

The ~~NASA~~ Journal

VOLUME XL NUMBER 7

JULY 2000



North American Shortwave Association — America's Shortwave Broadcast Club

Universal Radio - Quality quipment since 1942.

RADIO BOOKS

● **Worldwide Shortwave Listening Guide 2000-01**
Here is your hour-by-hour guide to actual programs on shortwave (those targeted to the Americas are in bold type). Plus there is a special section organized by topic (News, Science, Sports, Art & Culture, Business, etc.). Easy to use and up-to-date.
Printed in June! #0023 \$15.95



- **Pirate Radio** By A. Yoder With audio CD!
Here is the incredible saga of America's underground illegal broadcasters (with audio CD). 326 pgs. #3038 \$24.95
- **Discover DX'ing!** By J. Zondio *Second Edition*
Hear distant AM, FM and TV stations. #0019 \$5.95
- **Shortwave Listening Guide** By Helms *Second Ed.*
Here is understandable information on: selecting and operating a shortwave receiver, simple antennas, time stations, pirates and much more. 323 pgs. #2984 \$19.95
- **Communications Receivers - The Vacuum Tube Era**
By R.S. Moore *Fourth Edition*
Key facts, figures and photos for shortwave receivers of the *Golden Era* 1932-1981. 141 Pages. #2945 \$19.95
- **Buying A Used Shortwave Receiver** *Fourth Ed.*
Photos, facts, figures and values for the 100 most sought after SW radios of the last 20 years. #0444 \$5.95

JRC

NRD-545
DSP



The new Japan Radio Co. NRD-545 DSP is the most sophisticated receiver ever developed for the hobby market. Please call to receive full technical details and pricing.

JRC

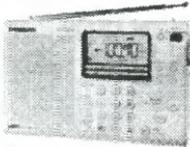
NRD-345



Owning a Japan Radio receiver has never been more affordable. The attractive and compact NRD-345 delivers hour-after-hour of listening pleasure with high dynamic range and synchronous AM detection to help tame fading. Dual IF filters are supplied, with a third optional position available. 100 Memories, AGC, dual VFOs, Attenuator, clock timer are also featured. Please request a free color brochure for the full story. Order #0345 \$599.95

SANGEAN ATS-505

The Sangean ATS-505 covers long wave 153-279 kHz, AM and, shortwave solid from 1711-29999 kHz plus FM. The backlit display can show either the frequency or the time (12/24 format). Tune via the tuning knob, Up-Down buttons, automatic tuning, keypad entry or from the 45 memories. The ATS-505 has a Clarity knob **single sideband**. You may press in the tuning knob to select between normal and fine tuning (1 or 10 kHz on AM/LW and 1 or 5 kHz on SW). Other features include: FM stereo to headphone jack, 9/10 kHz AM step, beep on/off, dial lock, stereo-mono switch, alarm by radio or buzzer, auto-scan, auto memory, sleep-timer, tune LED, stereo-mono switch, tilt-stand, ext. antenna input and 6VDC jack. With: case and earphones. Titanium matte finish. 8.5"x5.3"x1.6" Requires four AA cells or #1665 ADP-808 AC adapter (both optional). Order #0505 \$129.95



The American made Universal M-8000v7.5 offers the professional or hobbyist sophisticated capability. Modes include: CW, Baudot, FAX, SITOR, ARO-M2/M4, ARO-E/E3, ARO-90, ARO-S, SWED-ARO, FEC-A, FEC-S, POL-ARO, GMDS, ASCII, Packet, Pactor, Piccolo, VFT and ACARS. The color VGA output includes a spectral display and simulated scope. Printer and monitor are optional. #0775 \$1299.00

UNIVERSAL M-8000v7.5



UNIVERSAL M-450v1.5

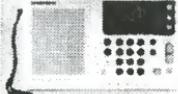
The self-contained Universal M-450v1.5 decodes: RTTY, SITOR, FEC-A, ASCII, SWED-ARO and Weather FAX (to the printer port) plus the ACARS aviation teletype mode. DTMF, CTCSS and DCS is also supported. Features a big two-line, 20 character LCD and parallel port. The M-450v1.5 operates from 12 VDC or with the supplied AC adapter. No computer or monitor is required. Now with serial port. Made in USA. #0450 \$399.95



