHILE R *Esperanza* in SP 0913, religious pgm, hymns, ID's, f (Kohlbrener PA 3/28)
- 6130 CANADA CHNX Halifax in EG 0820, local wx rpt, promos, oldies rock, g (Costello NJ 4/1)
- 6150 BRAZIL R *Record* in PT 2311-2355, lively tlk, mx, sports coverage, //9505 (Kohlbrener PA 3/21)
- 6265 ZAMBIA *Zambia NBC* in Vern 0253, choral rendition of NA, tlk, ID in EG amid lengthy list of FM fqys, relig mx (Brandi NJ 3/17, Martin GA 4/9)
- 6304v nf PERU R *Union* in PS 0410-0600+, tlks, phone interview, ID, LA mx, SP pop mx (Alexander 3/24)  
ED: Is this possibly a move from listed 6115?
- 64797 PERU R *Altura Huarmaca* in SP 1110, rustic OA folklores, tlk, clear ID, f (Nozaki JP 4/14)
- 6536 PERU R *Dif Huancabamba* in SP 1120, "Amanecer Andino" pgm w/nice folklore mx, ID & TC 1130 (Nozaki JP 4/14)
- 7105 UZBEKISTAN R *Tashkent* in lang? 0030, nx, ID, tlk, soft jazz, abruptly off 0100 (Martin GA 4/9)
- 7110 TUNISIA R *Tunis* in AR 0456, AR vcls, strings, drums, exc signal, //9720, 7275 (Costello NJ 3/31)
- 7110 ETHIOPIA R *Ethiopia Addis Ababa* in Amheric? \*0259, ID's, nx, local mx, p (Kohlbrener PA 4/5)
- 7125 GUINEA RTV *Guinea* in FR \*0557, IS, NA, ID, into AR 0603 w/Koran prayers (Kohlbrener 3/28) in FR 2342-0002\*, nice hilife vocals, ID, ancmts, orchestra NA, f-g (D'Angelo PA 3/25)
- 7210 BELARUS R *Minsk* in EG 0200, ID's, QTH, nx, ad, E-mail address, request to donate blood, mx, slight fading and flutter but strong signal (Montgomery PA 4/1)
- 7255 NIGERIA V O *Nigeria* in EG 2200, "Nigerian Composers", scholarly tlk re relig piece w/commentary matched to the corresponding musical passages, s/off 2300 (Martin GA 4/6)
- 7305 VATICAN CITY *Vatican R* in EG 2246, nx from the Vatican, message by the Pope (Humenyk ONT)
- 7325 AUSTRIA RAI *Vienna* in EG 0230, waltz mx, ID, rpt on European Union, g (McGuire MD 3/20)
- 7500 BULGARIA R *Bulgaria* in EG 2008, nx abt opposition party, econ nx, //7200, f (Humenyk ONT)
- 9445 TURKEY V of *Turkey* in TK \*2159, instrum'l mx, pips, ID, nx, //9460, g (Humenyk ONT)
- 9505 JAPAN R *Japan Tokyo* in EG \*1400, rpt on Japan earthquake, PM visits Russia (Newbury NE 3/24)
- 9520 PHILIPPINES R *Veritas Asia* in EG/CH 0950, pop mx from the 60's and 70's, trumpet fanfare 0959 followed by EG ID, fqys, sked, bells 1001, into CH pgmg, f (Kohlbrener PA 4/3)
- 9530 RUSSIA R *Rosii* Magadan in RS 0700, mx, cmntry, ID, ID, g (Uhler OR 3/26)
- 9545 GERMANY *Deut Welle Wertachtel* in GM \*2200, fqy, sked, IS, ID, nx, g (McGuire MD 3/16)
- 9560 HUNGARY R *Budapest* in EG \*0100, IS, ID, "Europe Unlimited" pgm, g (McGuire MD 4/2)
- 9580 AUSTRALIA R *Australia* in EG 1115, "Asia Pacific" pgm, problems of Taiwan's new president, //13605, g (Fraser MA 3/19)
- 9600 SINGAPORE R *Singapore Int* in EG \*1100, nx, ID, "Spin the Globe" w/musical selections from around the world (Martin GA 4/7)
- 9635 COLOMBIA RN de *Colombia* in SP 0155, LA mx, ID 0220, fqy, audio distorted (Brandi NJ 4/1)
- 9650 CANADA R *Korea* relay in EG 1130, ID, fqy, sked, nx, cmntry (McGuire MD 3/16, Pace IA 3/20)
- 9655 TURKEY V of *Turkey* Ankara in EG 2300, IS, pips, ID, fqy, sked, national nx (McGuire MD 3/6) in EG 0418, "Impressions of Turkey" pgm (Limbach PA)
- 9665 MOLDOVA V of *Russia* relay in EG 0400, IS, ID, rpt on Milosevic, "Woman to Woman" interview, // on 11750 but weaker signal (McGuire MD 4/2, Costello NJ 3/31)
- 9675 PAPUA NEW GUINEA *NBC* Port Moresby in EG 0914, rpt on mental disorder problems in PNG & other features, p-f (D'Angelo PA 4/6)
- 9675 PERU R *del Pacifica* Lima in SP 0946, faded up and over PNG w/religious tlks, instrumental mx, ID 0959, f (D'Angelo PA 4/6)
- 9705 MEXICO *RMI* in EG 0458, ID, sked, tlk on history of postcards in Mexico (Kohlbrener PA 3/21)
- 9730 SINGAPORE R *Australia* relay in Cambodian \*2300, s/off with "Waltzing Matilda", bad QRM from Dr. Gene Scott's Costa Rican relay on 9725 (Field MI 4/8)

- 9760 OMAN *R Sultanate of Oman* in AR \*2300, AR mx, chimes, ID, regional nx, g (McGuire MD 3/16)
- 9765 GERMANY *Deut Welle* in EG \*2100, IS, ID, rpt on Russian plane hijacking, g (McGuire MD 3/15)
- 9765nf VATICAN CITY *V of Russia* relay in EG 0203, nx, "Commonwealth Update" (Neal TX 3/23)
- 9770 EGYPT *R Cairo* in AR 0417, chanting with slightly better signal on //12050 (Costello NJ 3/31)
- 9775 RUSSIA *V of Russia* Serpukov in EG 1925, "Commonwealth Update", //9890 (Fraser MA 3/13)
- 9875nf LITHUANIA *R Vilnius* in Lith/EG 2353-0100\*, brief EG ID before start of Lithuanian xmsn at 0000, full ID prior to EG xmsn at 0030, tlk on agricultural land ownership (D'Angelo PA, Newbury NE)
- 9885 THAILAND *R Thailand* in EG \*1230, regional mx, nx feature on health issues (Martin GA 4/7)
- 9925 GERMANY *Croatian R* relay Juelich 2343, pop mx w/no introductions between sels, no tlk, exc sig beamcd to NE USA (Costello NJ 4/10)
- 9965 ARMENIA *V of Armenia* Yerevan in EG 2040, NA, ID, fqy, lovely folk song, g (Robinson TN 3/15)
- 10320usb HAWAII *AFN* relay Pearl Harbor in EG 0500, ID, nx, usual AFN pgmg, exc (Uhler OR 3/24)
- 109425usb ITALY *AFN* relay Sionella still transmitting via this fqy even tho the US Navy was requested by the Italian Environmental Ministry to pull the plug on their xmts located near Naples (Costello NJ 4/15)
- 11585 ISRAEL *Kol Israel* Tel Aviv in HB 0121, EG pop songs, call-ins, exc, //9345 better (Costello NJ 4/2)
- 11600 CZECH REPUBLIC *R Prague* in EG 0434-0457\*, feature called "Czech Spotlight" (Limbach PA)
- 11655 MADAGASCAR *R Nederlands* relay in EG 1915, "A Good Life", QRM Qatar (Fraser MA 3/13)
- 11660 FRENCH GUIANA *Swiss R Int* relay in EG, ID, political nx, rpt on art exhibit (McGuire MD 3/15)
- 11675 NEW ZEALAND *RNZI* in EG 0801, "Sounds Historical" feature, QRM splatter (Costello NJ 4/1)
- 11675 CHINA *China R Int* Kunming in EG 1215, tlk on China and WTO, f-p (Rhyne NC 3/15)
- 117341v TANZANIA *RT Zanzibar* in SH 1815, African pops, AR-influenced taraab, Hindi film mx, many IDs nx at TOH, closing ancmt, NA 2100, no QRM from RCI s/on 11735 (Brandt NJ 3/29)
- 11765 USA *KNLS* Alaska in EG 0832-0859\*, tlk re impact of railroads on US life, feature on DX reception rpts, ID's, f (D'Angelo PA 4/6)
- 11800 ITALY *RAI* Rome in EG 0100, cmntry on Italian Renaissance exhibit in US, //9675, g (Fraser MA)
- 118052 GEORGIA *Georgian R* Tbilisi in EG 0532, sked, mx, ID, tlk re UN, QRM, audio mud (Fine VA 3/26)
- 11815 BRAZIL *R Brasil Central* in PT 2326, futebol scores, ID's, relig pgm, g (Brouillette IL 3/11)
- 11885 TURKEY *V of Turkey* Ankara in TK 0135, traditional and Western songs including one abt sneezing; //s on 9460, 9445, and 5980 all weaker or noisier (Costello NJ 4/2)
- 11895 FRENCH GUIANA *R Japan* relay in SP 0505, political and econ nx, rpt on Bank of Japan, ment of US president Bush, g (McGuire MD 3/20)
- 11895nf SWEDEN *R Sweden* in SW \*0300, IS, ID, fqys, sked, nx, //FM 99.6, g (McGuire MD 4/10)
- 11915 BRAZIL *R Gaucha* in PT 2343, local ads, futebol scores, ID's, wx rpt, lottery numbers, exc local traditional mx pgm on Sat nites, ezl listening with unusually strong signal (Brouillette IL 3/24)
- 11925 BRAZIL *R Bandeirantes* in PT 0007, accordion mx, low key DJ, local events (Brouillette IL 3/11)
- 11940 ROMANIA *R Bucharest* in EG 2300, IS, ID, fqy, sked, political nx, cmntry, g (McGuire MD 3/15)
- 11970 SOUTH AFRICA *AWR Voice of Hope* relay in EG \*0530, mx, pgm on health, ID (Rhyne NC 3/14)
- 11975 SAO TOME *VOA* relay in EG 2009, wx rpt, rpt on HIV, p, //13710 Botswana, 15580 (Brown 2/9)
- 11990 HUNGARY *R Budapest* in HG 2345, YL interviewing senior citizens, ID (Brouillette IL 3/18)
- 12000nf PORTUGAL *Deut Welle* relay in GM 2230, ID, rpt on Macedonia, g (McGuire MD 3/20) in GM 0003, nx summary, IS (Brouillette IL 3/11)
- 12010 RUSSIA *V of Russia* Samara in PT \*0000, ID as "Fala Moscou", 1 hr xmsn daily (Brouillette IL 3/11)
- 120196 VIETNAM *V of Vietnam* Hanoi in EG 1000, nx, cmntry, ID, g, //98395 (Alexander PA 3/9) in EG 2330, political cmntry, tlk re Vietnam-Cuba relations (Martin GA 4/6) in EG 2341, current affairs with Cold War presentation, pop mx, vg (Brouillette IL 3/10) in EG 2350, ID 2348, into mx, OM anc trnx listeners and invites them to tune in again, weak but audible sig, some flutter (Montgomery PA 4/1)
- 12050 EGYPT *R Cairo* in AR 2336, nx summary, ID, exc sig and even clean audio! (Brouillette IL 3/10)
- 12060 MADAGASCAR *R Voice of Hope* relay in EG 0520-0056\*, cmntry re war in the Sudan, ID 0521, //15320 (Martin GA 4/7)
- 12060 RUSSIA *V of Russia* Volograd in SP 2350, station QTH, IS, ID, national nx, g (McGuire MD 3/30)
- 120649 PHILIPPINES *FEB* Manila in IN 2300, ID, fqy, postal address in EG prior to IN xmsn (Martin 4/8)
- 12085 SYRIA *R Damascus* in EG 2015, nx, AR-type mx, f (McGuire MD 3/16) in SP 2320, local mx, ID, Big Ben style chimes, nx (Brouillette IL 3/10)
- 12085 MONGOLIA *V of Mongolia* Ulan Bator in EG 1020, IS 1029, pgm on woman's issues, several vcls, article re river basin region, ID, sked (Kohlbrener PA 3/28, Martin GA 4/7) Both rptd poor signals.
- 13640 MADAGASCAR *R Canada Int* relay in EG 1810, "Maple Leaf Mailbag", DX pgm (Fraser MA 3/18)
- 13675 UNITED ARAB EMIRATES *R Dubai* in AR/EG 0321, regional nx in AR, into EG xmsn 0330, nx, exc, //15400 (Costello NJ 4/5) in EG 0330, ID, rpt on hijacking, wx fcst, g (McGuire MD 3/16)

