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the
JOURNAL

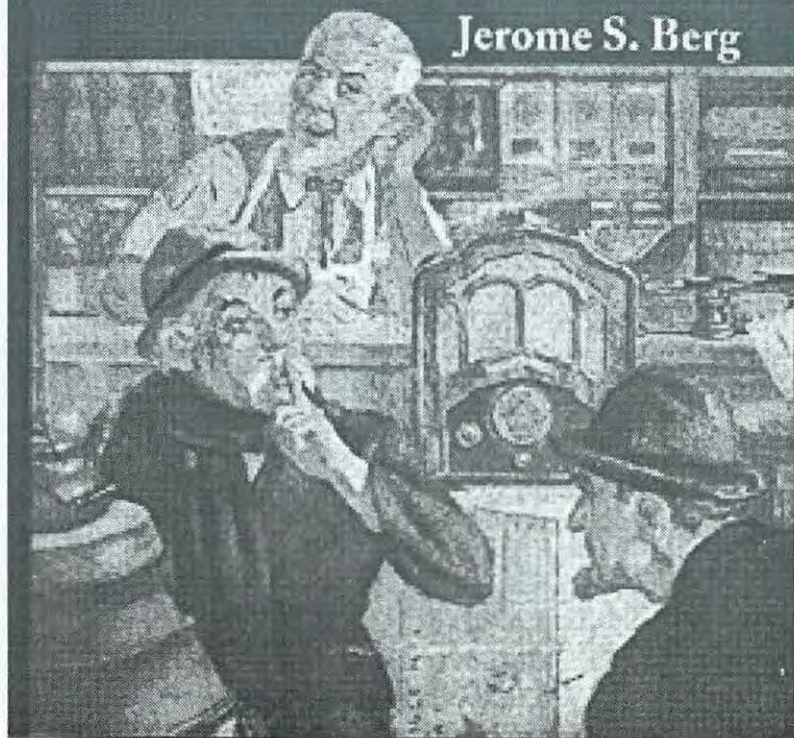
NORTH AMERICAN SHORTWAVE ASSOCIATION

VOLUME XXXIX NUMBER 5

MAY 1999

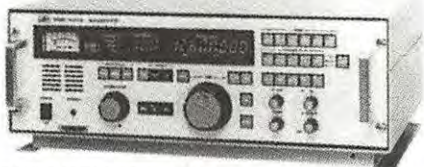
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● Worldwide Aeronautical Frequency Dir. By R. Evans
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● Joe Carr's Receiving Antenna Handbook
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● Shortwave Listening Guidebook 2nd Ed. By H. Helms
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www.universal-radio.com

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The smaller Freeplay FPR-2 model covers just AM & FM. #3657 \$69.95 (+\$6)
The Freeplay FPR-2SM is gray, AM & FM with solar cell. #2413 \$79.95 (+\$6)
The Freeplay FPR-2SC is clear, AM & FM with solar cell. #1441 \$79.95 (+\$6)

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On The Shortwaves, 1923-1945: Broadcast Listening in the Pioneer Days of Radio, written by our own **Jerry Berg**, is featured on our cover this month. Congratulations to Jerry for producing this outstanding book about the history of shortwave broadcasting and shortwave listening. The book will appeal to those with an interest in SWBC history and the early days of DX'ing. The book (ISBN 0-7864-0506-6) is 7 x 10 inches in size, hardback, and 280 pages with over 150 illustrations. On the Shortwaves can be purchased from the publisher, McFarland and Co., Inc. (Box 611, Jefferson, NC 28640) by mail or telephone (1-800-253-2187) for US\$42.50 plus shipping and handling (US\$4.00 in USA and US\$6.00 to the rest of the world). We will have a review in the Listeners Library column in the near future. Congratulations to Jerry on a job well done and for this major contribution to the history of the listening hobby.

Nearly 400 listeners participated in the 1998 Adventist World Radio DX contest submitting entries for the world's largest QSL. The winner was **Hans Godschan** from Germany. He will receive the 1998 Bronze Medallion. Past winners of the AWR DX contests include **John Wilkins** (1997), **William Matthews** (1996), **Arthur Cushen** (1995), **Gordon Darling** (1980) and **Victor Goonetillike** (1977). Watch for upcoming AWR contests in September 1999 and September 2000, which are listed in the Calendar of Events.

Remember to direct any questions you may have about the use of the club's country list to **Don Jensen** (5204 70th Street, Kenosha, WI 53142 or dnjkenosha@acronet.net). Señor Jensen will be glad to answer any

ANARC SWL Ham Net

Tune in Sunday mornings at 10 A. M. Eastern Time on 7240 LSB for the latest in shortwave, medium wave and longwave listening, DX tips, and up to the minute hobby news. Contributors share their DX tips via their own amateur radio stations or by telephoning a "gateway" station who then broadcasts the relayed tips. Contributions are also accepted via the Internet Relay Chat (IRC) channel #swl while the net is in progress. Net Controls Dave N1DK, Bill WA2DVU, and A1NN2U host an always lively gang of DX monitors. (Best heard in the eastern half of NAM) Net info is also available at <http://www.trsc.com/Radio/SWL_Net/swl_net.html>. If you miss the net, you can hear it in RealAudio on the Internet, on Dave Kirby's home page, <<http://www.n1dk.com/>>. Dave also posts text versions of loggings.

questions you have. Remember to include return postage if contacting Don by regular mail. Also, don't forget that **Bill Oliver** has a new e-mail address <boliver@bboard.com>. Any questions about your membership, mail problems, etc. should be directed to Bill at that address or the standard surface mail address (45 Wildflower Road, Levittown, PA 19057).

The summer of 99-radio listener's convention season is heating up. Check the Calendar of Events for some of the activities planned to happen during the summer months. The annual National Radio Club ("NRC") Labor Day weekend gathering and the World TV-FM DX Association ("WTFDA") meeting

Our Motto is - "Unity and Friendship"

Contribute!

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

now joins the International Radio Club of America ("IRCA")/DecalcoMania gathering in the calendar section. The NRC and IRCA specialize in medium wave DX'ing, the WTFDA specializes in TV and FM DX, while DecalcoMania is a medium wave memorabilia collectors club.

The summer travelling softball season will be kicking into high gear shortly. I expect my radio time to drop considerably as it has in previous seasons around this time each year.

The high school softball team is beginning to reach the end of its regular season schedule. This summer I will be switching from hardball, where I have managed and coached for twenty teams over the last fourteen years, and coach 18 and under girls Class "A" fast-pitch softball. If our winter workouts were any indication, it promises to be an adventure!

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



FRENDX: Twenty Five Years Ago....

Tom Meyer of the Happy Station was featured on the cover. Charlie Loudenboomer presented "DX Funtage", a collection of random thoughts spoofing a similar column that appeared in another DX publication during that time period. Ed Shaw's Shortwave Center carried an article by Henry Peters about Togo and an interview with Jim Vastenhoude of Radio Nederlands by Serge Neuman. Also, there was a mini review of the Lafayette HA-600A communications receiver and an Allied SX-190 workshop for upgrading the SX-190 receiver. Due to postal problems, Dan Ferguson prepared the lower half of the Log Report at Headquarters. Ferguson informed members that the Danish Shortwave Club International and the Cimbler DX Club were considering a merger. The combined clubs will be known as the Danish Shortwave Clubs International (it would be another 2 decades before the "s" in clubs was dropped from the name!).

Welcome to the following new NASWA members

Michael Addiego, Melville, NY
Michael F. Ananian, Greensboro, NC
Stephen E. Ananian DMD, Portsmouth, NH
John Blackman, Nashville, TN
Sam Carmichael, Mechanicsburg, PA
Bruce W. Churchill, Escondido, CA
Mr. Ira S. Cohen, Lake Worth, FL
Ross Comeau, Andover, MA
Kim Elliott, Arlington, VA
Creed Freeman, Doylestown, PA
Eldon Geiman, Greencastle, PA
Tony Germanotta, Chesapeake, VA
George L. Glotzbach, Santa Fe, NM
Howard J. Greenwald PC, East Rochester, NY
Ray Gulbrandson, Racine, WI
Terry Kelly, Santa Rosa, CA

Risto Kotalampi, Hayward, CA
E. J. Krucenski, Panama City, FL
Robert F. Lindahn, Ramsey, NJ
Dave Marshall, New Carlisle, OH
Floyd W. Meentemeyer, Olney, IL
M. K. Phares, Cleveland, OH
Lee Reynolds, Lempster, NH
Pedro F. Royer, Brooklyn, NY
Lee Philip Schlanger, Sand Springs, OK
Abraham Shaw, Secane, PA
Jack Sisler, Wooster, OH
Mr. Robert C. Tibbils, Glastonbury, CT
Bobby R. Walker, Lincoln, AL
Howard Weinstein, Marlton, NJ
Tracy Wood, Sterling, VA

Calendar Of Events

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

May 21 Meeting. Boston Area NASWA Chapter. The Lexington Club, Rts. 4 & 225, Lexington, MA at 7:30 PM. The location is 1/4 mile west of Rt. 128, Exit 31. For more information contact Paul Graveline at 978-470-1971 or Internet: 74007.3434@compuserve.com. The URL for the BADX guys is <<http://www.anarc.org/naswa/badx/>>.

Jun'99 Meeting. Pirate Radio Meeting arranged by **East and West Radio Club** will be held 4-6 June 1999 about 40 kilometers south of Köln. Contact Adolf Schwegeler, Bahnhofstr 56, DE-50374 Erfstadt, Germany. Fax +49 223545046. E-mail: achim.baum@t-online.de.

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

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

Jun'99 Convention. IRCA/DecalcoMania Ultra-Convention will be held June 25, 26 and 27, 1999 at the Holiday In-Boardwalk (3750 Las Vegas Blvd., So. Las Vegas, NV); call 800-635-4581 for reservations (\$55 per room if made before April 25th). Registration fee \$35.00. Send registration fee and inquiries to Mike Sanburn, P.O. Box 1256, Bellflower, CA 90707 stating name, address, phone number, date arriving, number of persons, and club affiliation.

Jul'99 Convention. WTFDA Convention will be held July 16-18, 1999 at the Wyndham Garden Hotel (1000 International Drive, Mt. Olive, NJ 07828); call 973-448-1100 or 1-800-WYNDHAM for reservations (\$89/night). Convention host is Rick Shaftan. No other details are available at this time.

Sep'99 Convention. NRC Annual Convention will be held September 3-6, 1999 at the Holiday Inn in Bridgeport, WV (100 Lodgeville Road, Bridgeport, WV); call 304-842-4635 for reservations (\$70.85 per room if made before August 13th). Registration fee is \$35.00 prior to August 1st and \$40.00 thereafter. Send registration fee to William Swiger, One Casey Lane, Bridgeport, WV 26330 (304-842-4635).

Sep'99 Contest. AWR Contest. Largest QSL collections, long delays in receiving a QSL, and QSL cards from the old AWR unit in Africa. More details to follow.

Mar 10-12, 2000 Convention. The **13th Annual Winter SWL Festival** will be held at the Kulpsville Holiday Inn (Exit 31 on the Northeast Extension of the Pennsylvania Turnpike) on 10-12 March 2000.

Mar 19-21 Contest. 1999 North American DX Championships. For further information you can send a self-addressed stamped envelope to 2000 NADXC, c/o Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606. Rules will also be posted eventually at <<http://www.anarc.org/>>.

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

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

Musings

This column provides a forum wheras members can express comments, ideas, and thoughts about NASWA or the SW radio hobby. Please feel free to comment on anything presented this month (or previous months). Opinions expressed here are are soley 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.

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

Well, well, well... the 12th annual Winter SWL Festival is now history. There were around 150 folks visiting Kulpsville for this year's festivities. For many radio monitors, this is an annual pilgrimage. Special thanks go out to Bob Brown, Harold Cones and Kris Field for their efforts. It was appropriate that ANARC took the opportunity to recognize their fine work all these years with Certificates of Recognition. Supporting your club's participation was Fred Kohlbrenner and Ed Mauger who run the club table at the FEST. Also, Rich Cuff and John Figliozzi provide the hospitality in the hospitality suite! This year your club was the sponsor for the hospitality room. There are other club members that participate in the FEST in one way or another—thanks to all—you know who you are!

The DX season is beginning to wind down as we head into spring. Naturally, there are a lot of good listening opportunities out there so keep listening and, just as important, keep reporting. An idle editor isn't a pretty site!

William A. Lukerth, 1857 Olympic Drive, Martinez, CA 94553

Thank you for the sample copy of your magazine. Judging by what I've seen, I'll probably be subscribing.

I'm new to the shortwave hobby, and I have a few questions and observations that your readers might wish to respond to. The first is that SWL (and DX'ing in particular) appears to be mainly an "East Coast" hobby (bear in mind that to a native Californian, such as myself, the "East Coast" would be the other side of Denver). Many of the stations listed as "easy catches" can not be received on the west coast at all, at least not with what I'm using (a Sony ICF-SW7600G connected to an external 35-foot wire antenna). Paradoxically, many of the far east stations (Vietnam for example) actually come in better on the East Coast than on the West (probably due to relay stations?). There is a "Catch-22" situation here in that people in the West don't buy shortwave radios because reception is so bad here, and therefore the broadcasters aim their signals at the East where they know most of the SWLs are, thereby insuring that reception in the West stays bad. Incidentally, I have met several people here in the Bay Area who "listen" to SW on the Internet, but so far I haven't met anyone else who uses a radio.

My second observation is that the biggest obstacle to SWLing is the tremendous amount of fluctuation in schedules and frequencies. Many of the schedules sent out by the stations themselves are out of date at the time they're sent, as witnessed by the correction sheet packaged with the schedule. For example, lately I have been picking up a strong signal on 11655 kHz from about 0200 to 0430 UTC; the language is either Italian, Greek or Russian; the only words I can identify are "Internationale" and something that sounds like "Milleon." According to Passport, WRTH, the December issue of Monitoring Times and The North American Shortwave Frequency Guide, this station doesn't exist. Can anybody help me out here?

Two short technical questions: 1) would an antenna tuner help my reception measurably? 2) I've read things about static electricity that have made me paranoid about it to the point that I always touch my antenna lead to a ground before hooking it to the radio—but I have never noticed any spark of static electricity when I do this—am I being overly concerned?

Lastly, as a born-again Christian it frankly embarrasses me that the only exposure to American Christianity that many people in foreign lands have is the right-wing, kooky, paranoid and eccentric version that so many American SW stations broadcast—I've heard things on some of them that made me wish I could apologize to anyone else unfortunate enough to have heard them.

Thanks for putting up with this long letter—Bill.

N446b

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

FOR SALE: Grundig YB-305 with case, \$65.00. Radio Shack Digital Signal Processor for communications receiver. Like new in box, \$45.00. Postage extra. Dennis Tackett, 1452 Countryside Drive, Indianapolis, IN 46231. Phone (317) 484-2585.

NOTICE: Disabled fellow SWL enthusiast with limited income is searching for a used shortwave radio to be donated. He is especially interested in single sideband. Please respond to Mr. Joe Stamper, 1312 North Parke Avenue, Warsaw, IN 46580.

FOR SALE: Customized Beam Headings (from/to) and Distances (MI/KM) to more that 480 WRTH transmitter sites including Russian republics. ITU Country Codes includes. Send your location or coordinates. Price \$8.00. NASWA Journals for 1996, '97, '98 complete, \$16.00 each. 1996 Passport to World Band Radio, \$10.00. WRTH 1991, \$5.00; 1997, \$12.00; 1998, \$16.00. All items include shipping (overseas shipping extra). Cashiers check or money order only, please. Al Drehmann, Route 2, Box 3-B, Tryon, NC 28782. E-mail <ADrehman@juno.com>. Phone (828) 894-3398. No collect calls, please.

Easy Listening

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

BBC: Another Opinion

Accepting my challenge to provide input the column, NASWAN John Lyon sent me the following note regarding his thoughts on the changes the BBC World Service has been implementing of late:

Any seasoned listener to the BBC recently has noticed a profound change in program content and style. The current BBC director is said to be of a commercial radio mentality—which is obvious. That he is dismantling one of the United Kingdom's greatest current cultural assets seems irrelevant to him, based on his behavior.

No matter what the source, everyone has to evaluate his or her news source(s). Because American news sources have become so shallow, it's natural to turn to short wave to avoid the rewritten press releases, the interference of advertisers, and the adolescent happy talk of radio talk shows and TV. It was said decades ago by TV executives themselves, that TV is aimed at the guy with the 6th grade education, sitting on the couch in his T-shirt, with a can of beer in his hand. That is apparently the demographic the BBC now desires. Nowadays, marketers are trying to reach women as well as men, but the principle is the same.

The strength of BBC in the past has been its objectivity and factualness. Although EU-centric, at least you knew that BBC's coverage wouldn't take sides most of the time. It was clear that candor suffered, but balance, credibility, and depth were its strength. Now we have Rent-A-BBC. Maybe it started before the Gulf War, but that's when I first noticed regular BBC dispatches on both on local stations and national. Since then, the BBC seems to like the smell of American greenbacks. A recent program at 1000Z on

BBC is World Update, tailor-made for American-style public radio. The anchor is one Vicki Barker, with an American accent. At times she reminds me of the tabloid-style broadcaster David Page, of Radio France International, and at other times of our own shallow, US media personalities. Some hard news, lots of folksy human-interest features especially on female topics, and lots of repetition for the attention impaired. BBC Lite. And that raises an interesting question. In a completely hypothetical example, let's assume you are a public radio station somewhere that has a corrupt, multinational business advertiser, sorry, underwriter. Do you suppose BBC would ever have any story about that business that wasn't sweetness and light?

Most of the entertainment programs have been watered down for the guy with the beer can. Pandering seems to be the order of the day. Several BBC listeners objected, in the Write On letters show, to the use of sound effects/music to artificially increase the drama [read hype] of programs, while not adding to the content. BBC producers, when questioned, did their duty and fell on their swords, maintaining that the sounds were justified even though they would not have been used only a short time ago. Infotainment, as in NPR. Style over content. Hmmm, maybe David Page really is a consultant to the BBC after all.

What's a hard-core news junkie to do? My other news source since college, the New York Times, has also gone Infotainment. Any long-term reader has seen a similar dumbing down. It has even added new lifestyle sections to the paper, and the only purpose for these sections seems to be as a place holder for advertisements. The Paper of Record is becoming the Paper of Advertisers.

What's next? Tabloid sleaze and tease? My respect for the BBC, even after decades of listening, has diminished. I can't help but think the BBC is designing its content to what it—or marketing—thinks the target market wants to hear—in order to facilitate the revenue stream. For any of us, when someone pays, we dance to his or her tune. Time to start seriously considering the BBC's short wave competitors for objective, hard-core news.

Agree? Disagree? To add your two cents to this discussion, drop me a line via E-mail or snail mail. I'm less critical than John is regarding the BBC's changes, because I recognize that the BBC will need to change to reach a younger demographic as the rest of us get older. The statistic I'm hoping to find out is how people listen to the World Service nowadays. Is it via shortwave? Local relays? Public Radio? The Internet?

BBC — Additional Items

VOA's *News Now* vs. BBC's *World Today*
When the NATO air campaign in Kosovo got underway late in March, I thought it would be a good opportunity to compare the two English language "rolling news" broadcasts currently on shortwave: the Voice Of America's *News Now* service, and the BBC World Service's *World Today* program. Both programs provide news and current affairs in comparatively small, digestible chunks; both services focus much of their efforts on Kosovo.

News Now seems to rely on media spokespersons' regular briefings for much of its content. Both NATO and American generals' comments are aired, but these comments appear to be culled from daily briefings and press conferences, not interviews. There is some field reporting, but this reporting generally appears to be field-based spokespersons. Sports reporting figures more prominently in *News Now* than in *The World Today*, but the sports tend to be, naturally, American sports. Cricket and soccer fans are out of luck.

The World Today features a more diverse mix of coverage, with substantially more field reporting than *News Now*. To some extent,

one hears the same spokespersons on *The World Today* as on *News Now*, but the BBC often obtains one-on-one interviews, and involves the spokesperson in direct question-and-answer dialogue. While the VOA's coverage is certainly more plentiful than on any domestic USA radio network, it doesn't measure up to the depth, analysis, and field correspondent base the BBC has.

BBC's all-news World Service

Somehow I missed this when the news first came out in February. The BBC has announced what had long been rumored: the creation of a second English-language world service, with a 24-hour rolling news format. This service will not be 100% available on shortwave, but will be available via satellite (presumably for local distribution) and via Internet audio. I would assume that the *World Today* program amounts to this second all-news service; the night the NATO air strikes began, I tuned into the World Service at around 2200 UTC, and the Americas stream had *World Today* programming. At that hour, *The World Today* is only scheduled for the Far East and Asia.

This second World Service stream has been shown at the broadcast.com home of the BBC's 24-hour webcast for several months, but hasn't featured any unique content. This second World Service stream wasn't available when I checked the link during preparation of this month's column. I'll provide an update once I get additional information.

May BBC World Service Highlights Music

The World Service joins *Music Live*, the UK's biggest broadcast live music festival, for the first time in 1999. The festival comes from Glasgow, Scotland, and both classical and popular music will be featured.

Sundays, 1515, May 30th and June 6th: *International Recital* airs two special editions; the group *The City Waites* performs popular music from the Middle Ages with period instruments, costumes, and street performers on May 30th. *The Whistlebinkies* is a Scottish traditional music ensemble that's been around since the 1960s; they use authentic Celtic instruments and will perform on June 6th.

Features

Tuesdays-Saturdays, 0055, and Mondays, 0030: *My Century* themes for May include *The City*, which looks at trends towards urbanization in the 20th century, featuring Oscar Niemeyer, the architect who designed Brasilia, and Ed Koch, the former mayor of New York. *The Secret State*, in the third week of May, examines the world of secret agents and spies, and hears from Hermann Arndt, the Mossad agent who tracked down Adolf Eichmann in Argentina in 1960.

Thursday, May 13th, 1130: *Assignment* investigates Cuban society, as Cuba has turned the corner from its economic crisis, thanks largely to a dramatic increase in tourism. Jonathan Fryer investigates the largely two-class society and meets a diverse group of men and women, including some of the original revolutionaries. First airing Thursdays 0730; an audible African airing is 1930. The airdate for this edition may change based on current events between now and then.

Drama

Saturday, May 8, 2230, *Play of the Week: Playing Sinatra* by Bernard Kops was first staged in 1991, and has a revised ending, presumably because Frank Sinatra died a year ago. The play itself is about an agoraphobic bookbinder who lives with his caretaker sister in South London; their relationship of dependency and bitterness is settled only with the music of Sinatra, which calms him down, and gives her the will to live on. North American West Coast listeners can also hear *Play of the Week* Sundays 0530 UTC.

Program Exchange

African Music

Bob Montgomery sends along the following suggestion:

We all have different tastes in music and as the mode strikes, so does the music. I have to say near the top of my list of most listened to music would have to be almost anything from Africa. It seems to have a care free spirit, always happy music. A good diversion from following various world situations and work, is music, no matter the language.

My first stop, and I usually spend the evening till fade out is Afrique Numero UN from Gabon which is in French. I am sorry to say I don't speak the language but that is not needed for the music. Starting on 9580 I try to start around 2100 or so. The listing shows it to go off around 2300 but have many times heard it later. When it finally shuts down move to 4777 and the music continues. Both frequencies are an easy catch here on the east coast of the US. On a Saturday evening, after a couple of adult beverages, you might find yourself dancing across the shack.

Also, from Hans Johnson:

Keep an ear on Libya's frequencies of 11815 and 15435 if you like African music. They are playing a fair amount of this stuff as part of their Voice of Africa effort. Recently Hans heard a real good Chadian music program; with the state of Chad's own transmitters and frequencies selection, this is the best shot we have at such music. Best times to catch them: After 2000 UTC till about 0300.

Radio Australia: Correspondents' Report

In the style of the BBC's *From Our Own Correspondent*, Radio Australia features this program on the weekends. *Correspondents' Report* is a series of field reports from various locations — not necessarily the Pacific — with a slightly longer focus than in a day-to-day current affairs program. The reports are either standup reports by the correspondent, or interviews with others having an analytical perspective. Topics are current affairs; recently, Kosovo has figured prominently. Air times: Sundays 0310, 0630, 1010. I found the 1010 airing on 13605 kHz, which is a new frequency and is shown on the Radio Australia webpage.

Radio Netherlands: Wide Angle

This is a new Radio Netherlands program, occupying the *Newsline* program slot on Sundays. *Wide Angle* deals with a single issue for the entire 15-minute program, much like *Insight* on the BBC World Service. A recent edition featured the role of the Internet in the Kosovo war; it was interesting to hear Jonathan Marks on something other than *Media Network*. *Wide Angle* is a well-done

program, not surprising given its roots with the *Newsline* team. Sundays 2338 to the Americas.

Easy Listening — Multimedia Opportunities

Programming Discussion E-mail List Reflector

One of the problems we have as shortwave listeners is that it is hard to find out in advance what is going to be aired on upcoming programs. Near term forward promotion, when it is done at all, is usually only done by voice announcements. Some services have published printed program guides, but the lead times associated with the print and mailing cycle have made the inclusion of detailed information in many programs impossible. Some broadcasters are now posting more detailed information on web sites but the burden is on the listener to go find and download the information.

In an effort to help the broadcasters reach their listener community, several shortwave listeners have decided to establish an e-mail reflector for the specific purpose of quickly sharing information on program content. Each of us has adopted a major broadcaster and have begun posting detailed program information to help inform the others of interesting upcoming programs.

The list is primarily focused on broadcasters targeting the Western hemisphere in the English language but information related to musical programs in any language are also welcome. You can subscribe to this list and receive the benefit of this effort. If you desire to and have the ability to gather information on upcoming programs, you can also adopt a broadcaster and begin posting information to the list.

In addition, the charter of the list also permits the critical discussion of program content and general program philosophy of international broadcasters.

The list is limited to 500 subscribers, so if you are interested in program content, sign up today before the list is full.

To subscribe, either visit the website <http://www.topica.com> and search for the group *swprograms* or send an e-mail to the address swprograms-subscribe@topica.com. Nothing is required for the body or subject of this message.

So far, we have "adoptive parents" for Radio Australia, Radio Canada International, the Voice of Russia, Radio Austria International, Radio Taipei International, and Radio Netherlands, and I'm posting information on the BBC World Service. If you have an ongoing dialogue with any broadcasters, even including these, your input would be most welcome.

Thanks to Peter Bowen, Saul Broudy, Joe Buch, John Figliozzi, Maryanne Kehoe and George Maroti for their insight, support, and ideas in setting this reflector up; thanks specifically to Joe for the synopsis appearing above.

Programming Focus on DXing With Cumbre

I'm pleased to announce that I am now providing a monthly five-minute report on programming topics on *DXing With Cumbre*, the shortwave hobby program hosted by NASWA Marie Lamb on World Harvest Radio's outlets (WHRI, WHRA, KWHR). Generally my report will air the first week-end of the month, though this might vary from time to time. If you have any late-breaking information with a shelf life too short for the NASWA Journal but of interest to the radio audience, please send it my way.

Easy Listening Website

I have a home page set up at <http://www.angelfire.com/pa2/ezlistening> with selected links, observations, and thoughts relevant to international broadcast program listening. Don't expect to see all that much new content out there, but I'll have a package of links specifically tailored to program listening.

Don't forget to keep those contributions flowing in; until next month,

73 DE Richard



Listener's Library

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Most folks in NASWA know the name Jerry Berg. There are only a handful of folks who rightfully deserve the title of Grandmaster in the shortwave hobby and any such list would include Jerry with little argument from any corner. I was very excited when I heard that Jerry had a new book out. I was equally excited when I heard that John Herkimer wanted to share his thoughts about it.

*On The Short Waves, 1923-1945:
Broadcast Listening in the Pioneer Days
of Radio*

by Jerome S. Berg

280 pages

\$42.50

McFarland & Co., Inc.

Box 611

Jefferson, NC 28640

1-800-253-2187

<http://www.mcfarlandpub.com>

ISBN 0-7864-0506-6

Reviewed by John C. Herkimer

When well-known hobbyist Jerry Berg formed the Committee to Preserve Radio Verifications (CPRV) in 1986, his mission was to rescue those QSL collections that would otherwise be lost for the benefit of radio historians and interested hobbyists. As donated collections were received and examined, however, another story began to emerge: the origins and development of shortwave broadcasting and, equally important, the radio listening hobby.

"On the Short Waves" is the definitive story of the birth of shortwave radio, inspired by those QSL collections and the dedicated hobbyists who chased distant signals in the night. Even though the author suggests the book is a "first telling of a much richer story," it digs deep into a chapter of radio history of which very little is known. "On the Short Waves" successfully captures the thrill and

mystery of the early days of radio through meticulous research, colorful anecdotes, and beautiful illustrations.

The book is divided into three time periods. "The Early Days" takes the reader back to the very beginnings of radio and the first "wireless" experiments. The author explores the work of inventors and experimenters like Guglielmo Marconi, Dr. Lee De Forest, Edwin H. Armstrong, and Westinghouse engineer Frank Conrad (whose station, KDKA, is generally acknowledged to be the first nonexperimental broadcast station).

As the technology moved from experimenters to large corporations, more stations began to appear and with it a growing number of listeners discovered the thrill and competition of chasing long distance reception (DX). The listening hobby was born. The section concludes with the first experiments in the U.S. "on the short waves" (and, again, the honor of being first went to Conrad's KDKA) and the eventual acceptance of shortwave as a credible medium for news and entertainment.

Shortwave's golden era takes center stage in "Shortwave Comes of Age: The 1930s." The section begins with a detailed, by-continent examination of shortwave activity in the 1930's. As a bonus, the section features many reproductions of QSLs from the CPRV archives which were the inspiration for the book. Another chapter describes the little-known private U.S. stations that operated widely in the 1930s (before World War II, all international shortwave broadcasting from the U.S. was in private hands, before eventually closing down or being absorbed by the government-controlled Voice of America).

It was also during this period that familiar radio manufacturers such as Hallicrafters,

Hammarlund, and National began producing shortwave sets for the consumer market. If you are interested in vintage receivers, you'll particularly enjoy the chapter on the equipment of the 1930s and the many reproductions of radio advertising from the period.

Publications devoted to the growing listening hobby were in full force during the 1930s. Among those examined are Hugo Gernsback's "Radio News" and "Short Wave Craft," "Radex" (considered by many to be the finest DX publication of its time), and the numerous call books and radio logs produced at the time. Not surprisingly, radio clubs also began to emerge where listeners could share information and boast about long distance DX. Among the clubs discussed are the Newark News Radio Club, National Radio Club, Universal Radio DX Club, and the International Short Wave Club. The section concludes with a look at the history and tradition of QSLs and station memorabilia of the era, including Ekko stamps.

**"On the Short Waves"
is an important,
ground breaking book
that should take a
prominent place
in every DX library.**


Finally, the book concludes with "The War Years: 1940-1945" and the important role of shortwave during World War II. The section discusses the intense battles that were being played out on the airwaves, notably between Britain and the Reich, and the numerous black clandestines operated by all sides (but most effectively by the British). Official monitoring activities are also discussed and the creation of the famed BBC Monitoring Service and the U.S. Foreign Broadcast Monitoring Service. Military broadcasting also emerged during the war and the author examines the early years of the Armed Forces

Radio Service and Britain's Forces Broadcasting Service.