SANGEAN DT-300VW

This AM, FM, FM stereo, VHF TV audio and the weather band radio fits in your pocket! Features include: 36 memories, auto-shutoff, LED tuning indicator, built-in speaker, clock, alarm and sleep timer, earphone jack and lightweight stereo earbuds. Requires two AAA cells (not supplied). Only 2.35" x 3.9" x .75". 3.4 oz.
DT-300VW List \$99.95 Order #3262 \$69.95

GRUNDIG



The Grundig YB-400PE has a striking titanium colored case and includes a wind-up antenna, case, SW Guide and AC adapter. You get digital readout, keypad, 40 memories, SSB, two bandwidths, clock and ant. jack! Buy it from Universal and get a FREE Lucite stand! #0400 \$199.95

SANGEAN



It's all in the Sangean ATS-606AP! You get continuous coverage of LW, AM and SW (153-30000 kHz) plus FM stereo. Enjoy 54 memories, scanning, dual clock timer, 1 kHz LCD, dual conversion circuit, dial light, dial lock, keypad entry and local DX switch. Includes multivoltage AC adapter and wind-up antenna! #479.95 \$3219 \$99.99

www.universal-radio.com

- Informative On-line Catalog
- Used Equipment Listing
- Glenn Hauser's Continent of Media
- Glenn Hauser's Shortwave DX Report
- Favorite Tube Type SW Receivers
- Specials and Close Outs
- Customer Caters & Staff Caters
- Don Schimmel's Radio Intrigue
- Joe Carr's Tech Notes
- Modern SW Receiver Survey

www.DXing.com

DRAKE

SW1

Made in America



- Full Coverage
- LW/MW/SW
- Digital Readout
- Keypad Entry
- 32 Memories
- RF Gain



The Drake SW1 sets the stage for worldwide shortwave listening with ease, simplicity and clarity. Coverage from 100 through 30000 kHz provides solid coverage of longwave, medium wave and shortwave in the AM mode (no SSB). This makes it an ideal broadcast receiver for the desk or bed-stand. Tuning is a snap via the keypad, manual tuning knob, Up/Down buttons or 32 memories. The huge LED display features 1 kHz readout. Antenna input is via a 50 ohm terminal or SO-239 jack. Operates from 12 VDC or supplied AC adapter. \$199.99

universal
radio inc.

Quality Communications
Equipment Since 1942

Universal Radio, Inc.

6830 Americana Pkwy.
Reynoldsburg, Ohio
43068-4113 U.S.A.
800 431-3939 Orders & Prices
614 866-4267 Information
614 866-2339 FAX
dx@universal-radio.com
www.universal-radio.com

Visa, Mastercard or Discover card.
Prices and specifications subject to change.



The Universal Radio Catalog covers everything for the shortwave, amateur and scanner enthusiasts. With informative photos and full descriptions. Request your free copy!

1 800 431-3939

www.universal-radio.com

U.S.A. orders under \$100 ship for \$4.95. Under \$500 ship for \$9.95.

NASWA Notes

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

I would like to thank **Fred Kohlbrenner** for undertaking the coordination role for the club's planned DXpedition. Unfortunately, we only had cash from one new participant so we had to scratch the planned NASWA DXpedition. Maybe we can revive it in the future but for now the club sponsored DXpedition has been cancelled with no immediate plans to revive it. The biggest concern expressed by members appeared to be making a payment commitment many months prior to the event. Unfortunately, there was no way around this situation because the cabins at the park do go fast and require full payment at the time of the reservation. Someone has to pay for the cabin at the time of the reservations, why not each of the participants? Experience from prior DXpeditions tells us that committed folks become uncommitted folks real fast when they have no skin in the game, i.e. paid their fair share of the cabin. When folks drop out unexpectedly without having paid, it just raises the costs for the rest of the gang. Also, it tends to block out others that would want to participate, and gladly pay to do so, but there was no room. That doesn't make for a happy situation. Consequently, we have always insisted as a matter of courtesy that serious DXpeditioners make an up front investment like everyone else so others don't get stuck. Perhaps another adventurous member would like to attempt to organize a DXpedition where more flexible arrangements can be made?