- 15125 **INDONESIA RRI** Jakarta in IN 1030, mx mix, relig sounding discussion, frequent ment "Indonesia", pop records, Spice Girls, No Mercy, Back Street Boys etc. (Martin GA 4/8)
- 15135 **RWANDA Deut Welle** relay Kigali in EG 1925, billboard, rpt on Togo, //11810 (Humenyk ONT)
- 15205 **PHILIPPINES VOA** relay Tinang in IN 2330, then into pgm in special EG, g (Brouillette IL 3/5)
- 15240 **AUSTRALIA R Australia** in EG 0715, cmntry on US military in Guam, ID (Uhler OR 3/26)
- 15330 **GUAM KTWR** in EG 0828, QTH in Australia, relig pgm, weak sig but intelligible (Brandi NJ 3/29)
- 15355 **OMAN R Sultanate of Oman** in EG/AR 0300-0357\*, nx in EG, AR & western pop mx, ID, Koran, TP (Martin GA 4/3, Alexander PA 3/10)
- 15375 **CHILE Voz Cristiana** Santiago in SP 0445, hymns, relig tlk, //11745, 11690 (Kohlbrenner PA 3/21)
- 15400 **FINLAND R Finland** in EG 1335, "Capita Café" - rpt on Swedish films, //17660 (Fraser MA 3/10)
- 15425 **SRI LANKA SLBC** in EG \*0027-0105, IS, NA(p), ID, fqy, sked, "Our Thought for Today", thanks to listeners for their Easter cards, "Early Bird" mx pgm, //9770 (Kohlbrenner PA 4/4, Neal TX 3/16)
- 154559v **PAKISTAN R Pakistan** in EG/Assamese? 0050-0145, nx in EG at toh, traditional mx, long tlks in language, ID at 0145, weak sig, poor modulation, //116496 (Montgomery PA 4/3, Fine VA 4/3)
- 15495 **KUWAIT R Kuwait** in AR 2325, reading listeners' mail, AR mx in background, vg (Brouillette 3/3)
- 15650 **ISRAEL Kol Israel** Tel Aviv in EG 2013, Knesset votes no on new budget, //9435 (Fraser MA 3/13)
- 15725 **USA WRMI** Miami in EG 2145, prgming of Genesis Comm. R Network (Brouillette IL)
- 17605 **NETHERLANDS ANTILLES R Nederland** relay Bonaire in EG 1858, "Newsline", ID, station QTH, pips, TC, f (McGuire MD 3/16)
- 17605 **FRANCE R France Int** in EG 1612, nx re Hebron bomb blast, Macedonians claim victory against the Albanians, g (Newbury NE 3/27)
- 17680nf **SWITZERLAND SRI** Sottens in FR 1530, IS, ID, cmntry, s/off 1600 (Treibel WA 3/25)
- 17775 **UZBEKISTAN R Tashkent** in EG 1200, nx, ID, mailbag, feature on Islam issues (Martin GA 4/7)
- 18960 **SWEDEN R Sweden** in EG 1430, "60 degrees North", medical nx, overweight children, Jewish museum in Stockholm, exc (Robinson TN 3/15)
- 21455 **ECUADOR HCJB** Quito in EG 2128, singing, "Did You Hear" pgm (Neal TX 3/24) Only 500 watts
- 21520 **ITALY RAI** Rome in IT 1407, Calcio Italia, live soccer match, //21710, 21535 (Humenyk ONT)
- 21605 **UNITED ARAB EMIRATES R Dubai** in EG 1330, ID, wx rpt (blowing sands), tlk abt conservative Muslim legal school, exc (Robinson TN 3/15)
- 21615 **NORTHERN MARIANAS R Australia** relay via Tinian Island in EG 0030\*, end of daily 1/2 hour bcst with familiar "Waltzing Matilda", hrd only occasionally in Michigan (Field MI 4/9-11)
- 21680nf **AUSTRALIA Christian Voice R** via Darwin relay in EG 0122, tlk, mx at 0130 identical to that used on other Christian Voice stations like Zambia on 4965, p (Brandi NJ 4/4) in EG 0415, Christian mx, tlk by wife of Olympic weight-lifting gold medal winner, ID (Craighead KS 3/29) in EG 0330 with religious mx, jingles, weak sig (Montgomery PA 4/3) ED: Listed xmsn hrs from 0000-0900 with // on 17775 from 0000-0300.
- 21725 **SOUTH AFRICA Channel Africa** in EG 1425, ID, mx, "Dave Brubek, Take 5", fair sig with slight echo at times and flutter, off at 1454 w/IS (Montgomery PA 4/1)
- 21730 **IRAN VOIRI** Sirjan in EG 1110, political cmntry, story abt celebration of the anniversary of the death of an Islamic martyr, nx headlines from Iranian newspapers (Martin GA 4/7)
- 21745 **CZECH REPUBLIC R Prague** in EG 1400, tlk on Roma persecution and Czech secondary schools, vg (Robinson TN 3/15)

### Clandestine, Tentative, Presumed, or Unknown

- 6900 **TURKEY Turkish State Meteorological Radio**(p) 0420, tune in to continuous TK vcl mx, weak but in the clear (Alexander PA 3/31, Brandi NJ 3/18)
- 6995v **IRAQ V of the People of Kurdistan** in AR 0220, E-mail QTH, nx items, mx, f-g (Montgomery 4/1)
- 9495 **GERMANY Democratic V of Burma** relay Juelich in lang? 0010-0030\*, long tlks, brief mx segments, nice ID 0025 and Norway addr, YL vocal, g (D'Angelo PA 3/31) ED: Listed daily \*2330-0030 s/off.
- 9635 **COLOMBIA R. Nacional**(p) in SP 0446-0501\*, ballads, guitar instrm'ts, NA (Kohlbrenner PA 3/22)
- 96653 **NORTH KOREA KCBS Pyongyang**(p) in KR 0929\*1, KR operatic mx, abrupt off (Kohlbrenner 3/22)
- 9935 **GREECE R Makedonias Thessaloniki**(p) in GK 2040, apparently still transmitting along with //7430, abrupt sign off 2050 altho listed s/off is 2300 (Costello NJ 4/14)
- 13254usb **UNKNOWN AFRTS/AFN** outlet at 2322 in EG, nx read by a man associated with USA Radio Net, into mx starting with Mama and Papa's "Monday, Monday, ID as AFN at 0000 (Costello NJ 4/15)
- 13795 **INDIA AIR Bangalore**(p) in lang? 1847, subcontinent mx, new fqy repl 13750?, barely audible due to RTTY QRM producing the sound like bubble jamming (Costello NJ 3/31) 

# English Schedules

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0000-0015	<b>Radio Japan</b>	6145.0na	13650.0pa	17810.0pa				
0000-0015	<b>V. of Cambodia</b>	11940.3as						
0000-0027	<b>Radio Prague Int'l</b>	7345.0na	11615.0na					
0000-0030	<b>BBC World Service</b>	3915.0as	5965.0as	5975.0am	6175.0na	6195.0as	7105.0as	
		9410.0me	9590.0am	9915.0sa	11945.0as	11955.0as	12095.0sa	
		15280.0as	15310.0as	15360.0as	17615.0as	17790.0as		
0000-0030	<b>Radio Cairo</b>	9900.0am						
0000-0030	<b>Radio Thailand</b>	9655.0af	9690.0af	11905.0af				
0000-0030	<b>Sri Lanka B'casting Corp.</b>	4940.0do						
0000-0030	<b>VDA</b>	7215.0as	9770.0as	11760.0as	15185.0as	15290.0as	17740.0as	
		17820.0as						
0000-0045	<b>All India Radio, Delhi</b>	9705.0as	9950.0as	11620.0as	13605.0as			
0000-0056	<b>Voice of Korea</b>	4405.0va	11460.6na	11710.0na	13760.0na	15180.0na		
0000-0057	<b>Radio Canada Int'l</b>	11895.0as						
0000-0100	<b>HCJB Quito Ecuador</b>	9745.0na	15115.0na	17660.0as	21455.0uf			
0000-0100	<b>KAIJ Dallas TX</b>	13815.0va						
0000-0100	<b>KTBN Salt Lake City UT</b>	15590.0na						
0000-0100	<b>Radio Australia</b>	9660.0pa	12080.0pa	15415.0as	15240.0as	17580.0va	17750.0as	
		17795.0va	21740.0va					
0000-0100	<b>Radio Ukraine Int'l</b>	5905.0eu	7320.0eu	9640.0eu	13590.0na			
0000-0100	<b>RTM Radio 4, Malaysia</b>	7295.0do						
0000-0100	<b>VDA</b>	5995.0am	6130.0am	7405.0am	9455.0am	9775.0am	11695.0am	
		13740.0am						
0000-0100	<b>WBCQ Monticello ME</b>	7415.0na	9335.0na					
0000-0100	<b>WRMI Miami FL</b>	9955.0sa						
0000-0100	<b>WWBS Macon GA</b>	11910.0uf						
0000-0100	<b>WWCR Nashville TN</b>	3215.0na	5070.0na	7435.0na	13845.0na			
0000-0100	<b>WWFV McCaysville GA</b>	5085.0uf	6890.0uf					
0000-0100	<b>WYFR Okeechobee FL</b>	6085.0na	9505.0na					
0000-0125	<b>Radio Netherlands</b>	6165.0na	9845.0na					
0000-0200	<b>Radio Exterior de España</b>	15385.0na						
0000-0200	<b>University Network</b>	9940.0as						
0000-0200	<b>WEWN Birmingham AL</b>	5825.0na	13615.0na					
0000-0200	<b>WSHB Cypress Creek SC</b>	7535.0af	9430.0am	15285.0sa				
0000-0230	<b>WINB Red Lion PA</b>	12160.0am						
0000-0300	<b>Christian Voice, Austr.</b>	17775.0pa	21680.0pa					
0000-0300	<b>Christian Voice, Zambia</b>	4965.0do						
0000-0300	<b>WRNO New Orleans LA</b>	7354.4va						
0000-0400	<b>KWHR Naalehu HI</b>	17510.0as						
0000-0500	<b>R. for Peace Int'l</b>	7450.0lr	15049.0va	21815.1uf				
0000-0500	<b>Radio New Zealand Int'l</b>	17675.0pa						
0000-0500	<b>SIBC Solomon Islands</b>	9545.0do						
0000-0500	<b>SIBC Solomon Islands</b>	5020.0do						
0000-0500	<b>WHRA Greenbush ME</b>	7580.0eu						
0000-0515	<b>CBC Northern Service</b>	9625.0do						
0000-0700	<b>Scandinavian Weekend R.</b>	11720.0va						
0000-0730	<b>Nat'l BC, Papua NG</b>	9675.0do	11880.0lr					
0000-0800	<b>NBC Windhoek, Namibia</b>	3270.0af	3290.0af	7215.0lr				
0000-0830	<b>ABC Alice Springs</b>	2310.0lr	4835.0do					
0000-0830	<b>ABC Katherine</b>	5025.0do						
0000-0830	<b>ABC Tennant Creek</b>	4910.0do						
0000-1000	<b>Caribbean Beacon</b>	6090.0am						
0000-1000	<b>Voice of Guyana</b>	3291.4do	5949.4do					
0000-1000	<b>WHRI Noblesville IN</b>	5745.0va	7315.0am					
0000-1000	<b>ZLXA New Zealand</b>	3935.0do	7290.0do					
0000-1100	<b>Radio Vanuatu</b>	3945.0do	4960.0do	7260.0do				
0000-1100	<b>SBC Radio 1, Singapore</b>	6150.0do						
0015-0100	<b>Radio Japan</b>	6145.0na						
0020-0030	<b>Kyrgyz Radio, Bishkek</b>	4010						
0030-0100	<b>BBC English Teaching</b>	9600.0as	17615.0as					
0030-0100	<b>BBC World Service</b>	5965.0as	5975.0am	6175.0na	6195.0as	7105.0as	9410.0me	
		9590.0am	9915.0sa	11955.0as	12095.0sa	15280.0as	15310.0as	
		15360.0as	17790.0as					
0030-0100	<b>Radio Thailand</b>	9655.0as	11905.0as	15395.0na				
0030-0100	<b>VDA Special English</b>	7215.0as	9770.0as	11760.0as	15185.0as	15290.0as	17740.0as	
		17820.0as						
0030-0130	<b>VOIRI Teheran</b>	9022.1am	9835.0am	11970.0am				
0030-0200	<b>Sri Lanka B'casting Corp.</b>	4940.0do	6005.0as	6075.0as	9770.0as	15425.0as		
0045-0115	<b>Radio Pakistan</b>	11649.6as	15456.0as					
0050-0056	<b>Int'l BC Tamil</b>	11570.0as						
0050-0110	<b>RAI, Rome</b>	9675.0na	11800.0na					
0100-0127	<b>Radio Prague Int'l</b>	5915.0na	7345.0na					
0100-0127	<b>Voice of Vietnam</b>	9525.0na						

0100-0130		Radio Budapest	9560.0na						
0100-0130		Radio Slovakia Int'l	5930.0na	6190.0ca	9440.0sa				
0100-0130		Radio Tashkent	7190.0as	9375.0as	9530.0as	9715.0as			
0100-0130	s	Universal Life, Germany	9435.0as						
0100-0130	twhfa	VOA	5995.0am	6130.0am	7405.0am	9455.0am	9775.0am	13740.0am	
0100-0145		Deutsche Welle	6040.0na	9640.0am	11810.0na	13720.0am			
0100-0156		China Radio Int'l	9570.0na						
0100-0156		Voice of Korea	3560.0va	11734.8va	15230.2va	17735.1va			
0100-0159		Radio Canada Int'l	5960.0am	9755.0am	13670.0am	15170.0am	15305.0am		
0100-0200		BBC World Service	5965.0as	5975.0am	6175.0na	6195.0as	9410.0as	9590.0am	
			9915.0sa	11955.0as	12095.0sa	15280.0as	15310.0as	15360.0as	
			17790.0as						
0100-0200		Radio Australia	9660.0pa	12080.0pa	15240.0as	15415.0as	17580.0va	17750.0as	
0100-0200		Radio Japan	17795.0va						
0100-0200		Swiss Radio Int'l	11860.0pa	11870.0me	11880.0me	15325.0as	17685.0pa	17810.0as	
0100-0200		VOA	17835.0sa	17845.0as					
			9885.0am						
			7115.0as	9635.0as	11705.0as	11725.0as	11820.0as	13650.0as	
			15250.0as	17740.0as	17820.0as				
0100-0200		Voice of Indonesia	9525.0as	11785.0as	15149.8as				
0100-0200		Voice of Russia	9665.0na	9725.0na	11825.0na	12000.0na	17595.0na		
0100-0200	sm	WRMI Miami FL	9955.0am						
0100-0200	twhfa	WRMI Miami FL	7385.0na						
0100-0200		WYFR Okeechobee FL	6065.0na	9505.0na	15060.0as				
0100-0230		KJES Vado NM	7555.0na						
0100-0330	s twhfa	WBCQ Monticello ME	9335.0na						
0100-0400		WWCR Nashville TN	3215.0na	5070.0na	5935.0na	7435.0na			
0100-0500		Radio Havana Cuba	6000.0na	9820.0na	11705.0uf				
0100-0600		HCJB Quito Ecuador	9745.0na	15115.0na	21455.0uf				
0100-0600		WBCQ Monticello ME	7415.0na						
0100-0700		WWFV McCaysville GA	3270.0uf	5085.0uf					
0100-1200		KALJ Dallas TX	5755.0va						
0100-1500		KTBN Salt Lake City UT	7510.0na						
0105-0110		Croatian Radio, Zagreb	9925.0ir						
0130-0145		Voice of Africa, Libya	11815.0af	15435.0af	17725.0af				
0130-0200		ORF Vienna	9870.0na						
0130-0200		Radio Sweden	13625.0as						
0130-0200		Radio Telefis Eireann	6155.0ca						
0130-0200	twhfa	VOA	5995.0am	6130.0am	9455.0am				
0130-0200	twhfa	VOA Special English	7405.0am	9775.0am	13740.0am				
0140-0200		Vatican Radio	9650.0au	12055.0au					
0145-0200		Radio Tirana, Albania	6115.0na	7160.0na					
0200-0210		Radio Bangladesh	4882.0as						
0200-0210	mtwhf	Voice of Greece	7475.0va	9420.0va	11645.0va	12105.0va			
0200-0230	sm w fa	Radio Minsk, Belarus	6070.0eu	7210.0eu					
0200-0230	a	Wales Radio Int'l	9795.0na						
0200-0245		Deutsche Welle	11965.0as	13720.0as	15370.0as				
0200-0245		Radio Iraq Int'l	7157.0ir	9684.0ir	11784.9ir				
0200-0256		Radio Romania Int'l	11940.0na	15105.0as	15180.0pa	15340.0na	17735.0as	17790.0pa	
0200-0256		Voice of Korea	11845.0va	13650.0va					
0200-0257		Radio Canada Int'l	15260.0as	17860.0as					
0200-0300		BBC World Service	5975.0am	6135.0am	6175.0na	6195.0eu	9410.0eu	9770.0af	
			9915.0sa	11955.0as	12095.0va	15280.0as	15310.0as	15360.0as	
			17790.0as						
0200-0300		Radio Bulgaria	9400.0na	11700.0na					
0200-0300		Radio Korea	7275.0as	11725.0sa	11810.0sa	15575.0na			
0200-0300		Radio Myanmar	7185.0do						
0200-0300		Radio Taipei Int'l	5950.0na	9680.0na	11740.0am	11825.0pa	15270.0as		
0200-0300	twhfa	RAE Buenos Aires	11710.0am						
0200-0300		VOA	7115.0as	9635.0as	11705.0as	11725.0as	11820.0as	13650.0as	
			15250.0as	17740.0as	17820.0as				
0200-0300		Voice of Russia	9665.0na	9725.0na	117595.0na				
0200-0300		WSHB Cypress Creek SC	5850.0al	7535.0am	9430.0na				
0200-0330		Radio Cairo	9475.0am						
0200-0400		WYFR Okeechobee FL	6065.0na	9505.0na					
0200-0430		Sri Lanka B'casting Corp.	6005.0as	6075.0as	6130.0do	9770.0as	15425.0as		
0200-0430		WRMI Miami FL	7385.0na						
0200-0700		Radio Australia	9660.0pa	12080.0pa	15240.0as	15415.0as	15515.0va	17580.0va	
			17750.0as	21725.0va					
0200-1000		WEWN Birmingham AL	5825.0na						
0200-2110		Kenya BC Corp	4935.0do						
0200-2400		RTM Radio 4, Malaysia	7295.0do						
0205-0210		Croatian Radio, Zagreb	9925.0ir						
0215-0220		Radio Nepal, Katmandu	5005.0as	7165.0as					
0230-0257		Voice of Vietnam	9525.0na						
0230-0300		Radio Budapest	9570.0na						
0230-0300		Radio Sweden	9495.0na	9755.0na					
0230-0300		Radio Tirana, Albania	6115.0na	7160.0na					
0230-0300		Swiss Radio Int'l	9885.0am						
0230-0300	sm f	WINB Red Lion PA	12160.0am						
0230-0330		Radio Pilipinas, Manila	11885.0pa	15120.0pa	15270.0pa				
0245-0300		BBC English Teaching	9610.0af						
0250-0310		Vatican Radio	7305.0am	9605.0am					
0250-2210		Zambia Nat'l BC Corp.	6165.0do	6265.0do					
0300-0327		Radio Prague Int'l	7345.0na	7385.0na	9870.0na				