No discussion of wartime broadcasting would be complete without a profile of the "traitors" who attempted to discourage their fellow countrymen through radio. We are given a glimpse into the colorful (but often tragic) propaganda voices such as Lord Haw Haw, Axis Sally, Ezra Pound, and Tokyo Rose.

With the war raging, the shortwave hobby fell into decline. Equipment manufacturers concentrated on the war effort, many hobbyists were in the military and radio clubs were forced to cut back publication. The final chapter takes a look at the shortwave hobby during that period, including the changes and improvements in receiver design brought on by the war.

"On the Short Waves" is an important, ground breaking book that should take a prominent place in every DX library (the illustrations alone are worth the price of the book). It can be purchased from the publisher, McFarland & Co., Inc., Box 611, Jefferson, NC 28640, by mail, phone, FAX or on the web (it is not available from the author). The price is \$42.50, plus shipping and handling (\$4 for 1st book, \$.75 each additional; international orders including Canadian, \$6 for 1st book, \$1.50 each additional, U.S. funds only). Orders can be charged to your VISA, MasterCard, AMEX or Discover card. For detailed ordering instructions, see the McFarland website at <http://www.mcfarlandpub.com> or call the publisher (in the U.S.) at 1-800-253-2187, FAX 336-246-5018. "On the Short Waves" is also available from other major Internet book-sellers, including these: Amazon.com <http://www.amazon.com/>, Barnes & Noble <http://www.barnesandnoble.com/>, Borders <http://www.bordersbooks.com/>, and Waterstone's <http://www.waterstones.com/>.

Well, we know with the move toward summer the static crashes will limit our listening and give us more opportunities to crack the books. Stay tuned to Listeners Library for the latest in great radio reading. 

The Radio Boys Search For The Mystery Phantom Signal

NASWA member, Journal compositor, and NASWA web site guru, Ralph Brandi, ran into an interesting problem recently which I would like to share with you this month.

One of the problems we encounter when moving into a new location is not knowing what to expect in the way of radio interference. The prudent person will take a portable radio and listen for the usual power line leakage, light dimmer buzzes, etc. But some of the more subtle problems are sometimes missed. That was Ralph's problem. Ralph wrote to me to see if I had any suggestions. Here is what he said.

"I live about a mile south of 500 watt WHTG on 1410 kHz and a mile and a half north of 2500/1000 watt WADB on 1310 KHz. I'm finding them breaking through on 60 meters, particularly the 1310 station. But it's not third-order intermod, because it doesn't follow the formulas. The formula is much simpler. I get the station mixing with a strong station on 49 meters at minus 1310. So for example, if BBC is broadcasting in the morning on 5965, I'll receive WADB with a little BBC at 4655. With all the strong signals on 49m, I'm getting WADB almost up to 4900 kHz, and it's driving me nuts.

"I have a MW filter from ICE that notches out 500-1700 kHz, but putting it in line hasn't helped at all. I can tell it's doing what it's supposed to because MW is pretty dead on my long wire, locals only.

"The radio is an R8, and my antenna is 70' running directly from the radio out the win-

dow, around the corner, and tied to a pile of PVC lawn chairs in the back yard. (This is referred to as the 'Inverted Lawn Chair' antenna.) It's a stopgap measure until I figure how to get coax through the window and out to the woods in back of the house. The house has vinyl siding."

Ralph had already done two good things to narrow down the problem.

¶ He calculated the mathematical relationship that described how the broadcast band signal was showing up on the 60 meter band. He figured out that the frequencies he heard were the difference between the strong 49 meter band signals and his local broadcast-

¶ He inserted a filter in his antenna lead to reduce the amplitude of one of the interfering signal components. The fact that this filter did no good gives us another clue on where the mixing product is coming from. More on this later.

I suggested Ralph run a simple test to show whether this mixing product was occurring in his receiver or somewhere else. I asked him to insert the input attenuator on the Drake R8 and let me know how much the interference dropped on his S-meter. He did that and reported the 20dB attenuator caused a 3 S-unit drop in level on the 60 meter band mixing product. This test combined with the fact that the ICE filter had no effect allowed me to deduce that the mixing was not occurring in his receiver. Here's why.

Mixers are non-linear devices. If you reduce the power level of the strongest component going into a mixer, the power level out of the mixer will drop by more than the original reduction. Most S-meters have about 6dB difference between each S-unit. Ralph measured 3 S-units or about 18 dB. That's close enough to draw the conclusion that things downstream of the attenuator are operating in a linear manner. This is confirmed by the fact that greatly reducing the level of the local broadcaster with the ICE filter had no measurable effect on the level of the mixing product.

The conclusion is that the mixing is occurring before the receiver and is being re-radiated and received on the antenna. It is something called a "passive intermod product". Mixers are essentially diodes. Some mixers use more than one diode for greater efficiency, but in essence all mixers use diodes to provide the necessary non-linear element.

Any metal object touching another metal object can set up a diode through point contact rectification. Remember the old crystal detectors with their "cats-whisker" wires that had to be adjusted for a good spot on the galena metal at just the right pressure? It was an early example of a diode made by point contact rectification.

I once worked in the field of space and satellite communications. Antennas designed for this service are usually used for simultaneous transmitting and receiving. The antenna designers had to be wary of the passive intermod phenomenon because the antenna surface itself could generate these products when many kilowatts of RF were involved on the transmit side. Segments of the big dish antennas had to be electrically bonded or insulated from one another to avoid weak metal to metal contact. Failure to observe this precaution could result in passive intermod products of the transmitted frequencies showing up on the receive frequencies. With the extremely weak signals associated with satellite and deep space links, it did not take much of an intermod signal to wipe out the received signal.

In Ralph's case there is something in his yard

or home that is acting as a point contact rectifier. It is probably connected to a large physical structure that is acting as an antenna on the short-wave bands. It could be a drain spout for collecting and diverting rain water off the roof. These are usually made of thin-walled aluminum tubes which are force fitted together but not electrically bonded. The poor contact becomes a point contact diode mixer and the rain gutter acts as a pretty efficient antenna.

Other common point contact rectification source are the power lines and guy wires running through your backyard. The guy wires are often tied to the neutral bus on the pole. Where the guy wires attach to the ground anchor the electrical connection is usually less than a solid electrical bond. After years of flexing and wear of the guy wire, rust and corrosion will build up on the mating surfaces. The joint becomes a point contact rectifier and the guy wire acts as an antenna.

The same thing can happen from loose hardware on the overhead electrical lines. The power company will often whack their poles with a big sledge hammer while listening to the effect on the radio. The hammer sets up a vibration in the wires that will quickly reveal a loose connection.

The easiest way to cure these kinds of problems is to snoop around with a portable radio tuned to the intermod frequency. When you find the structure re-radiating the signal, you will then be able to physically examine it for loose connections between elements. **WARNING:** Leave correction of electrical service problems to the utility.

Another approach is to get your antenna as far as possible from any other metal conductors. Use a coax cable shielded-lead-in feed line. The RG-6 cable, used for backyard satellite dishes, can be buried in a narrow slit in the lawn providing further isolation.

If you have technical problems or questions, drop me a line, preferably by e-mail. I'll do my best to help and will share what we learn with other Journal readers. Until next time, stay tuned.



Listener's Notebook

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SINCE A LARGE PART of this month's JOURNAL is devoted to Mark Fine's useful English-language broadcasts schedule, LN features only newsy items and logs this time around. Next month's LN will feature more complete summer frequency schedules.

ALBANIA 14220 *Radio Tirana*, 0700-0955, Albanian language. This is really Radio Tirana // 7110. Starting at 0700 with ID, frequencies etc. and ending 0955 with National Anthem (14220 kHz Harmonic of 7110 kHz? Seems to be). Thanks for all advices. (17-Apr/Elsebusch-GER/HCDX)

BELARUS Schedule of SSB transmissions in the tropical bands

2371 0230/0300-0400, 1600-2100
2654 0230/0300-0330/0400, 1600-2100
4246 0330/0400-1600
4541 0330/0400-1600
4855 1200-1400

Mostly with *Belorussian Radio* 1st programs and *Radio Mayak* relays (with frequent switching between these programs), but some other relays were also noted (*Radio 1* from Russia from 1000 or *VOA* (!) Russian at 0800-1000 on March 13). After *R. Mayak* closing shortwave transmissions this is one and only way to hear the station on SW. By the way, their web-site is: <http://www.radiomayak.ru> (13-Mar/Timofeyev-RUS)

Last check of *Belorussian Radio* daytime frequencies (March 30 at 1130 UTC):

BR1 5965 6035 6070 6080 6100 6115 6165 7140
7145 7210 11670 (6035 and 6070: spurious signals or mixed products?)
BR2 7265

(30-Mar/Timofeyev-RUS)

On Mar 29th I heard a Belorussian "*Oblastnoye Radio*," as I understood it was Grodno, on 11960 from around 15.20. From 1540 strong interference made it impossible to listen. The ID was mostly only "*Oblastnoye Radio*," but the time and the fact that there was an interview with a member of Belorussian academy. Only once a full ID could be heard—sounding like *Grodnosko Radio* or so. (29-Mar/Erbe-GER/RUSDX/Klepov-RUS)

2340.0 *Radio Stalitsa* (Capital Radio), harmonic (2x1170), 0429-0447//279, 6115, 7210, etc. Morning exercises, ID, into political talk. All in Belorussian. Weak. (23-Mar/Titarev-RUS/DSWCI DX-Window/van den Boogert-TWN)

BOLIVIA 3310 *R. Mosoj Chaski*, Cochabamba, 0950 talk by man and woman in local language, high Andean vocals, full ID 1000. Nice signal in horrendous QRN this morning. Tnx Dave Valko tip. (15-Apr/Novello-NC/Rev. of International Broadcasting/Hausser-OK) *Radio Mosoj Chaski* is a religious station for Quechua speaking people in the area. Transmission times are: 0900-1200 and 2200-0100 UTC. The power is 10 kW. Reception reports may be sent to Chaski@bo.net. This news come from the HCJB DX Party-line last Saturday and their Home Page at <http://www.hcjb.org/english/dxpl.htm> (20-Apr/Lintujarvi-FIN/HCDX)

BOSNIA HERCEGOVINA (YUGOSLAVIA/SERBIA) *R. Yugoslavia*, A99, complete sked:

0000-0030	Spanish	9680 9605
0030-0130	Serbian	9580 Su
0100-0130	Serbian	9580 Mo-Sa
0100-0130	English	Am 9580 Mo-Sa
0130-0200	Serbian	Am 9580
0530-0600	English	9580
1300-1330	Serbian*	11835
1430-1500	Arabic	15175 11800
1500-1530	Russian	11870 11710
1530-1545	Hungarian	6100
1545-1600	Greek	6100
1600-1630	French	11800 9620
1700-1715	Albanian	6100
1715-1730	Bulgarian	6100
1730-1800	German	9620 7215
1730-1800	Italian	6100
1800-1830	Russian	7165 6100
1830-1900	English	9720 6100
1900-1930	English	7230
1900-1930	Spanish	7220
1930-2000	Serbian	7230 6100 Su-Fr
1930-2030	Serbian	7230 6100 Sa
2000-2030	German	6100 Su-Fr
2030-2100	French	6185 6100
2100-2130	English	6185 6100

*=Relay Of RTS Home Service (8-Apr/BBCM/Electronic DX Press/Padula-AUS)

BRAZIL 3255.12 *Radio Difusora de 6 de Agosto*, Xapur, 0100, "Aqui Radio Educadora de Agosto." (20-

Apr/Vos-HOL/DSWCI DX-Window/van den Boogert-TWN)

3365.01 *Radio Cultura*, Araraquara, 0040-0055 Portuguese, fast talking announcer in between ballads, 0055 "Cultura do Araraquara..." ID, followed by promo/ad block. (7-Apr/Mohrmann/DSWCI DX-Window/van den Boogert-TWN)

4774.98 *Radio Congonhas*, Congonhas, 0033-0038 Portuguese; 0033 tuned in to full ID, followed by inspirational talk then 0038 sign-off. "...alegria...Radiodifusora do Congonhas do Minas Gerais...mil...khz...onda tropical, 4775 khz...transmitido do Congonhas..." Again in the morning: 0903-0910 with sign-on announcements. Weak, fair to good signal. Reactivation, or just good conditions today? (11-Apr/Mohrmann/DSWCI DX-Window/van den Boogert-TWN)

5015 *R. Pioneira*, Teresina, Piau, 0045, accordion-led forro music and Brazilian pops, ID "R Pioneira de Teresina" by M DJ. Thanks due to Pete Costello in #swl for pointing out this probably wasn't Asgabad at this time. This one is seldom reported. (17-Apr/Novello-NC/DSWCI DX-Window/van den Boogert-TWN)

6010.18 *R. Inconfidencia*, Belo Horizonte, Minas Gerais, 2335, noted with canned ID during break between long narrative by woman via phone link. (10-Apr/Novello-NC/DSWCI DX-Window/van den Boogert-TWN)

6105.13 *Radio Cultura Filadelfia*, Foz do Iguaçu, 0942-1000, fair, religious programming in Portuguese. Canned ID was given at 1000 as "...Radio Cultura Filadelfia de Foz do Iguaçu, ZYE728 ondas cortas de 49 metros, 6105 kHz, anunciando a palavra de Deus a todas as nações. Cultura Filadelfia, a frequência da vida, a rdio evangelica do Brasil." (17-Apr/TIN-JPN/Relampago DX)

11794.24 *Radio Guaíba*, Porto Alegre, 0120-0133, Portuguese; ads and promos, pulsating carrier/audio and 11800 khz RSA sign-on splatter made for horrendous listening. However: // Radio Guaíba live audio feed from their website at <http://www.cpovo.net/guaiba.ram>. RealAudio stream was lagging the broadcast by about 10 seconds. No splatter, no distortion. I could actually hear the announcers words and enjoy the music. (Radio Guaíba RealAudio stream SINPO 55555). Me thinks the future prospects for shortwave broadcasting do not look good. (10-Apr/Mohrmann/DSWCI DX-Window/van den Boogert-TWN)

17814.68v *R. Cultura de Sao Paulo*, 0055-0150, M dj in Portuguese, long Sao Paulo store commercials block, 0057 canned ID with MW/SW/FM freqs and Caixa Postal address, into the usual assortment of Brazilian tropical jazz, // very poor 9615. Good, but have never before heard this one off-frequency; varying up to 17814.98 by tune-out. (10-Apr/Krueger/DSWCI DX-Window/van den Boogert-TWN)

BURUNDI 6140.2 *Radio Burundi*, 1725-1747, Vernacular with French accent talk, local music—fair to poor, strong heterodyne with DW (some other African stations were also noted in the 49 m.b. at this time, i.e. 5985 Congo—poor to fair, 5990.4 Ethiopia—poor, 5993.2 Malawi—fair, 6050 Nigeria—poor, 6055 Rwanda—fair, 6110.7 Mozambique—very weak, 6165 Chad and Zambia—both poor) (13-Apr/Timofeyev-RUS)

CANADA CKZN-Newfoundland on 6160 Canadian NA 0850, second Canadian patriotic (vocal) song, full sign-on 0855. The signal was very good until half-way through the list of FM translators. At 0858 DW-Antigua came on with its IS. CKZN put up a good fight for the next 15 minutes. CKZN announced power as 1 kw, different from what PWBR and WRTH show. (16-Apr/Sundstrom-NJ)

CHILE Sorry to say but *Radio Minería* no longer exist since 01/04/1999. From this date the Santiago station and all network belongs to new owners wich give new name, *Radio Santa Mara de Guadalupe* and Catholic profile. I believe that the best way to try anything is through the former address of Minería:

Miguel Claro 161 Santiago Chile

Good luck (Asenjo-CHI/HCDX)

CLANDESTINE—AFRICA Nigerian opposition station *Radio Kudirat* has unexpectedly returned, heard April 15 at 1900 on its former frequency 6205, also announcing 11540; heard the next night 1900-2000 on 6205 and 11560, not 11540. These are via SENTECH, South Africa. Press reports say the station returned April 12 after having difficulty getting permission to broadcast within Nigeria (Greenway-UK/Rev. of International Broadcasting/Hauser-OK) Noted with excellent signal on 11560, carrier on at *1856, two minutes of 3-pips-every-7-seconds, two minutes of raucous celebration IS (whistles, drums, chanting), then M "The time is 8 o'clock. This is Radio Kudirat Nigeria, the Voice of Democracy," into brass band anthem and programming. Now announcing 11560, by the way. (22-Apr/Quagliieri-NY)

COLOMBIA 5975 *Radio Autentica* 1130-1210 New Station, ex-Radio Macarena. Now this station belongs to Cadena Radial Autentica de Colombia; it's an evangelic organization of Centro Misionero Bethesda. They have various stations in MW. Music evangelic and predication "Estas escuchando Radio Autentica..." Advs. Ferreteria la 15, Libreria El Salvador. (2-Apr/Rodriguez-COL/Hauser-OK) I contacted Ligia Gomez, General Manager of CRA (Cadena Radial Autentica) in Bogota, who confirmed the SW operation from Villavicencio, the organization is very interested in to take your evangelic message to distant regions in Colombia. Although don't promise QSL, they are interested in letters from listeners,

send to: Cadena Radial Autentica Ligia Gomez Calle 32 No. 16-12 Santa Fe de Bogota D.C. or directly to: Radio Autentica Villavicencio, Sandra Urrego, Calle 38 No. 32-41 piso 7, Edificio Prollano, Villavicencio, Meta (Rodriguez-COL/Klemetz/Rev. of International Broadcasting/Hauser-OK)

CONGO—REPUBLIC 6828 *Radio Bunia* Heard many times during the past few days around 1800 until went off at 1900 in French with nx, debate and it ended at 1900 after a few African Songs without any announcement and ID. Again on April 3 at 1958 ID in French as Radio Bunia and continued "we have come to the end of our 3rd edition of the day and shall be back to-morrow at 1200—1400," then IS [usually went off after NA] and off at 2003*. It was also on 5066 earlier at 1540 with African songs and at 1605 ID, off at 1615*. (4-Apr/Vaghjee-MAU/Rev. of International Broadcasting/Hauser-OK)

ECUADOR HCB—another freq change already for European service 1900–2200- station did move to 17725 on Mar-28 but now changed to 17660. Morning service on new 11950 is arriving well between 0700–0900 in English. 17660 is fair to good audio at the moment. (8-Apr/Kruger/Electronic DX Press/Padula-AUS)

ETHIOPIA 9704.21 *R. Ethiopia*, Gedja, 2215, presumed them on late with US pop-soul ("The Boy Is Mine"), acoustic Afro tunes, distinctive modern horn-of-Africa pop music, occasional announcements by man and woman in language I didn't recognize, all // 5990.51. DW began splashing up from 9700 at 2230, rendering it useless, but 5990 building nicely. Dropped carrier at 2300 on both frequencies. (10-Apr/Novello-NC)

QSL received from the *Voice of Tigray Revolution* included this letter:

"I've received your letter of 02/01/99 and thanks for your information. Our station has received similar letters from different parts of Europe and America.

"The station you heard on 13/1/99 and 31/1/99 in the frequency of 5500Khz at 1605- 1629 UTC is truly ours. Our radio is not a newly installed radio station. It has been broadcasting ever since 1986 from the bushes of Tigray we used to call the liberated area during the past armed struggle period we waged against the pro-Soviet fascist regime. The people of Tigray lead by the Tigray Peoples Liberation Front (TPLF) fought for 17 years against Soviet intervention and fascist Military junta of the Derg. We have paid a lot of sacrifices.

"Since that times the radio has been the Voice of the People of Tigray. It was installed with the help of Tigrayans living inside and outside Tigray as immigrants in different parts of the world.

"The radio was a symbol of unity of our people, through which our people speak about their horri-

ble times under the late feudal system of Emperor Haile Sellasie and under the fascist Derg Regime. It was a radio, through which our people used to know the sources of their atrocities, the solution to their problems. It was a radio, which helped our people to organize themselves around the Democratic principles of TPLF.

"Our Radio the Voice of the Revolution of Tigray was the first Tigrigna language Voice that truly informed, educated and entertained the Tigray people. It developed credibility in the people and was considered as a voice that directs the daily life of the people.

"In 1991 the war ended. The Soviet backed Derg regime was toppled down. Our organization TPLF with its sister member organizations of Ethiopian Peoples Revolutionary Democratic Front EPRDF came to power through a democratic election.

"A new era has begun in Ethiopia. Democratic institutions are structured and functioning. Basic human and political rights including freedom of belief are respected. Peace is consolidated. The whole Ethiopian Peoples are now progressing towards development. Economic conditions are improving. Our country has started developing at a rate of more than 7% annually. We are having excellent international relations. Foreign investors are coming. Annual inflation has fallen to 1% etc.

"And our radio is now working for the consolidation of the already gained peace and democracy, for the enhancement of Socio-economic development by giving relevant information and education to our people.

"The Voice of the Revolution of Tigray is broadcasted, using 10kw short-wave (AM) transmitter from the capital city of Tigray (one of the autonomous regional states of Ethiopia), Mekelle for 50 hrs. Weekly, on 5500 and 7515 khz short wave. Its present air time programs are as follows: Monday to Friday Morning 0400–0500 (UTC); Midday 0930–1030 (UTC); Evening 1500–1900 (UTC) Saturday and Sunday Morning 0400–0900 (UTC); Afternoon 1100–1630 (UTC). These airtime programs can be expanded for the future. The radio's area of coverage with excellent reception are Ethiopia, Eritrea, and other Horn of African countries and The Middle East. The language is Tigrigna.

"We wish you one-day come to Ethiopia and see Tigray. Tigray has many tourist attractions. Ancient obelisks and Rock-hewn churches, different cultural expressions, social activities, attractive landscapes.

"Ethiopia as a whole is well known for its different wild life and landscape. The Mountain Nyala and the Red Fox, the wild animals, are found only in Ethiopia. Many tourists are now coming to Ethiopia. We hope to hear from you once again.

"With best wishes, Fre Tesfamichael, Director, VORT"

Address is Fre Tesfamichael, Voice of the Revolution of Tigray, POB 450, Mekelle, Tigray Ethiopia (Li-angas-GRC/HCDX/Rev. of International Broadcasting /Hauser-OK)

FRANCE RFI has added a daily news broadcast in Albanian, due to the Kosovo conflict; 0530-0600 on 7280, 9805, and Tirana 102 MHz FM, Paris 738 MW; and via <http://www.rfi.fr> (26-Mar/RFI/BBCM/Rev. of International Broadcasting/Hauser-OK) RFI noted on new 12045 from Novosibirsk with morning service in Mandarin, *2200-2300* (8-Apr/Padula-AUS/Electronic DX Press)

GEORGIA 5975 High Adventure Ministries 0720 music and talk in Arabic, ID in English @ 0730 "High Adventure Ministries," solicitation for donations, into English religious program; location per <http://www.highadventure.org/Stations/Europe/Europe.shtml> (15-Apr/Brandi-NJ)

GERMANY Deutsche Welle has its broadcasts towards the Balkan heavily expanded, acc. press release from April 1st onwards. Following schedule taken from <http://www.dwelle.de>, sites per means of their original schedule (w = Wertachtal, n = Nauen, s = Sines/POR) with the exception of added 7125, which should originate from one of the German sites:

0500-0530	Bulgarian	7190w 9750w
0530-0545	Serbian	7190w 9750w
0545-0600	Albanian	7190w 9750w
0600-0615	Bosnian	7190w 9750w
0615-0630	Serbian	7190w 9750w
0630-0700	Macedonian	7190w 9750w
0700-0730	Croatian	7190w 9650w 11905w
0730-0800	Albanian	7190w 9650w 11905w
0800-0830	Albanian	9650w 11905w
0830-0900	Serbian	9650w 11905w
0830-0930	Romanian	9680w 11825w 15545n
0930-1000	Bulgarian	9680w 11825w 15545n
0900-0930	Macedonian	9650w 11905w
0930-1000	Serbian	9650w 11905w
1000-1050	Bulgarian	9650w 9680w 11825w 11905w 15545-n
1100-1130	Albanian	9650w 11905w 11970w
1130-1200	Bosnian	9650w 11905w
1200-1230	Bosnian	7185w 9650w 9770w
1230-1300	Croatian	7185w 9650w 9770w
1300-1330	Macedonian	7185w 9650w 9770w
1330-1430	Serbian	7185w 9650w 9770w
1430-1500	Albanian	7185w 9650w 9770w
1500-1530	Albanian	7185w 9770w 15470s 17835s
1530-1600	Macedonian	7185w 9770w
1530-1600	Romanian	15470s 17835s
1600-1700	Bulgarian	15470s 17835s (until 1650);
1600-1700	Serbian	7185w 9770w
1700-1730	Croatian	7125 11905s 15470s
1730-1800	Albanian	7125 11905s 15470s
1800-1830	Albanian	7125 15470s

1830-1900	Bosnian	7125 15470s
1900-2000	Romanian	6140w 7125 9470Samara 11855s
2000-2015	Serbian	5995n 7125 13790s
2015-2030	Albanian	5995n 7125 13790s

(2-Apr/Ludwig-GER/Rev. of International Broadcasting/Hauser-OK)

17750 *Democratic Voice of Burma*, via Juelich. NF Burmese program to 1330*, but mixing with c/c WYFR. Much better when it came back at *1430-1455*, // 5945, 11850 and NF 15600 (3-Apr/Fran- cis-AUS/EDXP/Padula/Rev. of International Broad- casting/Hauser-OK)

INDIA 4800 AIR Hyderabad 0012 Test tone till 0023, when into IS; s/on at 0025 with "Vande Mat- aram" announcement and chorus, then talk by woman in subcontinental language. Fair but with considerable QRM from co-channel and adjacent Lat- ins. This one is difficult to hear except when signals from the subcontinent are significantly better than usual, which they were this evening. (11-Apr/Hill- MA)

5040 *AIR Jeypore* 0023 Same s/on procedure as Hyderabad except that talk following "Vande Mat- aram" was by man. Weaker and choppy than Hy- derabad, but in the clear. (11-Apr/Hill-MA)

INDONESIA 4003.2 RRI Padang, 1441-1502, In- donesian, local pop music program, "Rayuan Pulau Kelapa," ID at 1459, local news. (10-Apr/Nishiguchi- JPN/Japan Premium/DSWCI DX-Window/van den Boogert-TWN)

4606.40 *RRI Serui*, 1505-1516* in Indonesian with news, NA, 1511 pop music in English, South Seas Island music before IS, 1515 sign off announce- ment, end transmission at 1516, needs LSB due to RTTY QRM on USB part of the time. (10-Apr/Kec- skes/DSWCI DX-Window/van den Boogert-TWN)

4750.00 *RRI Ujung Pandang* (p), 1524-1558* in Indonesian with wailing type of music and short an- nouncement, followed by choir singing, 1530 talk by a man and woman then more music: sounds like a TV/FM radio program. 1556 announcement for R. Jakarta program "Satu," no clear ID heard, suffers from het QRM and deep fades at times. 1557 South Seas Island music & IS. It seems they no longer use the coconut song IS, but this South Seas Island mu- sic. End transmission at 1558*. (10-Apr/Kecskes/ DSWCI DX-Window/van den Boogert-TWN)

4874.5 *RRI Sorong*, 1132-1142, huge signal with M dj in Indonesian, Indonesian and US soft pops. (4-Apr/Krueger/DSWCI DX-Window/van den Boogert-TWN) 1055, little acoustic guitar and drum theme, then very short vocal chorus just before 1100; man with "Radio Republik Indonesia Sorong" ID, then five pips, last one long; woman with ID, and warta berita. Nice signal. (6-Apr/Novello/DSWCI DX-Window/van den Boogert-TWN)

6153.40 **RRI Biak**, 0905-0925, in Indonesian with Koranic chants followed by Middle Eastern/Arab sounding music and short talk. Very bad QRM from DW on 6160: I got the feeling Biak only just signed on at 0900. (10-Apr/Kecskes/DSWCI DX-Window/van den Boogert-TWN)

9741.55 **RRI Sorong**, 0745-0801*, snippets of Indo talk by woman as is the typical program fare at this time. Audio seemed to be cut about the same time as the HCJB pre sign-on theme music began at 0755, slopping badly over the RRI carrier which was subsequently cut about 5 mins later than usual at 0801. Very weak signal over/under the noise floor. (13-Apr/Clark-CAN/DSWCI DX-Window/van den Boogert-TWN)

ISRAEL 6442USB *Galei Zahal*, 1900, ID, pop mx. (16-Apr/Pijpers-HOL/British DX Club/Rev. of International Broadcasting/Hauser-OK) 0236-0340 Huge signal with M announcer in Hebrew, pop mx. ID and news summary 0300; Nice to hear them again. (18-Apr/Krueger/DSWCI DX-Window/van den Boogert-TWN)

KAZAKHSTAN New observed schedule of *Kazakh Radio*: 0400-0800 17825, 1700-2100 6255. (30-Mar/Timofeyev-RUS)

KOREA (SOUTH) Last minute changes for *KBS* relays via Sackville (announced March 28): Spanish for South America will remain at 30 minutes for the time being, although there are plans to increase the time to a full hour in the near future. Now heard 1000-1030 UT on 11715, followed by English for the US 1030-1100 on 11715 (replaces previously announced 9650 kHz 1100-1130 UT). Good reception in U.K. of English on 11715. Also, English for Europe relayed from BBC Skelton is now 2100-2130 and not 2200-2230 as previously announced. Still on 3970 kHz. (6-Apr/Holder-UK/Rev. of International Broadcasting/Hauser-OK)

KURDISTAN *Voice of the People of Kurdistan*, the radio station of Jalal Talabani's Patriotic Union of Kurdistan (PUK) carries the following announcement before and after its 1700 news bulletin in Arabic on 7th April: "Dear Listeners: Here is an announcement from the Voice of the People of Kurdistan, the voice of the PUK: We draw the attention of our dear listeners everywhere that our Arabic programs will be transmitted, effective Sunday 11th April, on two shortwave frequencies; the first is on 41 metres, corresponding to 7100 kHz, and the second is on 49 metres, corresponding to 6020 kHz. Our transmission on the 75 metre shortwave band will be stopped. For this we draw the attention of our dear listeners everywhere." (Voice of the People of Kurdistan usually broadcasts on 4060 kHz in the 75 metre band. On 6th April it was also monitored on 6015 kHz at 1800) (BBCM/Rev. of International Broadcasting/Hauser-OK)

LAOS Full sked for *Lao National Radio* on 6130 is 2200-0730, 0925-1455/1500v. (Alan Davies, Apr-10)

The radio scene in Vientiane looks like this: *Lao Nat Radio* Nat Sce: *2235-0730, 0930-1455/1500v on 6130; relays Nat Sce news at 0000-0030; International Sce: on 1030 kHz 2330-0030 in Vietnamese and Khmere, 0500-0630 in Thai French English, 1130-1400 in Thai Vietnamese Khmere French English. (30-Mar/Davies/Electronic DX Press/Padula-AUS)

LITHUANIA It seems the new 100 kW transmitter at Sitkunai is finally on the air. I heard them from the beginning of April. 0900-0930 Lithuanian; 0930-1000 English; 1000-1200 Domestic Services (I) and (II) in Lithuanian—all on 9710 kHz for Europe.