The Danish Shortwave Club International has just issued its latest edition of the *Domestic Broadcasting Survey* ("DBS-2"), formerly known as the Tropical Band Survey. The 2000 edition of the DBS-2 contains 44 A4

sized pages covering all domestic shortwave radio broadcasting in the 2,200 to 22,000 kHz frequency range and is edited by well-known tropical band DXer Anker Petersen. The DBS is legendary in publishing some of the finest DXing references resources throughout the world. The 2000 DBS continues this fine tradition. The paper edition is available for US\$10.00 or 14 International Reply Coupons ("IRCS"). For the first time the club is making available a disc edition for US\$5.00 or 7 IRCS. Orders can be placed with DBS/CI Treasurer Bent Nielsen Egekrogen 14, DK-3500 Vaerloese, Denmark. Watch the *Shortwave Center* for a review of the DBS-2.

Bill Bergadano <ka2emz@cybercomm.net>, P. O. Box 484, Colts Neck, NJ 07722, our Manager of the Company Store, is always looking to do some business with club members. Watch the Company Store ads, which appear monthly in the Journal, and place your orders for merchandise. If you have any suggestions for the Company Store, Bill will be more than happy to do what he can.

Finally, is it too early to begin talking about the NASWA sponsored **14th annual Winter SWL Festival**, which is scheduled for March 9 and 10, 2001 in beautiful Kulpville, PA? Okay, maybe I have mentioned it once or twice already but it really is never too early to begin planning to attend this club sponsored event. Festmeisters **Richard Cuff** and **John Figliozzi** along with a helpful assortment of elves look forward to seeing you next March in Kulpville. Be there!

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



Our Motto is - "Unity and Friendship"

Calendar Of Events

- Jul 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.
- Jul 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/>>.
- Aug'00 DX Meeting.** The **6th National Mexican DX Meeting** will be held in Oaxaca, Mexico from August 4-6, 2000. For details contact the organizers at Miraizos@gnp.com.mx.
- Aug 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
- Aug 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>>
- Aug'00 Convention.** The **International Radio Club of America ("IRCA")** will its annual convention at the Homestead Quality Inn in Billings, MT from August 25-27, 2000. The \$35.00 registration fee made out to "John C. Johnson" can be sent to John and Nancy Johnson, 265 Waterton Way, Billings, MT 59102-7755. Check out the convention web site at: <http://pages.prodigy.net/john_johnson/irca2000>.
- Sep'00 Contest. AWR Contest.** Number of different QSL stamps in the listener's collection. More details to follow.
- Oct'00 Conference.** The annual **EDXC Conference** will be held in Barcelona, Spain from October 12-15, 2000 (temporary date until further notice). Details to follow.
- Mar 9-10 Convention.** The **14th Annual Winter SWL Festival**, sponsored by NASWA, will be held in Kulpsville, Pennsylvania (Exit 31 on the Northeast Extension of the Pennsylvania Turnpike). Richard Cuff and John Figliozzi co-chair the organizational committee. It's never too early to begin planning. See you there!
- Mar '01 Contest. 2001 North American DX Championships.** For further information you can send a self-addressed stamped envelope to 2001 NADXC, c/o Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606. Rules will also be posted eventually at <<http://www.anarc.org/>>, and are published in the Awards column in the Journal.

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).

Contribute!

Send your loggings and QSL information off to our Distributing Editor, **Fred Kohlbrenner** (**New address:** 214 West Marshall Road, Lansdowne, PA 19050). 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.