0300-0330		<b>BBC World Service</b>	3255.0af 6195.0eu 12095.0me 17790.0as	5975.0am 7120.0af 15280.0as 21660.0as	6005.0af 7160.0af 15310.0as 21830.0as	6135.0am 9410.0eu 15360.0as	6175.0na 11730.0af 15575.0me	6190.0af 12035.0af 17760.0as
0300-0330		<b>Channel Africa, S. Africa</b>	6035.0af					
0300-0330		<b>Radio Thailand</b>	9655.0am	11905.0am	15395.0na			
0300-0330		<b>VOA</b>	5855.0af 9575.0af	6080.0af 9885.0af	7105.0af	7275.0af	7290.0af	7340.0af
0300-0345		<b>Deutsche Welle</b>	9535.0na	9640.0na	13780.0am	15105.0na		
0300-0356		<b>China Radio Int'l</b>	9690.0na					
0300-0400	mtwhf	<b>BBS, Bhutan</b>	5030.0al	6035.0do				
0300-0400	sm	<b>R. Luz y Vida, Honduras</b>	3250.0ca					
0300-0400		<b>Radio Japan</b>	17825.0ca	21610.0pa				
0300-0400		<b>Radio Sultanate Oman</b>	15355.0af					
0300-0400		<b>Radio Taipei Int'l</b>	5950.0na	9680.0na	11745.0as	11825.0as		
0300-0400		<b>Radio Ukraine Int'l</b>	7320.0eu	7410.0eu	9640.0eu	11840.0eu	13590.0na	
0300-0400		<b>Voice of Russia</b>	9665.0na	11750.0na	17565.0na	17650.0na	17660.0na	17690.0na
0300-0400		<b>Voice of Turkey</b>	7270.0af	11655.0va	21715.0as			
0300-0400	s	<b>WINB Red Lion PA</b>	12160.0am					
0300-0400		<b>WSHB Cypress Creek SC</b>	5850.0al	7535.0eu				
0300-0430		<b>Radio Cultural, Guatemala</b>	3300.0do	5955.0do				
0300-0530		<b>Zimbabwe BC Corp.</b>	4828.0do	6045.0do				
0300-0600		<b>Christian Voice, Zambia</b>	6065.0do					
0300-0600		<b>Radio Botswana</b>	3356.0do	4820.0do	7255.0do			
0300-0600		<b>Radio Rwanda</b>	6055.0do					
0300-0600		<b>Radio Uganda</b>	4976.0do	5026.0do				
0300-0600		<b>Voice of Islam, Malaysia</b>	6175.0as	9750.0as	15295.0as			
0300-0700		<b>Christian Voice, Austr.</b>	21680.0pa					
0300-1500		<b>WRNO New Orleans LA</b>	7394.3am					
0300-1600		<b>University Network</b>	17645.0as					
0305-0310		<b>Croatian Radio, Zagreb</b>	9925.0ir					
0310-0340		<b>Vatican Radio</b>	9660.0af					
0330-0345		<b>Voice of Africa, Libya</b>	11815.0af	15435.0af	17725.0af			
0330-0357		<b>Radio Prague Int'l</b>	11600.0as	15470.0as				
0330-0357		<b>Voice of Vietnam</b>	9795.0na					
0330-0400		<b>AWR Europe, Austria</b>	17635.0as					
0330-0400		<b>BBC World Service</b>	3255.0af 6195.0eu 12095.0me 17790.0as	5975.0am 7120.0af 15280.0as 21660.0as	6005.0af 7160.0af 15310.0as 21830.0as	6135.0am 9410.0eu 15420.0af	6175.0na 11730.0af 15575.0me	6190.0af 12035.0af 17760.0as
0330-0400	m	<b>La Voz Evangelica, Hond.</b>	4819.2do					
0330-0400		<b>Radio Dubai, UAE</b>	11725.0na	12005.0na	13675.0na	15400.0na		
0330-0400		<b>Radio Sweden</b>	9495.0na	11895.0na				
0330-0400		<b>VOA</b>	5855.0af 9885.0af	6080.0af 17895.0af	7105.0af	7275.0af	7290.0af	9575.0af
0330-0400	twhfa	<b>WBCQ Monticello ME</b>	9335.0na					
0330-0830		<b>Radio Myanmar</b>	9730.8do					
0345-0400	f	<b>FEBA Seychelles</b>	11885.0af					
0345-0400		<b>Radio Tajikistan</b>	7245					
0400-0405		<b>WWCR Nashville TN</b>	5070.0na	5935.0na	7435.0na			
0400-0405	sm	<b>WWCR Nashville TN</b>	3210.0na					
0400-0405	twhfa	<b>WWCR Nashville TN</b>	3215.0na					
0400-0415		<b>Kol Israel</b>	9435.0va	15640.0va	17545.0va			
0400-0429		<b>R. Vlaanderen Int'l</b>	15565.0na					
0400-0430		<b>Channel Africa, S. Africa</b>	5955.0af					
0400-0430		<b>Radio France Int'l</b>	15155.0af					
0400-0430	s twhfa	<b>Radio Mexico Int'l</b>	9705.0am	11770.0am				
0400-0430		<b>Radio Nigeria, Kaduna</b>	6090.0do	7275.0do				
0400-0430		<b>Swiss Radio Int'l</b>	9610.0eu	9885.0am				
0400-0445		<b>Deutsche Welle</b>	7225.0af	9565.0af	9765.0af	13690.0af		
0400-0445		<b>WYFR Okeechobee FL</b>	6065.0na	9355.0eu	9505.0na			
0400-0456		<b>China Radio Int'l</b>	9560.0na	9730.0na				
0400-0456		<b>Radio Romania Int'l</b>	11940.0na	15365.0na	17735.0as	21480.0as		
0400-0500		<b>BBC World Service</b>	3255.0af 6195.0eu 12095.0me 17790.0as	5975.0am 7120.0af 15280.0as 21660.0as	6005.0af 7160.0af 15310.0as 21830.0as	6135.0am 9410.0eu 15575.0me	6175.0na 11730.0af 15575.0me	6190.0af 12035.0eu 17760.0as
0400-0500		<b>VOA</b>	4960.0af	5855.0af	6080.0af	7275.0af	7290.0af	9530.0va
0400-0500		<b>Voice of Russia</b>	9575.0af 9665.0na	11965.0me 11750.0na	15205.0va 12000.0na	17895.0af 17565.0na	17650.0na	17660.0na
0400-0500		<b>WSHB Cypress Creek SC</b>	7535.0eu	15195.0af				
0400-0700		<b>KWHR Naalehu HI</b>	17780.0as					
0400-2305		<b>Radio Nigeria, Enugu</b>	6025.0do					
0400-2400		<b>Cameroon Radio-TV</b>	4850.0do	6005.0do				
0405-0410		<b>Croatian Radio, Zagreb</b>	9925.0ir					
0405-0900		<b>WWCR Nashville TN</b>	3210.0na	5070.0na	5935.0na	7435.0na		
0425-0440		<b>RAI, Rome</b>	5975.0af	7150.0af				
0427-0500	a	<b>Radio Voice of Hope</b>	12060.0af	15320.0af				
0430-0445		<b>BBC English Teaching</b>	6010.0eu	9915.0eu				
0430-0500		<b>AWR Africa, Meyerton</b>	11975.0af					
0430-0500		<b>Swiss Radio Int'l</b>	9885.0am					
0430-0500	mtwhfa	<b>TWR Swaziland</b>	3200.0af	4775.0af				
0430-0530		<b>Radio Netherlands</b>	6165.0na	9590.0na				
0430-0530	s twhfa	<b>WRMI Miami FL</b>	7385.0na					

0430-0600		Italian Radio Relay Svc	3985.0uf							
0430-1000		Radio Nigeria, Lagos	3326.0do	4990.0do						
0430-1000		Sri Lanka B'casting Corp.	6130.0do							
0430-2305		Radio Nigeria, Ibadan	6049.9do							
0430-2305		Radio Nigeria, Kaduna	4770.0do	6090.0do	7275.0do	9570.0do				
0445-0500		WYFR Okeechobee FL	9355.0eu							
0500-0504		Radio Pakistan	15180.2me	17835.0me	21460.1me					
0500-0515	s	hfa KVOH Los Angeles CA	9975.0na							
0500-0520		Vatican Radio	4005.0eu	5885.0eu	7250.0eu	9660.0af	11625.0af	15570.0af		
0500-0525	a	Radio Voice of Hope	12060.0af	15320.0af						
0500-0530		AWR Africa, Meyerton	5960.0af	6015.0af						
0500-0530		BBC World Service	5975.0am	6005.0af	6175.0am	6190.0af	6195.0eu	7160.0af		
			9410.0eu	9740.0as	11760.0me	11765.0af	11940.0af	11955.0pa		
			12095.0eu	15280.0as	15310.0as	15360.0as	15420.0af	15575.0as		
			17640.0af	17760.0as	17790.0as	17885.0af	21660.0as			
0500-0530		Channel Africa, S. Africa	11720.0af							
0500-0530		Radio Canada Int'l	6145.0eu	7290.0eu	9595.0eu	11710.0eu	13755.0af	15330.0af		
			17740.0af							
0500-0530		Radio France Int'l	17800.0af							
0500-0530	s	twhfa Radio Mexico Int'l	9705.0am	11770.0am						
0500-0530		Swiss Radio Int'l	9610.0eu							
0500-0545		Deutsche Welle	9670.0na	9785.0na	11985.0na					
0500-0600		Radio Exterior de España	6055.0na							
0500-0600		Radio Japan	5975.0eu	6110.0na	7230.0eu	11715.0as	11760.0as	13630.0na		
			15195.0as	17810.0pa	21755.0pa					
0500-0600		VOA	5970.0af	6035.0af	6080.0af	7195.0af	9530.0va	11965.0me		
			12080.0af	13670.0af	15205.0va					
0500-0600		Voice of Russia	17635.0au	17685.0au	21790.0au					
0500-0600		WSHB Cypress Creek SC	7535.0eu	9840.0af						
0500-0600		WYFR Okeechobee FL	5985.0na	9355.0eu	11580.0eu					
0500-0700	mtwhf	KWHR Naalehu HI	11565.0pa							
0500-0700		Radio Havana Cuba	9550.0na	9820.0na	9830.0uf					
0500-0700		Voice of Nigeria	7255.0af							
0500-0705		Radio New Zealand Int'l	15120.0pa							
0500-0720		TWR Swaziland	4775.0af	6035.0af	9500.0af					
0500-0800		R. for Peace Int'l	7450.0va	15049.0ir						
0500-0800		Radio Kuwait	15110.0as							
0500-0800		SIBC Solomon Islands	5020.0do	9545.0do						
0500-1000		Radio Liberia Int'l	5100.0do							
0500-1000		WHRA Greenbush ME	11730.0af							
0505-0510		Croatian Radio, Zagreb	9470.0au							
0515-0530	h	a KVOH Los Angeles CA	9975.0na							
0520-0530		Vatican Radio	9660.0af	11625.0af	15570.0af					
0525-0915		Ghana Broadcasting Corp.	3366.0do	4915.0do						
0530-0545	s	a BBC English Teaching	9875.0eu	11675.0eu						
0530-0559	m	h a KVOH Los Angeles CA	9975.0na							
0530-0600		Radio Canada Int'l	13755.0af	15330.0af	17740.0af					
0530-0600		AWR Africa, Meyerton	11970.0af							
0530-0600		BBC World Service	5975.0am	6005.0af	6175.0am	6190.0af	6195.0eu	7160.0af		
			9410.0eu	9740.0as	11760.0me	11765.0af	11940.0af	11955.0pa		
			12095.0eu	15310.0as	15360.0as	15420.0af	15575.0as	17640.0af		
			17760.0as	17790.0as	21660.0as					
0530-0600	mtwhf	BBC World Service	17885.0af							
0530-0600	s	FEBa Seychelles	3306.0af	3396.0af						
0530-0600		Georgian Radio, Tbilisi	11805.2eu							
0530-0600		Radio Dubai, UAE	13675.0au	15435.0au	17830.0au	21700.0au				
0530-0600		Radio Thailand	9655.0eu	11905.0eu	21795.0eu					
0530-1630		Zimbabwe BC Corp.	5975.0do	6045.0do						
0532-0600		ORF Vienna	6155.0eu	13730.0eu	17870.0eu					
0545-0600		BBC English Teaching	9875.0eu	11675.0eu						
0545-0600	m	a KVOH Los Angeles CA	9975.0na							
0600-0615		TWR Meyerton	11640.0af							
0600-0615	mtwhfa	WBCQ Monticello ME	7415.0na							
0600-0630		Channel Africa, S. Africa	15215.0af							
0600-0630		Radio France Int'l	17800.0af	21620.0af						
0600-0630	mtwhfa	V. of the Mediterranean	7150.0eu							
0600-0630		VOA	5970.0af	6035.0af	6080.0af	7195.0af	9530.0va	9680.0af		
			11805.0af	11965.0me	11995.0af	12080.0af	13670.0af	15205.0va		
0600-0640		Radio Romania Int'l	9510.0na	11940.0na						
0600-0645		Deutsche Welle	6140.0eu	11925.0af	13790.0af	17860.0af				
0600-0700		BBC World Service	6005.0af	6175.0am	6190.0af	6195.0eu	7160.0af	9410.0eu		
			9580.0pa	9740.0as	11760.0me	11765.0af	11940.0af	11955.0pa		
			12095.0eu	15310.0as	15360.0as	15485.0eu	15565.0eu	15575.0as		
			17640.0af	17760.0as	17790.0as	21660.0as				
0600-0700	s	a BBC World Service	17885.0af							
0600-0700		HCJB Quito Ecuador	9745.0na	11680.0eu	15115.0na	21455.0uf				
0600-0700		Italian Radio Relay Svc	7120.0uf							
0600-0700		Radio Japan	7230.0eu	11740.0pa	13630.0pa	15195.0as	17870.0pa	21755.0pa		
0600-0700		Republic of Yemen Radio	9780.0me							
0600-0700		Voice of Russia	15490.0au	17635.0au	17685.0au	21790.0au				
0600-0700		WYFR Okeechobee FL	5985.0na	7355.0eu						
0600-0800		WSHB Cypress Creek SC	7535.0af	11615.0af	13650.0af					
0600-0825		Voice of Malaysia	6175.0as	9750.0as	15295.0as					
0600-0900	s	Radio Rwanda	6055.0do							
0600-1000		SLBS, Sierra Leone	3316.0do							