Good signal here. Still co-channelling with Australia, but dominating until after 1000 when the Australians start to fade out. The audio is more "punchy" so they are obviously using a processor. Hopefully Lithuania can be persuaded to move to a better frequency. Presumably they are using the new transmitter instead of Juelich for the US on 9855 kHz 0000-0100 UTC for North America. (6-Apr/Holder-UK/Rev. of International Broadcasting/Hauser-OK)

MALAWI 5993.3 *MBC*, Limbe, 1802, EE news bulletin, M with African accent. Unfortunately blocked by RAI bird & sign on at 1805 on 5990. No ID, so presumed. 33333 (17-Apr/Rouw/DSWCI DX-Window/van den Boogert-TWN)

MEXICO *XETF* Veracruz 9545 plans to reactivate SW simulcasting MW-1250 but may have some SW programming too. (Hauser-OK/Rev. of International Broadcasting)

MOZAMBIQUE 9619 // 15293 *R. Nacional de Mozambique* Maputo—it seems that Mozambique is making a great effort to reactivate its transmitter one by one and here is another one which has not been heard for many months has been heard at 10.45 on March 25 very poor reception and noisy transmitter—it has been covered mostly by other stations until 12.00. The reception improved after that time as Mozambique is alone there. (25-Mar/Vaghjee-MAU/Rev. of International Broadcasting/Hauser-OK) Here are some observations of *R. Mozambique* made here at St. Petersburg (Mar-30): 15293 0855 weak carrier...1133 poor, P talk, pop mx, clear ID at 1136...1453 weak carrier only; 9618.9 1704-1828 with usual news program at 1730, poor to almost fair signal—but very poor modulation; 6110.7 2110 weak carrier.

There were no any parallel freqs—only one transmitter in use? I think they can use some other old channels, such as 4865v, 7242v or 11812v/11818v (30-Mar/Timofeyev-RUS)

MYANMAR *Myawaddy Radio Station* noted on 5973 around 1305 on Friday Apr-09 and around 1435 on Sun Apr-04. Intended sked presumably remains 1100-1330, 1430-1530 but I estimate it's only on around 10% of the time --Sunday 1430-1530 seems the most reliable time each week, though it often goes off air early. Minor change to *Radio Myanmar* Sat/Sun morning sched sees 7185 on at 0030-0300 (ex -0230), // 9731 after the latter comes on around 0240-0250v. Noted Sun Apr-04 and Sat Apr-10. The segment 0200-0300 is in English, with announcement telling SW listeners to retune to 31 metres just before 0300. (10-14-Apr/Davies/Electronic DX Press/Padula-AUS)

NETHERLANDS *Radio Nederland* English to Africa at 1830 and 1930 now confirmed on Bonaire 21590 ex-Dutch (and still in Dutch before 1830), huge signal one could easily believe is headed for us, and which a few months back we also caught with spurs (Hauser-OK/Rev. of International Broadcasting)

NIGER On April 9 there was a coup in Niger; they said the radio was off air but I found them the same evening and the following morning:

5020.7 *ORTN* Niamey, April 9, 1950 M speaker in vernacular with many mentions of Niger followed by local guitar with touareg M songs, no news or announcements at 2000 but continued with touareg songs.

5020 *ORTN* Niamey, April 10, 0507 M vocal songs, still continued with that at 0537 until 0544 then French announcement and int sig at 0545 with sereendu and guitar followed by french news by M speaker as usual with mentions of Niger and crisis, coup and general. (10-Apr/van Rooy-HOL/HCDX/Rev. of International Broadcasting/Hauser-OK)

PERU 3234.83 *Radio Luz y Sonido*, Hunuco, 0200, with many IDs: "La hora en Radio Luz y Sonido." (19-Apr/Vos-HOL/DSWCI DX-Window/van den Boogert-TWN)

4534.18 *Radio Horizonte*, Chiclayo, 1000-1011, fair, folklore show "Aires Andinos del Peru" with nice OA folklore. (17-Apr/TIN-JPN/Relampago DX)

4664v *R. Nuevo Horizonte*, 1045-1120, first noted March 7 on 4626v. Very irregular. Sometimes mentions *R. Horizonte* and other times *R. Nuevo Horizonte*. Music: folk; I don't have clear the transmitter location, but continuous mentions of Pataz. (4-Apr/Rodriguez-COL/NU/DSWCI DX-Window/van den Boogert-TWN)

4748.31 *R. Huanta 2000*, Huanta, Ayacucho, 2345, program of comunicados read by man, short bits of music and numerous IDs in passing. Andean very nice tonight. (2-Apr/Novello-NC/DSWCI DX-Window/van den Boogert-TWN)

4774.98 *Radio Tarma*, 1100, poor with px "Musica Folklorica Nacional" (11-Apr/TIN-JPN/Relampago DX)

4824.42 *Radio La Voz de la Selva*, Iquitos, 1011-1020 fair, noted that the morning broadcasts' schedule was changed again. Its s/on is now around 1000 (ex-1100). (17-Apr/TIN-JPN/Relampago DX)

4826.35 *Radio Sicuani*, Sicuani, 0928-1003 Spanish; time checks and talk in between Andean vocals. 1003 ID in passing. Weak signal with het from 4825. (11-Apr/Mohrmann/DSWCI DX-Window/van den Boogert-TWN)

4990.84 *Radio Ancash*, Huaraz, slightly drifted from 4990.87. It was noted at 1050 with fair signal. The morning folklore program "Cushi Cushum" was heard. (17-Apr/TIN-JPN/Relampago DX)

5304.87 UNID was again heard at 1048-1129 poor, playing several folklores of the Central Peru, such as Chonguinada, Santiago, etc. Talk by M and W in Quechua. This is not *Radio La Inmaculada* in Santa Cruz, Department of Cajamarca. (17-Apr/TIN-JPN/Relampago DX)

5640.43 *Radio Peru*, San Ignacio, 1129-1135 fair w/px "Buenos Dias Peru, Arriba San Ignacio" with OA folklore. ID was announced with TC as "Son las 6 y 32 en Radio Peru." (17-Apr/TIN-JPN/Relampago DX)

5678.1 *Radio Ilucan*, Cutervo, 1001-1012, bulletin news and identifications. (3-Apr/Slaen/DSWCI DX-Window/van den Boogert-TWN)

5760.34 *Radio Sorochnuco* (p), 1114-1150, poor signal. Playing several rustic OA folklores, adverts for Folklore Festival in Sorochnuco, but no ID was given. (11-Apr/TIN-JPN/Relampago DX)

5949.3 *Radio Arequipa*, Arequipa, 1045-1055, coral music, ID: "Estan en sintonia con Radio Arequipa," time announcement (3-Apr/Slaen/DSWCI DX-Window/van den Boogert-TWN)

5949.17 *Radio Arequipa*, 1053-1110, fair to poor signal. Religious px with several hymns. ID was announced as "Estas en la sintonia de Radio Arequipa con el mensaje y la palabra de Dios para los jovenes de..." (11-Apr/TIN-JPN/Relampago DX)

5995.2 *Radio Melodia*, Arequipa, 0612-0634, Spanish, M announcer, musical program (boleros), ID "donde vaya Melodia lo acompaa" (10-Apr/Eramo/DSWCI DX-Window/van den Boogert-TWN)

6173.87 *Radio Tawantinsuyo*, Cusco, noted at 1117 with poor signal. Huayno and W talk in Quechua. (11-Apr/TIN-JPN/Relampago DX)

6195.5 *Radio Cusco*, 0020-0035, Spanish, huayo music, advertisement, clear ID, new frequency! (ex 6204v). (9-Apr/Schnitzer/DSWCI DX-Window/van den Boogert-TWN)

6535.73 **Radio Difusora Huancabamba**, noted at 1135-1144 fair with program "Musica Variada" with cumbia and folklore. (17-Apr/TIN-JPN/Relampago DX)

6689.87 **Radio Estudio 2000**, Pardo Miguel Naranjos, 1149-1200, poor signal OA folklore and M talk. (10-Apr/TIN-JPN/Relampago DX)

6895.0 **R. San Miguel de El Faique**, ID at 2338, "Desde la region Grau, departamento de Piura, renace una luz en los aires Peruanos, comunicando, informando dia a dia, en cada instante, llevando hasta sus hogares (con) la orientacion y difusion de la palabra. Somos conscientes de la difcil y (andegarra) labor que nuestro personal que labora. Modestamente en esta emisora, igualmente confiamos en la divina providencia, nos sigue por el buen camino para ser unidos, nos esforcemos por el desarrollo y el progreso de nuestro pueblo lo merece. R. San Miguel del Faique, fiel guardiana de su frontera. Desde el vasto cielo azul de la serrania piurana, provincia de Huancabamba, distrito San Miguel de El Faique, nace una voz joven, tipicamente representativa, dando una nueva imagen al Peru, R. San Miguel de El Faique, onda corta internacional y tropical, con talento, con funcion de pueblos hermanos por medio de la comunicacion que aman a nuestra patria. R. San Miguel de El Faique, onda integradora de los pueblos curzando fronteras. (6-Mar/Hirahara-ECU/NU/DSWCI DX-Window/van den Boogert-TWN)

6987.1 **Radio San Miguel El Faique**, Pampa Alegre, 0236-02.53* Spanish, Musical Program (Huaynos and Chicha Music) ID, Greetings for inhabitants and s/off with National Anthem (Instrumental Version) ID "Radio San Miguel El Faique..." time checks "nuevo de la noche con treinta y ocho minutos" 02.50 National Anthem without of announcements 02.53 no carrier, Apr 05, (5-Apr/Eramo-ARG/The Four Winds)

9721.6 **Radio Victoria**, Lima, 1146-1200, poor w/religious program "La Voz de la Liberacin" which is produced by the Pentecostal Church. (17-Apr/TIN-JPN/Relampago DX)

RUSSIA Following up a report from Mikhail Timofayev via Kai Ludwig in RUS-DX I listened to the new **Voice of Russia** Kosovo service last night. Schedule is:

0300-0430	Serbo-Croatian	7440 9485
1900-1920	English	7350 11980 12000
1920-1940	Russian	7350 11980 12000
1940-2000	German	7350 11980 12000
2000-2020	French	7350 11980 12000
2020-2040	Serbo-Croatian	7350 11980 12000
2040-2100	Albanian	7350 11980 12000
2100-2230	Serbo-Croatian	7350 12000

All shortwave frequencies were excellent last night for the 1900-2100 transmission, best on 12000. The English broadcast specifically addresses its messages at NATO soldiers asking them to ques-

tion their campaign. The service has an extensive web-site at <http://www.vor.ru/Kosovo/index.html> Part of their appeal to servicemen on the site reads: "Neither the NATO leaders nor President Clinton are likely to be worried if this Easter happens to be the last in your lives. They don't care if your missiles and bombs turn Easter into a nightmare and spell death for men, women and children of Yugoslavia. Use your brains." (6-Apr/Barracough-UK/Rev. of International Broadcasting/Hauser-OK)

Voice of Russia found on new frequency in a range not previously used: 15735 in English at 2006 //11675 (10-Apr/Hanlon-PA/Rev. of International Broadcasting/Hauser-OK) 21755 **Golos Rossii** *0100 S/on with news in Russian; weak/fair. Not listed, but probably Far East location at this hour. (11-Apr/Hill-MA)

The French broadcast of **China Radio International** via Samara 2030-2127 now runs on 12010, i.e. the same frequency than the Polish **Radio Maryja** uses until 2000 (likely the carrier stays on between 2000 and 2030, but I haven't checked this yet); noted here in Germany with a transmitter-wise perfect, local-like signal BUT absolutely unsatisfactory, very narrow audio (hardly more than 2 kHz), at least the whistle on the feed from Beijing is below the threshold of the Russian feeder-line gating, hence not permanent present. Are the Chinese really not able to use other than simple phone lines to feed their signal abroad? (Ludwig-GER)

According to Murmansk Radio, **Radiostation "Atlantika"** will broadcast for sailors and fishermen in Russian via its "personal" transmitters in Murmansk. The following frequencies will be in use: 4429 (USB), 6510 (USB), 13093 (USB) and 17266 (USB). (Ozerov-RUS/RUSDx/Klepov-RUS) Noted 4429U at 0845. (12-Mar/Ozerov-RUS/RUSDx/Klepov-RUS) Formerly, the station was on the air 0100-0200 We/Sa/Su, 0810-0910 Tu/We/Fr/Sa, and 1200-1300 Tu/Fr. (RUSDx/Klepov-RUS)

9450 **China Radio**, transmitting via Petropavlovsk-Kamchatsky, operates here at *1200-1300*, power is 200 kw, which makes it well heard in Australia. programs are in Chinese and the frequency is valid from March 28 to Sept 4. The autumn/winter frequency for the last period was probably 5895. China Radio is a media ministry of the Assemblies of God, and has been broadcasting over several radio stations for more than 30 years. The station responded to my report on "Real Light Radio" sent to P.O. Box 90337, Jianshaju, Hong Kong, with a sked all in Chinese (not much help), but then replied in English from their Taiwan "field" address at 21 Chang Chun Road, 7th Floor, Taipei 10413. Director Richard Adams can be contacted by E-mail at readams@usa.net but station staff can provide more specific details at cradio@gcn.net.tw (14-Apr/Foster-AUS/NU/DSWCI DX Window/Rev. of International Broadcasting/Hauser-OK)

SOUTH AFRICA *South African Amateur Radio League* broadcasts are now aired every week via Sentech in Meyerton. Sundays at 0800 UT on 21530 for Central Africa and 9750 for Southern Africa. Repeated following Monday at 1800 on 3215 for Southern Africa. Fair signals in U.K. on 21530 kHz. (6-Apr/Holder-UK/Rev. of International Broadcasting/Hauser-OK)

SURINAME 4990.94 R. *Apintie*, 0338-0436, tune-in to all English soft pop/rock (i.e., Lionel Richie duet, Mike + the Mechanics "The Living Years," Paul Anka/Odia Coates duet "(You're) Having My Baby," Sheena Easton "For Your Eyes Only"), Dutch talk by M dj for under 30 seconds after every few songs and, if locally-originated programming with any ID's, not copyable. Some constant, distant lightning QRN, but a fair signal with pretty decent modulation. No nearby station QRM. (8-Apr/Krueger/DSWCI DX-Window/van den Boogert-TWN)

TANZANIA 5050.08 *Radio Tanzania* 0155 IS @ 0155, talk, into national anthem "Nkosi Sikelel' i-Afrika," Arabic-style chants; audio distorted, but definitely them. (17-Apr/Brandt-NJ)

UGANDA Kony's Lord's Resistance Army (LRA) rebels in the north have launched a SW station against Pres. Museveni on "shortwaves one and two" based in southern Sudan heard very weakly daily at 5pm [1400 UT] (The Monitor website, Kampala, April 6 via BBC Monitoring, summarized by Hauser-OK/Rev. of International Broadcasting)

UKRAINE Current state of *Radio Ukraine* short-wave broadcasts according to their chief engineer: The service to North America [through the Nikolayev-Kopani site] and the English broadcast 1100-1200 are cancelled, the service for Europe mostly uses just three transmitters. They try to get more money from the responsible Ministry for a restoration of the full service. A quick check after 1700 showed indeed just 5905, 6020 and 6090 [all Brovary] on the air, although the German service still announces all scheduled frequencies. At check after 2200 there is again no sign of the scheduled outlets from Kharkov, 7320 (channel empty) and 7410 (only the Tajikistan outlet of IBC Tamil in the clear here), looks like this site is currently also off air completely. (Sajuk/Bethge/WWDXC/Ludwig-GER)

UNITED KINGDOM 9355 *IBC-Julich*. NF *0000-0050 in Tamil followed by English to 0100. Replaces 7460. (10-Apr/Jacob-IND/EDXP/Padula-AUS) Press)

UZBEKISTAN *Radio Tashkent* English observed at 1330-1400 on 7285 9715 15295 17775. I checked the 1200-1230 broadcast and could hear 15295 and 17775. They announced 41, 31, 19 and 16 metre bands so I guess the frequencies are exactly the same as the 1330 broadcast as they usually are. (6-Apr/Barracough-UK/Rev. of International Broad-

casting/Hauser-OK) *Radio Tashkent* is heard on new 9375 at 0100 in English. (10-Apr/Jacob/Electronic DX Press/Padula-AUS) Also heard in English 1200-1230 and 1330-1400 on 15295 and 17775. (18-Apr/RVI/Van Oudheusden-BEL/Electronic DX Press/Padula-AUS)

VIETNAM *Lao Cai* regional did some retuning on Apr-01, now heard on 5595 e(x- 5597v) and in parallel on 6825 (ex-6846v), usual schedule is 2230-2300, 0400-0600, 1000-1030, 1200-1230. (3-Apr/Davies/Electronic DX Press/Padula-AUS) After two days on 6825 (ex -6846v), unpredictable *Lao Cai* moved yet again to 6689v, noted daily since Apr-03. (14-Apr/Davies/Electronic DX Press/Padula-AUS)

ZAMBIA 9865NF *Christian Voice*, Lusaka, 1415-1435. English. "Kid's time- only on Christian Voice." Bible story presented in word and childrens song. At 1430 a child announced "Kids time on Christian Voice" and went on to give Lusaka contact address. Chris took over with "Inventions and Oddities" Magazine program for youngsters. Excellent reception here in Pretoria. (Clemiston-RSA/DSWCI DX-Window/van den Boogert-TWN)

ZIMBABWE 6045 *Radio Two*—Here is another strong African Station in the 49 meter band after Zambia and Rwanda. Usually AIR was good on that freq as no much interference with other station but on April 10 at 17.00 until went off at 22.00 "Radio Two " was so strong that it has covered AIR and with difficulties AIR has been heard. It also seems that 5975 has replaced 5012 as "Radio Four" and the latter is off air same as 3306 and 4828. Have a try I am sure it could be heard without too much difficulties in your region too as the reception was good this morning also (April 11) at 03.00. (Vaghjee-MAU/Rev. of International Broadcasting/Hauser-OK)

UNIDENTIFIED 4668v 1040, wildly drifting, probable Peruvian, caught around 4667.1 at tune-in and lost to morning fade ten minutes later around 4669. Rustic flute and drum selections with occasional M DJ interjections. (6-Apr/Novello-NC/DSWCI DX-Window/van den Boogert-TWN)

4733 2355, same probably west African as heard Jan 24 at same time, also on a Sunday. French-speaking W announcer with soul/pop vocal, then a bit more talk, and anthem to 0000*. Trx swlchris tip in #swl. (28-Mar/Novello-NC/DSWCI DX-Window/van den Boogert-TWN)

4917.5, UNID station (presumed Brazilian), 2245-2305, Portuguese, endless speaking man, news at the hour, very bad modulation, weak signal. (8-Apr/Schnitzer/DSWCI DX-Window/van den Boogert-TWN) Renato Bruni advised this is probably Rdio Relgio from Rio. The station is listed on 4904.9. In the Tropical Band List also 4918.2 kHz is mentioned as alternative frequency. (Schnitzer/DSWCI DX-Window/van den Boogert-TWN)

Pirate Radio Report

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

Hi and welcome to the *May Pirate Radio Report!* Summer conditions are upon us which means that the 'ole pirate frequency of 6955 kHz should remain open for reliable reception well into the night or perhaps until dawn. The sunspot numbers are rising fast so we should not see this frequency go dead as has been the case in the past few years.

Pirating With Cumbre

I thought I'd put in a little plug for my new segment to be found in the "*DXing With Cumbre*" radio show. **PIRATING WITH CUMBRE** is scheduled to air the third week-end of the month as a 10 minute segment within the "*DXing with Cumbre*" program. During the program we will cover current pirate activity and play audio of pirate stations. The program will even have its own QSL card!

So tune in, tell me what you think and feel free to contribute!

The current schedule is as follows via World Harvest Radio/WHRI.

Indiana Sked:

Saturday/UTC at 0500-0530, 0730-0800 on 5745 and 7315; 2230-2300 on 9495. Sunday/UTC 0300-0330 on 5745.

Hawaii Sked:

Saturday/UTC at 0230-0300 on 17510; 0600-0630 on 17780; 0800-0830 on 11565; Sunday/UTC at 0600-0630 on 17780; 1030-1100 on 11565; 1300-1330 on 11565; 1830-1900 on 17510.

Maine Sked:

Friday/UTC at 2200-2230 on 17650; Sat/UTC at 1600-1630 on 17650; 2230-2300 on 17650 and Sun/UTC at 2230-2300 on 17650.

Loggings...

Thanks to Bill Finn in PA and Walter Volodya in BC, Canada we have loggings to share with you!

KMART, a relatively new station was heard on April 15th at 0333 UTC hosted by Stone Cold playing "Cat Scratch Fever" and other songs. [Finn-PA]

RBCN/RADIO BOB'S COMMUNICATION NETWORK was logged at 0215 UTC on April 2nd with a Stevie Nicks Special. A prize was offered if you could ID the mystery song. [Finn-PA]

RADIO METALLICA WORLDWIDE continues to be quite active. They were heard throughout March with strong signals on 6955 kHz in the AM band. One of the latest receptions was on April 11th at 2100 and 2230 UTC. The usual characters were involved. [Finn-PA, Lobdell-MA, Volodya-BC]

WKND/WE'RE CANINE DOG, Radio Animal's station was heard on March 29th at 0014 UTC. The format noted included a song by Josie and The Pussy Cats. [Finn-PA]

WGTG/WITH GLORY TO GUMBY, et al was heard via Radio Eclipse on April 11th at 0002 UTC on 6955 USB. [Finn-PA]

WPUP/THE PIRATE PUPPERS was heard on April 11th at 1420 UTC with a repeat program featuring talk about President Clinton and the Y2K problem. [Finn-PA]

That's all we have for this month. Don't forget to send us your logs for next month and vote in the pirate popularity poll.

Until next month,

Happy Pirate DX!



QSL Report

Sam Barto
47 Prospect Place
Bristol, CT 06010

ALBANIA: Trans World Radio 7385 via Shijak f/d
* "Boy Listening to a Radio" cd. in 2 wks.
for 2 IRCs. v/s John Moore. Also rcvd. sked
and a paper pennant. This seems to be the
only way to QSL Albania these days. (Wilkins)

ANTIGUA: BBC 5975 p/d ltr. in 21 ds. MO)
for \$1.00. (Kremer-WI).

ARGENTINA (Pirate): Radio Titanic Internation-
* al 6980 via Radio Cochiquaz
f/d "Vessel Titanic" cd. in 8
mo. Also rcvd. brochures,
a few booklets and stickers.
(Kusalik-ALB).

ASCENSION ISLAND: VOA 7105 f/d
"National Archives w/ Ice
Skaters" cd. in 2 mo. (Barto)
BBC f/d ltr. in 2 mo. for
\$1.00. (Kremer-WI).

ASIATIC RUSSIA: Radio Nederland
13755 via Khabarovsk f/d
"Special Radio QSL" cd. in
7 wks. (Barto-CT). 12065 via
Petropavlovsk same cd. in 7
wks. (Barto). Deutsche Welle 5905 via Novosibirsk cd.
* in 7 wks. (Field-MI). Kamchatka Radio 4485 cd. w/ post
cards in 2 mo. after a f/up rpt. for a 1993 reception

AUSTRIA: Radio Austria International 9870, (Field-MI)
7325 and 9495 f/d ltr. in 5 wks. w/ schedule and a
few stickers. (Barto-CT). 9870 personal ltr. in Ger-
man in 20 ds. Also rcvd.
schedule. (Glotzbach-NM).

BANGLADESH: Banqladesh Betar
* 4880 f/d ltr. in 75 ds.
after several f/up rpts.
v/s Monoranjan Das, Station
Engineer. Current schedule
was rcvd. (Martin-CA).

BELARUS: Radio Minsk 7210 p/d
cd. w/ a very nice person-
al ltr. in 46 ds. for \$1.00
v/s Irina Polozhentseva.
(Klinck-NY).

BELGIUM: RTBF 15715 f/d cd.
for their test broadcast
in 28 ds. w/ stickers.

I should of listed this under Germany as
I assume it was relayed via Julich...Sam.

BONAIRE: Deutsche Welle 11750 (Kusalik-ALB)
f/d "Antenna Towers Then and Now" cd. in
62 ds. w/ stickers. v/s Horst Scholz. (Hu-
menyk-ONT).

BOTSWANA: VOA 13710 f/d "Thanks Giving Day"
cd. in 2 wks. (Kremer-WI). Radio Botswana
7255 f/d cd. in 77 ds. for 2 IRCs. (Ray-
mond-NH). 4830 f/d cd. in 142 ds. for 2
IRCs. (Neal-TX).

BRASIL: Radio Difusora de Londrina 4815
p/d postcard QSL in 30 ds. for a PT
rpt. I also sent along a taped rpt. and
ms. (Klinck-NY).



You Have a Friend at
KOL ISRAEL
Israel Radio International
P O B 1082, Jerusalem, Israel

**PAZ Y BIEN
LA RADIO**

F.M. Stereo
92.9 - 104.5
106.9 - Mhz
A. M.
MW.1340 Khz
Onda Corta
4.820

1993

QSL VERIFICATION

RADIO REPUBLIK INDONESIA STASIUN REGIONAL I AMBON
 Kepada Yth. Tuan RICHARD A. LINDGREN
 Kami menerangkan laporan Tuan dari Radio Republik Indonesia AMBO/4
 siaran pada Gelombang 6566 meter, atau frekuensi 4865 KHz,
 pada tgl. 17 Oktober 1992 dari PKL 20.45 sampai 21.11
 waktu Indonesia Timor. Pemancar kami berkapasitas 10 Kw.
 *Benyak terima kasih atas laporan Tuan.

CHILE: Voz Cristiana

21550 f/d cd. in
 52 ds. after a f/
 up rpt. to the US
 address. (Kusalik-
 ALB). f/d cd. in
 10 ds. for US MS.
 (Raymond-NH). f/d
 "Plant/Cross" cd.
 in 10 mo. for 2
 IRCs. (Lobdell-MA).
 f/d cd. in 1 yr.
 for 2 IRCs. This
 QSL was rcvd. from
 Chile. I sent a
 f/up rpt. to the
 Miami address in
 Dec. 98 and ver-
 ification was rcvd.



Ambon, 5 OKTOBER 1992.

in only 2 wks. Pleased with this one. (Wilkins-MO).

CHINA, PEOPLES REPUBLIC OF: China Radio International 15500 f/d "Dragon Pool" cd. in 20 ds. w/ schedule for 1 IRC. (Brouillette-IL). 6950, 7385, 11675 and 11660 f/d "Huangguoshu Waterfalls" cd. w/ pennant & several stickers in 9 wks. (Barto-CT). 15210 and 17755 via Kunming f/d cd. w/ schedule and stickers in 7 wks. Pennant was rcvd. (Barto).
 * Voice of Russia 15500 f/d cd. w/ site in 2 mo. Site listed on card was Pekin (Peking?) (Barto-CT).

NOTES: Steve Martin in Calif. says a hearty hello to everyone. A few veries have made it through the postal system. He was quite surprised to get the QSL from Yemen. Not too shabby... Sam. Gene Borokowski says that Dxing has been great during March. He notes that Africa has been the most consistent as far as nice clear signals are concerned.
 Your Editor needs addresses for WRVT, WMHT WYJB, WVPR and WMUA... Sam.

CLANDESTINE: Radio Irina / Voice of Freedom

* 15580 and 15425 via Irkutsk 2 f/d prepared cds. were stamped and signed in 21 ds. after a f/up rpt. This was for a 92 reception via the Washington DC address. v/s Dr. Dao Thi Hoi. (Kusalik-ALB).

COSTA RICA: Adventist World Radio / Radio Korea International Special Relay 9725 f/d cd.

* in 4 mo. w/ site and schedule. v/s Han Hee-Joo. (Kusalik-ALB). f/d cd. w/ site in 33 ds Also rcvd. radio stamp, station info., and schedule. v/s Adrian Peterson. (Kusalik-ALB).
 * Adventist World Radio / Radio Bhutan Special Relay via Radio For Peace International 6975 f/d "Orantes Paint" card series in 33 ds. Radio stamp was rcvd. (Kusalik).

CUBA: Radio Habana Cuba 6000 f/d "Logo" cd. in 128 ds. Also rcvd. station calendar, personal ltr. and contest info. v/s Lourdes Lopez. (Borokowski-NY).



TGMI.

via Robertson

Que pensais de Cristo?

MATEO 22:42

RADIO "BUENAS NUEVAS"

13020 San Sebastián H.

Huehuetenango.

Guatemala, C. A.



ECUADOR: HCJB 5970 and 9685 f/d blue and yellow "Macau Bird" cd. w/ calendar in 2 mo. (Bar-EGYPT: Radio Cairo 9990 to) p/d cd. in 146 ds. for 2 IRCs. v/s Doaa. (Raymond-NH).

ENGLAND: Sunrise Radio 5850 ltr.

* in 25 ds. v/s Samaira Sadeghi, PA to Chief Executive. (Kusalik-ALB). Merlin Network One 13690 cd. w/ no site in 24 ds. after a f/up rpt. in 80 ds. total. (Kusa- * 1ik). Radio Caroline 13690 via Merlin Network One f/d large (8x6) orange cd. in 40 ds. w/ pirate booklet and sked.

v/s John Knight. (Kusalik-ALB).

EURO PIRATE: Radio Mariquita 11470 via Shortwave Relay Service f/d red

* and pink cd. in 4 mo. (Kusalik). Play DX Program via Shortwave Relay Service 11470 f/d red cd. in 28 ds. for an E-mail rpt. (Kusalik-ALB).

* Shortwave Relay Service 21450 f/d red cd. in 82 ds. (Kusalik).

RADIO R PA®

Ihre private EURO-INFO-WELLE

Info

NOTES: Jerry Klinck wishes everyone had a healthy, happy Easter. The weather has been a bit erratic with rain in the 30's and sunny and 70. Guess its that time of the year. George Glotzbach in santa Fe, NM is new to QSLing. Thanks for the contributions. Be sure to send them all in...Sam.

EUROPEAN RUSSIA: Voice of Russia

12010 via Krasnodar f/d E-mail in 5 ds. for an E-mail rpt. I also received a Happy99.exe.

* fireworks display program. (Neal-TX). Radiostansiya Atlantika 7125 and 11850 via Murmansk f/d cds. w/ station stamp, hand written in EG If I read the cd. correctly they broadcast to Russian fisherman on Tuesdays and Fridays 1200-1300 Moscow Time on 4429 and 13095khz. QSL came direct from Murmansk. (Field-MI).

FINLAND: Radio Finland 11755 f/d cd. w/ schedule and stickers in 18 ds. for \$1.00. (Klinck-NY). 17660 f/d "Shortwave Centre" cd. in 15 ds. w/ decal and schedule. for \$1.00. v/s Raimo Makela. (Borowski-NY).

GERMANY: Radio Vilnius 6120 via Julich f/d "Logo/Flag" cd. in 25 ds.