N4S16b

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

Musings

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

Walt Fair <wfair@mars.comportco.com>

In response to Bill Smith's musing, I agree that it would be nice to have the NASWA member list available. Back in the mid-1960's we had a group of local DXers in Houston, most of who came together because of being in either NASWA or NRC. We've all lost touch and long since scattered to who knows where, unfortunately. Like Bill, I also still have a copy of a real old membership list filed away.

At any rate, if the list is available in any sort of electronic format, I can put it on-line in fairly short order. Of course, I'm not sure everyone would want his or her addresses published and available so readily, so this is just an offer.

I also agree with Bill that the Loudenboomer reports would be nice to see again, too.

Take care and good DX, Walt

Scott Gentry, 21208 Main St., Matteson, IL 60443

I guess I'll tell you a little bit about myself. I have been DXing on shortwave since Xmas of 1973 with the gift of a multiband radio (I can't seem to remember the brand name—but it was low end). Since then I have possessed an Icom R-70 and an Icom IC-735 (for listening only) which I have sold and am now looking for another tabletop set. I currently use a Radio Shack DX-398 and use it most of the time in my car, while I deliver pizza (which actually pays really well too). For an antenna, I use a Radio Shack portable amplified SW antenna running to a magnetic mount scanner antenna on the center of the roof of my '91 Ford Tempo. It's a cheap and simple set up that really does a nice job. I have heard all kinds of worldband, Ute's, hams, and even weak pirates on 6,955. I joined up with CIBX at this year's SWL Fest; three weeks later I joined NASWA, and in May the World DX Club. I also belong to the ACE and once was an ACE publisher with another Illinois DXer—Yoland Lewis. We published ACE from August 1995 to April 1997.

I am really looking forward to more issues. I'll be watching the mail and scanning the dials.

73 from Scott

John Mosman <john445@sillymoose.com> (WPE9GIZ), Fitchburg, WI

I was a member from in the 70's until around 1992 when some life changing situations brought me out of the hobby. Yesterday I received my first copy of *FRENDX* in about seven or eight years. What fun it was to sit back and read through it again after all this time. The scary thing is one of the covers on the May 2000 issue is from the February, 1977 issue—and I remember it very well.

I recently pulled my ICOM R71-A out of the box. The radio has been sitting idle for the same number of years. Of course it did not work and I sent it out to a reputable dealer who got it working. We then moved to a house a half-mile from a local am transmitting farm and the 71-a is overwhelmed with one station in particular. The signal is so strong I can hear it in the background on my cordless phone. Others have told me the R71-A should be able to deal with those signals. I am thinking about sending it back to ICOM for them to look it over. Any advice is appreciated.

Anyway, reading the May issue and seeing names of people I recognize from the past is so wonderful. This is just a note to say thanks for many years of hard work and enjoyment FRENDX has provided. And best wishes many years more. Keep up the good work!

Marlin A. Field, 128 Oak Street, Hillsdale, MI 49242-1345

I enjoyed "Tropical Band Radio in the Center of South America" in the May issue. I found the statement by Sr. Lucio Montan Escobar, owner of Radio Mamore—that he hadn't had any reports from the United States—interesting since I have a letter from him dated in 1979. The letter confirmed my reception of the station when it was on 4600 kHz, about to move he wrote to 4750 kHz. I never heard the station there; neither have I heard the station on the current frequency of 4682.4 kHz.

Robert E. Montgomery <RMonty3@worldnet.att.net>

A hardy thanks to Mr. Mark Fine for a fantastic piece of software for those of us that still like listening to shortwave programs the old fashion way, via a shortwave receiver and not the internet. A number of control software programs for later version shortwave receivers including the Ten Tec RX320 is part of the package. NASWA is lucky to have someone that puts so much into the hobby.

73-Bob Montgomery

FRENDX: Twenty Five Years Ago....