0600-1300		<b>Radio Uganda</b>	5026.0do	7110.0do	7196.0do				
0600-1500		<b>Christian Voice, Zambia</b>	9865.0do						
0600-1530		<b>Radio Botswana</b>	7255.0do	9600.0do					
0600-2200		<b>ELWA Monrovia, Liberia</b>	4760.0do						
0605-0610		<b>Croatian Radio, Zagreb</b>	9470.0au						
0605-0610	mtwhfa	<b>Croatian Radio, Zagreb</b>	6165.0eu	7365.0eu	9830.0eu				
0610-0615	mtwhf	<b>Vatican Radio</b>	4005.0eu	5885.0eu	7250.0eu	9645.0eu	11740.0eu	15595.0va	
0610-0620	mtwhf	<b>Voice of Greece</b>	9420.0eu	11900.0au	15630.0eu	17520.0pa	21530.0eu		
0630-0700	t h	<b>Georgian Radio, Tbilisi</b>	6080.0me						
0630-0700		<b>Radio Finland</b>	15135.0va	21670.0va					
0630-0700		<b>Vatican Radio</b>	11625.0af	13765.0af	15570.0af				
0630-0700		<b>VOA</b>	9530.0va	9680.0af	11805.0af	11965.0me	15205.0va		
0630-0700	s	<b>a VOA</b>	5970.0af	6035.0af	6080.0af	7195.0af	11995.0af	12080.0af	
			13670.0af						
0640-0656		<b>Radio Romania Int'l</b>	9510.0na	11775.0eu	11830.0eu	11940.0na	15105.0eu	15365.0eu	
0645-0655	s	<b>a TWR Monte Carlo</b>	6045.0eu	9870.0eu					
0645-0900		<b>Deutsche Welle</b>	6140.0eu						
0655-0820		<b>TWR Monte Carlo</b>	6045.0eu	9870.0eu					
0700-0727		<b>Radio Prague Int'l</b>	9880.0eu	11600.0eu					
0700-0729		<b>R. Vlaanderen Int'l</b>	5985.0eu						
0700-0730		<b>BBC World Service</b>	6175.0na	6190.0af	9410.0eu	9580.0pa	9740.0as	11760.0me	
			11765.0af	11940.0af	11955.0pa	12095.0eu	15310.0as	15360.0as	
			15400.0af	15485.0eu	15565.0eu	15575.0as	17640.0eu	17760.0as	
			17790.0as	17830.0af	21660.0as				
0700-0730	s	<b>a BBC World Service</b>	17885.0af						
0700-0730		<b>Radio Slovakia Int'l</b>	9440.0au	15460.0au	17550.0au				
0700-0730	a	<b>VOA</b>	10869.0lf	10869.0uf					
0700-0745		<b>WYFR Okeechobee FL</b>	7355.0eu	13695.0af	15170.0af				
0700-0756		<b>Radio Romania Int'l</b>	17735.0af	17815.0af					
0700-0800		<b>HCJB Quito Ecuador</b>	11680.0eu	11755.0pa	21455.0uf				
0700-0800		<b>Radio Australia</b>	9660.0pa	12080.0pa	15240.0va	15415.0as	17580.0va	17750.0as	
			21725.0va						
0700-0800		<b>Radio France Int'l</b>	15605.0af						
0700-0800		<b>Radio Taipei Int'l</b>	5950.0na						
0700-0800		<b>Voice of Russia</b>	15490.0au	17495.0au	17635.0au	17685.0au			
0700-0900		<b>Christian Voice, Austr.</b>	17820.0as	21680.0pa					
0700-0900		<b>Voice of Hope, Germany</b>	5975.0eu	21590.0me					
0700-1000		<b>KWHR Naalehu HI</b>	11565.0pa	17780.0as					
0700-1100		<b>Radio Africa, Eq. Guinea</b>	15183.8af						
0700-1200	a	<b>Scandinavian Weekend R.</b>	11690.0va						
0700-1500	s	<b>a Italian Radio Relay Svc</b>	7120.0uf						
0705-0710		<b>Croatian Radio, Zagreb</b>	13820.0au						
0705-0710	s	<b>Croatian Radio, Zagreb</b>	6165.0eu	7365.0eu	9830.0eu	13830.0eu			
0705-0720		<b>BBC English Teaching</b>	6005.0af						
0705-1105		<b>Radio New Zealand Int'l</b>	11675.0pa						
0715-0815		<b>KTWR Guam</b>	15200.0as						
0720-0735	smtwhf	<b>TWR Swaziland</b>	4775.0af	6035.0af	9500.0af				
0730-0800		<b>BBC World Service</b>	6175.0na	6190.0af	9410.0eu	9580.0pa	9740.0as	11760.0me	
			11765.0af	11940.0af	11955.0pa	12095.0eu	15310.0as	15360.0as	
			15400.0af	15485.0eu	15565.0eu	17640.0eu	17760.0as	17790.0as	
			17830.0af	21660.0as					
0730-0800	s	<b>a BBC World Service</b>	15575.0as	17885.0af					
0730-0800		<b>Georgian Radio, Tbilisi</b>	11910.0eu						
0730-0800		<b>Swiss Radio Int'l</b>	15545.0af	17685.0af	21750.0af				
0730-1400		<b>Nat'l BC, Papua NG</b>	4890.0do	9675.0lr					
0730-1400		<b>R. E. Highlands, Papua NG</b>	3395.0do						
0730-1400		<b>R. Milne Bay, Papua NG</b>	3365.0do						
0730-1400		<b>R. S. Highlands, Papua NG</b>	3275.0do						
0740-0800	s	<b>Voice of Armenia, Yerevan</b>	4810.0eu	15270.0eu					
0750-0800	mtwhf	<b>Voice of Greece</b>	9375.0va	9420.0eu	11900.0au	15630.0eu	17520.0af		
0800-0804		<b>Radio Pakistan</b>	17520.0eu	21465.0eu					
0800-0900	s	<b>Amateur Radio League, SA</b>		9750.0af	21560.0af				
0800-0900		<b>BBC World Service</b>	6190.0af	9740.0as	11940.0af	11955.0pa	12095.0eu	15310.0as	
			15360.0as	15400.0af	15485.0eu	15565.0eu	17640.0eu	17760.0as	
			17830.0af	17885.0af	21470.0af	21660.0as	21830.0as		
0800-0900	s	<b>a BBC World Service</b>	15575.0as						
0800-0900	mtwhf	<b>BBS, Bhutan</b>	5030.0al	6035.0do					
0800-0900		<b>KNLS Anchor Point AK</b>	11765.0as						
0800-0900		<b>Radio Australia</b>	5995.0pa	9580.0va	9710.0as	12080.0pa	13605.0va	15240.0va	
			15415.0as	17750.0as	21725.0va				
0800-0900		<b>Radio Korea</b>	9570.0om	13670.0eu					
0800-0900	s	<b>V. of the Mediterranean</b>	11770.0eu						
0800-0900		<b>Voice of Indonesia</b>	9525.0pa	11785.0pa	15149.8pa				
0800-0900		<b>Voice of Russia</b>	15490.0au	17495.0au	17525.0au	17635.0au	17685.0au		
0800-0900		<b>WSHB Cypress Creek SC</b>	9845.0au	9860.0eu	11615.0af				
0800-1000		<b>VOA</b>	11930.0as	13610.0as	15150.0as				
0800-1100		<b>HCJB Quito Ecuador</b>	11755.0pa	21455.0uf					
0800-1105		<b>SIBC Solomon Islands</b>	5020.0do						
0800-1200		<b>R. for Peace Int'l</b>	15049.0lr						
0800-1700		<b>NBC Windhoek, Namibia</b>	7165.0af	7215.0af					
0805-0810		<b>Croatian Radio, Zagreb</b>	13820.0au						
0815-0845	f	<b>FEBAS Seychelles</b>	15460.0as						
0815-0900		<b>KTWR Guam</b>	15200.0as	15330.0as					
0830-0900		<b>AWR Europe, Austria</b>	17780.0af						
0830-0900		<b>AWR Europe, Forli</b>	9610.0eu						

0830-0900		<b>Georgian Radio, Tbilisi</b>	11910.0eu						
0830-0900		<b>Radio Vilnius, Lithuania</b>	9710.0eu						
0830-0900		<b>Swiss Radio Int'l</b>	21770.0af						
0830-2130		<b>ABC Alice Springs</b>	2310.0do	4835.0lr					
0830-2130		<b>ABC Katherine</b>	2485.0do						
0830-2130		<b>ABC Tennant Creek</b>	2325.0do						
0900-0929		<b>Radio Prague Int'l</b>	21745.0as						
0900-0930		<b>BBC World Service</b>	6190.0af	6195.0as	9605.0as	9740.0as	11760.0me	11940.0af	
			11945.0as	12095.0eu	15190.0sa	15310.0as	15360.0as	15400.0af	
			15485.0eu	15565.0eu	15575.0as	17640.0eu	17655.0as	17760.0af	
			17790.0as	17830.0af	17885.0af	21470.0af	21660.0as		
			15330.0as						
0900-0930		<b>KTWR Guam</b>	6140.0eu	6160.0pa	12035.0af	15410.0af	15470.0as	17715.0pa	
0900-0945		<b>Deutsche Welle</b>	17770.0pa	17800.0af	17820.0as	21560.0af	21680.0pa	21790.0af	
			11730.0pa	15210.0pa					
0900-0956		<b>China Radio Int'l</b>	13775.0as						
0900-1000		<b>Christian Voice, Austr.</b>	9580.0va	13605.0va	15240.0as	21820.0va			
0900-1000		<b>Radio Australia</b>	15400.0as	17750.0as					
0900-1000 s	a	<b>Radio Australia</b>	5885.0eu						
0900-1000 mt hfa		<b>Vatican Radio</b>	9455.0sa	9860.0eu	11615.0al				
0900-1000		<b>WSHB Cypress Creek SC</b>	2390.0na	5070.0na	5935.0na	7435.0na			
0900-1000		<b>WWCR Nashville TN</b>	15725.0as						
0900-1030		<b>KHBN Palau</b>	21590.0me						
0900-1200		<b>Voice of Hope, Germany</b>	9955.0am						
0900-1200 mtwhfa		<b>WRMI Miami FL</b>	6055.0do						
0900-2103		<b>Radio Rwanda</b>	6130.0do						
0915-1200		<b>Ghana Broadcasting Corp.</b>	4915.0do						
0915-1200 s	a	<b>Ghana Broadcasting Corp.</b>	9605.0as	11945.0as	17655.0as				
0930-1000		<b>BBC English Teaching</b>	6190.0af	6195.0as	9740.0as	11760.0me	11940.0af	12095.0eu	
0930-1000		<b>BBC World Service</b>	15190.0sa	15310.0as	15360.0as	15400.0af	15485.0eu	15565.0eu	
			15575.0as	17640.0eu	17760.0as	17790.0as	17830.0af	17885.0af	
			21470.0af	21660.0as					
0930-1000 s		<b>FEBA Seychelles</b>	3306.0af	3396.0af					
0930-1030		<b>Radio Netherlands</b>	9790.0as	12065.0as	13710.0as				
0945-1100		<b>Deutsche Welle</b>	6140.0eu						
1000-1027		<b>Voice of Vietnam</b>	9839.5au	12019.7au					
1000-1030		<b>BBC World Service</b>	6190.0af	6195.0va	9740.0as	11760.0me	11940.0af	12095.0eu	
			15310.0as	15360.0as	15485.0eu	15565.0eu	15575.0as	17640.0eu	
			17760.0as	17790.0as	17885.0af	21470.0af	21660.0as		
1000-1030 s	a	<b>BBC World Service</b>	15190.0sa	15400.0af	17830.0af				
1000-1030		<b>KSDA Guam</b>	11560.0as	11705.0as					
1000-1030		<b>Radio Telefis Eireann</b>	11685.0au						
1000-1030		<b>Sri Lanka B'casting Corp.</b>	4940.0do						
1000-1030		<b>Swiss Radio Int'l</b>	15315.0eu						
1000-1045		<b>KWHR Naalehu HI</b>	9930.0as	11565.0pa					
1000-1056		<b>China Radio Int'l</b>	11730.0pa	15210.0pa					
1000-1100		<b>All India Radio, Delhi</b>	11585.0as	13700.0au	15020.0as	15075.0as	17510.0au	17840.0as	
			17895.0au						
1000-1100 s	a	<b>BBS, Bhutan</b>	5030.0al	6035.0do					
1000-1100		<b>Radio Australia</b>	9580.0va	13605.0va	15240.0as	15400.0as	17750.0as	21820.0va	
1000-1100		<b>Radio Japan</b>	9695.0pa	15590.0as	21755.0pa				
1000-1100		<b>VOA</b>	6165.0am	7370.0am	9590.0am	9770.0pa	15240.0as	15425.0as	
1000-1100		<b>Voice of Nigeria</b>	7255.0af						
1000-1100		<b>WSHB Cypress Creek SC</b>	6095.0am	9455.0sa	11780.0as				
1000-1100		<b>WWCR Nashville TN</b>	5070.0na	5935.0na	7435.0na	9475.0na			
1000-1100		<b>WYFR Okeechobee FL</b>	5950.0na						
1000-1200		<b>Christian Voice, Austr.</b>	13775.0as	17825.0as					
1000-1300		<b>Radio Jordan</b>	11690.0eu						
1000-1300		<b>WEWN Birmingham AL</b>	7425.0na	15745.0eu					
1000-1300		<b>WHRI Noblesville IN</b>	6040.0na	9495.0am					
1000-1600		<b>Radio Nigeria, Lagos</b>	4990.0do	7285.0do					
1000-1800		<b>Radio Liberia Int'l</b>	6100.0do						
1000-1900		<b>SLBS, Sierra Leone</b>	5980.0do						
1000-2000		<b>ZLXA New Zealand</b>	3935.0do						
1000-2200		<b>Caribbean Beacon</b>	11775.0am						
1000-2200		<b>Voice of Guyana</b>	5949.4do						
1005-1010 mtwhfa		<b>FEBA Seychelles</b>	3306.0af	3396.0af					
1015-1030		<b>BBC English Teaching</b>	11845.0eu	13745.0eu	15325.0eu	15335.0eu	17695.0eu		
1015-1030 mtwh		<b>BBC English Teaching</b>	9410.0eu	11970.0eu					
1030-1035		<b>Kol Israel</b>	15640.0va	17545.0va					
1030-1045 mtwhf		<b>Radio Ethiopia</b>	5990.0do	7110.0do	9704.2do				
1030-1057		<b>Radio Prague Int'l</b>	9880.0eu	11615.0eu					
1030-1100		<b>BBC World Service</b>	6190.0af	6195.0va	9740.0as	11760.0me	11940.0af	12095.0eu	
			15310.0as	15485.0eu	15565.0eu	15575.0as	17640.0eu	17790.0as	
			17885.0af	21470.0af					
			15190.0sa	15400.0af	17830.0af				
			9965.0as	15725.0as					
1030-1100 s	a	<b>BBC World Service</b>	15190.0sa	15400.0af	17830.0af				
1030-1100		<b>KHBN Palau</b>	9965.0as	15725.0as					
1030-1100		<b>KSDA Guam</b>	11560.0as						
1030-1100		<b>Radio Dubai, UAE</b>	13675.0eu	15370.0eu	15395.0eu	21605.0eu			
1030-1100		<b>Voice of Mongolia</b>	12085.0au						
1030-1130		<b>Radio Netherlands</b>	6045.0eu	9790.0as	9860.0eu	12065.0as	13710.0as		
1030-1130		<b>Sri Lanka B'casting Corp.</b>	4940.0do	11835.0as	15120.0as	17850.0as			
1045-1600 s	a	<b>KWHR Naalehu HI</b>	11565.0pa						
1045-1800		<b>KWHR Naalehu HI</b>	9930.0as						
1100-1104		<b>Radio Pakistan</b>	17520.0eu	21465.0eu					