* for 2 IRCs. (Brouillette-IL). Radio Welle West 5905 via Julich f/d prepared cd. w/ verie ltr. in 22 ds. direct from the DTM Julich site v/s Walter Brodowsky, Technical Advisor. (Kusalik). another QSL in 1 yr. and 16 ds. after a f/up rpt. I rcvd. 2 prepared cds., signed and

* stamped. v/s A.J. Weisberger. (Kusalik). IBC Tamil Station 7150 via Julich prepared cd. w/ ltr. in 22 ds. from Julich. (Kusalik). Deutsche Welle 6145 via Wertachtal f/d cd. in 136 ds. for an E-mail rpt. (Neal-TX).

GREECE: Radio Free Iraq

* via VOA Kavala 7110 & 7275 f/d ltr. for the first day of broadcasting in 65 ds. v/s Dave Walcutt, BCB Operations Liaison. (Kusalik-ALB).

GUINEA: Radio Television

* Guineenne 9650 p/d ltr. w/ postcard in 1 mo. for a FR rpt. and \$2.00. v/s Sean Gamara. (Myers-VA). 7125 p/d form ltr. in 33



ds. for \$1.00. (Palmerheim-WA).

HAWAII: KWHR Angel 4 11565 f/d cd. in 2 mo. w/ schedule. (Barto-CT).

HOLLAND: Radio Nederland 13700 and 9895 via Flevo f/d "Special Radio" cd. in 7 wks. w/ schedule. (Barto-CT).

INDIA: All India Radio 4800 via Hyderabad f/d "Avantipur: Sculptured Panel, Avantisvamin Temple" cd. direct from the site via Delhi. in 92 ds. for SASE (used). v/s A.K. Bhatnagar, Director of Frequency Assignments. (Martin-CA). 4790 via Itanagar f/d prepared cd. direct from the site, signed and stamped by John T. Jirido, Station Director. Also rcvd. a very friendly ltr. on their letterhead. This was after 31 ds. and 2 f/up rpt.

*Das Wort
die kosmische Welle*



*Die Radiosendungen
der Urchristen
Leben im Geiste Gottes*

NOTES: Denis Pasquale of New Brighton, PA says that reception conditions as of late have been really miserable. All he seems to be able to pick up are pirate transmissions around 6955. He will keep trying and hope Mr. Sun cooperates...Sam. Joe Kremer sent out several reports and hopes to have more to report next month. I won't print them here but thank you very much for the very

kind remarks about the QSL Column...Sam.



**Pakistan
Broadcasting
Corporation**



I. sent the rpt. to the AIR Guwahati address. It seemed to work! (Martin).

* 3223 via Shimla f/d prepared cd. in 22 ds. direct from the site after 2 f/up rpt. v/s P.K. Sood, Assistant Station Engineer. SASE was used. (Martin-CA)...Nice going...Sam.

JAPAN: NHK Fukuoka-Kasuga 3259 f/d "JOLK * and JOLB" cd. in 3 wks. for a f/up rpt. on a 90 reception. The cd. lists 3262, 6133 and 9538 khz w/ 600 watts. (Palmerheim-WA).

JAVA: Radio Republik Indonesia - Kang Guru English Program 9680 f/d ltr. w/ magazine about the English program in 5 mo. v/s Walter Slamer.

KOREA, REPUBLIC OF: Radio Korea International 15575 via (Kusalik-ALB) Kimje f/d "Year of Architecture" cd. in 25 ds. w/ schedule, report forms and "Lets Learn Korean" booklet. (Borokowski-NY).

LIBERIA: Star Radio 3400 and 5880 2 f/d prepared cds., signed and stamped, in 20 ds. for a rpt. to the Swiss address. (Kusalik).

MALAGASY REPUBLIC: Deutsche Welle 11765 cd. in 7 wks. after a f/up rpt. (Field-MI).

NEW ZEALAND: Radio New Zealand International 17675 f/d cd. w/ sked. in 2 wks. (Glotzbach).

PAPUA NEW GUINEA: Radio Morobe 3220 f/d prepared cd, signed and stamped, in 3 mo. for SASE. v/s was the Acting Provincial Program Manager. (Martin-CA).

PERU: Radio Sudamerica * 5522 p/d ltr. in 1 yr. after a f/up rpt. in SP



Adventist World Radio
THE VOICE OF HOPE FOR ALL PEOPLES

v/s Jorge Luis Paredes Guevara. (Paszkie-wicz-WI). Radio Victoria 6020 and 9720 p/d ltr. in 1½ mo. for a SP rpt. Also rcvd. cd. of "Macchu Picchu". (Paszkie-wicz). Sheryl says that these 2 Peruvians are #25 and #26 for her so she can finally get her NASWA Award. Radio Ondas del Huallaga 3330.6 personal ltr.

w/ postcard of Huanuco and a station pennant in 39 ds. for a SP rpt v/s Mr. Flaviano Llamas M., Representante Legal. (Castro-BRASIL).

PHILIPPINES: FEBC Radio International 11635 f/d paper sheet w/ postcard and schedule in 2½ mo. (Barto-CT). 11610 f/d cd. in 3 mo. w/ schedule. (Barto-CT). VOA 11705 f/d "National Archives" cd. in 2 mo. (Barto).

PUERTO RICO: AERTS 6458.5 p/d E-mail in 1 day. 10 kws. v/s Wayne Eternicka. (Palmer-shelm-WA). f/d E-mail reply in 1 day. (Kusalk). same in 4 ds. for an E-mail rpt. (Neal-TX). p/d ltr. in 19 ds. for SASE. (Klinck-NY). p/d ltr. in 5 wks. on my second try. (Field-MI).

RWANDAM Deutsche Welle 9670 cd. in 7 wks. (Field-MI).

U.S. Department of Commerce
NATIONAL BUREAU OF STANDARDS
RADIO STATION WWV
FORT COLLINS, COLORADO

2.5 MHz-40°40'35"N, 105°02'25"W
5 MHz-40°40'42"N, 105°02'25"W
10 MHz-40°40'48"N, 105°02'25"W

15 MHz-40°40'45"N, 105°02'25"W
20 MHz-40°40'53"N, 105°02'25"W

via Bill Plonka

This is to confirm your reception report of WWV
on 15.0 MHz. 0000 UTC 5 December 1950
Serial No 27550

John S. Milton
Engineer in Charge

Leap Second

8 00478-100



SPECIAL OFFER: Our customers have spoken. The enclosure of used postage stamps as a form of gift with your reception reports seems to be working. For 1998 we are now offering the following:

\$10.00 will bring you 1300 foreign stamps; \$15.00 will net you a total of 2300 stamps. With either order you will receive an additional 600 stamps (US). That's 1900 total for only \$10.00 or 2900 for only \$15.00. You will not be disappointed. Please try to include an extra \$3.00 for overnight USPO delivery. Mail your order to your NASWA QSL Editor.



SAIPAN: KHBI

9355 f/d
"Do It Yourself" cd. in 4 mo. w/ site. v/s Cindy Blenheim. (Kus- alik-ALB).

SAO TOME: VOA

6035 f/d
"Highway 1633" cd. in 2 mo. (Barto-CT)

SARAWAK: Radio Television Malaysia - Kuching 5030 p/d ltr. w/ schedule in 59 ds. for an EG rpt., taped rpt. and \$1.00. (Klinck).

SAUDI ARABIA: Broadcasting Service of the Kingdom of Saudi Arabia 9715, 9553.6, 9619.4, 11870 and 9718.3 f/d cd. in 9 wks. w/ ltr. (Barto-CT) 12031.6 f/d cd. w/ ltr. and schedule in 3 mo. (Barto). 15230, 15275 & 15377 cd. w/ ltr. in 6 wks. (Barto). 9870 and 9555 cd. w/ ltr. in 2½ mo. (Barto). 15277.8 cd. in 7 wks. (Barto). 12038.4 cd. w/ ltr. in 3 mo. (Barto). 11730 cd. in 6 wks. (Barto). 15345 cd. w/ ltr. in 3 mo. v/s Sulaiman Samnan, Director. (Barto). 9578.6 f/d cd. w/ ltr. in 2 mo. Schedule was rcvd. (Barto-CT).

QSL

Certificado de Sintonía

Emisora LA VOZ DE GALAPAGOS
Para Michael S. Hardestey

Muchas gracias por su informe de recepción. Tenemos el gusto de confirmar su control de nuestra emisión en 1320 kHz. de fecha 10 Julio /1993 a las 2:30-8:00 horas de la mañana con 2500 vatios de potencia.

[Signature]
GERENTE (C).

firma



sello oficial

SLOVAKIA: Radio Slovakia International

5930 via Rimavska Sobota f/d "Ice Caves" cd. in 130 ds. (Borokowski-NY).

SOUTH AFRICA: Channel Africa

9525 f/d "Monitor Room" cd. in 290 ds. v/s Katy Otto. (Borokowski). 11900 f/d "Switch-Matrix" cd. in 153 ds. after a f/up rpt. (Borokowski-NY) 17860 f/d "Satelite Station" cd. in 17

QSL



ds. w/ schedule and station stickers. (Borokowski-NY).
SURINAME: Radio Apintie 4991 f/d prepared cd., signed and stamped, in 65 ds. for \$1.00 after a f/up rpt. v/s Ch. Vervuurt. 1kw. Also sent along an SASE which was used by the station. (Martin-CA).
SWEDEN: Radio Sweden International 7115 f/d cd. in 11 ds. w/ schedule. (Glotzbach-NM).
TAIWAN: CBS Dialect

via Trunnel

RADIO SRS

SOUTH AMERICA

- Network** 11745 via **Annan** f/d "Staff" cd. w/ schedule in 6 wks. (Barto-CT). 7130 via **Minhsuing** same in 6 wks. (Barto). 11860 f/d cd. w/ schedule, pennant and stickers in 2 mo. (Barto).
THAILAND: BBC 11750 n/d ltr. in 3 mo. (Barto). **VOA** 9645 via **Udorn** f/d "Highway 1633 through Monument Valley Tribal Park in Arizona" cd. in 2 mo. (Barto-CT).
TINIAN: Radio Free Asia 11790 f/d "Monument Valley" cd. in 2 mo. for * an E-mail rpt. to the IBB site. (Palmerheim-WA). **VOA** 11825 same cd. in 3 mo. (Palmerheim-WA).

NOTES: Paul Brouillette says that a few QSLs are starting to come in. Paul asked about the report forms that I've used in the past. Actually I ran out and decided that everyone was doing such a great job of typing or writing their reports to the QSL Column that I discontinued using the report forms. However you send them in they will get printed... Sam. **Marlin Field** relayed this message to **Richard Lawrenson** regarding the address that he uses for Radio Pyongyang: **Sonny Ashimori**, 11-14 Kawagoe-cho, Nishinomiya City, Hyogo 662, Japan. This person is a Japanese DXer who relayed the report. I don't know if he still does... Thanks... Sam.



UGANDA: Radio Uganda - Home

- * **Service 'B'** 4976 f/d ltr. in 5 mo. after I reported direct to the Ottawa Embassy. Total time was 7 yrs. v/s L.B. Lubega, Principal Engineer. This QSL was a project especially after trying several different direct reports and Alternative routes. (Kusalik-ALB).
USA: WKSH 1640 **Pewaukee, WI** ltr. w/ sticker and schedule in 1 mo. (Field-MI). **WMDH** 1690 **Leonardtown, MD** f/d ltr. in 1 mo. v/s Stacy Reynolds, Program Director. (Field-MI).
 * **HJFP** 26470 **Fort Pierce, FL** p/d cd. w/ postcard in 1 mo. (Field-MI).
KBGG 1700 **Des Moines, IA** ltr. in 1 mo. v/s Tom Conrad, Production Director. (Field-MI). **KCNZ** 1650 **Cedar Falls, IA** ltr. in 1 mo. (Field-MI). **WBCQ** 7415 f/d "Planet" cd. in 22 ds. for an EG rpt. (Kusalik).
 * **Adventist World Radio - Bhutan BCB** via **World of Radio** via **WGTC** 5085 f/d "25th Anniversary" cd. w/ radio

RADIO PUNTO
1030 AM

LA VOZ DE LOS QUE NO TIENEN VOZ

GARCIA MORENO 913 Y 9 DE OCTUBRE - TELFS 5247-7
322579-322584 FAX: 322668 CASILLA 0901, 4710
QUAYAOUIL - ECUADOR

Thank you for letting us know that you received our transmission.

We confirm that you heard us as:

Date JULIO 4, 1999

Time 1638-1745 UTC

Frequency 21.50 KHz

Transmitter H202S SW-100

We really appreciate your interest and look forward to hearing from you again. More information about us can be found at:

<http://www.christian-vision.org>

Radio Voz Cristiana & Radio Christian Voice

International Office: Ryder Street, West Bromwich, B70 0EQ, England



CHRIS LOBDELL
Box 146
STONEHAM, MA 02180
U.S.A.

stamp in 33 ds. v/s Adrian Peterson. (Kusalik-ALB).
* **Adventist World Radio - Bhutan Special** BCH via **WWCR** 15685 and 5070 f/d cd. #2 in the QSL Series in 33 ds. w/ radio stamp. (Kusalik). **APRTS** 12689.5 via **Key West, FL** ltr. w/ site in 5 wks. on my 2nd try. (Field-MI). p/d E-mail in 1 day. Power is 1 kw. from **Boca Chica, FL**. (Palmer-shheim-WA). f/d E-mail QSL. (Kusa-)



lik-ALB). **WSHB** 7535 and 5850 f/d "Do It Yourself" cd. in 4 mo. for ms. (Kusalik).

USA (Pirates): WREC 6955 f/d "5th Anniversary" cd. in 336 ds. for 3 ms. (Neal-TX). **WTBU** 6955 p/d "Howard Stern Experience Sheet" in 474 ds. for 3 ms. (Neal-TX). **Blind Faith Radio** 6955 f/d colored sheet in 18 ds. w/ another QSL sheet in 1 mo. for ms. (Kusalik). **Radio Titanic International** 6955 via some US relay in 6 wks. for an E-mail rpt. Also rcvd. stickers, booklets and brochures (Kusalik-ALB). **Radio Euroqek** 11092.5 QSL #3 in 1 day for an E-mail rpt. (Kusalik). **WJFK** 6955 rcvd. "JFK QSL" for a non-report to the station! (Kusalik). **Partial India Radio** 6955 QSL sheet in 70 ds. v/s Harold Krishna. (Kusalik). **WGTC** 6955 f/d business cd. w/ slogans in 10 mo. for ms. (Kusalik-ALB)

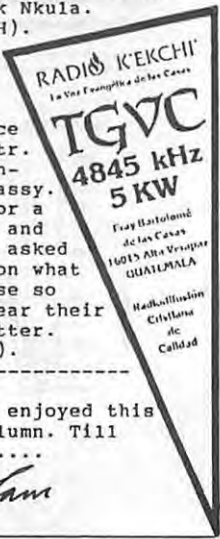
UZBEKISTAN: Radio Tashkent 5060 f/d "Logo" cd. in 66 ds. (Palmer-shheim-WA).

VATICAN: Radio Vatican 7305 f/d "Marconi Conference Room" cd. in 73 ds. for 1 IRC. (Brouillette-IL). 13765 and 11640 f/d cds. in 35 ds. (Kusalik-ALB).

YEMEN: Radio Sana'a 9780 f/d "Famous Wadi of Dhahr, w/ a rock Palace Constructed on Top" cd. in 6 mo. for \$1.00. v/s Mr. Mohammed Dahwan, General Director. Very pleased with this one! (Martin-CA).

ZAMBIA: Radio Zambia 6265 f/d cd. in 61 ds. for 2 IRCs. v/s Patrick Nkula. (Raymond-NH).

ZANZIBAR: Voice of Tanzania Zanzibar 11734.1 nice personal ltr. via the Tanzanian Embassy. This was for a taped rpt. and SASE. They asked my advise on what radio to use so they can hear their station better. (Klinck-NY).



RADIO ONDAS DEL HUALLAGA S.A.

Calle Media OAX 3N 1330 Mts. Onda Corta Tropical OAX 50 2370 Mts. FM 88.9
H. Lameda Plaza N°73 Teléfono 31-1221 31-1222 31-7424
Teléfax 31-2428 - Huánuco Perú

Huánuco capital del Departamento de Huánuco de la eterna primavera con 264.224 habitantes, su plano es un diamero, fundado por los españoles el año de 1539 con el nombre de los Caballeros del León, 1.850 metros s. n. m. Departamento con área de 34.414 Km. Cuadrados. Tiene once provincias son: Huánuco, Ambo Dora de Mayo, Hímalayas, Leoncio Prado, Merafón, Pachica, Hucaybamba Puerto Inca, Lantzocolla y Yarowilca, zona de producción, agrícola, ganadera y minera con futuro prometedor.

Huánuco ciudad ubicada sobre el río Huallaga, que lo divide en dos, esta ciudad nace en Cerro de Panko a 4.400 metros s. n. m. haciendo un recorrido de 1.138 Km. formando el Amazonas con los ríos Merafón y Ucayali, pesa según 713Km. dentro del territorio nacional. Pucallpa sobre el río Ucayali pesa solamente en kilómetros del Brasil. La comunicación por carretera a Lima capital del Perú es de 419 Km.; servicio de aviones vuelos diario, tiene un puente de 3 arcos construido de cal y piedra en el año 1848 por una firma italiana, se dice en la construcción usaron Argemasa en cuya mezcla se usaron miles de claras de huevo de gallinas para garantizar su construcción y duración, tiene un ancho de ocho metros por 80 metros de largo.

Zona turística: Ruinas de Kotosh, Andahuayllita, Cayra, Chaurubamba, Huánuco el viejo, Chayín de Pariscas, Tantiwayno y en Tingo María Las Cuevas de las Pava. Las cuevas de las Lechinas y otros muy interesantes, nuestras caravitas se interna hacia la activa Higuera a la ciudad de Tingo María, donde se encuentra la Dilla Dormiente formada por cerros y tiene lindos pascos, siguiendo hacia Pucallpa, ciudad sobre el río Ucayali a 140 Km. de nuestra frontera con la República del Brasil.

De acuerdo a la actual política del Estado, hoy Departamento Región Huánuco, ésta cuenta con tres buenos hoteles (Huánuco), Real Hotel, Onda, Hotel Huánuco de 4 estrellas para hacer un año y visitar, gozar del ambiente de esta tierra de la Eterna Primavera.

Huánuco, 30 de Enero de 1999

Señor Pedro, M. C. de Castro
Av. Osvaldo Arnobn. 1124
12600-000 SP. B.R.A.S.I.L.

Hope everyone enjoyed this months QSL Column. Till next time.....

Sam

Net Notes

Tom Sundstrom

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More photos of the 1999 gathering of the faithful in Kulpsville have been added to our Web site. This time the photos were supplied by Ed Mauger. Thanks Ed! The links to the photos are atop the 2000 SWL Fest info page.

We've had a few inquires as to what is being heard as the Kosovo business spins out of control. Rather than duplicate the work of others, we have a one-page summary of links to Kosovo Web super-sites and pages. On our Web site, go to the "Radio" sub-menu page and click on the red button.

The Voice of Russia does not agree with NATO on the process to settle the Balkan conflict. Not only has the regular programming content changed to focus on Kosovo details (to eNA, 00-05 9665, 03-05 7125), there is a special multi-language broadcast to the Balkans. Details within the Kosovo special section at <http://www.vor.ru/Kosovo/>. We can hear the broadcast here in NJ.

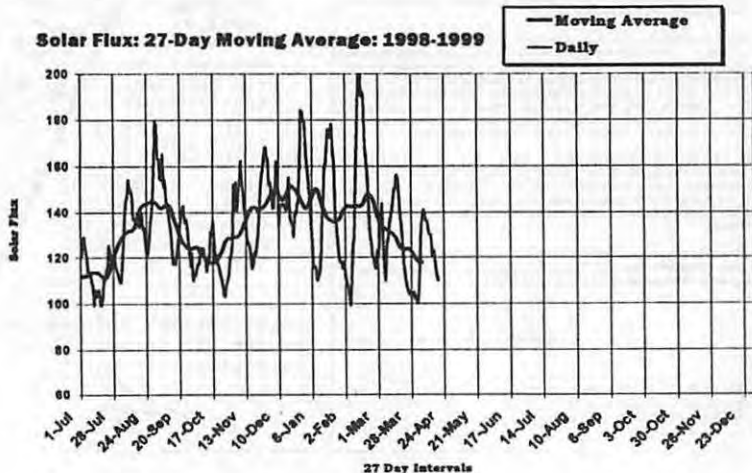
The Voice of the Mediterranean in Malta has a new "official" Web page <http://www.vom-malta.org.mt/>.

There is no schedule page (English is broadcast daily at 19-20 UT on 12060) but there is a RealAudio page that makes it easy to listen to the program.

Cumbre DX, on the radio and on the net, now has its own URL at <http://www.cumbredx.org/>. Check the Cumbre site for an updated broadcast schedule; in April there were many messages in the newsgroups correcting and re-correcting the air times and frequencies while World Harvest Radio juggled the air times and frequencies. The show, fortunately, is archived on the Cumbre Web site

Harry Helms has sold DXing.COM to NASWA advertiser Universal Radio. The effective date is June 1. Read Helms's comments about the sale and the state of the radio hobbies at <http://www.dxing.com/editoria.htm>.

Other URL changes: Radio for Peace Intl overhauls its site design, adds archived programs and moves to <http://www.rfpi.org/>. Don Moore moves his Patepluma International Radio Web Site to <http://www.swl.net/patepluma/>.



Contributors' Page


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DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA	R8B AOR AR-7030 100' LW
Gabriel Ivan BARRERA, Buenos Aires, ARG	NRD-525 32m dipole
Ralph BRANDI, Tinton Falls, NJ	R8 70' LW
Paul BROUILLETTE, Geneva, IL	R8 60' LW
David CLARK, Thornhill, ONTARIO	R8A NRD-515/SE-3 ANC-4 Carolina Beam
Wendel CRAIGHEAD, Prairie Village, KS	SPR-4 YB400 indoor LW
Rich A. D'ANGELO, Wyomissing, PA	R8 HF150 FL-3 AD Sloper LW
Peter COSTELLO, Matawan, NJ	AR3030 DX-390 YB400 70' LW Tun-4A
Nicolas ERAMO, Buenos Aires, ARGENTINA	Sony 2010 ICF-7600 7600G LW's
Ralph FAMULARO, Hyogo-ken, JAPAN	ICF-SW55 ATS-803A R5000 LW
Mark FINE, Remington, VA	
Bob FRASER, Cohasset, MA	Sony ICF-2003 ICF-SW100S 2m LW
Bill FLYNN, Cave Junction, OR	R8 R7A DX-Ultra inverted V
Hugh O. GRIFFIN, Jr., Portsmouth, VA	
Bob HILL, Littleton, MA	Sony 2010 120' dipole at 35'
Mark HUMENYK, Weston ONTARIO	Magnavox D-2935 AN-60 DX-SWL sloper
Jerry KLINCK, Wales, NY	R8 HQ-180AX 80' LW 60m dipole
Fred KOHLBRENNER, Philadelphia, PA	R8 NRD-525 Datong FL-3 ANC-4 AD Sloper
David KRAUSE, Eastlake, OH	Kenwood R600
Harold LEVISON, Philadelphia, PA	R8 R70 YB400
Jerry LINEBACK, Scranton, KS	Icom 746 beverage antennas
George MAROTI, Mt. Kisco, NY	R8B 2010 10/45m dipoles MFJ-956 tuner
William McGUIRE, Cheverly, MD	DX-380
Jim MOATS, Ravenna, OH	FRG-7700 LW
Gary NEAL, Sugarland, TX	Grundig YB-400
Jay NOVELLO, Wake Forrest, NC	R8A LW's
Takayuki Inoue NOZAKI, Tokyo, JAPAN	NRD515 NRD535 FRG7000
Denis PASQUALE, New Brighton, PA	Sony 2010 beverage antennas
Bob RAYMOND, Nashua, NH	DX-398 20m 5/8 wave vertical
Chuck RIPPEL, Cornland, VA	WJ-HF1000A R8B R390A/SE-3 51S-1 LW's
Betsy ROBINSON, Clinton, TN	Sony 2010 Indoor antenna
Conrad ROUTH, Chamblee, GA	NRD-535D w/ Autek audio filter AD Sloper
Giovanni SERRA, Rome, ITALY	NRD-525 AD Sloper
Randy STEWART, Springfield, MO	FRG-100 w/Collins filters
Mike STRAIN, Bayville, NJ	FRG-7 DX-394 D398 MFJ1020B LW
Gerald WITHAM, Keauau, HI	R8 ANC-4 135' LW

Wendel Craighead's logs were made during his second holiday trip to Bao Loc, Vietnam, and also during a short stay in Seoul, Korea. What an exotic spot for a Dxpedition! Don't forget to bring a radio with you during your upcoming vacations, and let us know what you are hearing.

Please check your equipment listings above and send me any changes or updates for the next issue, and don't forget to send in your country totals for the next Scoreboard column. 

Tropical Band Loggings

Sheryl Paszkiewicz
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Manitowoc, WI 54220
spasz@dataplusnet.com

- 2310 AUSTRALIA CAAMA R 3/30 1151 EG talk, p-f (Line-KS)
 2410 NEW GUINEA R Enga 3/23 1051 chorus, talks, mx bridge (Maro-NY) 3/17 1021
 Pidgin tlk (Line-KS) 3/20 1115 better than average US pops, many ment Enga
 (Ripp-VA)
 2460 BRAZIL R Alvorada 3/17 1020 Braz mx, fair (Line-KS)
 3172.5 MOLUCCAS RSPD Halmahera 3/17 1009 Indo mx & tlk, fades (Line)
 3205 NEW GUINEA R Sandaun 3/30 1145 weak audio (Line-KS)
 3220 ECUADOR HCJB 4/7 1035 lang tlk, Andean flute (Line-KS) 2/26 Andean pan pipes
 (Brou-IL)
 3220 NEW GUINEA R Morobe 3/27 1200* lang tlk, vcls (Line-KS)
 3224.8 SUMATRA Tanjungpinang 4/2 1158 Indo anmts, SCI (Line-KS)
 3234.9 PERU Luz y Sonido 4/7 1037 SP talk, ute QRM (Line-KS)
 3235 NEW BRIT RWNB 4/8 1134 local mx (Line-KS)
 3245 NEW GUINEA R Gulf 4/8 1150 local mx, poor (Line-KS)
 3250.8 PERU R Comas TV 3/10 1031 SP Peruvian mx, many anmts & msgs, IDs (Klin-NY)
 4/7 1040 SP talk (Line-KS)
 3255 BRAZIL R 6 de agosto 4/6 1017 mx, poor (Line-KS)
 3260 NEW GUINEA R Madang 4/8 1149 local mx (Line-KS)
 3265 SULAWESI Gorontalo 4/4 1150 Indo talk, vcls (Line-KS)
 3275 PAPUA R South. High. 4/8 1148 lang tlk (Line-KS)
 3280 ECUADOR LV del Napo 4/6 1014 vern talk, good (Line-KS)
 3315 ADM ISL R Manus 4/7 1137 lang tlk (Line-KS)
 3325 KALIMANTAN Palangkaraya 3/18 1225 trad Indo mx (Line-KS)
 3329.5 PERU Ondas del Huallaga 4/7 1027 SP tlk & mx (Line-KS)
 3335 NEW GUINEA R E Sepik 4/7 1132 local mx & talk (Line-KS)
 3345 MOLUCCAS Ternate 4/4 1105 Indo mx, NA (Line-KS)
 3355 NEW GUINEA R Simbu 4/8 1147 local mx (Line-KS)
 3360 UNID 4/7 1050 SP mx & talk under Guatemala (Line-KS)
 3365 BRAZIL R Cultura 3/23 0035 party mx, Tijuana Brass, ads, hyper DJ stingy with Ids,
 ment Brazil, Araraquara (Nove-NC)
 3375 BRAZIL R Educadora 4/6 1011 PT talk & mx (Line-KS)
 3380 GUATEMALA R Chortis 3/28 0158 SP anmts, weak (Stra-NJ)
 3385 BRAZIL R Educ Rural 4/6 1007 PT talk, poor (Line-KS)
 3385 NEW BRIT RENB 4/8 1221* mx, lang anmts, poss nx, NA (Line-KS)
 3385 SUNDAS Kupang 4/4 1111 Indo talk, fading up (Line-KS)
 *3390 ALASKA HAARP 3/27 0720 CW Ids, msg, one-time special broadcast (Brou-IL)
 Sorry I omitted yr logs last time but here they are
 3905 IRIAN JAYA Merauke 3/26 1228 Indo talk (Line-KS)
 3905 NEW IRELAND R New Ireland 3/22 1112 pres nx in Pidgin, some EG words, ment
 New Ireland (Maro-NY) mixing w/Merauke (Line-KS)
 3959 SULAWESI Palu 3/26 1228 mx, poor (Line-KS)
 3976 KALIMANTAN Pontianak 4/4 1152 Indo vocals under hams (Line-KS)