1100-1120		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0as	9740.0as	9815.0as	11760.0me
			11940.0af	11955.0as	12095.0eu	15280.0as	15310.0as	15400.0af
			15485.0eu	15565.0eu	15575.0as	17640.0eu	17700.0as	17790.0sa
			17830.0af	17885.0af	21470.0af			
1100-1120 s	a	<b>BBC World Service</b>	6195.0am	15190.0sa	15220.0am			
1100-1120 fa		<b>Radio Almaty, Kazakhstan</b>	9620.0eu	11840.0eu				
1100-1127		<b>Voice of Vietnam</b>	7285.0as					
1100-1130 mtwhf		<b>BBC Caribbean Report</b>	6195.0ca	15220.0ca				
1100-1130		<b>Radio Australia</b>	5995.0pa	6020.0va	9475.0as	9580.0va	11880.0as	12080.0pa
			13605.0va	15240.0as	21820.0va			
1100-1130		<b>Radio Ukraine Int'l</b>	12045.0eu	15135.0na				
1100-1145		<b>Deutsche Welle</b>	6140.0eu	11785.0af	15410.0af	17860.0af	21780.0af	
1100-1200		<b>Radio Bulgaria</b>	15700.0eu	17500.0eu				
1100-1200		<b>Radio Japan</b>	6120.0na	9695.0pa	15590.0as			
1100-1200		<b>Swiss Radio Int'l</b>	13735.0as	21770.0as				
1100-1200		<b>VOA</b>	6160.0as	9645.0as	9760.0as	9770.0pa	15160.0as	15240.0as
			15425.0as					
			7445.0as					
1100-1200		<b>Voice of Asia, Taiwan</b>	13570.0am					
1100-1200 s	a	<b>WINB Red Lion PA</b>	6095.0am	9455.0al	11590.0al	11660.0am		
1100-1200		<b>WSHB Cypress Creek SC</b>	5070.0na	5935.0na	7435.0na	15685.0na		
1100-1200		<b>WWCR Nashville TN</b>	5850.0na	5950.0na				
1100-1200		<b>WYFR Okeechobee FL</b>	3945.0do	4960.0do	7260.0do			
1100-1215 s		<b>Radio Vanuatu</b>	15385.0as	15430.0as	15585.0as	21470.0as	21730.0as	
1100-1230		<b>VOIRI Teheran</b>	6150.0as	9600.0as				
1100-1400		<b>Radio Singapore Int'l</b>	12005.0am	15115.0am	21455.0uf			
1100-1430		<b>HCJB Quito Ecuador</b>	9965.0as					
1100-1500		<b>KHBN Palau</b>	9625.0do					
1100-2400		<b>CBC Northern Service</b>	15175.0as					
1105-1305		<b>Radio New Zealand Int'l</b>	9420.0eu	15630.0eu				
1110-1120		<b>Voice of Greece</b>	5005.0as	7165.0as				
1115-1145		<b>Radio Nepal, Katmandu</b>	5965.0na	6190.0af	6195.0as	9740.0as	9815.0as	11760.0me
1120-1130		<b>BBC World Service</b>	11940.0af	11955.0as	12095.0eu	15280.0as	15310.0as	15400.0af
			15485.0eu	15575.0as	17640.0eu	17700.0as	17790.0sa	17830.0af
			17885.0af	21470.0af				
1120-1130 s	a	<b>BBC World Service</b>	6195.0am	15190.0sa	15220.0am			
1120-1140 w		<b>Radio Almaty, Kazakhstan</b>	9620.0eu	11840.0eu				
1130-1145		<b>Voice of Africa, Libya</b>	11815.0af	15435.0af	17725.0af			
1130-1159		<b>R. Vlaanderen Int'l</b>	9865.0as	9925.0eu				
1130-1200		<b>BBC English Teaching</b>	5875.0eu	9410.0eu	9635.0eu	11680.0eu	11895.0eu	15325.0eu
			17625.0eu					
1130-1200		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0va	9740.0as	9815.0as	11760.0me
			11940.0af	11955.0as	12095.0eu	15220.0am	15280.0as	15310.0as
			15485.0eu	15575.0as	17640.0eu	17700.0as	17830.0af	17885.0af
			21470.0af					
1130-1200		<b>ORF Vienna</b>	6155.0eu	13730.0eu				
1130-1200		<b>Radio Australia</b>	5995.0pa	6020.0va	9475.0as	9580.0va	11880.0as	12080.0pa
			13605.0va	21820.0va				
1130-1200		<b>Radio Korea</b>	9650.0na					
1130-1200		<b>Radio Sweden</b>	17505.0as	18960.0na				
1130-1200		<b>Radio Ukraine Int'l</b>	15135.0na					
1130-1200 f		<b>Vatican Radio</b>	15595.0va	17515.0va				
1130-1225		<b>Radio Netherlands</b>	6045.0eu	9860.0eu				
1130-1230		<b>Sri Lanka B'casting Corp.</b>	4940.0do					
1140-1200 t		<b>Radio Almaty, Kazakhstan</b>	9620.0eu	11840.0eu				
1145-1600		<b>Deutsche Welle</b>	6140.0eu					
1200-1215		<b>BBC English Teaching</b>	7135.0as	11835.0as				
1200-1215		<b>V. of Cambodia</b>	11940.3as					
1200-1220 mtwhf		<b>BBC Caribbean Report</b>	6195.0ca	15220.0ca				
1200-1220		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0as	9515.0na	9740.0as	9815.0as
			11760.0me	11940.0af	11955.0as	12095.0eu	15280.0as	15310.0as
			15485.0eu	15565.0eu	15575.0as	17640.0eu	17700.0as	17830.0af
			17885.0af	21470.0af				
1200-1220 s	a	<b>BBC World Service</b>	6195.0am	15220.0am				
1200-1230		<b>Radio France Int'l</b>	15540.0af	25820.0af				
1200-1230		<b>Radio Tashkent</b>	7285.0as	9715.0as	15295.0as	17775.0as		
1200-1230		<b>Swiss Radio Int'l</b>	15315.0eu					
1200-1245		<b>WYFR Okeechobee FL</b>	5850.0na	5950.0na	17750.0na			
1200-1255		<b>Radio Polonia, Warsaw</b>	6095.0eu	7270.0eu	9525.0eu	11820.0eu		
1200-1256		<b>China Radio Int'l</b>	9715.0pa	9760.0pa	11675.0pa	11700.0as	11760.0as	11855.0na
			11980.0as	12110.0as	15415.0pa			
1200-1256		<b>Voice of Korea</b>	3560.0va	9640.0af	9850.0va	9975.0af	11334.9va	13650.1va
1200-1300		<b>Radio Canada Int'l</b>	9660.0as	15190.0as				
1200-1300 mtwhf		<b>Radio Canada Int'l</b>	9640.0am	15305.0am	17820.0am			
1200-1300		<b>Radio Taipei Int'l</b>	7130.0as	9610.0au				
1200-1300		<b>VOA</b>	6160.0as	9645.0as	9760.0as	15160.0as	15240.0as	15425.0as
1200-1300		<b>WSHB Cypress Creek SC</b>	6095.0am	9455.0al	9875.0as	11590.0al	11660.0am	17635.0as
1200-1300		<b>WWCR Nashville TN</b>	7435.0na	12160.0na	13845.0na	15685.0na		
1200-1300 mtwhf		<b>WWFV McCalysville GA</b>	9400.0uf	12172.0uf				
1200-1325		<b>Voice of Hope, Germany</b>	15715.0me					
1200-1330		<b>Radio Australia</b>	5995.0pa	6020.0va	9475.0as	9580.0va	11650.0pa	11880.0as
			21820.0va					
1200-1700		<b>Christian Voice, Austr.</b>	13775.0as	13795.0as				
1200-1700		<b>Ghana Broadcasting Corp.</b>	4915.0do	6130.0do				
1200-1700 mtwhfa		<b>WRMI Miami FL</b>	15724.9na					
1200-1700 s		<b>WRMI Miami FL</b>	9955.0am					

1200-2100	a	<b>Scandinavian Weekend R.</b>	11720.0va						
1200-2400		<b>KALJ Dallas TX</b>	13815.0va						
1200-2400		<b>R. for Peace Int'l</b>	15049.0lr	21815.1uf					
1200-2400		<b>WINB Red Lion PA</b>	13570.0am						
1205-1210		<b>Croatian Radio, Zagreb</b>	6165.0eu	9830.0eu	13830.0eu				
1215-1330		<b>Radio Cairo</b>	17595.0as						
1220-1300		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0va	9515.0na	9740.0as	9815.0as	
			11760.0me	11940.0af	11955.0as	12095.0eu	15220.0am	15280.0as	
			15310.0as	15485.0eu	15565.0eu	15575.0as	17640.0eu	17700.0as	
			17830.0af	17885.0af	21470.0af				
1230-1245		<b>BBC English Teaching</b>	15105.0af	17780.0af	21640.0af				
1230-1257		<b>Voice of Vietnam</b>	9839.5as	12019.6as					
1230-1300		<b>AWR Europe, Forl</b>	9610.0eu						
1230-1300		<b>Radio Bangladesh</b>	7185.0as	9550.1as	15520.1as				
1230-1300		<b>Radio Finland</b>	15400.0na	17670.0na					
1230-1300		<b>Radio Sweden</b>	17505.0as	18960.0na	21530.0as				
1230-1300		<b>Radio Thailand</b>	9655.0as	9885.0as	11905.0as				
1230-1300	a	<b>Wales Radio Int'l</b>	17810.0au						
1230-1330		<b>Voice of Turkey</b>	17810.0as	17830.0eu					
1230-1600		<b>Sri Lanka B'casting Corp.</b>	4940.0do	6005.0as	6075.0as	9770.0as	15425.0as		
1245-1300	a	<b>FEBA Seychelles</b>	15535.0me						
1245-1300		<b>WYFR Okeechobee FL</b>	17750.0na						
1300-1329		<b>Radio Prague Int'l</b>	13580.0eu	21745.0as					
1300-1330		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0va	9515.0na	9740.0as	9815.0as	11760.0me
			11865.0na	11940.0af	12095.0eu	15310.0as	15420.0af	15485.0eu	
			15565.0eu	15575.0me	17640.0eu	17700.0as	17830.0af	17885.0af	
			21470.0af						
1300-1330		<b>KSDA Guam</b>	15385.0as						
1300-1356		<b>China Radio Int'l</b>	7405.0na	9570.0na	9890.0af	11675.0as	11900.0pa	11980.0as	
			13650.0na	13685.0af	15180.0as				
1300-1400		<b>KNLS Anchor Point AK</b>	11870.0as						
1300-1400		<b>Radio Canada Int'l</b>	9640.0am	15305.0am					
1300-1400		<b>Radio Korea</b>	9570.0as	13670.0om					
1300-1400		<b>VOA</b>	6160.0as	9645.0as	9760.0as	15160.0as	15425.0as		
1300-1400	a	<b>WBCQ Monticello ME</b>	17494.9na						
1300-1400		<b>WSHB Cypress Creek SC</b>	9430.0na	9455.0am	9940.0as				
1300-1500	s	<b>Channel Africa, S. Africa</b>	11720.0af	17780.0af	21725.0af				
1300-1500		<b>KJES Vado NM</b>	11715.0na						
1300-1500	mtwhf	<b>Radio Canada Int'l</b>	17820.0am						
1300-1500	s	<b>Radio Canada Int'l</b>	17800.0am						
1300-1500		<b>WHRI Noblesville IN</b>	6040.0na	15105.0am					
1300-1500		<b>WYFR Okeechobee FL</b>	11550.0as	11830.0na	11970.0na	17750.0na			
1300-1600		<b>Voice of Hope, China</b>	13820.0as						
1300-1600		<b>WEWN Birmingham AL</b>	11875.0na	15745.0eu					
1300-1630		<b>Radio Jordan</b>	11690.0na	17680.0al					
1300-2000	mtwhf	<b>WWFV McCaysville GA</b>	9400.0uf						
1300-2100		<b>Radio Uganda</b>	4976.0do	5026.0do					
1300-2100		<b>WWCR Nashville TN</b>	9475.0na	12160.0na	13845.0na	15685.0na			
1300-2200		<b>WWFV McCaysville GA</b>	12172.0uf						
1305-1650		<b>Radio New Zealand Int'l</b>	6095.0oc						
1325-1400		<b>Overcomer Ministries</b>	6110.0eu						
1325-1530		<b>Voice of Hope, Germany</b>	15715.0me	17550.0as					
1330-1345		<b>BBC English Teaching</b>	15105.0af	21640.0af					
1330-1357		<b>Voice of Vietnam</b>	9730.0eu	11630.0al	13740.0eu				
1330-1400		<b>BBC World Service</b>	5965.0na	6190.0af	6195.0va	9515.0na	9740.0as	9815.0as	
			11760.0me	11865.0na	11940.0af	12095.0eu	15220.0am	15310.0as	
			15420.0af	15485.0eu	15565.0eu	15575.0me	17640.0eu	17700.0as	
			17830.0af	17885.0af	21470.0af				
			11705.0as	11980.0as					
1330-1400		<b>KSDA Guam</b>	6155.0eu	13730.0eu	21780.0as				
1330-1400		<b>ORF Vienna</b>	5995.0pa	6020.0va	9580.0va	11650.0pa	11660.0as	21820.0va	
1330-1400		<b>Radio Australia</b>	13630.0eu	13675.0eu	15395.0eu	21605.0eu			
1330-1400		<b>Radio Sweden</b>	17505.0va	18960.0na					
1330-1400		<b>Radio Tashkent</b>	7285.0as	9715.0as	15295.0as	17775.0as			
1330-1500		<b>All India Radio, Delhi</b>	9690.0as	11620.0as	13710.0as				
1400-1415	mtw	<b>BBC English Teaching</b>	11860.0af	15420.0af	21490.0af				
1400-1430		<b>BBC World Service</b>	6190.0af	6195.0as	6195.0va	9515.0na	9740.0as	9815.0as	11865.0na
			11940.0af	12095.0eu	15220.0na	15310.0as	15485.0eu	15565.0eu	
			15575.0me	17640.0eu	17700.0as	17830.0af	17840.0am	21470.0af	
			21660.0af						
1400-1430	s	<b>BBC World Service</b>	15245.0as						
1400-1430		<b>KSDA Guam</b>	17720.0as						
1400-1430		<b>Radio Australia</b>	5995.0va	6080.0pa	9580.0va	11650.0pa	11660.0as		
1400-1430		<b>Radio Thailand</b>	9655.0as	9830.0as	11905.0as				
1400-1430		<b>VOA</b>	6160.0as	7125.0as	9645.0as	9760.0as	15160.0as	15255.0va	
			15425.0as						
1400-1430	s	<b>VOA</b>	18275.0lf	18275.0uf					
1400-1456		<b>China Radio Int'l</b>	7405.0na	9700.0as	11675.0as	11825.0as	12110.0as	13650.0na	
			13685.0af	15110.0as	15125.0af	17720.0na			
1400-1456		<b>Radio Romania Int'l</b>	15250.0eu	17735.0eu					
1400-1500		<b>Radio Canada Int'l</b>	9640.0am	15305.0am					
1400-1500		<b>Radio France Int'l</b>	11610.0as	17620.0me					
1400-1500		<b>Radio Japan</b>	7200.0pa	9505.0na	11730.0as	17755.0me			
1400-1500		<b>Radio Sultanate Oman</b>	15140.0eu						
1400-1500		<b>Radio Taipei Int'l</b>	15125.0as						

1400-1500	Swiss Radio Int'l	9575.0as	17680.0as						
1400-1500	Voice of Russia	9495.0as	12055.0as	15510.0as					
1400-1600	Overcomer Ministries	6110.0eu	13810.0af						
1400-1600	SBC Radio 1, Singapore	6150.0do							
1400-1800	WBCQ Monticello ME	17494.9na							
1415-1420	Radio Nepal, Katmandu	5005.0as	7165.0as						
1430-1500	BBC World Service	6190.0af	6195.0as	9515.0na	9740.0as	9815.0as	11865.0na		
		11940.0af	12095.0eu	15220.0na	15310.0as	15485.0eu	15565.0eu		
		15575.0me	17640.0eu	17700.0as	17830.0af	17840.0am	21470.0af		
		21660.0af							
1430-1500	VOA	6160.0as	7125.0as	9645.0as	9760.0as	15160.0as	15255.0va		
		15425.0as							
1430-1600	KTWR Guam	15330.0as							
1430-1600	Radio Australia	5995.0va	6080.0pa	9580.0va	11650.0pa	11660.0va			
1430-1600	Radio Myanmar	5985.9do							
1430-1625	Radio Netherlands	9890.0as	11835.0as	12075.0as					
1445-1500	BBC English Teaching	7205.0as	11920.0as						
1445-1500 f	FEBA Seychelles	11600.0as							
1500-1515 h	FEBA Seychelles	11600.0as							
1500-1530	BBC World Service	5975.0as	6190.0af	6195.0as	9515.0na	9740.0as	9815.0as		
		11860.0af	11865.0na	11940.0af	12095.0eu	15220.0na	15310.0as		
		15400.0af	15420.0af	15485.0eu	15565.0eu	17700.0as	17830.0af		
		17840.0am	21470.0af	21490.0af	21660.0af				
1500-1530	Channel Africa, S. Africa	17770.0af							
1500-1530	Radio Mexico Int'l	9705.0am	11770.0am						
1500-1530	VOA Special English	6160.0as	9590.0as	9760.0as	9845.0as	12040.0as	15550.0as		
1500-1530	Voice of Mongolia	12015.0as	12085.0as						
1500-1556	China Radio Int'l	7160.0as	7405.0na	9785.0as	13685.0af	15125.0af	17720.0na		
1500-1556	Voice of Korea	4405.0va	6574.9na	9335.2na	11710.0na	13760.1na			
1500-1559	Radio Canada Int'l	15455.0as	17720.0as						
1500-1559 s	a Radio Canada Int'l	9640.0am	15305.0am	17800.0am					
1500-1600	Radio Japan	7200.0pa	9750.0as	11730.0as					
1500-1600	VOA	7125.0as	9645.0as	9700.0me	15205.0eu	15255.0va			
1500-1600	Voice of Russia	4940.0me	4965.0me	4975.0me	7325.0me	9730.0eu	11500.0as		
		11985.0me							
1500-1600	WYFR Okeechobee FL	6280.0as	11830.0na	17750.0na					
1500-1700 a	Merlin Network One	6175.0eu							
1500-1700	Voice of Nigeria	7255.0af							
1500-1700	WHRI Noblesville IN	13760.0va	15105.0am						
1500-2200	WHRA Greenbush ME	17650.0af							
1500-2300	WRNO New Orleans LA	7394.3am	15420.6al						
1500-2400	Christian Voice, Zambia	4965.0do							
1500-2400	KTBN Salt Lake City UT	15590.0na							
1515-1530 mtwhf	FEBA Seychelles	11600.0as							
1530-1545	BBC English Teaching	11685.0as	15540.0as						
1530-1545 smtw fa	FEBA Seychelles	11600.0as							
1530-1545	Radio Bangladesh	4882.0as	15520.1as						
1530-1545	Voice of Shariah, Afghan.	7002.2lr	7090.0as						
1530-1600	AWR Europe, Austria	7165.0eu	17660.0as						
1530-1600	BBC World Service	5975.0as	6190.0af	6195.0as	9515.0na	9740.0as	9815.0as		
		11865.0na	11940.0af	12095.0eu	15220.0na	15310.0as	15400.0af		
		15485.0eu	15565.0eu	17700.0as	17830.0af	17840.0am	21470.0af		
		21660.0af							
1530-1600	Georgian Radio, Tbilisi	6180.0me							
1530-1600	ORF Vienna	6155.0eu	13730.0eu	17865.0na					
1530-1600	VOA Special English	6160.0as	9590.0as	9760.0as	9845.0as	12040.0as	15550.0as		
1530-1600	Voice of Hope, Germany	15715.0me							
1530-1600 mtwhf	World Beacon	6145.0af							
1530-1630	VOIRI Teheran	7245.0as	9635.0as	11775.0as					
1530-1800	Radio Botswana	3356.0do	4820.0do	7255.0do					
1545-1600 sm	a FEBA Seychelles	11600.0as							
1545-1600 s h	Radio Bangladesh	4882.0as	15520.1as						
1550-1610	Vatican Radio	12065.0au	13765.0au	15235.0au					
1600-1615	BBC World Service	3915.0as	5975.0as	6190.0af	6195.0as	7160.0as	9410.0eu		
		9515.0na	9740.0as	11940.0af	12095.0eu	15310.0as	15400.0af		
		15485.0eu	15565.0eu	17700.0as	17830.0af	17840.0am	21470.0af		
		21660.0af							
1600-1615	Radio Pakistan	11570.0me	15100.1af	15726.0af	17720.0af				
1600-1627	Radio Prague Int'l	5930.0eu	21745.0af						
1600-1630	Channel Africa, S. Africa	9525.0af							
1600-1630	Kol Israel	15615.0va	15640.0va	17545.0va	21665.0va				
1600-1630	Radio Dubai, UAE	13630.0eu	13675.0eu	15395.0eu	21605.0eu				
1600-1630	Radio Mexico Int'l	9705.0am	11770.0am						
1600-1645	Deutsche Welle	6140.0eu	6170.0as	7225.0as	9735.0af	11665.0af	17595.0as		
		21840.0af							
1600-1656	China Radio Int'l	9565.0af	9870.0af						
1600-1656	Voice of Korea	3560.0af	6520.0af	9660.0af	9975.0af				
1600-1700	KSDA Guam	11850.0as							
1600-1700	Radio Algiers	11715.0va	15160.0va						
1600-1700	Radio Australia	5995.0va	6080.0pa	9580.0va	9655.0va	11650.0pa	11660.0va		
1600-1700	Radio Ethiopia	5990.0af	7110.0af	7165.0af	9560.2af	9704.2af	11800.0af		
1600-1700	Radio Korea	5975.0om	6150.0eu	9515.0af	9870.0af				
1600-1700	Sri Lanka B'casting Corp.	4940.0do							
1600-1700	VOA	6035.0af	6160.0as	7125.0as	9645.0as	9700.0me	9760.0as		
		13605.0af	13710.0af	15205.0eu	15225.0af	15255.0va	15410.0af		