- 3987 **IRIAN JAYA** *Manokwari* 3/26 1227 Indo female vcls (Line-KS)
- 4000 **SULAWESI** *Kendari* 3/19 1224 Indo talk (Line-KS)
- 4005 **UNID** 3/20 1616 chanting 1635 Koran, vcl 1648* (Crai-VIET)
- 4534.1 **BOLIVIA** or **PERU** unid 3/17 1048 SP talk (Line-KS)
- 4600 **BOLIVIA** *Perla del Acre* 3/17 1038 talk (Line-KS)
- 4606 **IRIAN JAYA** *Serui* 4/2 1143 Indo female vcls (Line-KS)
- 4649 **BOLIVIA** *R Santa Ana* 3/30 0005 six songs by same group, Ids, couple more words then pulled plug (Nove-NC)
- 4668 **UNID** 4/6 1040 drifting, prob Peru, rustic flute/drum (Nove-NC)
- 4702.2 **BOLIVIA** *R Eco* 4/2 2330 piano mx, Ids, RTTY QRM (Nove-NC)
- 4719.9 **BOLIVIA** *R Abaroa* 4/6 1025 ballads (Line-KS)
- 4722 **VIETNAM** *Gia Lai* pres 3/20 1157 VT pop & ment Viet (Crai-VIET)
- 4725 **MYANMAR** *Vo Myanmar* 3/26 1239 YL in pres Burmese (Line-KS)
- 4733 **UNID** 3/28 2355 prob Waf stn, FR YL w/soul/pop, NA 0000* (Nove)
- 4748.3 **PERU** *R Huanta 2000* 4/7 1055 ID, mx, tlk (Line-KS) 4/2 2345 comunicados, mx, Ids (Nove-NC)
- 4753.3 **SULAWESI** *U-P* 3/15 1200 dead air when other Indos were into nx (Line-KS)
- 4760 **AND ISL** *AIR Pt Blair* 3/20 1229 lcl ID, 4 tones, EG nx & Spotlight (Crai-VIET)
- 4765.5 **PERU** *R Chincheros* 4/6 1030 SP ballads & talk (Line-KS)
- 4766 **IRIAN JAYA** *Wamena* 4/2 1204 RRI nx by YL (Line-KS)
- 4766 **SUMATRA** *Medan* 3/7 2310 Jakarta nx, fade, anthem, 11-note IS (Clar-ON)
- 4770 **ECUADOR** *R Centinela del Sur* 4/2 0125 SP OM (Stra-NJ)
- 4770 **NIGERIA** *Kaduna* 3/17 0440 Afr mx, EG nx (Stra-NJ) Tnx a lot!
- 4774.9 **PERU** *R Tarma* 4/7 1056 SP talk & mx (Line-KS)
- *4775 **BRAZIL** *R Congonhas* 4/10 2346 ID, uptempo vcls (Nove-NC)
- 4782.3 **BOLIVIA** *R Paititi* 3/17 1034 snatches of mx & tlk (Line-KS)
- 4784.4 **MALI** *RTM* 4/2 0720 FR tlk, local Afr mx, poor, weak. (Alex-PA)
- 4789 **IRIAN JAYA** *Fak-Fak* 4/4 1140 Indo talk & vocals (Line-KS) 3/19 0950 fair, lagu popular (TIN-JP)
- 4789.4h **SAUDI** *BSKSA* 2nd pgm 3/7 *0255 IS, Koran //9578.7 (Alex-PA)
- 4790 **INDIA** *AIR Chennai* 4/11 0015 film mx, listed Tamil. Atlantida way down in the mix (Nove-NC)
- 4790 **PERU** *R Atlantida* 3/12 1046 male anmts, talk over mx, OA mx, clear Ids, usually strongest Peruvian here AMs (Klin-NY) 4/7 1130 mx (Line-KS)
- 4800 **INDIA** *Hyderabad* 4/11 0012 tone, IS, chorus, tlk (Hill-MA)
- 4800 **LESOTHO** *R Lesotho* 2/9 0345 Afr tlk, ID (Rout-GA)
- 4800.7 **MEXICO** *XERTA* 3/11 0140 mx, IDs (Bran-NJ) 2/22 0450 ID (Rout-GA)
- 4815 **BRAZIL** *Radiodifusora* 3/21 0000 extensive ID (Bran-NJ)
- 4825 **BRAZIL** *R Educ Braganca* 4/3 0130 rel mx, tlks, IDs 0200* (Klin)
- 4826 **PERU** *R Sicuani* 4/6 1040 talk & ballads (Line-KS)
- *4830 **HONDURAS** *R Litoral* 4/7 0006 preaching, canned Ids, call ltrs, freq, Tachira off (Nove-NC)
- 4845 **MOLUCCAS** *Ambon* 4/4 1130* anmts, anthem? Poor (Line-KS)
- 4855.5 **PERU** *R La Hora* 4/6 1042 Andean mx (Line-KS)
- 4874.5 **IRIAN JAYA** *RRI Sorong* 4/6 1055 acoustic guitar/drum theme, chorus, local ID, TP, ID & nx (Nove-NC) 3/19 1220* SCI, nx, NA (Line-KS)
- 4875 **BRAZIL** *R Roraima* 2/26 0833 PT community anmts (Brou-IL)
- 4885 **BRAZIL** *R Clube* 2/26 0839 pol cmtry, ID, carnival mx (Brou-IL)
- 4890 **GABON** *RFI* Relay 3/17 0500 FR nx, fair (Stra-NJ)
- 4890 **PAPUA** *NBC* 4/10 1033 mx call in show in EG (Stra-NJ)

- 4895 **BRAZIL R Bare** 2/7 0445 ID, weak (Rout-GA) 2/26 0844 Christian pgm Voz de Salvacao, ID (Brou-IL)
- 4895 **RUSSIA R Tyumen** 3/17 0457 RS mx w/YL anncr (Stra-NJ)
- 4895 **SARAWAK RM** 4/2 1243 lang talk (Line-KS)
- 4914.2 **UNID** maybe R Cora 4/4 1135 SP pop vcls (Line-KS)
- 4920 **ECUADOR R Quito** 0922 folk mx, ID (Brou-IL)
- 4925 **SUMATRA Jambi** 4/4 1159 SCI, nx (Line-KS) 3/7 2305 nx, p-f (Clar-ON)
- 4939.5 **VENEZUELA R Amazonas** pres 3/31 0207 SP Venezuelan mx, anmts, ID I think (Klin-NY)
- 4950 **ANGOLA R Nacional** 3/27 0210 PT tlk, canned anmts, variety of PT pops, Afr pops, fair //11954.8 (Alex-PA)
- 4976 **UGANDA R Uganda** 3/22 0359 EG ID after Ecos del Torbes s/off nx (Bran-NJ)
- 4980 **VENEZUELA Ecos del Torbes** 3/14 1050 musica llanera, nx (TIN)
- 4985 **BRAZIL R Brasil Central** 3/16 0000 mx, Ids, ads (Bran-NJ)
- 4990.9 **PERU R Ancash** 4/3 1151 Huaraz ads (TIN-JP)
- 4990.9 **SURINAM R Apintie** 2/28 0359 mix of soul, rap, reggae, R&B, disco, jingle & ID 0408 (Maro-NY) 3/8 0523 C&W mx, muffled anmt, poss canned ID (Clar-ON)
- 5009.5 **MADAGASCAR RM** 2/9 0330 FR talk, ID, fade (Rout-GA)
- 5020.7 **NIGER LV du Sahel** 3/20 2302 NA matches anthem on AI Q's website (Bran-NJ) 4/11 0052 lang talk, FR ID (Eram-ARG)
- 5025 **PERU R Quillabamba** 3/20 1116 talk mixing w/Rebelde (Line-KS)
- 5030.1 **COSTA RICA AWR** 3/7 0030 lite instl mx, rel mx, Ids, SP anmts no //s hrd, gone at 0230 recheck (Alex-PA)
- 5040 **INDIA Jeypore** 4/11 0023 same s/on as Hyderabad except OM talk instead of YL (Hill-MA)
- 5040 **SUMATRA Pekanbaru** 3/8 2317 Jak nx, new anthem (Clar-ON)
- 5047 **TOGO Lome** 3/20 0555 Afr pop, FR nx, ment Togolaise, ID (Bran)
- 5050 **VIETNAM Quang Tri BS** 3/19 1135 VT ID, freq anmt (Crai-VIET) what some great loggings—sp
- 5054.8 **FR GUIANA RFO Cayenne** 2/7 0445 FR singing, talk, ID (Rout-GA) 3/7 0853 FR talk, ID, soft rock (Raym-NH)
- 5077 **COLOMBIA Caracol** 3/28 0203 SP nx, good (Stra-NJ)
- 5597 **VIETNAM Lao Cai** pres 3/14 1245 trad Viet vcl, 1259 anthem, then YL in VT (Crai-VIET)
- 5640.3 **PERU R Peru** 4/11 0105 Andean mx, canned Ids, ads, slight wobble (Nove-NC)
- 5678 **PERU R Ilucan** 3/14 1112 huaynos, poor (TIN-JP) 3/21 0252* many anmts, mx, ID (Raym-NH)

Net Notes: Update by Tom Sundstrom

HCJB's DX Partyline with Allen Graham now has a Web page unto itself at <http://www.hcjb.org/english/dxpl.htm>. There are some audio clips, including Bob Padula's Electronic DX Press report, ODXA Perspective, European DX Report and some other features read by the HCJB staffer Jeff Davis and a "recent loggings" page. Links to other Web sites, backing up DXPL items, are included. After the show is taped, the show's highlights are listed on the Website. At least four weeks' worth of prior shows remain on the page, with links; good for reference. This page is a good effort considering all the years only a text transmission schedule was available through a Gopher server.

International Band Loggings

Wallace C. Treibel
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Seattle, WA 98155
nwhikers@gte.net

- 5905 **UKRAINE** *RUI* in EG 0000-0100, nx, cmntry, lcl mx, lite piano mx, ID, p (Alexander PA 4/3)
- 59068nf7 **PERU** *R Panorama*, Lucmapama in SP 1108, huayno cajamarquino mx, p (Nozaki JP 3/19)
- 5950 **GUYANA** *V of Guyana* in EG 0935, Hindi nx, promo, ID, steel drum mx (Brandt NJ 3/21)
- 5980nf **NO MARIANAS** *Tinian IBB* in EG 1235, test xmsn, lite country/pops, ID, exc (Novello NC 3/16)
- 59952v **PERU** *R Melodia* Arequipa in SP 0612, boleros mx, ID, ancmts, f (Eramo ARGENTINA 4/10)
- 6000 **BRAZIL** *R Guaiba* Porto Alegre in PT 2310, live sports, many ID's, //11785, exc (Novello NC 4/10)
- 6005 **GERMANY** *Deutschland R Berlin* in GM 2257, mx, nx, clear ID in GM (Klinck NY 2/10)
- 6010 **MEXICO** *R Mil* in SP 1000-1030, SP popular songs, clear ID's (Raymond NH 4/10)
- 60102 **BRAZIL** *R Inconfidencia* Belo Horizonte in PT 2335, long narrative, canned ID, g (Novello NC 4/10)
- 60499 **NIGERIA** *RN Ibadan* in EG 0623, nx, Afro drums, stronger than //4770 (Clark ONT 3/27)
- 61148 **ALBANIA** *R Tirana* in EG 0143, IS, ID's, nx, press review, mostly re Kosovo crisis (Brandt NJ 4/5)
- 6120 **GERMANY** *R Vilnius* relay Jülich in EG 0035, ID, QTH, tlk re book on Lithuania history (Klinck NY)
- 61278v **CANADA** *CHNX* Halifax in EG 1207, sports nx, oddball fqy again, no Laos QRM (Clark ONT 3/8)
- 6130 **LAOS** *Lao Nat R* Vientiane in lang 1205, usual nx format, fair peak signal w/LSB (Clark ONT 3/27)
- 61534 **INDONESIA** *RRI Biak* in IN 0935-1100*, regional nx to 0940, Pacific vcls, ID "Inilah Radio Republic Indonesia Biak programa.....", Indonesian pops, new s/off time (Nozaki JP 3/19, Clark ONT 3/27)
- 6165 **CHAD** *R Dif Nat Tchadienne* in FR 0520, Afro mx, ID 0426, good before Bonaire s/on (Clark 4/2)
- 6180 **BRAZIL** *R Nac Amazonia* in PT 2335, mx, DJ in PT, ID's 2352 & 2356, BBC splash (Brandt NJ 3/15)
- 6200 **CZECH REPUBLIC** *R Prague* in CZ 0130, IS, ID in EG & CZ, national nx, g (McGuire MD 3/15)
- 6315 **ETHIOPIA** *V of the Tigrey Rev* in lang *0356, string mx, IS, tlk, better sig //5500 (Alexander PA 3/7)
- 64585usb **PUERTO RICO** *AFRTS* vis Isabella Naval Station in EG 24 hrs, ID, disclaimer re opinions and lack of censorship, NA, pgm on heart rate monitors, nx, PSA's, (Brandt NJ, Lineback KS, Raymond NH)
- 64797 **PERU** *R Altura* in SP 0215, mx, ads, periodic noise from UTE QRM, DJ, ID's (Brandt NJ 3/16)
- 65357 **PERU** *R Dif Huancabamba* in SP 1120, "Musica Variada", ID, TC (Nozaki JP 4/3)
- 66899 **PERU** *Estudio 2000*, Pardo Miguel Naranjos in SP 1127, relig mx, OM tlk, p (Nozaki JP 4/3)
- 67977 **PERU** *R Ondas del Rio Mayo* in SP 1057, ancmts, ID, lcl mx variety pgm, huaynos cajamarquinos, tlk, (Klinck NY 3/11, Nozaki JP 3/19) in SP 0130, mx, ID, NA, sign off (Brandt NJ 3/16)
- 6940 **ETHIOPIA** *R Fana* in lang 0335, Ethiopian pop mx, //6210, gone at 0444 recheck (Brandt NJ 4/4)
- 69871 **PERU** *R San Miguel* El Faique in SP 0253*, huaynos/chicha mx, ID, greetings, NA (Eramo ARG 4/5)
- 6990 test **ALASKA** *HAARP* in CW 0700, listening test for hams and SWL's, CW ID's and message, not true SWBC but was promoted as for public consumption this one time only (Brouillette IL 3/27)
- 7110 **ETHIOPIA** *R Ethiopia* in lang 0259, brief IS, ID "Yeh...Ethiopia....", speeches by OM, African vocals (Craighead VIET 4/5) in lang 0403, Ethiopian pop mx, //97042 (Brandt NJ 3/20)
- 7115 **BOSNIA** *R Yugoslavia* relay in EG 0100, nx, cmntry re Kosovo crisis (Pasquale PA, Klinck NY)
- 7125 **GUINEA** *R Dif TV Guineenne* Conarky in FR? 0630, easily audible while f mx, QRM (Clark 3/27)
- 7145nf **VIETNAM** *V of Vietnam* in VT 1720, monologue, ments of Vietnam, mx, p (Witham HI 3/27)
- 7160 **ALBANIA** *R Tirana* in EG 0229, IS, ID, sked, pgm preview, nx bulletin re Kosovo, tlk re Kosovan refugees, feature on AL architecture, mailbag, lcl mx, //6115 (Moats OH 3/31, Pasquale PA 3/19)
- 7200 **YUGOSLAVIA** *RTV Srbije* Belgrade in Serbian 0615, mx, ment Novi Sad, ID (Brandt NJ 3/21)
- 7255 **NIGERIA** *V of Nigeria* in EG 0530, nx of Africa, sports nx, ID, cmntry, g (Witham HI 3/4)
- 7270 **ALBANIA** *R Tirana* in AL 2300, ID, report on situation in Kosovo, g (McGuire MD 3/24)
- 7305nf **CHINA** *CPBS-1* in CH 1725, oldies mx, NA?, //7345, 9845, s/off at 1730 (Witham HI 3/25)
- 7350 **CHINA** *Heilongjiang PBS-1* Harbin in Mandarin *0855-1020, NA at s/on, class'1 mx, 5+1 pips 0900, fanfare, brief tlk, pop vcls, tlk in KR? 0951, ID, f-g (Clark ONT 4/6, Maroti NY 3/19)
- 7375 **BULGARIA** *RB* in EG 0012, cmntry on Iraq situation & NATO in the Balkans, exc (Klinck NY 3/14)
- 7450 **GREECE** *V of Greece* in GK 0005, regional nx, ment of Kosovo, into GK mx, g (McGuire MD 4/10)

- 9022 IRAN *VOIRI* Teheran in EG 0030, nx re Ghadaffi agreeing to Lockerbie trial, f (Pasquale PA 3/19)
- 9200 SUDAN *SNBC* Omdurman in Sudanese 0251, IS, NA, pips, tk, Koran 0303, f (Alexander PA 4/3)
- 9505 GERMANY *D Welle* Wertachtel in IN 2200, ID, fcy, sked, regional nx, g (McGuire MD 3/14)
- 9550 BANGLADESH *Betar* Dacca in Bengali 1932-2000*, subcont vcls, //17185 poor (Hill MA 3/14)
- 9555 GUAM *KTRW Trans World R* in Mandarin 1130*, relig tk, ID in EG at s/off (Maroti NY 3/19)
- 9570 ROMANIA *RR1* Bucharest in EG 0300*, mailbag pgm, ID, fcy, sked at s/off, g (McGuire MD 4/12)
- 9580 BOSNIA *R Yugoslavia* relay in EG 0100, nx, rpt on NATO protests, ID (Alexander PA, McGuire MD)
- 9585 VATICAN CITY *Vatican R* in RS 1735, IS, choral mx, co-channel QRM Swaziland (Witham HI 3/25)
- 9585nf SWAZILAND *Trans World R* in SH 1735, recorded message, dominating Vatican, p (Witham 3/25)
- 9600 VATICAN CITY *Vatican R* in VT 2350, religious program, s/off at 0000, g (McGuire MD 4/6)
- 9650 CANADA *R Korea* relay in EG 1135, rpt on water scarcity, ID, g (Fraser MA 3/23)
- 9655 THAILAND *HSK9 R Thailand* Patham Thanai in TH 1258, SE Asian mx under R Rossii, music theme IS, time pips at 1300 coincidental with Rossii pips, very weak under Rossii (Clark ONT 4/4)
- 9675 PAPUA NEW GUINEA *NBC* Pt Moresby in EG 0655-0700*, pop mx, TC, ID, drums, nx (Clark 3/26)
- 9685nf SOUTH AFRICA *Trans World R* in Baoule 1915, relig tk, choral mx, ID 1930, p (Witham HI 3/28)
- 9700nf THAILAND *VOA* relay Udo Thani on new fcy in IN *1130-1230*, lengthy interview, g, //9890 from Philippines relay but weaker sig, ID and IS at s/off (Treibel WA 4/2)
- 97042 ETHIOPIA *R Ethiopia* Gedja in lang 2215-2300*, US pop soul mx, acoustic Afro tunes, horn-of-Africa pop mx, ancmts, //59905; 97042 made useless at 2230 s/on of D Welle on 9700 (Novello NC 4/10)
- 97216 PERU *R Victoria* Lima in SP 0810, relig pgm produced by Pentecostal Church, p (Nozaki JP 4/3)
- 9725 PORTUGAL *Deut Welle* relay Sines in EG 2015, rpts on Iran and Britain, f (Famularo JP 3/9)
- 97399nf SAUDI ARABIA *BSKSA* in AR? 0303, tune in to Holy Qu'ran, //11935 (Alexander PA 3/13)
- 97416 INDONESIA *RR1 Sorong* in IN 0801*, typical tlks by YL in lang, p under HCJB (Clark ONT 4/13)
- 97744v BULGARIA *R Varna* in BG 2230, interview, pop duets, Varna ID 2252, endlessly chattering YL, fanfare 2300, pips, not hrd since March 14, rptd to be operating Sundays only (Hill MA 3/14)
- 97959nf IRAN *VOIRI* Teheran in EG 2335, ID, then into Koranic chants, g (McGuire MD 4/1)
- 9800 SOUTH AFRICA *Trans World R* in Kanuri? 1920, relig tk, lcl vocals, ID 1930 (Witham HI 3/28)
- 9810 INDIA *AIR Aligarh* in Nepali *0129, s/on with IS, vp, no //s found (Hill MA 3/18)
- 9810 THAILAND *R Thailand* Udo Thani in EG 1230, plans to correct lcl banking problems (Pasquale 3/20)
- 9830 JORDAN *R Jordan* in AR 2040, AR mx, then long conversation between 2 men, g (McGuire MD 4/4)
- 9835 HUNGARY *R Budapest* in EG 0200, nx re flooding in Northern Hungary, g (Pasquale PA 3/11)
- 9855 PHILIPPINES *VOA* relay Tinang in RS 0930, nx headlines, ID 0933 (Brandi NJ 3/21)
- 9870 MONACO *Trans World R* in EG *0745, IS, "Family Bible Hour", exc (Brouillette IL 3/27)
- 9900 EGYPT *R Cairo* in EG 2330, tk re founding of Egyptian Soc of Young Women (Pasquale PA 3/19)
- 9925 CROATIA *Croatian R* in CR 0315, ID, rpt on the bombings in Kosovo, g (McGuire MD 4/5)
- 9965 ARMENIA *V of Armenia* in AE 0205, national nx, mx, tlks, classical mx, ID "Erevan Khosum" (McGuire MD, Brandi NJ) in EG *2115, tlks, folk mx, nx items (Famularo JP, Pasquale PA)
- 11530 LEBANON *V of Hope* in AR 0355, relig and musical pgm, ID in EG, QTH (Eramo ARGENT 4/11)
- 11620 TAJIKISTAN *R Tajikistan* in Farsi 0255, lcl mx, ID, nx in Farsi, more lcl mx (Klinck NY 3/7)
- 11620 INDIA *AIR* Bangalore in EG 2225, rpt on the electronic media in India, ID, mx, f (McGuire MD 4/9)
- 11625 VATICAN CITY *Vatican R* in EG 2000, religious tk, ID (Klinck NY 3/21)
- 11670nf CHINA *CNR-CPBS 2* in CH 0600, continuous CH vcls, intermittent CH tk (Findlater CA 3/27)
- 11715 ALGERIA *R Algiers* in EG 2034, rap mx, AR song, Dylan song, ID (Famularo JP 3/11)
- 11730 SEYCHELLES *BBC* relay in EG 0302, "The World Today", ID, //1160, 6175 (Brandi NJ 3/20)
- 117341 TANZANIA *RT Zanzibar* in SH 1855, mx variety show w/beeps, ID, nx, cmntry, g (Klinck NY 3/13, Clark ONT 3/27) in SH 2017-2100*, AR mx, film song, DJ, ID, NA at s/off (Brouillette IL 4/2)
- 11740 SINGAPORE *RT E* Ireland relay in EG 1008, weekend sports rpt, weak sig w/fade (Krause OH 3/7)
- 11755 FINLAND *R Finland* in FN 1946, mx pgm w/YL DJ, ID, buried 1957 w/Merlin s/on (Klinck NY)
- 11755 CANADA *Merlin One* relay Sackville in EG 2100, rock mx, ID's, promos (Famularo Japan)
- 11775 SAO TOME *VOA* relay in FR 2009, hi-life mx, Bruce Spingsteen, ID, f-p (Famularo Japan)
- 11785 GERMANY *D Welle* in EG 0400, new fcy for EG xmsn, nx, cmntry, f, //7225, 9565 (Alexander 4/3)
- 11790 MONGOLIA *VOM* Ulan Bator in EG 2045, YL tk, songs, mailbag, exc, //12085 (Famularo JAPAN)
- 117944v BRAZIL *R Gualba* Porto Alegre in PT 2100, move from 11785?, sports, ID, newscast (Nozaki JP 3/27)
- 11795nf GREECE *VOA* relay Kavieng in Uzbek *1500-1530*, new frequency for Uzbek xmsn, extends added half hr on weekends, pgm nearly all tk (presumed nx & cmntry), g, off with ID in EG (Treibel WA 4/8)

- 11800 **ITALY RAI** Rome in EG 0050, nx, ID, QTH, cmntry on Italian cinema, //6010 (Klinck NY, Fraser MA)
- 11804 **BRAZIL R Globo** Rio in PT 0928, mx pgm "Bom Dia Brasil, Bom Dia Globo" (Nozaki JAPAN 4/3)
- 11810 **ROMANIA RRI** Bucharest in EG 2107, nx & cmntry on Kosovo crisis, ID 2114 (Costello NJ 4/15)
- 118149 **BRAZIL R Brasil Central** Goiania in PT 0800, musica sertaneja, OM tks, f (Nozaki JAPAN 4/3)
- 11815 **COSTA RICA RE Espana** relay in SP dialects 2225, cycle of nx in SP dialects (Brouillette IL 3/20)
- 11905 **SRI LANKA SLBC** in Tamil 1240, instrms, 4+1 pips, ID, lcl mx, g-p, QRM (Clark ONT 4/4)
- 11950nf **ECUADOR HCJB** Quito in EG 0710-0750+, "DX Party Line", vg (Alexander PA 4/3)
- 11985 **HUNGARY R Budapest** in HG 2230, radio drama, ID "Magyarorszag", f, fcs (Brouillette IL 3/14)
- 11995 **NO MARIANAS VOA** relay Tinian in EG 0817, ID, song, nx re Boris Yeltsin & Breitling Orbiter, TC, (Brandi NJ 3/21) ED: Eff 3/28 this VOA fqy replaced w/relay in AR from Kavalla Greece 0730-0830)
- 12082 **SYRIA SARBS** Damascus in AR 2145, AR mx, vcls, tlk, //13605 (McGuire MD 4/1, Clark ONT 3/26)
- 13710 **BOTSWANA VOA** relay in EG 1814, "VOA News Now", sports summary, g (Raymond NH 3/21)
- 13750 **SRI LANKA D Welle** relay in GM 0105, interview, //3995, 6075, 7130, 9545, 9730 (Brandi NJ 3/22)
- 13770nf **SWITZERLAND SRI** in EG 2000, nx bulletin w/stories on Kosovo refugee crisis and Rome protests, "Swiss Scene", feature on Swiss stamp, E mail address, //13710, 15220, g (Moats OH 4/3)
- 13780 **PORTUGAL D Welle** relay Sines in EG *0300, new fqy for EG xmsn, bulletins w/stories on Kosovo and N. Ireland conflicts, "News Link", f, //9640, 15105 (Moats OH 4/1, Krause OH 4/3)
- 13790 **NO KOREA R Pyongyang** in EG 0545, poetry reading, ID, vocals, fading, p (Witham HI 3/4)
- 15120 **PHILIPPINES R Pilipinas** in EG 0320, nx abt the Philippines and vicinity, f, //15270 (Witham HI 3/4)
- 15130 **NO KOREA R Pyongyang** in EG 2345, tlk on Kim Jin Il, group singing, exc (Klinck NY)
- 15135 **GERMANY D Welle** Wertachtel in Hausa/EG 1900, Afro mx, ID, Afro nx, g (McGuire MD 3/14)
- 151498 **INDONESIA V of Indonesia** in GM 2015, ezl IN vocals w/YL host, exc, no RCI QRM (Clark 3/27)
- 15185 **EQUATORIAL GUINEA R Africa** in EG 2208, "Divine Mercy of God Ministry" (Brouillette IL 3/13)
- 15205 **PHILIPPINES VOA** relay Poron in IN 2239, nx items, "Yankee Doodle" mx bridges (Brouillette 3/14)
- 15220 **ANTIGUA BBCWS** relay in EG 1140, "Omnibus" finding treasure off Key West, f (Fraser MA 3/23)
- 15250nf **FINLAND R Finland** in EG 0630, ID, interview with director of Helsinki Art Museum (Witham 3/27)
- 15265 **UNITED ARAB EMIRATES Abu Dhabi** in AR 1800*, AR mx, tlk, ID, g (McGuire MD 3/15)
- 15295 **MALAYSIA V of Malaysia** Kajang in EG/lang 0805-0832, world & Asian nx, ID, nx cmntry, oldies, closing anmts for EG xmsn 0825, into Bahasa Malaysian 0830, g (Clark ONT 4/13, Witham HI 3/11)
- 15300 **FRANCE RFI** in FR 1700, xmsn to Africa, ID, rpt on Kosovo, ment Yugo/ Canada (McGuire MD 4/1)
- 15330 **GUAM KTWR** in EG 0918, relig pgm "Insight for Living", ID hrd at 0943 (Costello NJ 4/15)
- 153367 **PAKISTAN R Pakistan** in Urdu 1738, subcont mx, tks, //115702 vy weak (Brandi NJ 3/20)
- 15345 **MOROCCO RTV Marocaine** in AR 1800, AR mx, ID, regional nx, g (McGuire MD 3/15)
- 15345 **ARGENTINA RAE** Buenos Aires in SP 2329, tango mx, ID 2330 (Brandi NJ 3/20)
- 15400 **UNITED ARAB EMIRATES R Dubai** in EG 0330, nx re Olympic Committee scandal (Pasquale 3/19)
- 15405nf **IRAN VOIRI** Teheran in RS 1530-1630 on new fqy, g, //13690 barely audible (Treibel WA 4/2)
- 15425 **SRI LANKA SLBC** in EG *1230, sign on EG xmsn, TC, co-chan QRM VOA, //9730 (Clark 3/27)
- 15435 **LIBYA V of Africa** in EG 1928, Mandela speech before large crowd, AR translation (Brandi NJ 3/20) in EG 0135, nx of Africa, ID, into FR lang, //15415, p (Witham HI 3/17)
- 15465 **PAKISTAN R Pakistan** in EG 1400, nx, ID's, mx break, into Urdu 1415, exc (Klinck NY 2/15)
- 154758 **ANTARCTICA LRA-36, R Nac Arcangel**, San Gabriel in SP/EG 2335-0104*, spec Sat bcst for USA, SP pops/ballads, ID ancmts in EG 0101, req rpts, 10 kw power (Alexander PA, Clark ONT 3-27/28)
- 15540nf **RUSSIA D Welle** relay in GM 1655, new fqy from leased xmtr in Moscow, target area is Near and Mid East, //15285 relay in Sackville, Canada (Treibel WA 3/19)
- 15555 **CYPRUS BBC** relay in EG 1244, slow speed world nx, ID to the Mid East, f-p (Famularo JP 3/15)
- 15565nf **NETHERLAND ANTILLES R Vlaanderen Int** relay Bonaire in EG *2227, IS, ID, fqy, "Radio World" noting current sked for R Yugoslavia, interviews at DX Winterfest (Moats OH 3/38, Krause OH 4/3)
- 15735nf **RUSSIA V of Russia** in EG 1858, IS, ID, nx re Kosovo refugees, tlk by Ivanov, f-p (Moats OH 4/3)
- 17555 **UNITED KINGDOM BBC** Skelton in FR *1200, IS, ID, nx leading w/Congo item, f (Famularo 3/15)
- 17560nf? **IRAN VOIRI** Teheran in EG 1144, rpts on Islamic world including criticism of Russian arms sales to Armenia, environment pgm, f (Famularo JP 3/15)
- 17615 **THAILAND BBCWS** relay Nakhon Sawon in EG 0026, headline nx, ID's, lang pgm (Krause OH 4/4)
- 178149 **BRAZIL R Cultura** in PT 0215-0302*, ballads, PT remakes of US oldies, NA, //9615 (Alexander 4/3)
- 17815 **SWITZERLAND SRI** Sottens in EG 1101, world nx, ID, rpt of Swiss cabinet, //9540 (Famularo JP)
- 17825 **JAPAN R Japan NHK** Tokyo in EG 0310, interview with famous JP TV lady, ID (Krause OH 3/27)

- 17870 SWEDEN *R Sweden* in EG 1245, rpt on English artists' exhibit in Stockholm, g (Fraser MA 3/15)
 17895 SOUTH AFRICA *Channel Africa* in EG 1345, interview w/UN official, f-p (Famularo JP 3/14)
 18960nf SWEDEN *R Sweden* in EG 1129, IS, ID, "60 Degrees North", wx rpt, "Media Scan", f (Moats OH 4/6)
 21455usb ECUADOR *HCJB* Quito in EG 2359, ID, fqy, relig pgm, 500 watts xmt! (Moats OH, Famularo JP)
 21480 ROMANIA *RRI* Bucharest in EG 0738, instr mx, YL reading listeners' letters, //17790 (Famularo 3/9)
 21510 UKRAINE *RUI* in EG 1210, story on history of Ukrainian Natl Opera, f (Pasquale PA, Famularo JP)
 21530 SO AFRICA *Channel Africa* in EG 1434, current nx in Africa, wildlife tlk, mx, f (Krause OH 2/28)
 21550 CHILE *R Voz Cristiana* in SP 1902, SP soft rock & ballads, many ancmts, ID's (Raymond NH 3/21)
 21605 UNITED ARAB EMIRATES *Dubai* in EG 1340, feature on museum of Moslem art (Fraser MA 3/14)
 21610 JAPAN *R NHK* Tokyo in EG 0300, headlines and nx details, fqy, f (Krause OH 3/22)
 21755nf? RUSSIA *Golos Rossii* in RS *0100, nx, f, not listed by probably Far East at this hour (Hill MA 4/11)
 21770 GUAM *KSDA* Agat in CH/EG 0158, tlk in CH, YL w/EG ID & QTH, back into CH (Famularo 3/13)
 21810 SWEDEN *R Sweden* in EG 1231, nx, wx rpt, f, //17870 (Famularo JP 3/13)

Clandestine, Tentatives, Presumed, or Unknown

- 61107 MOZAMBIQUE(p) *R Mocambique* 2152. Possibly Maputo reactivated here after a long absence, tho only a carrier audible till 2213* which fits with typical Maputo s/off times. What say, M Vaghjee or another African DX'er? (Hill MA 3/14)
- 6348 CLANDESTINE *R Echo of Hope* in KR 0312, weak with YL in KR (Craighead KOREA 3/22)
 6600 CLANDESTINE *V of the People* in KR 0527, weak with YL in KR (Craighead KOREA 3/22)
 69871 PERU *LV de las Huarinas*(p) in SP 0247*, off nominal 70037, OA folk mx, echo anmcts, mentions of Huancabamba, s/off with OA NA, p with noise (Alexander 3/28 & 4/3)
- 7155 VIETNAM *Bac Thai*(p) in VT 1210, no ID heard, VT pop vocals (Craighead VIETNAM 3/19)
 9230 CLANDESTINE *V of Free Eritrea* in AR? 1530, open w/3 tones, Qu'ran, Afr mx (Craighead 3/18)
 9230 CLANDESTINE *V of Truth* in AR? 1558, opening w/people shouting & marching sounds, mostly two men talking with many mentions of Asmara, some martial mx, s/off 1627 (Craighead VIETNAM 3/18)
 9650 URUGUAY *Em Ciudad de Montevideo*(p) in SP 2330, faint audio but telltale time pips punching thru clearly on the half hour, 7 pips at 0000 (Clark ONT 3/26)
- 9757 EGYPT(p) *Holy Qu'ran Radio?* in AR 0400, continuous chants, AR tlk, no ID hrd (Findlater CA 4/10)
 11850 CLANDESTINE *Democratic V of Burma* in lang 1429, fqys, tlk, s/off 1454 (Craighead VIET 3/20)
 11940 CLANDESTINE *V of China* in CH 0830, opening w/Beethoven Piano Concerto #5 (ED: My favorite!) mostly CH tlk, few EG words, brief pop instrmls, dominated by BBC *0857 (Craighead VIET 3/20)
- 15185 EQUATORIAL GUINEA(t) *R Africa*(p) in EG 2140, Afro-American preacher, strong signal until 2147 when co-channel VOA Philippines took over fqy, g-p (Famularo JP 3/10)
 15050 CLANDESTINE *ABS R International* via RFPI, Costa Rica in Yoruba 2043, many ments of Nigeria, phone no given, several ID's in EG "....the Voice of Democracy", off at 2126 (Craighead KS 4/1)
- 15293 MOZAMBIQUE(p) *R Mocambique Maputo?* 0635-0650, threshold bits of mx & tlk, nothing distinguishable as ID material but fqy and time frame fits w/rpt from Mahendra Vaghjee (Clark ONT 3/25)
 15330 CLANDESTINE *Democratic V of Burma* in lang 1244, flute IS, fqys & "....Democratic...." ID, ment'd Myanmar, Asian vocals, off 1345, weaker signal than in Kansas (Craighead VIETNAM 3/20)
 15380 NO MARIANAS *KFBS Saipan*(p) in IN 1210, fire and brimstone tlk in IN, pgm changed to Malaysian lang at 1230, Everly Brothers song in Malaysian, s/off at 1300 (Costello 4/11)
 15385 CLANDESTINE *New Star* in CH 0700, opening w/CH instrml mx, ID's, weak, off at 0713, //13750 9725, 11430 (Craighead VIETNAM 3/16)
- 17740 CLANDESTINE *V of East Timor* in Tetum(p) 1200, choral version of anthem "A Portuguesa", tlks mentioning Timur many times, ID 1259 "....programa....por Timur e Australia.." (Craighead VIET 3/19)

CSA

The Logging Reports depend on your contributions. Please let us know what you're hearing because Sheryl and Wally are waiting to hear from you. Send your contributions to our Distributing Editor, Fred Kohlbrenner.

English Schedules

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0000-0015	Radio Japan	6155.0eu	6180.0eu	9665.0af	11705.0na	11815.0as	13650.0as
0000-0015	V. of Cambodia	11940.3as					
0000-0027	Radio Prague Int'l	11615.0na	13580.0na				
0000-0030	BBC World Service	3915.0as	5965.0as	5970.0sa	5975.0am	6175.0am	6195.0as
		7110.0as	9410.0as	9590.0am	9915.0sa	11945.0as	11955.0as
		12095.0sa	15280.0as	15310.0as	15360.0as	17615.0as	17790.0as
0000-0030	Radio Cairo	9900.0am					
0000-0030	Radio Thailand	9655.0af	9690.0va	11905.0af			
0000-0030	mtwhfa Radio Yugoslavia	9580.0na					
0000-0030	VOA	7215.0as	9770.0as	11760.0as	15185.0as	15290.0as	17735.0as
		17820.0as					
0000-0045	All India Radio, Delhi	7410.0as	9705.0as	9950.0as	11620.0as	13625.0as	
0000-0056	Radio Pyongyang	11845.0am	13650.1am	15230.2am			
0000-0100	KTBN Salt Lake City UT	15590.0na					
0000-0100	Merlin Network One	3985.0eu	9600.0na	11985.0na			
0000-0100	Radio Australia	9660.0pa	12080.0va	15240.0pa	17580.0va	17750.0as	17795.0va
		21740.0va					
0000-0100	Radio Ukraine Int'l	5905.0eu	6020.0eu	7410.0eu	9550.0na	9560.0eu	12040.0na
0000-0100	twhfa VOA	5995.0am	6130.0ca	7405.0am	9455.0af	9775.0am	11695.0ca
		13740.0am					
0000-0100	m WRMI Miami FL	9955.0am					
0000-0100	WCCR Nashville TN	3215.0na	5070.0na	7435.0na	13845.0na		
0000-0100	WYFR Oketechobee FL	6085.0na	9505.0na				
0000-0130	Radio Kiribati	9809.9do	9825.0do				
0000-0200	Radio Exterior de Espana	15385.0na					
0000-0200	WEWN Birmingham AL	5825.0va	5850.0eu	13615.0na			
0000-0200	WSHB Cypress Creek SC	7535.0al	9430.0na	15285.0am			
0000-0200	s a WWBS Macon GA	11900.0na					
0000-0300	R. for Peace Int'l	6975.0va	15049.0va	21460.1uf			
0000-0300	WRNO New Orleans LA	7355.0na					
0000-0400	KWHR Naalehu HI	17510.0as					
0000-0500	s a SIBC Solomon Islands	5020.0do					
0000-0500	a SIBC Solomon Islands	9545.0do					
0000-0500	WHRA Greenbush ME	7385.0na					
0000-0500	ZLXA New Zealand	3935.0do	7290.0do				
0000-0600	CBC Northern Service	9625.0do					
0000-0600	WGTC McCaysville GA	5085.0am	6890.0uf				
0000-0600	WINB Red Lion PA	11950.0am					
0000-0700	HCJB Quito Ecuador	9745.0na	12015.0na	21455.0uf			
0000-0700	Nat'l BC, Papua NG	3925.0do	4890.0do	9520.0do	9675.0do	11880.0do	
0000-0700	WBCQ Monticello ME	7415.0na					
0000-0705	Radio New Zealand Int'l	17675.0va					
0000-0715	NBC Windhoek, Namibia	3270.1af	3289.9af				
0000-0830	ABC Alice Springs	4835.0do					
0000-0830	ABC Katherine	5025.0do					
0000-0830	ABC Tennant Creek	4910.0do					
0000-1000	Caribbean Beacon	6090.0am					
0000-1000	Voice of Guyana	3289.8do	5949.4do				
0000-1000	WHRI Noblesville IN	5745.0na	7315.0sa				
0000-1100	Radio Vanuatu	3945.0do	4960.0do	7260.0do			
0000-1100	SBC Radio 1, Singapore	6150.0do					
0000-1400	KAIJ Dallas TX	5810.0va					
0000-1600	RTM Radio 4, Malaysia	7295.0do					
0000-2200	Voice of Hope, Lebanon	11530.0me					
0015-0100	Radio Japan	6155.0eu	6180.0eu	9665.0af	11705.0na		
0030-0045	BBC English Teaching	6080.0as	7110.0as	9600.0as	15280.0as	17615.0as	
0030-0100	BBC World Service	5965.0as	5970.0sa	5975.0am	6175.0am	6195.0as	9410.0as
		9590.0am	9915.0sa	11955.0as	12095.0sa	15310.0as	15360.0as
		17790.0as					
0030-0100	ORF Vienna	9655.0na					
0030-0100	Radio Thailand	9655.0as	11905.0as	15395.0na			
0030-0100	Radio Vilnius, Lithuania	9855.0na					
0030-0100	VOA Special English	7215.0as	9770.0as	11760.0as	15185.0as	15290.0as	17735.0as
		17820.0as					
0030-0130	VOIRI Teheran	9022.0am	9795.0ca	11970.0na			
0030-0430	Sri Lanka B'casting Corp.	6005.0as	9730.0as	15425.0as			
0045-0100	BBC English Teaching	15280.0as	17615.0as				
0050-0100	Int'l BC Tamil	9355.0na					
0050-0110	RAI, Rome	9675.0na	11800.0na	15240.0na			
0100-0105	Croatian Radio, Zagreb	9925.0na					

0100-0127		Radio Prague Int'l	7345.0na	11615.0na				
0100-0127		Voice of Vietnam	7250.0va					
0100-0129		Radio Canada Int'l	5960.0na	9535.0am	9755.0am	11715.0am	13670.0am	
0100-0130		Radio Budapest	9560.0na					
0100-0130		Radio Slovakia Int'l	5930.0na	7300.0ca	9440.0sa			
0100-0130		Radio Tashkent	5955.0as	5975.0as	7105.0as	7285.0as	9540.0as	
0100-0130		Swiss Radio Int'l	9885.0am	9905.0am				
0100-0130	s	Universal Life, Germany	9495.0as					
0100-0130	m	VOA	5995.0am	6130.0am	7405.0am	9455.0af	9775.0am	13740.0am
0100-0130	mtwhfa	Voice of Deliverance	9855.0na					
0100-0130	mtwhfa	WRMI Miami FL	9955.0am					
0100-0145		Deutsche Welle	6040.0na	6145.0na	9640.0am	11810.0na	13720.0am	
0100-0200		BBC World Service	5970.0as	5975.0am	6175.0am	6195.0as	9410.0as	9590.0am
			9915.0sa	11955.0as	12095.0sa	15280.0as	15310.0as	15360.0as
			17790.0as					
0100-0200	s	Good News World Radio	9855.0na					
0100-0200		Radio Australia	9660.0pa	12080.0va	15240.0pa	15415.0as	17580.0va	17750.0as
			17795.0va	21740.0va				
0100-0200		Radio Japan	9660.0me	11860.0as	11870.0me	15570.0as	15590.0as	17685.0pa
			17835.0sa	21670.0pa				
0100-0200		VOA	7115.0as	7200.0as	9635.0as	11705.0as	11725.0as	11820.0as
			15250.0as	17740.0as	17820.0as			
0100-0200		Voice of Indonesia	9525.0va	11784.9na				
0100-0200		WYFR Okeechobee FL	6065.0na	9505.0na	15165.0as			
0100-0230		KJES Vado NM	7555.0na					
0100-0300		FEBC Manila	15450.0as					
0100-0300		Merlin Network One	3985.0eu	9600.0na	11875.0na			
0100-0300		Voice of Russia	9665.0na	12050.0na	15520.0na	15595.0na		
0100-0400		WWCR Nashville TN	3215.0na	5070.0na	5935.0na	7435.0na		
0100-0500		Radio Havana Cuba	6000.0na	9820.0na	11705.0uf			
0100-1500		KTBN Salt Lake City UT	7510.0na					
0129-0200		Radio Canada Int'l	5960.0na	9755.0am				
0129-0200	sm	Radio Canada Int'l	9535.0am	11715.0am	13670.0am			
0130-0200		AWR Europe, Slovakia	11600.0as					
0130-0200		Radio Sweden	13625.0as					
0130-0200	tw hfa	VOA	5995.0am	6130.0am	9455.0af			
0130-0200	tw hfa	VOA Special English	7405.0am	9775.0am	13740.0am			
0130-0200	a	WRMI Miami FL	9955.0am					
0140-0150		Voice of Greece	7450.0na	9420.0na	11645.0na	15630.0na		
0140-0200		Vatican Radio	7335.0au	9650.0au				
0145-0200		Radio Tirana, Albania	6115.0na	7160.0na				
0200-0205		Croatian Radio, Zagreb	9925.0na					
0200-0210		Radio Bangladesh	4880.0as					
0200-0229		Radio Canada Int'l	9535.0am	9755.0am	11715.0am	13670.0am		
0200-0230		BBC World Service	5970.0sa	5975.0am	6175.0am	6185.0am	6195.0eu	9410.0me
			9770.0af	9915.0sa	11955.0as	15280.0as	15310.0as	15360.0as
			17790.0as					
0200-0230	sm w fa	Radio Minsk, Belarus	7210.0va	11670.0va				
0200-0230		Radio Pakistan	15486.8as					
0200-0245		Deutsche Welle	9615.0as	9690.0as	11945.0as	11965.0as	13690.0as	15560.0as
0200-0256		Radio Romania Int'l	9510.0na	9570.0na	11725.0au	11740.0na	11810.0as	17735.0as
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	11740.0as	11745.0va	11825.0pa	15345.0as
0200-0300	tw hfa	RAE Buenos Aires	11710.0am					
0200-0300	tw hfa	RD Nacional de Colombia	4955.0am					
0200-0300		VOA	7115.0as	7200.0as	9635.0as	11705.0as	11725.0as	11820.0as
			15250.0as	17740.0as	17820.0as			
0200-0300		WSHB Cypress Creek SC	5850.0al	7535.0na	9430.0na			
0200-0330		Radio Cairo	9475.0am					
0200-0400		Overcomer Ministries	9860.0na					
0200-0400		WYFR Okeechobee FL	6065.0na	9505.0na				
0200-0500		KVOH Los Angeles CA	9975.0am					
0200-0500		Radio Australia	9660.0pa	12080.0va	15240.0pa	15415.0as	15515.0va	17580.0va
			17750.0as	21725.0pa				
0200-1000		WEWN Birmingham AL	5825.0va					
0200-2100		Kenya BC Corp	4885.0do	4935.0do				
0210-0215	t hfa	Kyrgyz Radio, Bishkek	4010.0do	4050.0do				
0215-0220		Radio Nepal, Katmandu	5005.3as	7165.0as				
0229-0300	sm	Radio Canada Int'l	9535.0am	9755.0am	11715.0am	13670.0am		
0230-0245		BBC English Teaching	11685.0as	15405.0as	17615.0as			
0230-0245		Radio Pakistan	9470.0as	11975.1as	13609.2as	15486.8as		
0230-0257		Voice of Vietnam	7250.0va					
0230-0300		BBC World Service	5970.0sa	5975.0am	6175.0am	6185.0am	6195.0eu	9410.0me
			9770.0af	9915.0sa	11955.0as	15280.0as	15310.0as	15360.0as
			17790.0as					
0230-0300		ORF Vienna	9655.0na	9870.0ca				
0230-0300		Radio Budapest	9840.0na					
0230-0300		Radio Sweden	9495.0na					
0230-0300		Radio Tirana, Albania	6115.0na	7160.0na				
0230-0330		Radio Pilipinas, Manila	11885.0pa	15120.0pa	15270.0pa			
0245-0300		BBC English Teaching	5995.0am	6050.0af	6110.0am	7325.0ca	9515.0am	9610.0af

0400-0456		Radio Romania Int'l	9570.0na	11740.0na	11810.0as	17735.0as		
0400-0500	lwhfa	WRMI Miami FL	9955.0am					
0400-0500		WSHB Cypress Creek SC	7535.0eu	15195.0af				
0400-0600		Christian Voice, Zambia	6065.0do					
0400-0600		KWHR Naalehu HI	17780.0as					
0405-1000		WWCR Nashville TN	2390.0na	3210.0na	5070.0na	5935.0na		
0425-0440		RAI, Rome	5975.0af	7150.0af				
0430-0445		BBC English Teaching	6010.0eu	7270.0eu	9915.0eu			
0430-0500	a	Kyrgyz Radio, Bishkek	4010.0do	4050.0do				
0430-0500		ORF Vienna	6155.0eu	13730.0eu				
0430-0500		Radio Yugoslavia	9580.0na					
0430-0500		Swiss Radio Int'l	9885.0am	9905.0am				
0430-0500		TWR Swaziland	3200.0af	4775.0af				
0430-0500		VOA	6080.0af	7170.0va	7265.0af	7275.0af	7290.0af	9575.0af
			11965.0me	15205.0va				
0430-0525		Radio Netherlands	6165.0na	9590.0na				
0430-1000		Radio Nigeria	3326.0do	3970.0do	4770.0do	4990.0do	6025.0do	6050.0do
			9570.0do					
0435-0500		BBC World Service	3255.0af	3955.0eu	5975.0am	6005.0af	6175.0am	6180.0eu
			6185.0am	6190.0af	6195.0eu	7160.0af	9410.0eu	11760.0me
			11765.0af	11955.0as	12095.0eu	15280.0as	15310.0as	15420.0af
			15575.0as	17640.0af	17760.0as	17790.0as	21660.0as	
0445-0500		WYFR Okeechobee FL	9985.0eu					
0445-0915		Ghana Broadcasting Corp.	3366.0do	4915.0do				
0455-0825		Voice of Malaysia	6175.0as	9750.0as	15295.0as			
0500-0505		Croatian Radio, Zagreb	13820.0au					
0500-0505		TWR Swaziland	4775.0af	6100.0af				
0500-0515	s	Cameroon Radio-TV	4850.0va					
0500-0520		Vatican Radio	4005.0eu	5883.0eu	7250.0eu	9660.0af	11625.0af	15570.0af
0500-0529		Radio Canada Int'l	5995.0na	6145.0eu	7295.0eu	9595.0eu	9755.0na	11710.0eu
			11830.0na	13755.0eu	15330.0eu	15400.0eu		
0500-0530		BBC World Service	3255.0af	3955.0eu	5975.0am	6005.0af	6175.0am	6180.0eu
			6190.0af	6195.0eu	7160.0af	9410.0eu	9740.0as	11760.0me
			11765.0af	11955.0as	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	w	Malawi B'casting Corp.	3380.0do					
0500-0545		Deutsche Welle	9615.0am	9670.0na	11795.0na	11810.0na		
0500-0556		China Radio Int'l	9560.0na					
0500-0556		Radio Exterior de Espana	6055.0na					
0500-0556		Radio Pyongyang	3560.0eu	11710.1eu	13790.0eu			
0500-0600		Merlin Network One	6010.0eu					
0500-0600		Radio Australia	9660.0pa	12080.0va	15240.0pa	15515.0va	17580.0va	21725.0pa
0500-0600	s	Radio Australia	17750.0as					
0500-0600	a	Radio Japan	6110.0na	7230.0eu	11715.0as	11760.0as	11840.0as	11850.0pa
			15230.0pa	15590.0as	17825.0na			
0500-0600		VOA	5970.0af	6035.0af	6080.0af	7170.0va	7195.0af	9630.0af
			11965.0me	12080.0af	15205.0va			
0500-0600		Voice of Russia	17625.0au	21790.0au				
0500-0600		WSHB Cypress Creek SC	7535.0eu	9840.0af				
0500-0600		WYFR Okeechobee FL	5985.0na	9985.0eu	11580.0eu			
0500-0630		Italian Radio Relay Svc	3985.0va					
0500-0700		Radio Havana Cuba	9550.0na	9820.0na	9830.0uf			
0500-0700		Voice of Nigeria	7255.0af	15120.0af				
0500-0800		Radio Kuwait	15110.0va					
0500-0800		SIBC Solomon Islands	5020.0do	9545.0do				
0500-1000		Radio Kiribati	9809.9do	9825.0do				
0500-1000		Radio Liberia Int'l	5100.0do					
0500-1000		WHRA Greenbush ME	11565.0af					
0500-1900		ZLXA New Zealand	3935.0do					
0505-0705		TWR Swaziland	4775.0af	6100.0af	9500.0af			
0515-0530	s	BBC English Teaching	6135.0af	9515.0af	11940.0af			
0520-0530	a	Vatican Radio	9660.0af	11625.0af	15570.0af			
0530-0545	s	BBC English Teaching	9840.0eu	11770.0eu				
0530-0600	a	BBC World Service	3255.0af	3955.0eu	5975.0am	6005.0af	6175.0am	6180.0eu
			6190.0af	6195.0eu	7160.0af	9410.0eu	9740.0as	11760.0me
			11765.0af	11955.0as	12095.0eu	15310.0as	15360.0as	15420.0af
			15575.0as	17640.0af	17760.0as	17790.0as	17885.0af	21660.0as
0530-0600		Georgian Radio, Tbilisi	11910.0eu					
0530-0600		ORF Vienna	6015.0na					
0530-0600		Radio Dubai, UAE	15435.0au	17830.0au	21605.0au	21700.0au		
0530-0600		Radio Thailand	9655.0eu	11905.0eu	15445.0eu			
0530-0600		Swiss Radio Int'l	13635.0eu					
0530-0600	mtwhfa	V. of the Mediterranean	9600.0eu					
0545-0600		BBC English Teaching	9710.0af	9760.0eu	11675.0eu	12045.0af		
0600-0615		BBC English Teaching	6155.0af					
0600-0630		BBC World Service	5975.0am	6005.0af	6175.0am	6180.0eu	6190.0af	6195.0eu
			7145.0pa	7160.0af	7325.0eu	9410.0eu	9740.0as	11760.0me
			11765.0af	11835.0af	11940.0af	11955.0pa	12095.0eu	15310.0as
			15360.0as	15400.0af	15420.0af	15565.0eu	15575.0as	17640.0af
			17760.0as	17790.0as	17885.0af	21660.0as		
0600-0630		Channel Africa, S. Africa	15215.0af					

0600-0630	s	Malawi B'casting Corp.	3380.0do						
0600-0630		VOA	5970.0af	6035.0af	6080.0af	7170.0va	7195.0af	9630.0af	
			9680.0af	11805.0af	11965.0me	11995.0af	12080.0af	15205.0va	
0600-0641		Radio Romania Int'l	11725.0na	11940.0na					
0600-0645		Deutsche Welle	6140.0eu	11915.0af	13790.0af	15185.0af	17820.0as	17860.0af	
			21680.0me						
0600-0700		Merlin Network One	6110.0eu	13720.0pa					
0600-0700		Radio Japan	5975.0eu	7230.0eu	11740.0as	11840.0as	11850.0pa	17825.0na	
0600-0700		Republic of Yemen Radio	5950.0me	5970.0me	7190.0me	9780.0me			
0600-0700		Voice of Russia	15490.0au	17625.0au	17655.0as	21790.0au			
0600-0700		WYFR Okeechobee FL	5985.0na	7355.0eu					
0600-0800		Radio Australia	9660.0pa	12080.0va	15240.0pa	15415.0as	15515.0va	17580.0va	
			17750.0as	21725.0pa					
0600-0800		SLBS, Sierra Leone	3316.0do						
0600-0800		WSHB Cypress Creek SC	13650.0af						
0600-1000		KWHR Naalehu HI	11565.0pa	17780.0as					
0600-1000		Overcomer Ministries	13810.0au						
0600-1000		Radio Veritas, Liberia	5470.0do						
0600-1300		Radio Uganda	7196.0do						
0600-1530		Radio Botswana	7255.0do	9600.0do					
0600-1600		Christian Voice, Zambia	9865.0do						
0600-2000		Sunrise Radio	5850.0va						
0605-0610	mtwhfa	Croatian Radio, Zagreb	5945.0eu	7365.0eu	9830.0eu				
0610-0615	s	Kyrgyz Radlo, Bishkek	4010.0do	4050.0do					
0630-0645		BBC English Teaching	5875.0eu	9710.0eu					
0630-0645		Vatican Radio	11625.0af	13765.0af	15570.0af				
0630-0645	mtwhfa	Vatican Radio	4005.0eu	5883.0eu	7250.0eu	9645.0eu	11740.0eu	15595.0eu	
0630-0700		BBC World Service	5975.0am	6005.0af	6175.0am	6180.0eu	6190.0af	6195.0eu	
			7145.0pa	7160.0af	7325.0eu	9410.0eu	9740.0as	11760.0me	
			11765.0af	11835.0af	11940.0af	11955.0pa	12095.0af	15310.0as	
			15360.0as	15400.0af	15420.0af	15565.0eu	15575.0as	17640.0af	
			17760.0as	17790.0as	21660.0as				
0630-0700	s	a BBC World Service	17885.0af						
0630-0700		ORF Vienna	6015.0na						
0630-0700		Radio Finland	15250.0va	21670.0as					
0630-0700		VOA	7170.0va	9680.0af	11805.0af	11965.0me	15205.0va		
0630-0700	s	a VOA	5970.0af	6035.0af	6080.0af	7195.0af	9630.0af	11995.0af	
			12080.0af						
0630-1200	s	a Italian Radio Relay Svc	7120.0va						
0641-0656		Radio Romania Int'l	9625.0eu	11725.0na	11775.0eu	11840.0eu	11940.0na	15270.0eu	
0645-0655	s	a TWR Juellch	6045.0eu						
0645-0655	s	a TWR Monte Carlo	5840.0eu	9870.0eu					
0645-0700		Deutsche Welle	6140.0eu						
0645-0700		Vatican Radio	11625.0af	13765.0af	15570.0af				
0655-0820		TWR Juellch	6045.0eu						
0655-0820		TWR Monte Carlo	5840.0eu	9870.0eu					
0700-0705		Croatian Radio, Zagreb	13820.0au						
0700-0715		BBC World Service	5975.0am	6005.0af	6175.0am	6190.0af	7145.0pa	7325.0eu	
			9410.0eu	9740.0as	11760.0me	11765.0af	11835.0af	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						
0700-0715	s	a BBC World Service	17885.0af						
0700-0726		R. Vlaanderen Int'l	9925.0eu	15195.0eu					
0700-0727		Radio Prague Int'l	9880.0eu	11600.0eu					
0700-0730	w	Malawi B'casting Corp.	3380.0do						
0700-0730		Radio Slovakia Int'l	9440.0au	15460.0au	17550.0au				
0700-0745		WYFR Okeechobee FL	7355.0eu	9985.0eu	13695.0va				
0700-0756		Radio Romania Int'l	15340.0af	17745.0af					
0700-0800		Deutsche Welle	6140.0eu						
0700-0800	s	Good News World Radio	13740.0au						
0700-0800		KHBN Palau	9965.0as	9985.0as	13840.0af	15725.0as			
0700-0800		Merlin Network One	6110.0eu	9915.0eu	13720.0pa	17630.0eu	21550.0af		
0700-0800		Radio Myanmar	9730.0do						
0700-0800		Radio Taipei Int'l	5950.0na						
0700-0800		Voice of Russia	17495.0au	17625.0au	17655.0as	21790.0au			
0700-0900		HCJB Quito Ecuador	11950.0eu	15115.0pa	21455.0uf				
0700-1100		Radio Africa, Eq. Guinea	15185.0af						
0700-1100		Voice of Hope, Germany	5975.0eu						
0700-2200		Nat'l BC, Papua NG	3925.0do	4890.0do					
0705-0710	s	Croatian Radio, Zagreb	5945.0eu	7365.0eu	9830.0eu				
0705-0720	mtwhfa	TWR Swaziland	4775.0af	6100.0af	9500.0af				
0705-1015		Radio New Zealand Int'l	9700.0va						
0715-0730		BBC English Teaching	6005.0af	15420.0af					
0715-0800		BBC World Service	5975.0am	6175.0am	6190.0af	7145.0pa	7325.0eu	9410.0eu	
			9740.0as	11760.0me	11765.0af	11835.0af	11940.0af	11955.0pa	
			12095.0eu	15310.0as	15360.0as	15400.0af	15485.0eu	15565.0eu	
			17640.0as	17760.0as	17790.0as	17830.0af	21660.0as		
0715-0800	s	a BBC World Service	15575.0as	17885.0af					
0715-1700		NBC Windhoek, Namibia	6060.0af	6175.0af					
0720-0730	mtwhf	TWR Swaziland	4775.0af	6100.0af	9500.0af				
0730-0735	mtwhf	TWR Swaziland	4775.0af						
0730-0745		BBC English Teaching	5875.0eu	9635.0eu					
0730-0800		Georgian Radio, Tbilisi	11910.0eu						