1600-1700		<b>VOA Special English</b>	13600.Oas	15445.Oaf	17895.Oaf				
1600-1700	a	<b>Voice of Greece</b>	7457.Oeu	9420.Oeu	15630.Oeu	17705.Ona			
1600-1700		<b>Voice of Russia</b>	9730.Oas	9875.Oas	11985.Ome	12055.Oas	15540.Ome		
1600-1700		<b>WYFR Okeechobee FL</b>	11830.Ona	13855.Oaf	17750.Ona	18980.Oeu	21455.Oeu	21525.Oaf	
1600-1725		<b>Overcomer Ministries</b>	6110.Oeu						
1600-1730		<b>Radio France Int'l</b>	11615.Oaf	11995.Oaf	12015.Oaf	15605.Oaf	17605.Oaf	17850.Oaf	
1600-1800		<b>Radio Taipei Int'l</b>	11550.Oas						
1600-1800		<b>World Beacon</b>	6145.Oaf						
1600-1800		<b>WSHB Cypress Creek SC</b>	18910.Oaf						
1600-2100	smtwhf	<b>WMLK Bethel PA</b>	9465.Oeu	15265.Oaf					
1600-2200		<b>WEWN Birmingham AL</b>	11875.Ona	13615.Ona	15745.Oeu				
1600-2305		<b>Radio Nigeria, Lagos</b>	3326.Odo	4990.Odo					
1615-1630		<b>BBC World Service</b>	3915.Oas	5975.Oas	6190.Oaf	6195.Oas	7160.Oas	9410.Oeu	
			9515.Ona	9740.Oas	11940.Oaf	12095.Oaf	15310.Oas	15400.Oaf	
			15420.Oaf	15485.Oeu	15565.Oeu	17700.Oas	17830.Oaf	17840.Oam	
			21470.Oaf	21660.Oaf					
1615-1630	s	a <b>BBC World Service</b>	11860.Oaf	21490.Oaf					
1615-1630		<b>Vatican Radio</b>	4005.Oeu	5885.Oeu	7250.Oeu	9645.Oeu	15595.Oeu		
1625-1640		<b>TWR Armenia</b>	5855.Oeu						
1630-1657		<b>Voice of Vietnam</b>	9730.Oeu	11630.Oaf	13740.Oaf				
1630-1700		<b>BBC English Teaching</b>	5875.Oeu	9535.Oeu	9660.Oeu	11705.Oeu	13645.Oeu		
1630-1700		<b>BBC World Service</b>	3915.Oas	5975.Oas	6190.Oaf	6195.Oas	7160.Oas	9410.Oeu	
			9740.Oas	11940.Oaf	12095.Oeu	15310.Oas	15400.Oaf	15420.Oaf	
			15485.Oeu	15565.Oeu	17700.Oas	17830.Oaf	17840.Oam	21470.Oaf	
			21660.Oaf						
1630-1700	s	a <b>BBC World Service</b>	9515.Ona	11860.Oaf	21490.Oaf				
1630-1700	s	<b>FEBa Seychelles</b>	3306.Oaf	3396.Oaf					
1630-1700		<b>Radio Slovakia Int'l</b>	5920.Oeu	6055.Oeu	7345.Oeu				
1630-1830		<b>Radio Cairo</b>	15255.Oaf						
1630-2200		<b>Zimbabwe BC Corp.</b>	4828.Odo	6045.Odo					
1645-1700		<b>Radio Tajikistan</b>	7245						
1645-1900		<b>Deutsche Welle</b>	6140.Oeu						
1650-1850	mtwhf	<b>Radio New Zealand Int'l</b>	6095.Opa						
1700-1715		<b>Radio Galkayo, Somalia</b>	6985.Ova						
1700-1727		<b>Radio Prague Int'l</b>	5930.Oeu	21745.Oaf					
1700-1727		<b>Voice of Vietnam</b>	12070.Oeu						
1700-1730		<b>Channel Africa, S. Africa</b>	17860.Oaf						
1700-1730		<b>Voice of Azerbaijan</b>	6110.Oeu	9155.Oeu					
1700-1746		<b>BBC World Service</b>	3255.Oaf	3915.Oas	5975.Oas	6005.Oaf	6190.Oaf	6195.Oeu	
			7160.Oas	9410.Oeu	9510.Oas	9630.Oaf	9740.Oas	12095.Oeu	
			15400.Oaf	15420.Oaf	15485.Oeu	15575.Ome	17830.Oaf	17840.Ona	
			21470.Oaf						
1700-1755		<b>Radio Polonia, Warsaw</b>	5995.Oeu	7285.Oeu					
1700-1756		<b>China Radio Int'l</b>	9570.Oaf	9670.Oaf	9695.Oaf	11920.Oaf	13790.Oaf		
1700-1756		<b>Radio Romania Int'l</b>	11740.Oeu	15365.Oeu	15380.Oeu	17805.Oeu			
1700-1800		<b>R. Omdurman, Sudan</b>	7200.Odo	9200.Odo	9505.Odo				
1700-1800		<b>Radio Australia</b>	5995.Ova	6080.Opa	9580.Ova	9655.Ova	9815.Oas	11880.Ova	
1700-1800		<b>Radio Japan</b>	9505.Ona	11970.Oeu	15355.Oaf				
1700-1800		<b>VOA</b>	6160.Oas	7125.Oas	7170.Oas	9645.Oas	9700.Ome	9760.Oaf	
			15255.Ova	15410.Oaf	15445.Oaf	17895.Oaf			
1700-1800	mtwhf	<b>VOA</b>	5990.Oas	6045.Oas	7215.Oas	9550.Oas	9770.Oas	9785.Oas	
1700-1800		<b>Voice of Russia</b>	9495.Oaf	9685.Oeu	9775.Oeu	9890.Oeu	11510.Oaf	11985.Oaf	
1700-1800	s	a <b>Voice of Russia</b>	7420.Oeu	9480.Oeu	9490.Oeu	9820.Oeu	11675.Oeu		
1700-1800		<b>WYFR Okeechobee FL</b>	13855.Oaf	18980.Oeu	21455.Oeu				
1700-1900		<b>Christian Voice, Austr.</b>	9720.Oas	11890.Oas					
1700-1900		<b>United Methodist Radio</b>	13820.Oaf	15485.Oaf					
1700-1900		<b>Voice of Hope, Germany</b>	9495.Oeu						
1700-2000		<b>WHRI Noblesville IN</b>	9495.Oam	13760.Ova					
1700-2000	mtwhf	<b>WRMI Miami FL</b>	15724.9na						
1700-2200		<b>Italian Radio Relay Svc</b>	3985.Ouf						
1700-2300		<b>Radio Africa, Eq. Guinea</b>	5003.7af	7190.Oaf	15183.8af				
1700-2300		<b>Sri Lanka B'casting Corp.</b>	4940.Olr						
1700-2400		<b>Ghana Broadcasting Corp.</b>	3366.Odo	4915.Odo					
1700-2400		<b>NBC Windhoek, Namibia</b>	3270.Oaf	3290.Oaf	7215.Olr				
1700-2400		<b>University Network</b>	9940.Oas						
1725-1745	mtwhf	<b>United Nations Radio</b>	6125.Oaf	15265.Ome	17580.Oaf				
1730-1745		<b>BBC English Teaching</b>	3390.Oaf	7230.Oaf	9525.Oaf				
1730-1745	m w	<b>BBC English Teaching</b>	6050.Oeu	11955.Oeu	15585.Oeu				
1730-1745	mtwhf	<b>TWR Swaziland</b>	3200.Oaf						
1730-1745		<b>Voice of Africa, Libya</b>	11815.Oaf	15435.Oaf	17725.Oaf				
1730-1759		<b>R. Vlaanderen Int'l</b>	5910.Oeu	9925.Oeu	13710.Oeu				
1730-1800		<b>AWR Africa, Meyerton</b>	12130.Oaf						
1730-1800		<b>Georgian Radio, Tbilisi</b>	6230.Oeu						
1730-1800	s	a <b>Georgian Radio, Tbilisi</b>	6080.Oas						
1730-1800		<b>KSDA Guam</b>	11965.Oas						
1730-1800	mtwhfa	<b>Radio Sweden</b>	6065.Oeu						
1730-1800	s	<b>Radio Sweden</b>	13580.Oeu						
1730-1800		<b>Swiss Radio Int'l</b>	15220.Oaf	17640.Oaf	21720.Oaf				
1730-1800		<b>TWR Swaziland</b>	9500.Oaf						
1730-1800		<b>Vatican Radio</b>	13765.Oaf	15570.Oaf	17515.Oaf				
1730-1830		<b>Radio Netherlands</b>	6020.Oaf	7120.Oaf	11655.Oaf				
1730-1930		<b>Radio Pilipinas, Manila</b>	11720.Opa	15190.Opa	17720.Opa				
1745-1800		<b>BBC English Teaching</b>	6065.Oas	9605.Oas					
1745-1800	smtwhf	<b>TWR Swaziland</b>	3200.Oaf						
1745-1900		<b>Radio Bangladesh</b>	7185.Oeu	7462.6eu	9550.1eu	15520.1eu			

1745-1945	All India Radio, Delhi	7410.0eu 17670.0af	9950.0eu	11620.0eu	11935.0af	13795.0af	15200.0af
1746-1800	BBC World Service	3255.0af 9410.0eu 15485.0eu	3915.0as 9510.0as 15575.0me	5975.0as 9740.0as 17830.0af	6190.0af 12095.0e	6195.0eu 15400.0af 21470.0af	7160.0as 15420.0af
1800-1827	Voice of Vietnam	9730.0eu	11630.0af	13740.0eu			
1800-1830	AWR Africa, Meyerton	5960.0af	6100.0af				
1800-1830	BBC World Service	3255.0af 9740.0pa 17840.0na 17870.0af	5975.0as 12095.0eu 21470.0af	6190.0af	6195.0eu 15420.0af	9410.0eu 15575.0me	9510.0as 17830.0af
1800-1830	Channel Africa, S. Africa	17870.0af					
1800-1830	Radio Telefis Eireann	15315.0me					
1800-1830 s	Universal Life, Germany	13855.0af					
1800-1859	Radio Canada Int'l	13690.0af	15200.0af	17820.0af	21570.0af		
1800-1900 m	Amateur Radio League, Saf		3215.0af				
1800-1900	KJES Vado NM	15385.0au					
1800-1900	Radio Australia	6080.0as	7240.0pa	9580.0va	9655.0va	9815.0as	11880.0va
1800-1900 s	a Radio Lusofonia, S.Afr.	3345.0af					
1800-1900	Radio Taipei Int'l	3955.0eu					
1800-1900 mtwhf	RAE Buenos Aires	15345.0eu					
1800-1900	Republic of Yemen Radio	9780.0me	11770.0me				
1800-1900	TWR Swaziland	3200.0af	9500.0af				
1800-1900	VOA	6035.0af 15580.0af	7415.0af	9760.0af	9770.0me	11975.0af	15410.0af
1800-1900	Voice of Russia	7300.0eu 11630.0eu	9480.0eu	9495.0af	9685.0eu	9775.0eu	9890.0eu
1800-1900	World Beacon	18980.0eu					
1800-2000	WYFR Okeechobee FL	3230.0af	9675.0af	17665.0af			
1800-2100	Radio Kuwait	11990.0va					
1800-2100 mtwhfa	WBCQ Monticello ME	17494.9na					
1800-2200	Radio Botswana	3356.0do	4820.0do				
1800-2200	WSHB Cypress Creek SC	15665.0va	18910.0af				
1800-2400	KWHR Naalehu HI	17510.0as					
1800-2400	Radio Liberia Int'l	5100.0do					
1804-1830 s	Voice of Greece	7457.0eu	7475.0eu	15630.0af	17705.0na		
1805-1810	Croatian Radio, Zagreb	6165.0eu	13830.0eu				
1830-1900	BBC World Service	3255.0af 9740.0pa 17840.0na	6005.0af	6190.0af	6195.0eu 15400.0af 15420.0af	9410.0eu 15575.0me	9630.0af 17830.0af
1830-1900	Georgian Radio, Tbilisi	11760.0eu					
1830-1900	ORF Vienna	5945.0eu	6155.0eu				
1830-1900	Radio Slovakia Int'l	5920.0eu	6055.0eu	7345.0eu			
1830-1900	Radio Telefis Eireann	13640.0na	21630.0af				
1830-1900 s	a VOA	11690.0af	13730.0af	15525.0af			
1830-1900 s	Voice of Greece	7475.0eu	9375.0va				
1830-1900 s	Voice of Greece	7457.0eu	15630.0af	17705.0na			
1830-1930	Voice of Turkey	9730.0af	9785.0eu				
1830-2025	Radio Netherlands	6020.0af 21590.0af	7120.0af	9895.0af	11655.0af	13700.0af	17605.0af
1845-1900	Radio Tirana, Albania	7210.0eu	9510.0eu				
1845-1915	RTVC Brazzaville, Congo	5985.0af					
1850-2050	Radio New Zealand Int'l	15160.0pa					
1900-1927	Voice of Vietnam	9730.0eu	11630.0af	13740.0eu			
1900-1930	Kol Israel	9435.0va	11605.0va	15615.0va	15640.0af	17545.0va	
1900-1930	Radio Budapest	6025.0eu	7130.0eu				
1900-1930	Swiss Radio Int'l	6110.0eu					
1900-1945	Deutsche Welle	11805.0af	11965.0af	13720.0af	15390.0af	17810.0af	
1900-1956	China Radio Int'l	9440.0af	11750.0af	13790.0af			
1900-1956	Voice of Korea	4405.0va	6575.0na	7505.0na	9335.1na	11710.1na	13760.1na
1900-2000	BBC World Service	3255.0af 9740.0pa	6005.0af	6190.0af	6195.0eu 15400.0af	9410.0eu 15575.0me	9630.0af 17830.0af
1900-2000 a	BBC World Service	17840.0na					
1900-2000	R. Central, Papua NG	3290.0ir					
1900-2000	Radio Australia	6080.0as	7240.0pa	9500.0as	9580.0va	9815.0as	11880.0va
1900-2000	Radio Bulgaria	9400.0eu	11900.0eu				
1900-2000	Radio Korea	5975.0om	7275.0eu				
1900-2000	Radio Thailand	7160.0eu	9655.0eu	11905.0eu			
1900-2000 a	Sri Lanka B'casting Corp.	6010.0eu					
1900-2000 smtwh a	V. of the Mediterranean	12060.0eu					
1900-2000	VOA	4950.0af 9760.0af 15445.0af	6035.0af	6160.0me	7375.0af	7415.0af	9525.0pa 15180.0pa 15410.0af
1900-2000 mtwhf	VOA	9550.0eu 15235.0as	9840.0as	11780.0me	11970.0as	12015.0as	13725.0me
1900-2000	VOA Special English	7260.0eu	9680.0me	13690.0me			
1900-2000	Voice of Russia	9480.0eu	9685.0eu	9775.0eu	9890.0eu	11675.0eu	12070.0eu
1900-2000	WYFR Okeechobee FL	15775.0af	18980.0eu				
1900-2015	TWR Swaziland	3200.0af					
1900-2030	HCJB Quito Ecuador	17660.0eu					
1900-2100	Christian Voice, Austr.	9720.0as					
1900-2100	STBC Solomon Islands	5020.0do					
1900-2100	Voice of Hope, Germany	7290.0eu					
1900-2100	Voice of Nigeria	7255.0af					
1900-2400	SLBS, Sierra Leone	3316.0do					
1915-1930	BBC English Teaching	15105.0af	17885.0af				

1930-1959		R. Vlaanderen Int'l	9925.0eu							
1930-2000	t h	Radio Minsk, Belarus	7105.0eu	7210.0eu						
1930-2000		Radio Sweden	6065.0eu							
1930-2025		Radio Polonia, Warsaw	6030.0eu	7165.0eu	7265.0eu	9540.0eu				
1930-2030		Swiss Radio Int'l	13770.0af	15220.0af	17580.0af	17735.0af				
1930-2030		VOIRI Teheran	9022.1eu	11670.0eu	13730.0eu					
1930-2230		Nat'l BC, Papua NG	4890.0do							
1930-2230		R. E. Highlands, Papua NG	3395.0do							
1930-2230		R. Milne Bay, Papua NG	3365.0do							
1930-2230		R. S. Highlands, Papua NG	3275.0do							
1935-1955		RAI, Rome	5970.0eu	9750.0eu						
1940-2000	mtwhfa	Voice of Armenia, Yerevan	4810.0eu	9960.0eu						
1950-2000		Vatican Radio	4005.0eu	5885.0eu	7250.0eu	9645.0eu				
2000-2010		Vatican Radio	4005.0eu	5885.0eu	7250.0eu	9645.0eu	9660.0af	11625.0af		
			13765.0af							
2000-2027		Radio Prague Int'l	5930.0eu	11600.0au						
2000-2030		VOA	4950.0af	6035.0af	6095.0me	7375.0af	7415.0af	9760.0af		
			9770.0af	11855.0af	11975.0af	15410.0af	15445.0af	15580.0af		
			17745.0af	17895.0af						
2000-2030		Voice of Mongolia	12015.0eu	12085.0eu						
2000-2045		Deutsche Welle	7130.0eu							
2000-2045		Radio Iraq Int'l	7157.0lr	9684.0lr	11784.9lr					
2000-2056		China Radio Int'l	9440.0af	11735.0af	11790.0af	13640.0af	13790.0af	15110.0af		
2000-2059		Radio Canada Int'l	5995.0eu	11690.0eu	15325.0eu	17870.0eu	21570.0eu			
2000-2100		BBC World Service	3255.0af	5975.0pa	6005.0af	6190.0af	6195.0eu	9410.0eu		
			9630.0af	9740.0pa	11835.0af	12095.0eu	15400.0af	17830.0af		
2000-2100		KJES Vado NM	15385.0na							
2000-2100		Radio Algiers	11715.0eu	11750.0eu	15160.0eu					
2000-2100		Radio Australia	9500.0as	9580.0va	9815.0as	11880.0va	12080.0pa			
2000-2100	s	Radio Australia	6080.0as	7240.0pa						
2000-2100		Radio Damascus	12085.0eu	13610.0eu						
2000-2100	mtwhf	Radio Exterior de España	9595.0af	15290.0eu						
2000-2100		Voice of Indonesia	9525.0eu	11785.0eu	15149.8eu					
2000-2100		Voice of Russia	9480.0eu	9775.0eu	9890.0eu	11675.0eu	12070.0eu	15455.0eu		
2000-2100		World Beacon	3230.0af	9675.0af	11640.0af	15465.0eu				
2000-2100	smtwhf	WRMI Miami FL	15724.9na							
2000-2100		WYFR Okeechobee FL	17845.0af	18980.0eu						
2000-2200		R. Central, Papua NG	3290.0do							
2000-2200	mtwhf	WWFV McCaysville GA	9320.0uf							
2000-2400		Radio Vanuatu	3945.0do	4960.0do	7260.0do					
2000-2400		WBCQ Monticello ME	7415.0na							
2000-2400		WHRI Noblesville IN	5745.0va	9495.0am						
2000-2400		ZLXA New Zealand	3935.0do	7290.0do						
2010-2030		Vatican Radio	9660.0af	11625.0af	13765.0af					
2025-2045		RAI, Rome	7125.0af	9635.0af	11880.0af					
2030-2045		Radio Thailand	9655.0eu	9680.0eu	11905.0eu					
2030-2045		Voice of Africa, Libya	11815.0af	15435.0af	17725.0af					
2030-2057		Voice of Vietnam	9730.0eu	11630.0af	13740.0eu					
2030-2100		AWR Africa, Meyerton	9745.0af							
2030-2100		BBC English Teaching	5875.0eu	6050.0eu	9635.0eu					
2030-2100	t h	Radio Minsk, Belarus	7105.0eu	7210.0eu						
2030-2100		Radio Tashkent	9540.0eu	9545.0eu						
2030-2100		VOA	6035.0af	6095.0me	7375.0af	7415.0af	9760.0af	9770.0af		
			11975.0af	15410.0af	15445.0af	15580.0af	17745.0af	17895.0af		
2030-2100	s	VOA	4950.0af							
2030-2100	f	Wales Radio Int'l	7325.0eu							
2030-2115		Radio Cairo	15375.0af							
2030-2130		Radio Havana Cuba	13660.0uf	13750.0eu						
2030-2130		Voice of Turkey	7170.0as							
2030-2200		HGJB Quito Ecuador	17660.0eu	21455.0uf						
2045-2230		All India Radio, Delhi	7150.0au	7410.0eu	9650.0eu	9910.0au	9950.0eu	11620.0au		
			11715.0au							
2050-2400		Radio New Zealand Int'l	17675.0pa							
2100-2130		AWR Europe, Austria	15195.0af							
2100-2130		BBC World Service	3255.0af	3915.0as	5965.0as	5975.0pa	6005.0af	6190.0af		
			6195.0va	9410.0eu	9740.0pa	11835.0af	11945.0as	12095.0as		
			15400.0af							
2100-2130	s	BBC World Service	5975.0am							
2100-2130		China Radio Int'l	11735.0af	11790.0eu	13640.0af	15110.0eu				
2100-2130		Radio Australia	7240.0pa	9500.0as	9580.0va	9660.0pa	11880.0va	12080.0pa		
			17715.0va	21740.0va						
2100-2130		Radio Budapest	6025.0eu							
2100-2130		Radio Korea	3975.0eu	15575.0eu						
2100-2145		Deutsche Welle	9670.0pa	9765.0pa	9875.0af	11865.0af	11915.0pa	15135.0af		
2100-2145		WYFR Okeechobee FL	13855.0af	15120.0af	17845.0af	18980.0eu				
2100-2156		Radio Romania Int'l	9725.0eu	11740.0eu	11940.0eu	15365.0eu				
2100-2200		R. Nacional de Angola	3374.9va	4950.0va	7245.0va					
2100-2200		Radio Bulgaria	9400.0eu	11900.0eu						
2100-2200		Radio Damascus	12085.0na	13610.0na						
2100-2200	s	Radio Exterior de España	9595.0af	9840.0eu						
2100-2200		Radio Japan	6035.0pa	6155.0eu	6180.0eu	11830.0eu	11855.0af	17825.0na		
			17860.0pa	21670.0pa						
2100-2200		Radio Ukraine Int'l	5905.0eu	7410.0eu	9560.0eu	11705.0eu	11950.0eu	13590.0na		