0950-1000		a	BBC World Service	6065.0as	9580.0as	11945.0as	11955.0as	15280.0as	
1000-1010		fa	Kyrgyz Radio, Bishkek	4010.0do	4050.0do				
1000-1025			Voice of Vietnam	5940.0as	7270.0as	7400.0as	9730.0as	13740.0as	15110.0as
1000-1030			BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9740.0as	11760.0me
				11765.0pa	11940.0af	12095.0eu	15310.0as	15360.0as	15485.0eu
				15565.0eu	15575.0as	17640.0eu	17705.0eu	17760.0as	17790.0as
				17885.0af	21660.0as				
1000-1030	s	a	BBC World Service	15190.0sa	15400.0af	17830.0af			
1000-1030			KSDA Guam	11560.0as					
1000-1030			Radio Nigeria	3970.0do	4770.0do	4990.0do	6025.0do	6050.0do	7285.0do
				9570.0do					
1000-1030			Radio Telefls Elreann	11740.0au					
1000-1030			Swiss Radlo Int'l	15315.0eu					
1000-1056			China Radlo Int'l	15210.0pa	17755.0pa				
1000-1100			All India Radlo, Delhi	11585.0as	11735.0au	13700.0as	15020.0as	17387.0au	17840.0as
1000-1100			Deutsche Welle	6140.0eu					
1000-1100			Radio Japan	9695.0as	11850.0pa	15590.0as			
1000-1100			VOA	6165.0ca	7405.0ca	9590.0ca	9770.0pa	11660.0as	11720.0as
				15240.0as	15425.0as	15665.0as			
1000-1100			Voice of Nigeria	7255.0af	15120.0af				
1000-1100			WSHB Cypress Creek SC	6095.0am	9455.0sa				
1000-1100			WWCR Nashville TN	2390.0na	5070.0na	5935.0na	12160.0na		
1000-1100			WYFR Okeechobee FL	5950.0na					
1000-1300			WEWN Birmingham AL	7425.0na	15745.0eu				
1000-1300			WHRI Noblesville IN	6040.0na	9495.0sa				
1000-1630			Radio Jordan	11690.0va					
1000-1700			KWHR Naalehu HI	9930.0as	11565.0pa				
1000-1700			WGTC McCaysville GA	9400.0am					
1000-1800			Radio Liberia Int'l	6100.0do					
1000-2200			Caribbean Beacon	11775.0am					
1000-2200			Voice of Guyana	5949.0do					
1015-1030			BBC English Teaching	11805.0eu	13685.0eu	15325.0eu	15340.0eu	17695.0eu	
1015-1030	mtwh		BBC English Teaching	9745.0eu	11970.0eu				
1015-1030	mtwhfa		Vatlfcan Radio	5883.0eu	9645.0eu	11740.0eu	15595.0eu	21850.0va	
1015-1206			Radio New Zealand Int'l	9700.0oc					
1030-1035			Kol Israel	15650.0va	17535.0va				
1030-1045	mtwhf		Radio Ethiopia	5990.0do	7110.0do	9704.2do			
1030-1057			Radio Prague Int'l	9880.0eu	11615.0eu				
1030-1100			BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9740.0as	11760.0me
				11765.0pa	11940.0af	12095.0eu	15310.0as	15485.0eu	15565.0eu
				15575.0as	17640.0eu	17705.0eu	17790.0as	17885.0af	
				15190.0sa	15400.0af	17830.0af			
				11560.0as	11795.0as				
1030-1100	s	a	BBC World Service	15190.0sa	15400.0af	17830.0af			
1030-1100			KSDA Guam	11560.0as					
1030-1100	mtwhf		Malawi B'casting Corp.	5995.0do					
1030-1100			Radio Dubai, UAE	13675.0eu	15370.0eu	15395.0eu	21605.0eu		
1030-1100			Radio Korea	11715.0na					
1030-1125			Radio Netherlands	6045.0eu	9820.0au	9860.0eu	12065.0as	13710.0as	
1030-1130			Sri Lanka B'casting Corp.	11835.0as	15150.0as	17850.0as			
1030-1445			Radio Nigeria	4770.0do	4990.0do	6025.0do	6050.0do	7285.0do	9570.0do
1030-1550	s	a	Radio Tanzania	5050.0af					
1100-1115	s		Kyrgyz Radlo, Bishkek	4010.0do	4050.0do				
1100-1120		fa	Radio Almaty, Kazakhstan	9620.0eu	11840.0eu				
1100-1125			Voice of Vietnam	7285.0as	9730.0as	15110.0as			
1100-1130	mtwhf		BBC Caribbean Report	6195.0ca	15220.0ca				
1100-1130			BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9580.0as	9740.0as
				11760.0me	11940.0af	11955.0as	12095.0eu	15280.0as	15310.0as
				15400.0af	15485.0eu	15565.0eu	15575.0as	17640.0eu	17705.0va
				17790.0sa	17830.0af	17885.0af	21660.0af		
				15190.0sa	15220.0am				
1100-1130	s	a	BBC World Service	15190.0sa	15220.0am				
1100-1130		a	Malawi B'casting Corp.	5995.0do					
1100-1130			VOA	6160.0as	9355.0as	9645.0as	9760.0as	9770.0pa	11720.0as
				15160.0as	15240.0as	15425.0as			
1100-1130	mtwhf		VOA	13675.0af	15510.0af	17690.0af	17780.0af	21705.0af	
1100-1135			Radio Maputo, Moz.	11818.0af	11835.0af				
1100-1145			Deutsche Welle	6140.0eu	15370.0af	15410.0af	17680.0af	17860.0af	
1100-1156			Radio Pyongyang	3560.0af	9640.0af	9850.0af	9975.0af	11335.0af	13650.1va
1100-1200			Radio Australia	5995.0pa	6020.0pa	9580.0va	13605.0va	21820.0as	
1100-1200			Radio Bulgaria	15700.0eu	17500.0eu				
1100-1200			Radio Japan	6120.0na	9695.0as	15590.0as			
1100-1200			Radio Ukraine Int'l	12050.0na	21520.0au				
1100-1200			Swiss Radlo Int'l	13735.0as	21770.0as				
1100-1200			Voice of Asia, Taiwan	7445.0as					
1100-1200			WWCR Nashville TN	5070.0na	5935.0na	7435.0na	12160.0na		
1100-1200			WYFR Okeechobee FL	5850.0na	5950.0na	6015.0na			
1100-1215	s		Radio Vanuatu	3945.0do	4960.0do	7260.0do			
1100-1230			VOIRI Teheran	13710.0as	15255.0pa	15430.0me	17565.0as	21510.0as	
1100-1300			WSHB Cypress Creek SC	6095.0am	11660.0am				
1100-1400			Radio Singapore Int'l	6015.0as	6150.0as				
1100-1630			HCJB Quito Ecuador	12005.0ca	15115.0am	21455.0uf			
1104-1120			Radio Pakistan	15530.1eu	17835.1eu				
1115-1130	s		BBC English Teaching	5875.0eu	9635.0eu				
1115-1130			BRT Int'l, Cyprus	6159.0do					
1115-1145			Radio Nepal, Katmandu	5005.3as	7165.0as				

1120-1140	w	Radio Almaty, Kazakhstan	9620.0eu	11840.0eu					
1125-1225		Radio Netherlands	6045.0eu	9860.0eu					
1130-1145		Radio Burundi	6140.0do						
1130-1150	F	Vatican Radio	15595.0au	17550.0au					
1130-1156		R. Viaanderen Int'l	5985.0eu						
1130-1200		BBC English Teaching	5875.0eu	9635.0eu	9745.0eu	11680.0eu	11895.0eu	13670.0eu	
			15260.0eu	15325.0eu	17695.0eu				
1130-1200	mt,whf	BBC English Teaching	15310.0as	17705.0as					
1130-1200		BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9580.0as	9740.0as	
			11760.0me	11940.0af	11955.0as	12095.0eu	15220.0am	15280.0as	
			15485.0eu	15565.0eu	15575.0as	17640.0eu	17705.0va	17830.0af	
			17885.0af	21660.0af					
1130-1200	s	a BBC World Service	15310.0as						
1130-1200		Radio Sweden	18960.0na	21810.0na					
1130-1200		VOA	6160.0as	9355.0as	9645.0as	9760.0as	9770.0pa	11720.0as	
			15160.0as	15240.0as	15425.0as				
1140-1200	t	Radio Almaty, Kazakhstan	9620.0eu	11840.0eu					
1145-1200		Deutsche Welle	6140.0eu						
1200-1204		BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9515.0am	9580.0as	
			9740.0as	11760.0me	11940.0af	11955.0as	12095.0eu	15220.0am	
			15280.0as	15310.0as	15485.0eu	15565.0eu	15575.0me	17640.0eu	
			17705.0va	17830.0af	17885.0af	21660.0af			
			7135.0as	9605.0as	11835.0as				
1200-1215		BBC English Teaching	11940.3as						
1200-1215		V. of Cambodia	1512.0do						
1200-1226		R. Viaanderen Int'l	9660.0as	13650.0na	15195.0as	17765.0na	17820.0na		
1200-1229		Radio Canada Int'l	9660.0as						
1200-1230	mt,whf	Malawi B'casting Corp.	5995.0do						
1200-1230		Radio Tashkent	5060.0as	5975.0as	6025.0as	9715.0as			
1200-1230		Swiss Radio Int'l	15315.0eu						
1200-1230		Voice of Mongolia	12015.0au						
1200-1245		WYFR Okeechobee FL	5850.0na	5950.0na	6015.0na	17750.0na			
1200-1255		Polish Radio, Warsaw	6095.0eu	7270.0eu	9525.0eu	11820.0eu			
1200-1256		China Radio Int'l	6950.0pa	7265.0pa	9715.0as	9945.0pa	11660.0as	11675.0pa	
			15180.0as						
1200-1300		Deutsche Welle	6140.0eu						
1200-1300		R. for Peace Int'l	21460.0uf						
1200-1300		Radio France Int'l	9805.0eu	11600.0as	15155.0eu	15195.0eu	15540.0af		
1200-1300		Radio Talpel Int'l	7130.0as	9610.0au					
1200-1300		VOA	6160.0as	9355.0as	9645.0as	9760.0as	11715.0as	15160.0as	
			15240.0as	15425.0as					
1200-1300		WWCR Nashville TN	5070.0na	7435.0na	13845.0na	15685.0na			
1200-1320		Radiobras, Brasilia	15445.0am						
1200-1400		Radio Australia	5995.0pa	6020.0pa	9580.0va	11650.0va	17750.0pa	21820.0as	
1200-1400	s	WRMI Miami FL	9955.0am						
1200-1700		Ghana Broadcasting Corp.	4915.0do	6130.0do					
1200-1800		SLBS, Sierra Leone	5980.0do						
1200-2400		CBC Northern Service	9625.0do						
1204-1216	mt,whf	BBC Caribbean Report	6195.0ca	15220.0ca					
1204-1216		BBC World Service	5965.0am	6190.0af	6195.0va	9410.0eu	9515.0am	9580.0as	
			9740.0as	11760.0me	11940.0af	11955.0as	12095.0eu	15280.0as	
			15310.0as	15485.0eu	15565.0eu	15575.0me	17640.0eu	17705.0va	
			17830.0af	17885.0af	21660.0af				
			15220.0am						
1204-1216	s	a BBC World Service	7365.0eu	9830.0eu	13830.0eu				
1205-1210		Croatian Radio, Zagreb	6105.0oc						
1206-1500		Radio New Zealand Int'l	17595.0as						
1215-1330		Radio Calro	5965.0am	6190.0af	6195.0va	9410.0eu	9515.0am	9580.0as	
1216-1300		BBC World Service	9740.0as	11760.0me	11940.0af	11955.0as	12095.0eu	15220.0am	
			15280.0as	15310.0as	15485.0eu	15565.0eu	15575.0me	17640.0eu	
			17705.0va	17830.0af	17885.0af	21660.0af			
1225-1230	smt,wh	BBC English Teaching	7140.0me	11820.0me	13660.0af	15180.0af	15555.0me	17585.0af	
			21830.0me						
1229-1300		Radio Canada Int'l	13650.0na	17765.0na	17820.0na				
1230-1240		Radio Mogadishu	6870.0af						
1230-1245		BBC English Teaching	15105.0af	17780.0af	21640.0af				
1230-1255	smt,wh	BBC English Teaching	7140.0me	11820.0me	13660.0af	15180.0af	15555.0me	17585.0af	
			21830.0me						
1230-1255		Voice of Vietnam	5940.0as	7270.0as	7400.0as	9730.0as	13740.0as		
1230-1300		AWR Europe, Forl	11800.0eu						
1230-1300		KSDA Guam	15330.0as						
1230-1300		ORF Vienna	6155.0eu	13730.0va					
1230-1300		Radio Bangladesh	7185.0as	9548.0as					
1230-1300		Radio Finland	15400.0na	17670.0na					
1230-1300		Radio Sweden	17895.0as	21810.0as					
1230-1300		Radio Thailand	9655.0as	9885.0as	11905.0as				
1230-1330		Radio Korea	9570.0as	9640.0om	13670.0as				
1230-1330		Voice of Turkey	17560.0as	17830.0eu					
1230-1630		Sri Lanka B'casting Corp.	9730.0as	15425.0as					
1240-1250		Voice of Greece	17525.0af						
1300-1315		Cameroon Radio-TV	4850.0va						
1300-1329		Deutsche Welle	6140.0eu						
1300-1329		Radio Prague Int'l	13580.0eu	17485.0as					
1300-1330		China Radio Int'l	6950.0pa	7265.0pa	7405.0na	9945.0pa	11660.0as	11675.0pa	
			11715.0pa	11980.0as	15180.0as				

1300-1330	smtwhf	Radio Canada Int'l	13650.0na						
1300-1330	mtwhf	Radio Canada Int'l	17765.0na	17820.0na					
1300-1330	s	Radio Canada Int'l	17800.0na						
1300-1330		VOA	6160.0as	9355.0as	9645.0as	9760.0as	11715.0as	15160.0as	
			15425.0as						
1300-1345		WYFR Okeechobee FL	11550.0as	11830.0na	11970.0na	13695.0na	17750.0na		
1300-1356		Radio Romania Int'l	9690.0eu	15390.0eu	17720.0na				
1300-1400		BBC World Service	5965.0am	5990.0as	6190.0af	6195.0va	9410.0eu	9515.0am	
			9740.0as	11760.0me	11865.0am	11940.0af	12095.0eu	15220.0am	
			15310.0as	15420.0af	15485.0eu	15565.0eu	15575.0me	17640.0eu	
			17705.0va	17830.0af	17885.0af	21660.0af			
1300-1400		a Good News World Radio	15330.0as						
1300-1400		KFBS Salpan, Marianas	9495.0as	9670.0as	11650.0as				
1300-1400		KNLS Anchor Point AK	9615.0as						
1300-1400		WSHB Cypress Creek SC	9430.0na	11660.0am					
1300-1455	s	a Channel Africa, S. Africa	11900.0af	17860.0af	21530.0af				
1300-1500		KJES Vado NM	11715.0na						
1300-1500		WHRI Noblesville IN	6040.0na	15105.0sa					
1300-1600		WEWN Birmingham AL	11875.0na	15745.0eu					
1300-2100		Radio Uganda	4976.0do						
1300-2200		WWCR Nashville TN	9475.0na	12160.0na	13845.0na	15685.0na			
1300-2400		R. for Peace Int'l	15049.0va	21460.0uf					
1315-1325	mtwhf	BBS, Bhutan	5030.0do						
1325-1530		Voice of Hope, Germany	15715.0as						
1330-1345		BBC English Teaching	15105.0af	17810.0af	21640.0af				
1330-1355		Voice of Vietnam	5940.0eu	7270.0eu	7400.0eu	9730.0eu	13740.0eu		
1330-1356		China Radio Int'l	7405.0na	9945.0pa	11660.0as	11675.0pa	11715.0pa	11980.0as	
			15180.0as						
1330-1400		KSDA Guam	11705.0as						
1330-1400		ORF Vienna	13730.0va						
1330-1400		Radio Canada Int'l	9535.0as	11795.0as	11935.0eu	15325.0eu			
1330-1400	smtwhf	Radio Canada Int'l	13650.0na						
1330-1400	mtwhf	Radio Canada Int'l	17765.0na	17820.0na					
1330-1400	s	Radio Canada Int'l	17800.0na						
1330-1400		Radio Dubai, UAE	13630.0eu	13675.0eu	15395.0eu	21605.0eu			
1330-1400		Radio Sweden	15240.0na	17505.0as					
1330-1400		Radio Tashkent	5060.0as	5975.0as	6025.0as	9715.0as	11905.0as	15295.0as	
			17775.0as						
1330-1400		VOA	6160.0as	9355.0as	9645.0as	9760.0as	15160.0as	15425.0as	
1330-1500		All India Radio, Delhi	9545.0as	11620.0as	13710.0as				
1345-1400		Vatican Radio	15500.0as	17550.0as					
1345-1500		WYFR Okeechobee FL	11550.0as	11830.0na	11970.0na	17750.0na			
1400-1405		Vatican Radio	15500.0as	17550.0as					
1400-1414		Radio Pakistan	11570.0af	15169.0af	15464.0af				
1400-1415	smtwhf	BBC English Teaching	11860.0af	15420.0af	17880.0af	21490.0af			
1400-1430		Kol Israel	15650.0va	17535.0va					
1400-1430	mtwhf	Malawi B'casting Corp.	3380.0do						
1400-1430		Radio Australia	5995.0as	6180.0va	9580.0va	11650.0va	17750.0pa		
1400-1430		Radio Mexico Int'l	5984.9am	9704.9am					
1400-1430		Radio Thailand	9530.0as	9830.0as	11905.0as				
1400-1456		China Radio Int'l	7405.0na	9535.0as	9700.0as	11675.0as	11825.0as	13685.0af	
			15110.0af	15125.0af					
1400-1500	s	ANARC SWL Net	7240.0lf						
1400-1500		BBC World Service	5990.0as	6190.0af	6195.0as	9410.0eu	9515.0am	9740.0as	
			11865.0am	11940.0af	12095.0eu	15220.0am	15310.0as	15485.0eu	
			15565.0eu	15575.0me	17640.0eu	17705.0va	17830.0af	17840.0am	
			21470.0af	21660.0af					
1400-1500		Radio France Int'l	11910.0as	17560.0va	17680.0as				
1400-1500		Radio Japan	9505.0na	11730.0as	11880.0me				
1400-1500		Radio Taipei Int'l	15125.0as						
1400-1500		Swiss Radio Int'l	9575.0as	17670.0as					
1400-1500		VOA	6160.0as	7125.0as	7215.0as	9645.0as	9760.0as	15160.0as	
			15255.0va	15395.0as	15425.0as				
1400-1500		Voice of Russia	12025.0as	15550.0as					
1400-1559	s	Radio Canada Int'l	13650.0na	17800.0na					
1400-1600		FEBC Manila	11995.0as						
1400-1600		KFBS Salpan, Marianas	9465.0as	9495.0as	9670.0as				
1400-1600		SBC Radio 1, Singapore	6150.0do						
1400-2400		KAIJ Dallas TX	13815.0va						
1410-1420		Voice of Greece	9425.0eu	15630.0eu					
1415-1420		Radio Nepal, Katmandu	5005.3as	7165.0as					
1415-1430	s	BBC English Teaching	11860.0af	15420.0af	17880.0af	21490.0af			
1430-1500		AWR Europe, Slovakia	17525.0as						
1430-1500		KSDA Guam	11980.0as						
1430-1500		Radio Myanmar	5986.0do						
1430-1600		KTWR Guam	15330.0as						
1430-1625		Radio Netherlands	9890.0as	12075.0as	15590.0as				
1430-1700		Radio Australia	5995.0as	6180.0va	9500.0as	9580.0va	11650.0va	11660.0as	
			17750.0pa						
1445-1600		Radio Nigeria	3970.0do	4770.0do	4990.0do	6025.0do	6050.0do	7285.0do	
			9570.0do						
1500-1505	mtwhf	Radio Burundi	6140.0do						
1500-1515		BBC World Service	5975.0as	5990.0as	6190.0af	6195.0as	9410.0eu	9515.0am	
			9740.0as	11860.0af	11865.0am	11940.0af	12095.0eu	15220.0am	

			15310.0as	15400.0af	15420.0af	15485.0eu	15575.0eu	17705.0va
			17830.0af	17840.0am	21470.0af	21490.0af	21660.0af	
1500-1530		Channel Africa, S. Africa	17870.0af					
1500-1530	tw	FEBA Seychelles	11600.0as					
1500-1530		Radio Mexico Int'l	5984.9am	9704.9am				
1500-1530		VOA Special English	6110.0as	6160.0as	9590.0as	9760.0as	9845.0as	12040.0as
			15235.0as					
1500-1530	s	a VOA Special English	1575.0as					
1500-1530		Voice of Mongolia	9720.0as	12015.0as				
1500-1556		China Radio Int'l	7160.0as	9785.0as	13685.0af	15125.0af		
1500-1556		Radio Pyongyang	3560.0eu	9640.0af	9975.0eu	11335.0va	11735.0eu	13650.1me
1500-1600	mtw	FEBA Seychelles	9810.0as					
1500-1600		KHBN Palau	9955.0as	9965.0as	9985.0as	15725.0as		
1500-1600		Merlin Network One	9915.0eu	13645.0eu	21550.0af			
1500-1600		Radio Japan	7200.0as	9505.0na	9750.0as	11730.0as		
1500-1600		Radio Myanmar	5986.0do					
1500-1600		VOA	7125.0as	7215.0as	9645.0as	9700.0me	15205.0va	15255.0va
			15395.0as					
1500-1600		Voice of Russia	4730.0me	4940.0me	4975.0me	7325.0me	9730.0eu	11500.0as
			12070.0me	15545.0eu				
1500-1600		WHRI Noblesville IN	6040.0al	13760.0na	15105.0sa			
1500-1600		WYFR Okeechobee FL	11830.0na	17750.0na				
1500-1650		Radio New Zealand Int'l	6145.0oc					
1500-1700		Voice of Nigeria	7255.0af	15120.0af				
1500-2300		WRNO New Orleans LA	7395.0na	15420.0af				
1500-2400		KTBN Salt Lake City UT	15590.0na					
1515-1530		BBC World Service	5975.0as	5990.0as	6190.0af	6195.0as	9410.0eu	9515.0am
			9740.0as	11860.0af	11865.0am	11940.0af	12095.0eu	15220.0am
			15310.0as	15400.0af	15420.0af	15485.0eu	15575.0eu	17705.0va
			17830.0af	17840.0am	21470.0af	21490.0af	21660.0af	
1530-1540		Radio Bangladesh	4880.0as	15520.0as				
1530-1545		BBC English Teaching	11685.0as	15540.0as				
1530-1545	sm	FEBA Seychelles	11600.0as					
1530-1600		BBC World Service	5975.0as	5990.0as	6190.0af	6195.0as	9410.0eu	9515.0am
			9740.0as	11865.0am	11940.0af	12095.0eu	15220.0am	15310.0as
			15400.0af	15485.0eu	15575.0eu	17705.0va	17830.0af	17840.0am
			21470.0af	21660.0af				
1530-1600		Georgian Radio, Tbilisi	6180.0me					
1530-1600		KSDA Guam	11930.0as					
1530-1600		VOA Special English	6110.0as	6160.0as	9590.0as	9760.0as	9845.0as	12040.0as
			15235.0as					
1530-1630		VOIRI Teheran	7250.0as	11680.0as	13605.0as	15150.0as		
1530-1800		Radio Botswana	3356.0do	4820.0do	7255.0do			
1530-1915		Radio Tanzania	5050.0af					
1545-1600	s	Radio Bangladesh	4880.0as	15520.0as				
1550-1615	h	Vatican Radio	12065.0om	13765.0au	15500.0au			
1600-1615		BBC World Service	3915.0as	5975.0as	5990.0as	6190.0af	6195.0as	7160.0as
			9410.0eu	9515.0am	9740.0as	11940.0af	12095.0eu	15310.0as
			15400.0af	15485.0eu	15575.0eu	17705.0as	17830.0af	17840.0am
			21470.0af	21660.0af				
1600-1615		Swiss Radio Int'l	9575.0as	17670.0as				
1600-1625		Voice of Vietnam	5940.0eu	7270.0eu	7400.0eu	9730.0eu	13740.0eu	
1600-1627		Radio Prague Int'l	5930.0eu	21745.0af				
1600-1630		Channel Africa, S. Africa	6150.0af					
1600-1630	s	a KTWR Guam	15330.0as					
1600-1630		Malawi B'casting Corp.	3380.0do					
1600-1630		Radio Pakistan	11570.2me	15169.1af	15325.0	15465.1me	17720.0af	
1600-1630	s	Universal Life, Germany	15105.0af					
1600-1640		Radio Dubai, UAE	13630.0eu	13675.0eu	15395.0eu	21605.0eu		
1600-1645		Deutsche Welle	6140.0eu	6170.0as	7225.0as	9735.0af	9875.0as	11810.0af
			15135.0af	17595.0as	21695.0af			
1600-1656		China Radio Int'l	7190.0af	9565.0af				
1600-1700	a	Good News World Radio	15105.0af					
1600-1700		KFBS Saipan, Marianas	9465.0as	9495.0as				
1600-1700		KSDA Guam	11750.0as					
1600-1700		Overcomer Ministries	13810.0me					
1600-1700		Radio Algiers	6160.0eu	11715.1va	11749.9va	15160.0va		
1600-1700		Radio Ethiopia	5990.0af	7110.0af	7165.0af	9560.0af	9704.2af	
1600-1700		Radio France Int'l	11615.0af	11995.0af	12015.0af	15210.0af	17605.0af	17850.0af
1600-1700		Radio Korea	5975.0om	9515.0af	9870.0af			
1600-1700		Radio Nigeria	3970.0do	4770.0do	4990.0do	6025.0do	6050.0do	9570.0do
1600-1700		VOA	6035.0af	6110.0as	6160.0as	7125.0as	7215.0as	9645.0as
			9700.0me	9760.0as	13710.0af	15205.0va	15225.0af	15255.0va
			15395.0as	15410.0af				
1600-1700		VOA Special English	13600.0af	15445.0af	17895.0af			
1600-1700		Voice of Russia	9730.0eu	12070.0me	15490.0me	15550.0as		
1600-1700		WHRI Noblesville IN	13760.0na	15105.0sa				
1600-1700		WYFR Okeechobee FL	11830.0na	15600.0na	15695.0eu	17555.0eu	17750.0na	21525.0af
1600-1715		TWR Swaziland	9500.0af					
1600-1800		KHBN Palau	9955.0as	9965.0as				
1600-1800		WSHB Cypress Creek SC	18910.0af					
1600-1900		Merlin Network One	6175.0eu	21550.0af				
1600-2100		Radio Rwanda	6055.0do					
1600-2100	smtwhf	WMLK Bethel PA	9465.0eu					

1600-2200		Christian Voice, Zambia	4965.0do						
1600-2200		WEWN Birmingham AL	11875.0na	13615.0na	15745.0eu				
1600-2400		WHRA Greenbush ME	17650.0af						
1615-1630		Vatican Radio	4005.0eu	5883.0eu	7250.0eu	9645.0eu	15595.0eu		
1615-1645		BBC World Service	3915.0as	5975.0as	6190.0af	6195.0as	7160.0as	9410.0eu	
			9740.0as	11940.0af	12095.0eu	15310.0as	15400.0af	15420.0af	
			15485.0eu	15575.0eu	17705.0as	17830.0af	17840.0am	21470.0af	
			21660.0af						
1615-1645	s	BBC World Service	11860.0af						
1615-1645	a	BBC World Service	9515.0am						
1630-1645		Radio Calro	11875.0af	15255.0af					
1630-1657		Radio Canada Int'l	6140.0as	7150.0as					
1630-1700		BBC English Teaching	5875.0eu	9535.0eu	9660.0eu	11985.0eu	13650.0eu		
1630-1700		BRT Int'l, Cyprus	6159.0do						
1630-1700		ORF Vienna	6155.0va	13730.0va	15240.0eu	17560.0as			
1630-1700		Radio Slovakia Int'l	5920.0eu	6055.0eu	7345.0eu				
1630-1700	a	Universal Life, Germany	15105.0af						
1630-2200		Zimbabwe BC Corp.	3306.0do	4828.0do					
1645-1700		BBC World Service	3915.0as	5975.0as	6190.0af	6195.0as	7160.0as	9410.0eu	
			9740.0as	11940.0af	12095.0eu	15310.0as	15400.0af	15420.0af	
			15485.0eu	15575.0eu	17705.0as	17830.0af	17840.0am	21470.0af	
			21660.0af						
1645-1700	sm w fa	BBC World Service	11860.0af						
1645-1700	a	BBC World Service	9515.0am						
1645-1700		Deutsche Welle	6140.0eu						
1645-1700		Radio Tajikistan	7245.0as						
1645-1830		Radio Calro	15255.0af						
1650-1750	mtwhf	Radio New Zealand Int'l	6145.0va						
1700-1715		Cameroon Radio-TV	4850.0va						
1700-1725		Voice of Vietnam	12070.0eu						
1700-1727		Radio Prague Int'l	5930.0eu	21745.0af					
1700-1730		BBC World Service	3255.0af	3915.0as	5975.0as	6005.0af	6190.0af	7160.0as	
			9410.0eu	9510.0as	9630.0af	9740.0as	11995.0me	12095.0eu	
			15400.0af	15420.0af	15485.0eu	15575.0eu	17830.0af	17840.0am	
1700-1730		Channel Africa, S. Africa	17860.0af						
1700-1730		Radio France Int'l	15210.0af	17605.0af					
1700-1730	s	VOA	1530.0af						
1700-1730		Voice of Azerbaijan	9165.0eu						
1700-1730		Voice of Sharjah, Afghan.	4774.0do	7077.8do					
1700-1755		Polish Radio, Warsaw	6095.0eu	7285.0eu					
1700-1756		China Radio Int'l	7150.0af	7405.0af	9570.0af	9745.0af			
1700-1756		Radio Romania Int'l	15270.0eu	15380.0eu	17735.0eu	17865.0eu			
1700-1800		Deutsche Welle	6140.0eu						
1700-1800	a	Good News World Radio	11795.0me						
1700-1800		KWHR Naalehu HI	9930.0as						
1700-1800		Overcomer Ministries	3965.0eu	13810.0me					
1700-1800		Radio Australia	5995.0as	6180.0va	9500.0as	9580.0va	9660.0va	11880.0va	
1700-1800		Radio Japan	7110.0eu	9825.0as	15355.0af				
1700-1800		VOA	6110.0as	6160.0as	7125.0as	7170.0as	7215.0as	9645.0as	
			9700.0me	9760.0af	15255.0va	15395.0as	15410.0af	15445.0af	
			17895.0af						
1700-1800	mtwhf	VOA	5990.0as	6045.0as	7150.0as	9550.0as	9770.0as	11870.0as	
1700-1800	mtwhf	VOA Special English	5955.0as	9535.0as	11885.0as				
1700-1800		Voice of Russia	9720.0eu	9775.0eu	11510.0af	12065.0af	15545.0eu	15735.0eu	
1700-1800	sm whr a	Voice of Russia	9820.0eu	11675.0eu					
1700-1800		WYFR Okeechobee FL	15695.0eu	17555.0eu					
1700-1900	s	Swaziland Commercial R.	6155.0do						
1700-2000		KFBS Salpan, Marianas	9465.0as						
1700-2000		WHRI Noblesville IN	9495.0sa	13760.0na					
1700-2030		Radio Nigeria	3326.0do	3970.0do	4770.0do	4990.0do	6025.0do	6050.0do	
			9570.0do						
1700-2200		Italian Radio Relay Svc	3985.0va						
1700-2300		Radio Africa, Eq. Guinea	5003.7af	7190.0af	15185.0af				
1700-2300		WGTG McCaysville GA	9370.0am	9400.0am					
1700-2400		Ghana Broadcasting Corp.	3366.0do	4915.0do					
1700-2400		NBC Windhoek, Namibia	3270.1af	3289.9af					
1700-2400		WINB Red Lion PA	13790.0eu						
1715-1830		TWR Swaziland	3200.0af	9500.0af					
1730-1745		BBC English Teaching	3390.0af	6070.0af	9520.0af				
1730-1745	w	BBC English Teaching	6050.0eu	11955.0eu	15585.0eu				
1730-1745		BBC World Service	3255.0af	3915.0as	5975.0as	6005.0af	6190.0af	7160.0as	
			9410.0eu	9510.0as	9630.0af	9740.0as	11995.0me	12095.0eu	
			15400.0af	15420.0af	15485.0eu	15575.0eu	17830.0af	17840.0am	
1730-1745	s	BBC World Service	9750.0as	12045.0as	15310.0as				
1730-1756		R. Viaanderen Int'l	5910.0eu	9925.0eu	11840.0af	13685.0eu			
1730-1800		Georgian Radio, Tbilisi	11910.0eu						
1730-1800		KSDA Guam	11965.0as						
1730-1800	mtwhf a	Radio Sweden	6065.0eu						
1730-1800	s	Radio Sweden	9590.0eu						
1730-1800		Radio Telefls Elreann	17885.0af						
1730-1800	a	Universal Life, Germany	6195.0eu						
1730-1800		Vatican Radio	13765.0af	15570.0af	17550.0af				
1730-1830		Radio Netherlands	6020.0af	7120.0af	11655.0af				

1730-1930		Radio Pilipinas, Manila	11720.0pa	15190.0pa	17720.0pa				
1735-1745	C h	R. Nacional Paraguay	9735.0sa						
1745-1800		BBC World Service	3255.0af	3915.0as	5975.0as	6190.0af	7160.0as	9410.0eu	
			9510.0as	9740.0as	11995.0me	12095.0eu	15400.0af	15420.0af	
			15485.0eu	15575.0eu	17830.0af	17840.0am			
1745-1800	s	BBC World Service	9750.0as	12045.0as	15310.0as				
1745-1800		Radio Burundi	6140.0do						
1745-1800		RTV Madagascar	3282.0do	3358.9do	5009.5do				
1745-1900		Radio Bangladesh	7185.0eu	7462.6eu	9548.0eu	15520.0eu			
1745-1945		All India Radio, Delhi	7410.0eu	9635.0af	9950.0eu	11620.0eu	11935.0af	13780.0af	
			15075.0af						
1750-1755	mtwhf	Radio New Zealand Int'l	11695.0va						
1755-1950		Radio New Zealand Int'l	11695.0va						
1800-1815		BBC English Teaching	6065.0as	9605.0as	11970.0as				
1800-1815		Voice of Greece	7450.0eu	9525.0eu	17705.0sa	17765.0eu			
1800-1825		Voice of Vietnam	5940.0eu	7270.0eu	7400.0eu	9730.0eu	12070.0eu	13740.0eu	
1800-1830		BBC World Service	3255.0af	5975.0as	6180.0eu	6190.0af	6195.0eu	9410.0eu	
			9510.0as	9740.0pa	11995.0me	12095.0eu	15400.0af	15420.0af	
			15485.0eu	15575.0eu	17830.0af	17840.0am			
1800-1830		Channel Africa, S. Africa	17870.0af						
1800-1830		Malawi B'casting Corp.	3380.0do						
1800-1856		Radio Pyongyang	4405.0eu	6575.0eu	9335.2am	11710.1am	13760.2am		
1800-1900	s	Amateur Radio League, SAf		3215.0af					
1800-1900		Deutsche Welle	6140.0eu						
1800-1900		KHBN Palau	9965.0as						
1800-1900		KJES Vado NM	15385.0au						
1800-1900		R. Omdurman, Sudan	7200.0do	9200.0do	9505.0do				
1800-1900		Radio Maputo, Mozambique		3265.0af	4855.0af				
1800-1900	mtwhf	RAE Buenos Aires	15345.0eu						
1800-1900		Republic of Yemen Radio	6005.0me						
1800-1900	s	Universal Life, Germany	11785.0af						
1800-1900		VOA	6035.0af	7415.0af	9760.0af	9770.0me	11975.0af	13820.0as	
			15410.0af	15580.0af	17895.0af				
1800-1900		Voice of Russia	7330.0eu	9640.0af	9720.0eu	9775.0eu	9820.0eu	9865.0eu	
			11510.0af	11675.0eu	12025.0af	12065.0af	15545.0eu	15735.0eu	
1800-1920		Radiobras, Brasilia	15265.0eu						
1800-1945		WYFR Okeechobee FL	15695.0eu						
1800-2000		Radio Australia	6080.0pa	7240.0va	9500.0as	9580.0va	9660.0va	11880.0va	
1800-2100		Overcomer Ministries	3965.0eu						
1800-2100		Radio Kuwait	11990.0va	18980.0va					
1800-2200		Radio Botswana	3356.0do	4820.0do					
1800-2200		Radio Veritas, Liberia	3450.0do						
1800-2200		WSHB Cypress Creek SC	15665.0eu	18910.0af					
1800-2400		KWHR Naalehu HI	17510.0as						
1800-2400		Radio Liberia Int'l	5100.0do						
1800-2400		SLBS, Sierra Leone	3316.0do						
1805-1810		Croatian Radio, Zagreb	13830.0eu						
1830-1840		Radio Mogadishu	6870.0af						
1830-1900		BBC World Service	3255.0af	6005.0af	6180.0eu	6190.0af	6195.0eu	9410.0eu	
			9630.0af	9740.0pa	11995.0me	12095.0eu	15400.0af	15420.0af	
			15485.0eu	15575.0eu	17830.0af	17840.0am			
1830-1900	w	FEBC Manila	9465.0eu						
1830-1900		Georgian Radio, Tbilisi	11760.0eu						
1830-1900		Radio Slovakia Int'l	5920.0eu	6055.0eu	7345.0eu				
1830-1900		Radio Telefis Eireann	17885.0af						
1830-1900	mtwhf	Radio Telefis Eireann	12160.0am						
1830-1900		Radio Yugoslavia	6100.0eu	9720.0af					
1830-1900	s	a VOA	7170.0af	11940.0af	15435.0af				
1830-1930		Radio Ivory Coast, Abidjn	11920.0af						
1830-1930		Voice of Turkey	11765.0uf	13695.0eu					
1830-2000		Sri Lanka B'casting Corp.	6005.0as						
1830-2025		Radio Netherlands	6020.0af	7120.0af	9895.0af	11655.0af	13700.0af	17605.0af	
			21590.0af						
1830-2215		TWR Swaziland	3200.0af						
1830-2400		Radio Kiribati	9809.9do	9825.0do					
1840-1850		Voice of Greece	9375.0af	12105.0af					
1845-1900		Radio Mali	4783.4do	4835.0do	5995.0do				
1845-1900		RTV Guinea	6155.0af	7125.0af	9650.0af	15310.0af			
1900-1910		Voice of Greece	7475.0eu	9375.0eu					
1900-1915		BBC English Teaching	11880.0af	15105.0af	17885.0af				
1900-1925		Kol Israel	11605.0va	15640.0af	15650.0va	17545.0va			
1900-1925		Voice of Vietnam	5940.0eu	7270.0eu	7400.0eu	9730.0eu	12030.0eu	13740.0eu	
1900-1930		Radio Budapest	6025.0eu	7170.0eu					
1900-1930		Radio Finland	6135.0eu						
1900-1930	a	Radio Latvia	5935.0eu						
1900-1930	s	a Radio Telefis Eireann	12160.0am						
1900-1930		Radio Yugoslavia	7230.0au						
1900-1930		Swiss Radio Int'l	9885.0eu						
1900-1930		VOA	6035.0af	7375.0af	7415.0af	9525.0pa	9760.0af	9770.0af	
			11870.0pa	11975.0af	15180.0pa	15410.0af	15445.0af	15580.0af	
			4950.0af						
1900-1930	a	VOA	9720.0eu	12015.0eu					
1900-1930		Voice of Mongolia	9640.0af	11785.0af	11810.0af	13790.0af	15390.0af	17810.0af	
1900-1945		Deutsche Welle							

1900-1956		China Radio Int'l	6755.0af	9440.0af	9600.0af	11840.0af			
1900-1956		Radio Pyongyang	6520.0af	9600.0af	9975.0af				
1900-2000		BBC World Service	3255.0af	6005.0af	6180.0af	6190.0af	6195.0eu	9410.0eu	
			9630.0af	9740.0pa	11835.0af	11995.0me	12095.0eu	15400.0af	
			15485.0eu	17830.0af					
1900-2000		Merlin Network One	3965.0eu	6175.0eu	13690.0na				
1900-2000		Radio Bulgaria	9400.0eu	11720.0eu					
1900-2000		Radio Korea	5975.0om	7275.0eu					
1900-2000		Radio Kudrat, Nigeria	6205.0do	11560.0do					
1900-2000		Radio Thailand	7210.0eu	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		Voice of Russia	9480.0eu	9720.0eu	9775.0eu	9820.0eu	11675.0eu	12070.0eu	
			15545.0eu	15735.0eu					
1900-2100		SIBC Solomon Islands	5020.0do						
1900-2100		Voice of Nigeria	7255.0af	15120.0af					
1900-2200		HCJB Quito Ecuador	17660.0eu	21455.0uf					
1900-2400		ZLXA New Zealand	3935.0do	7290.0do					
1915-1930		Radio Tirana, Albania	7180.0eu	9510.0eu					
1930-1956		R. Vlaanderen Int'l	5960.0eu						
1930-2000		Polish Radio, Warsaw	6035.0eu	6095.0eu	7285.0eu	9525.0eu			
1930-2000	t h	Radio Minsk, Belarus	7210.0va	11960.0va					
1930-2000		Radio Sweden	6065.0eu						
1930-2000		VOA	4950.0af	6035.0af	7375.0af	7415.0af	9525.0pa	9760.0af	
			9770.0af	11870.0pa	11975.0af	15180.0pa	15410.0af	15445.0af	
			15580.0af						
1930-2030		VOIRI Teheran	7215.0eu	9022.0eu	9880.0eu				
1935-1955		RAI, Rome	5970.0eu	7160.0eu	9760.0eu				
1945-1950		RTV Togo	5047.0af						
1950-2000	s	a Radio New Zealand Int'l	11695.0eu						
1950-2000	mtwhf	Radio New Zealand Int'l	17675.0va						
1950-2000		Vatican Radio	4005.0eu	5883.0eu	7250.0eu	9645.0eu			
2000-2010		Radio Mogadishu	11204.1af						
2000-2010		Vatican Radio	4005.0eu	5883.0eu	7250.0eu	9645.0eu	9660.0af	11625.0af	
			13765.0va						
2000-2025		Polish Radio, Warsaw	6035.0eu	6095.0eu	7285.0eu	9525.0eu			
2000-2027		Radio Prague Int'l	5930.0eu	11600.0as					
2000-2030	w	Malawi B'casting Corp.	3380.0do						
2000-2030		Swiss Radio Int'l	13710.0af	13770.0af	15220.0af	17580.0af			
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	
			17725.0af	17745.0af					
2000-2045		Deutsche Welle	11970.0eu						
2000-2045	s	a WRMI Miami FL	9955.0am						
2000-2045		WYFR Okeechobee FL	15695.0eu	17750.0va	17845.0af				
2000-2056		China Radio Int'l	6950.0eu	7170.0af	9440.0af	9535.0eu	11840.0af	11975.0af	
			15500.0af						
2000-2100		BBC World Service	3255.0af	3955.0eu	5975.0pa	6005.0af	6180.0eu	6190.0af	
			6195.0va	7325.0eu	9410.0eu	9630.0af	9740.0pa	11835.0af	
			12095.0sa	15400.0af	17830.0af				
2000-2100		Merlin Network One	3965.0eu	13690.0na	17695.0eu				
2000-2100		R. Nacional de Angola	3355.0	9535.0					
2000-2100		Radio Algiers	11715.1va	11749.9va	15160.0va				
2000-2100		Radio Australia	9500.0as	9580.0va	9660.0va	11880.0va	12080.0va		
2000-2100		Radio Canada Int'l	5995.0eu	11690.0eu	13650.0eu	13670.0eu	15150.0eu	15325.0eu	
			17820.0eu						
2000-2100	mtwhf	Radio Exterior de Espana	9595.0af	15285.0eu					
2000-2100		Voice of Indonesia	15149.8va						
2000-2100		Voice of Russia	9720.0eu	9775.0eu	9820.0eu	11675.0eu	15485.0eu	15735.0eu	
2000-2130		Sri Lanka B'casting Corp.	6005.0as						
2000-2400		Radio New Zealand Int'l	17675.0va						
2000-2400		Radio Vanuatu	3945.0do	4960.0do	7260.0do				
2000-2400		WBCQ Monticello ME	7415.0na						
2000-2400		WHRI Noblesville IN	5745.0na	9495.0sa					
2005-2105		Radio Damascus	9365.0eu	12085.0eu	13610.0eu				
2010-2030		Vatican Radio	9660.0af	11625.0af	13765.0va				
2015-2045	mtwhf	a Voice of Armenia, Yerevan	4810.0eu	9965.0eu					
2025-2045		RAI, Rome	7220.0af	9710.0af	11880.0af				
2030-2035	mtwhf	Radio Latvia	5935.0eu						
2030-2045		Radio Thailand	9655.0eu	9680.0eu	11905.0eu				
2030-2055		Radio Moldova Int'l	7520.0eu						
2030-2055		Voice of Vietnam	5940.0eu	7270.0eu	7400.0eu	9730.0eu	13740.0eu		
2030-2100		AWR Europe, Germany	15560.0af						
2030-2100		BBC English Teaching	5875.0eu	6050.0eu	9635.0eu				
2030-2100	t h	Radio Minsk, Belarus	7210.0va	11960.0va					
2030-2100		Radio Tashkent	4850.0eu	5995.0eu	9540.0eu				
2030-2100		VOA	6035.0af	6095.0me	7375.0af	7415.0af	9760.0af	9770.0af	
			11975.0af	15410.0af	15445.0af	15580.0af	17725.0af	17745.0af	
2030-2100	s	a VOA	4950.0af						
2030-2115		Radio Calro	15375.0af						
2030-2130		Radio Havana Cuba	13720.0eu	13750.0uf					
2030-2130		Voice of Turkey	7170.0as						
2030-2300		Radio Nigeria	3326.0do	4770.0do	4990.0do	6025.0do	6050.0do	9570.0do	

2045-2100		Volce of Africa, Libya	11815.0af	15415.0af	15435.0va				
2045-2100		WYFR Okeechobee FL	15695.0af	17845.0va					
2045-2130	a	WRMI Miami FL	9955.0am						
2045-2230		All India Radio, Delhi	7150.0au	7410.0eu	9650.0eu	9910.0au	9950.0eu	11620.0eu	
			11715.0au						
2100-2115		BBC World Service	3255.0af	3915.0as	3955.0eu	5965.0as	5975.0va	6005.0af	
			6180.0eu	6190.0af	6195.0va	7325.0eu	9410.0eu	9740.0pa	
			11835.0af	11945.0as	12095.0sa	15400.0af			
2100-2115		Cameroon Radio-TV	4850.0va						
2100-2129		Radio Canada Int'l	7235.0eu	11690.0eu	13650.0eu	13670.0eu	15150.0eu	15325.0eu	
			17820.0eu						
2100-2130		China Radio Int'l	6950.0eu	9535.0eu	11975.0af	15500.0af			
2100-2130		Malawi B'casting Corp.	3380.0do						
2100-2130		Radio Australia	7240.0pa	9500.0as	9580.0va	9660.0pa	11880.0va	12080.0va	
			17580.0va	21740.0va					
2100-2130		Radio Budapest	6025.0eu						
2100-2130		Radio Korea	3970.0eu	6480.0eu	15575.0eu				
2100-2130		Radio Yugoslavia	6100.0eu	6185.0eu					
2100-2130		VOA	6035.0af	6040.0me	7375.0af	7415.0af	9535.0af	9705.0as	
			11870.0pa	11975.0af	15185.0as	15410.0af	15445.0af	15580.0af	
			17725.0af	17735.0as					
2100-2145		Deutsche Welle	9670.0as	9765.0as	9875.0af	11865.0af	11915.0as	13780.0as	
			15135.0va						
2100-2156		Radio Pyongyang	4405.0eu	6575.0eu	9335.2am	11710.1am	13760.2am		
2100-2156		Radio Romania Int'l	9570.0eu	11810.0eu	11840.0eu	15180.0eu			
2100-2200		KHBN Palau	9985.0as						
2100-2200		Merlin Network One	13690.0na	17695.0eu					
2100-2200		Radio Bulgaria	9400.0eu	11720.0eu					
2100-2200	s	a Radio Exterior de Espana	9595.0af	15105.0eu					
2100-2200		Radio Iraq Int'l	9685.0ir	11785.0ir					
2100-2200		Radio Japan	6035.0pa	9725.0eu	17825.0na	21610.0pa			
2100-2200		Radio Ukraine Int'l	5905.0eu	6020.0eu	7410.0eu	9550.0na	9560.0eu	12040.0na	
			13590.0eu						
2100-2200		VOA Special English	6095.0me	9760.0eu					
2100-2200		WYFR Okeechobee FL	15215.0eu	15695.0af	17845.0va				
2100-2230		SIBC Solomon Islands	5020.0do	9545.0do					
2110-2210		Radio Damascus	9365.0au	12085.0na	13610.0na				
2115-2130	mtwhf	BBC Caribbean Report	5975.0ca	15390.0ca	17715.0ca				
2115-2130		BBC World Service	3255.0af	3915.0as	3955.0eu	5965.0as	5975.0va	6005.0af	
			6180.0eu	6190.0af	6195.0va	7325.0eu	9410.0eu	9740.0pa	
			11835.0af	11945.0as	12095.0sa	15400.0af			
2115-2200		Radio Cairo	9990.0eu	15375.0af					
2130-2145	t f	BBC Calling Falklands	11680.0sa						
2130-2155		Radio Moldova Int'l	7520.0eu						
2130-2156		China Radio Int'l	6950.0eu	9535.0eu					
2130-2157		Radio Prague Int'l	11600.0as	15545.0af					
2130-2200		BBC World Service	3255.0af	3915.0as	3955.0eu	5965.0as	5975.0va	6005.0af	
			6180.0eu	6190.0af	6195.0va	7325.0eu	9410.0eu	9740.0pa	
			11835.0af	11945.0as	12095.0sa	15400.0af			
2130-2200		KSDA Guam	15550.0as						
2130-2200		ORF Vienna	6155.0eu						
2130-2200	smtwh a	ORF Vienna	5945.0eu	13730.0af					
2130-2200		Radio Australia	7240.0pa	9660.0pa	11880.0va	12080.0va	17580.0va	21740.0va	
2130-2200		Radio Budapest	3975.0eu						
2130-2200		Radio Korea	15575.0eu						
2130-2200		Radio Sweden	6065.0eu	9430.0eu					
2130-2200		Radio Tirana, Albania	7160.0eu	9635.0eu					
2130-2200		Radio Vilnius, Lithuania	1557.0do						
2130-2200		VOA	6040.0me	9535.0af	9705.0as	11870.0pa	15185.0as	17735.0as	
2130-2200	smtwhf	VOA	6035.0af	7375.0af	7415.0af	11975.0af	15410.0af	15445.0af	
			15580.0af	17725.0af					
2130-2225		VOIRI Teheran	11740.0as	13745.0as					
2130-2400		ABC Alice Springs	4835.0do						
2130-2400		ABC Katherine	5025.0do						
2130-2400		ABC Tennant Creek	4910.0do						
2200-2225		RAI, Rome	9675.0as	11900.0as	15240.0as				
2200-2229		Radio Canada Int'l	5960.0na	9755.0na	11705.0as	13670.0am	15305.0am		
2200-2230		Malawi B'casting Corp.	3380.0do						
2200-2230		Radio Mexico Int'l	5984.9am	9704.9am					
2200-2230	mtwhf	VOA	6035.0af	7215.0as	7340.0af	7375.0af	7415.0af	9705.0as	
			9770.0as	11760.0as	11975.0af	15185.0as	15290.0as	15305.0as	
			17735.0as	17820.0as					
2200-2230	a	WRMI Miami FL	9955.0am						
2200-2245		Radio Cairo	9990.0eu						
2200-2245		WYFR Okeechobee FL	11740.0na	15215.0af	17845.0va				
2200-2256		China Radio Int'l	9880.0eu						
2200-2300		BBC World Service	5965.0as	5975.0am	6175.0am	6195.0va	7110.0as	9590.0am	
			9660.0as	9890.0as	9915.0sa	11835.0af	11955.0as	12080.0pa	
			12095.0sa	15400.0af					
2200-2300		Radio Australia	17580.0va	17795.0va	21740.0va				
2200-2300		Radio Taipei Int'l	11565.0eu	15600.0eu					
2200-2300		Voice of Turkey	7190.0eu	13640.0va					
2200-2400		Caribbean Beacon	6090.0am						
2200-2400		KHBN Palau	9955.0as	9965.0as	9985.0as				

2200-2400	Merlin Network One	3985.0eu	9850.0as	11985.0na					
2200-2400	Nat'l BC, Papua NG	3925.0do	4890.0do	9520.0do	9675.0do	11880.0do			
2200-2400	RTM Radio 4, Malaysia	7295.0do							
2200-2400	Voice of Guyana	3289.8do	5949.4do						
2200-2400	WEWN Birmingham AL	9385.0na	9975.0eu	13615.0na					
2200-2400	WSHB Cypress Creek SC	13770.0eu	15285.0sa						
2200-2400	WWCR Nashville TN	5070.0na	7435.0na	9475.0na	13845.0na				
2229-2300	Radio Canada Int'l	5960.0na	9755.0na	13670.0na					
2230-2256	R. Vlaanderen Int'l	15565.0na							
2230-2257	Radio Prague Int'l	11600.0na	15545.0na						
2230-2330	Radio Havana Cuba	9550.0am							
2230-2400 S	a SIBC Solomon Islands	5020.0do							
2230-2400	a SIBC Solomon Islands	9545.0do							
2230-2400	VOA	7215.0as	9705.0as	9770.0as	11760.0as	15185.0as	15290.0as		
		15305.0as	17735.0as	17820.0as					
2240-2250	Voice of Greece	9425.0au	11645.0au						
2245-2305	Vatican Radio	9600.0as	11830.0as						
2245-2345	WYFR Okeechobee FL	11740.0na							
2245-2400	All India Radio, Delhi	7410.0as	9705.0as	9950.0as	11620.0as	13625.0as			
2300-2330	BBC World Service	3915.0as	5965.0as	5975.0am	6035.0as	6175.0am	6195.0as		
		7110.0as	9590.0am	9915.0s	11945.0as	11955.0as	12095.0as		
		15280.0as							
2300-2330	Radio Canada Int'l	5960.0na	9755.0na	11895.0am	13670.0am	15305.0am			
2300-2330	Radio Mexico Int'l	5984.9am	9704.9am						
2300-2345	Deutsche Welle	9715.0as	9815.0as	11965.0as					
2300-2356	Radio Pyongyang	11335.1am	11710.1am	13760.3am	15130.1am				
2300-2356	Radio Romania Int'l	9570.0eu	11810.0eu	11830.0na	15105.0na				
2300-2400 S	Good News World Radio	9405.0sa							
2300-2400	Radio Australia	9660.0pa	12080.0va	17580.0va	17795.0va	21740.0va			
2300-2400	Radio Bulgaria	9400.0na	11700.0na						
2300-2400	Radio Cairo	9900.0am							
2300-2400	SBC Radio 1, Singapore	6150.0do							
2300-2400	Voice of Hope, Lebanon	11530.0me							
2300-2400	WGTX McCaysville GA	5085.0am	6890.0uf						
2300-2400	WRNO New Orleans LA	7355.0na							
2310-2320	Kyrgyz Radio, Bishkek	4010.0eu	4050.0eu						
2330-0125	Radio Netherlands	6165.0na	9845.0na						
2330-2345	BBC English Teaching	3915.0as	5875.0as						
2330-2345	BBC World Service	5965.0as	5975.0am	6035.0as	6175.0am	6195.0as	7110.0as		
		9590.0am	9915.0sa	11945.0as	11955.0as	12095.0sa	15280.0as		
2330-2345	Voice of Africa, Libya	11815.0af	15415.0af	15435.0va					
2330-2355	Voice of Vietnam	5940.0af	7270.0af	7400.0af	9730.0af	13740.0af	15110.0af		
2330-2400	Radio Canada Int'l	5960.0na	9755.0na	13670.0am					
2330-2400 S	a Radio Canada Int'l	11895.0am	15305.0am						
2340-2350	Voice of Greece	7450.0am	9375.0am	9420.0am	11645.0am	12105.0am			
2345-2400	BBC World Service	5965.0as	5975.0am	6035.0as	6175.0am	6195.0as	7110.0as		
		9590.0am	9915.0sa	11945.0as	11955.0as	12095.0as	15280.0as		
2345-2400 smtwh	BBC World Service	3915.0as							
24 hr	R. MINURCA, Cen. Af. Rep	5900.0	9900.0						
24hr	AFRTS	4278.5uf	6458.5uf	12689.5uf					
24hr	CFCX Montreal PQ	6005.0do							
24hr	CFRX Toronto ON	6070.0do							
24hr	CFVP Calgary AB	6030.0do							
24hr	CHNX Halifax NS	6130.0do							
24hr	CKZN Saint John's NL	6160.0do							
24hr	CKZU Vancouver BC	6160.0do							
24hr	WJCR Upton KY	7490.0va	13595.0as						
Key: s - Sunday am - Americas af - Africa do - Domestic									
m - Monday na - North America me - Middle East va - Various									
t - Tuesday ca - Central America as - Asia oc - Occasional									
w - Wednesday sa - South America pa - Pacific fr - Irregular									
h - Thursday eu - Europe au - Australia									
f - Friday lf - Lower Sideband									
a - Saturday uf - Upper Sideband									

[Ed. note: Mark Fine's English Language Schedules are available in electronic format, updated weekly, via the World Wide Web, for \$35/year, from Mark's web site at <http://www.erols.com/fineware/>. Mark also sells receiver control software for Windows for the Drake R8 series, JRC NRD-535, Kenwood R-5000, and Lowe HF-150.]

On the Short Waves, 1923-1945

Broadcast Listening in the Pioneer Days of Radio

by Jerome S. Berg

As radio developed in the early 1920s, the focus for most people was the AM band and early domestic broadcasting stations like KDKA. However, as knowledge about the capabilities of various frequency ranges increased, another broadcast method developed and became popular among many early enthusiasts. It was shortwave broadcasting. Unlike amateur radio, where hobbyists operate their own stations and talk with one another over the air, shortwave broadcasting is the transmission of news and entertainment over great distances via shortwave for the listening public. Such long-distance ("DX") listening was an exciting aspect of the new medium of broadcasting.

The development of early shortwave broadcasting has received comparatively little attention. This book addresses its development in general, and the growth of long-distance radio listening in North America from the perspectives of both those who tuned the shortwave bands for the programming and those who enjoyed the thrill of the hunt.

With its many references to the popular radio literature of the 1920s, 30s and 40s, the book conveys a flavor of the mystery and magic of shortwave's early years. The author begins with a review of broadcasting's roots, and then covers the story of shortwave broadcasting from its beginning through World War II. Among the topics addressed are:

- early personalities in the development of radio
- the radio acts of 1912 and 1927
- reception reporting, QSLs, applause cards and EKKO stamps
- early radio broadcasting
- frequency utilization and interference
- the "HCL" (broadcast listener)
- early shortwave literature
- receivers, antennae and set building
- shortwave propaganda
- clubs and other shortwave organizing

- all-wave, communications and "hi-fi" shortwave sets
- early shortwave broadcasters in the U.S. and overseas
- the amateurs
- the birth of the Voice of America
- shortwave "FM"
- government and private monitoring
- broadcasting during the war
- clandestine radio
- listening in wartime
- shortwave broadcast traitors

The book includes endnotes, a list of additional readings and an index. It is also rich in illustrations from shortwave's early days (including many QSLs).

Jerome S. Berg has been active in shortwave radio circles for 40 years as listener, editor and preservationist. He is an attorney, and lives in Lexington, Massachusetts.

280pp. \$42.50 illustrated casebound (7 x 10) ISBN 0-7864-0506-6 171 photos and illustrations, notes, bibliog., index 1999

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Radio 510 International is a non-commercial organisation (so called non-profit) and is responsible for playing free radio programs via IRRS in Milan, Italy. For a reduced rate, IRRS airs free radio programs every Saturday for a total of 6 hours. Every free radio producer who relays via Radio 510 International is responsible for his or her program. All programs are carefully checked and do not contain any material that might offend the listener.

WINTER SCHEDULE 1999

DAY	UTC	KHZ	STATION	TARGET AREA
SATURDAY	08.30-10.30	7120	VIA IRRS	EUROPE
SATURDAY	12.00-13.00	7120	VIA IRRS	EUROPE
SATURDAY	18.30-20.30	3985	VIA IRRS	EUROPE
SATURDAY	21.30-22.30	3985	VIA IRRS	EUROPE

While I'm here at this festival, I'll be taking plenty of photos. Most of these will appear in the next coming weeks on my homepage. Have a look and you just might see yourself!

Coming up via WRMI in April, you'll be able to hear a special report on the SWL Fest '99. I'll be going around with my microphone annoying people, so avoid me!! Check out homepage for times and frequencies for this show. Don't forget to send a reception report if you do manage to hear us.

A big "Thank You" to all at the SWL Fest for making life more exciting.



Radio 510 International, P.O.Box 510, 4010 Basel, Switzerland.

Website: www.radio510.org

Email: stevie@radio510.org

Hi and a warm welcome to Radio 510 International. We are a Swiss legal relay service blasting Europe to pieces every weekend. Since 1994, we have been relaying free radio programs via IRRS in Milan, Italy. Our main target area is Europe, but we have been heard as far away as Australia, New Zealand and the USA. Our format is chat, listeners' letters and requests. Our member stations come from Germany, Switzerland, France and the USA to name a few. English and German are the main languages used.

History



- ☞ Started in 1994 by Peter Galliker as Shortwave Radio Switzerland.
- ☞ DJ Stevie and Yves join SWRS in late 1994 to complete the team.
- ☞ Visit to EDXC '95 in Denmark. This gave us a huge boost.
- ☞ 1996 was very busy. Plenty of stations show interest. Schedule full for the year. Visit to Merchweiler DX Camp in Germany.
- ☞ Peter Galliker leaves SWRS in 1997. Stevie and Yves stay on. Another visit to the Mercweiler DX Camp.
- ☞ 1998 starts off bad. No stations show interest. Yves leaves in April and Stevie stays on to run it all alone. Change of station name to Radio 510 International. Hard work and heavy advertising bring back the stations plus new ones. Schedule jumps to 6 hours!!
- ☞ Visit to SWL Fest '98. Chocolate sales in the USA drop!

want more →

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All s/h charges for the following items are included unless otherwise noted. Write for shipping and handling costs for orders shipped outside N. America. Please note the new proprietor and address.

Publications

<i>Transmitter Documentation Project (TDP)</i>	\$10.00 US
A result of 10 years of research by DXer Ludo Maes, the TDP presents 80 pages of info listing SW broadcast tx'ers worldwide arranged by country with station name, tx'er site, geographical coordinates, callsign and more	\$13.00 worldwide
<i>Shortwave Listening Guidebook</i>	\$19.95
by Harry Helms. Covers equipment, antennas, propagation, station profiles, utilities, clandestines, QSL'ing, etc. 315 pages.	+2.00 s/h
<i>Secrets of Successful QSL'ing</i>	\$12.95
by Gerry Dexter. The complete guide to Reception Reports and QSL collecting. Going out of print! Get it while you can. 125 pages.	+1.00 s/h
<i>Limited Space Antenna Solutions</i>	\$13.00
by Frank P. Hughes. Covers the random wire, dipole, vertical, outdoor, loft and indoor antennas, antenna tuners, and grounds.	+1.00 s/h
<i>Inside Your Shortwave Radio</i>	\$13.95
by Ted Benson. Companion to your receiver's instruction manual, filling in what your manual leaves unclear.	+2.00 s/h
<i>NASWA Country List and Awards Program Booklet</i>	\$3.00 PP US
	\$5.00 elsewhere
<i>The System</i>	\$2.00
Masters for Log Book, QSL Reports, Program Notes, and QSL Log.	
<i>Propagation Predictor</i>	\$3.00
Divides the year into 27-day segments for tracking solar patterns.	
<i>Spectrum Log</i>	\$8.50
Covers Tropical and International bands.	
<i>NASWA Reprints Catalog</i>	\$3.00
A catalog of 800+ pages of info available from past NASWA issues.	
<i>Joe Carr's Receiving Antenna Handbook (Currently out of stock)</i>	\$19.95
A complete guide for high performance antennas from longwave all the way to the upper end of the shortwave spectrum.	+2.00 s/h
<i>QSL Signers</i>	\$3.00 PP NA
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