2100-2200	<b>VOA</b>	6035.0af 9705.0as 15445.0af 3230.0af 15724.9na 7435.0na	6040.0me 9760.0eu 15580.0af 9675.0af	6095.0me 11870.0pa 17740.0as 17820.0as	7375.0af 11975.0af 17820.0as	7415.0af 15185.0as 17895.0af	9530.0af 15410.0af
2100-2200	<b>World Beacon</b>						
2100-2200	<b>WRMI Miami FL</b>	15724.9na					
2100-2200	<b>WWCR Nashville TN</b>	7435.0na	12160.0na	13845.0na	15685.0na		
2100-2230	<b>SIBC Solomon Islands</b>	5020.0do	9545.0do				
2100-2400	<b>Christian Voice, Austr.</b>	9865.0pa					
2100-2400	<b>Scandinavian Weekend R.</b>	11690.0va					
2100-2400	<b>WBCQ Monticello ME</b>	9335.0na					
2115-2130	<b>BBC Caribbean Report</b>	5975.0ca	11675.0ca	15390.0ca			
2115-2200	<b>Radio Cairo</b>	9990.0eu	15375.0af				
2118-2200	<b>Voice of Greece</b>	9425.0pa	15650.0pa				
2130-2145	<b>BBC Calling Falklands</b>	11680.0sa					
2130-2156	<b>China Radio Int'l</b>	11790.0eu	15110.0eu				
2130-2157	<b>Radio Prague Int'l</b>	11600.0au	15545.0af				
2130-2200	<b>BBC World Service</b>	3255.0af 6195.0va 15400.0af	3915.0as 9410.0eu	5965.0as 9740.0pa	5975.0va 11835.0af	6005.0af 11945.0as	6190.0af 12095.0sa
2130-2200	<b>KSDA Guam</b>	11980.0as	15240.0as				
2130-2200	<b>ORF Vienna</b>	5945.0eu	6155.0eu				
2130-2200	<b>Radio Australia</b>	7240.0pa	9660.0pa	11880.0va	12080.0pa	17715.0va	21740.0va
2130-2200	<b>Radio Budapest</b>	3975.0eu					
2130-2200	<b>Radio Korea</b>	15575.0eu					
2130-2200	<b>Radio Sweden</b>	6065.0eu	15255.0as				
2130-2200	<b>Radio Tashkent</b>	7105.0eu	9540.0eu				
2130-2200	<b>Radio Tirana, Albania</b>	7130.0eu	9540.0eu				
2130-2230	<b>VOIRI Teheran</b>	9570.0as	13745.0as				
2130-2400	<b>ABC Alice Springs</b>	2310.0ir	4835.0do				
2130-2400	<b>ABC Katherine</b>	5025.0do					
2130-2400	<b>ABC Tennant Creek</b>	4910.0do					
2145-2200	<b>WYFR Okeechobee FL</b>	13855.0af	15120.0af	17845.0af			
2200-2218	<b>Voice of Greece</b>	9425.0pa	15650.0pa				
2200-2225	<b>RAI, Rome</b>	9675.0as	11900.0as	15240.0as			
2200-2230	<b>Radio Canada Int'l</b>	15305.0am	17880.0am				
2200-2230	<b>Radio Mexico Int'l</b>	9705.0am	11770.0am				
2200-2230	<b>VOA</b>	7215.0as 15305.0as	9705.0as 17740.0as	9770.0as 17820.0as	11760.0as	15185.0as	15290.0as
2200-2230	<b>VOA</b>	5855.0af	6035.0af	7375.0af	7415.0af	11975.0af	
2200-2245	<b>Radio Cairo</b>	9990.0eu					
2200-2245	<b>WYFR Okeechobee FL</b>	11740.0na	15120.0af	17845.0af			
2200-2256	<b>China Radio Int'l</b>	9880.0eu					
2200-2300	<b>BBC World Service</b>	5965.0as 9660.0as	5975.0am 11835.0af	6175.0na 11955.0as	6195.0va 12080.0pa	7105.0as 12095.0sa	9590.0na 15400.0af
2200-2300	<b>Italian Radio Relay Svc</b>	7120.0of					
2200-2300	<b>Radio Australia</b>	15110.0as	15240.0as	17715.0va	17795.0va	21740.0va	
2200-2300	<b>Radio Taipei Int'l</b>	11565.0eu	15600.0eu				
2200-2300	<b>Voice of Nigeria</b>	7255.0af					
2200-2300	<b>Voice of Turkey</b>	7190.0va	11845.0va				
2200-2300	<b>WRMI Miami FL</b>	9955.0am					
2200-2300	<b>WWCR Nashville TN</b>	7435.0na	9475.0na	12160.0na	13845.0na		
2200-2300	<b>WWFV McCallville GA</b>	12172.0uf	6890.0uf				
2200-2359	<b>Radio Canada Int'l</b>	9755.0am	13670.0am	17695.0am			
2200-2400	<b>Caribbean Beacon</b>	6090.0am					
2200-2400	<b>Voice of Guyana</b>	3291.4do	5949.4do				
2200-2400	<b>WEWN Birmingham AL</b>	9385.0na	13615.0na	17595.0eu			
2200-2400	<b>WHRA Greenbush ME</b>	7580.0eu					
2200-2400	<b>WSHB Cypress Creek SC</b>	13770.0eu	15285.0na				
2230-2257	<b>Radio Prague Int'l</b>	11600.0na	15545.0na				
2230-2259	<b>R. Vlaanderen Int'l</b>	15565.0na					
2230-2300	<b>VOA</b>	7215.0as 15305.0as	9705.0as 17740.0as	9770.0as 17820.0as	11760.0as	15185.0as	15290.0as
2230-2330	<b>Radio Havana Cuba</b>	9550.0am					
2230-2400	<b>Nat'l BC, Papua NG</b>	9675.0do	11880.0ir				
2230-2400	<b>SIBC Solomon Islands</b>	9545.0do					
2230-2400	<b>SIBC Solomon Islands</b>	5020.0do					
2245-2300	<b>WYFR Okeechobee FL</b>	11740.0na					
2245-2400	<b>All India Radio, Delhi</b>	9705.0as	9950.0as	11620.0as	13605.0as		
2300-2330	<b>China Radio Int'l</b>	5990.0na					
2300-2330	<b>Radio Australia</b>	9660.0pa	12080.0pa	15110.0as	15240.0as	17715.0va	17795.0va
2300-2330	<b>Radio Australia</b>	21740.0va					
2300-2330	<b>Radio Mexico Int'l</b>	9705.0am	11770.0am				
2300-2345	<b>Deutsche Welle</b>	9815.0as	12055.0as	13610.0as	21790.0as		
2300-2345	<b>WYFR Okeechobee FL</b>	11740.0na					
2300-2356	<b>Radio Romania Int'l</b>	9570.0eu	11775.0eu	11940.0na	15105.0na		
2300-2400	<b>BBC World Service</b>	3915.0as 7105.0as	5965.0as 9590.0na	5975.0am 11945.0as	6035.0as 11955.0as	6175.0na 12095.0sa	6195.0as 15280.0as
2300-2400	<b>HCJB Quito Ecuador</b>	17660.0as					
2300-2400	<b>Radio Bulgaria</b>	9400.0na	11700.0na				
2300-2400	<b>Radio Cairo</b>	9900.0am					
2300-2400	<b>SBC Radio 1, Singapore</b>	6150.0do					
2300-2400	<b>Sri Lanka B'casting Corp.</b>	4940.0do					
2300-2400	<b>VOA</b>	7215.0as 15305.0as	9705.0as 17740.0as	9770.0as 17820.0as	11760.0as	15185.0as	15290.0as

2300-2400	<b>VOA Special English</b>	7190.0as	7200.0as	7225.0pa	7260.0as	9545.0as	11805.0pa
		11925.0as	13735.0as	13775.0as	15205.0pa		
2300-2400	<b>WRMI Miami FL</b>	9955.0am					
2300-2400	<b>WRNO New Orleans LA</b>	7354.4va					
2300-2400 s	<b>WWBS Macon GA</b>	11910.0uf					
2300-2400	<b>WWCR Nashville TN</b>	5070.0na	7435.0na	9475.0na	13845.0na		
2300-2400	<b>WWFV McCaysville GA</b>	5085.0uf	6890.0uf				
2330-2345	<b>Voice of Africa, Libya</b>	11815.0af	15435.0af	17725.0af			
2330-2356	<b>China Radio Int'l</b>	5990.0na					
2330-2357	<b>Voice of Vietnam</b>	9839.5as	12019.6as				
2330-2400	<b>Radio Australia</b>	9660.0pa	12080.0pa	15240.0as	17715.0va	17795.0va	21740.0va
2330-2400	<b>Radio Netherlands</b>	6165.0na	9845.0na				
2330-2400	<b>Radio Vilnius, Lithuania</b>	9875.0na					
2330-2400	<b>Swiss Radio Int'l</b>	9885.0sa	11905.0sa				
24hr-	<b>AFRTS</b>	4278.5uf	4319.0uf	4993.5uf	5765.0uf	6350.0uf	6458.5uf
		6847.5uf	10320.0uf	10942.5uf	12579.0uf	12689.5uf	13254.0uf
		13362.5uf	16847.5uf				
24hr-	<b>CFRX Toronto ON</b>	6070.0do					
24hr-	<b>CFVP Calgary AB</b>	6030.0do					
24hr-	<b>CHNX Halifax NS</b>	6130.0do					
24hr-	<b>CKZN Saint John's NL</b>	6160.0do					
24hr-	<b>CKZU Vancouver BC</b>	6160.0do					
24hr-	<b>University Network</b>	5030.1am	6150.0am	7375.0am	9724.9sa	11870.0am	13749.6na
24hr-	<b>WJCR Upton KY</b>	7490.0am	13595.0as				
24hr-	<b>WTJC Newport NC</b>	9370.0na					

Key:

Days:

s - Sunday  
m - Monday  
t - Tuesday  
w - Wednesday  
h - Thursday  
f - Friday  
a - Saturday

Target Areas:

na - North America  
ca - Central America  
sa - South America  
am - Americas  
eu - Europe  
af - Africa  
me - Middle East  
as - Asia  
pa - Pacific

Other Notes:

va - Various  
do - Domestic  
om - Omnidirectional  
ir - Irregular  
oc - Occasional  
al - Alternate  
lf - Lower Sideband  
uf - Upper Sideband

The cover:

This month's cover features Radio Aparecida which transmits on 5035 kHz, 9630 kHz, and 11855 kHz. The address is Avenida Getulio Vargas 185, Centro, Aparecida SP, Brazil. URL is <[www.radioaparecida.com.br](http://www.radioaparecida.com.br)>.

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<b>Shortwave Listening Guidebook</b> by Harry Helms. Covers equipment, antennas, propagation, station profiles, utilities, clandestines, QSLing, etc. 315 pages.	\$19.95 +2.00 s/h US/CA +3.00 s/h world
<b>Limited Space Antenna Solutions</b> by Frank P. Hughes. Covers the random wire, dipole, vertical, outdoor, loft and indoor antennas, antenna tuners, and grounds.	\$13.00 +1.00 s/h US/CA +2.00 s/h world
<b>Inside Your Shortwave Radio</b> by Ted Benson. Companion to your receiver's instruction manual, filling in what your manual leaves unclear.	\$13.95 +2.00 s/h US/CA +2.50 s/h world
<b>Underground Frequency Guide (New to Company Store!)</b> by Donald W. Schimmel. An in-depth look at illegal radio communications; pirate, spies and so much more! Lists hundreds of frequencies & diplomatic radio systems worldwide. A book no pirate or clanny enthusiast should be without!	\$11.00 +2.00 s/h all
<b>Joe Carr's Receiving Antenna Handbook (Back in stock)</b> A complete guide for high performance antennas from longwave all the way to the upper end of the shortwave spectrum.	\$19.95 +2.00 s/h US/CA +3.00 s/h world
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