With *QSL Report* missing in the March, May, June and July issues of *Frendx*, a decision was made to move Larry Yamron from *Log Report B* to the editors chair of *QSL Report* for the September edition of *Frendx*. Mac Leonhardt asked members if they had an interest in membership certificates. Spanish, Portuguese and French language report forms were available from headquarters in Liberty, Indiana for 10 cents return postage. The *Shortwave Center* featured an article by Bob Padula as a "Tourist In Indonesia" while Marlin Field wrote about collecting shortwave radio station pennants. Glenn Hauser's first *Listeners Notebook* column appeared. Kevin Szot pinched hit for Bob Hill as *Log Report A* editor while Hill prepared for the ARRL Field Day contest.

This month's cover was first used on the November 1981 FRENDX.

Easy Listening

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

New Edition of *Worldwide Shortwave Listening Guide* now available!

A significant source of frustration in shortwave listening has now been eliminated: the 2000-2001 edition of John Figliozzi's *Worldwide Shortwave Listening Guide* is now available! You no longer need to be frustrated by the imbecilic policies of Radio Shack, who refused to proactively stock the prior edition of the guide, as John has arranged for the *Guide* to be sold directly by the printer, as well as by leading hobby vendors. Universal Radio, C. Crane, and Grove Enterprises, and the book's printer will sell this new edition; Crane, Universal, and Grove all have the book in their Worldwide Web catalogs.

The new edition retains key features of the prior two editions, including:

- § Spiral binder, so the book can lay flat
- § Boldface highlighting for programming targeted to the Americas
- § Use of letter codes for 36 different program subject areas
- § Frequency listings
- § Separate, segregated listings for 10 popular program subject areas

John has also provided an expanded listing of shortwave broadcasters who also offer live or on-demand webcasts, along with helpful information on downloading and configuring software for webcast listening.

By the numbers: You'll find more than 7,500 listings, 75 broadcasters, and 112 pages of information not readily available elsewhere.

Prior editions of the guide included a "+/-" symbol to indicate whether a broadcaster shifted UTC broadcast times when local times seasonally changed; unfortunately, broadcasters have become unpredictable in their use of seasonal time shifting, and the **BBC** hasn't publicly indicated which streams will shift in the new schedule. The **BBC** has indicated, though, that some streams will shift by one hour during seasonal time changes. All this uncertainty required John to omit the time shift symbol from the listings in this edition, and John requests readers let him know if they would rather see the time shift information restored in future editions.

If you've owned either of the prior two editions of the *Guide*, you'll feel totally at home with this new version. The look, feel, and format of the guide haven't changed; only the content has been updated. While the NASWA website has a portion of this schedule information available, this is one instance where the printed version beats the web version hands down. The spiral binding and the listings by time and genre make for a very user-friendly book.

In summary, this is a necessary reference for anyone interested in being a discriminating listener, choosing what he or she wishes to listen to, and when. The *Worldwide Shortwave Listening Guide* will quickly pay for itself in enhanced enjoyment of the shortwave hobby.

Ordering information:

Direct from the Printer using MasterCard or Visa by Toll Free Phone Line in the US and Canada: 1 (877) 724-7274

Direct from the printer by Mail Order by sending check or money order to:

Shortwave Listening Guide
7101 N. Ridgeway Ave.
Lincolnwood, IL 60712
USA

Cost: \$15.95, plus \$3.95 for Shipping and Handling: (total \$19.90) for Surface Mail, or choose Priority Mail Shipping for \$ 6.95 (total \$22.90), especially recommended for purchasers outside North America. Allow 14-21 days for delivery.

Contact information for shortwave hobby dealers:

C. Crane Company, Inc., 1001 Main Street, Fortuna, CA 95540-2008 USA; Telephone 1-800-522-8863 or (707) 725-9000, e-mail: ccraneco@aol.com, web: <http://www.ccrane.com>

Grove Enterprises, 7540 Highway 64 West, Brasstown, NC 28902 USA; Telephone (800) 438-8155 or (828) 837-9200, fax: (828) 837-2216, e-mail: order@grove-ent.com, web: <http://www.grove-ent.com/order.html>

Universal Radio, Inc., 6830 Americana Pkwy., Reynoldsburg, OH 43068-4113 USA; Telephone +1 800 431-3939 (Orders & Prices), 1 614 866-4267 (Technical Information), 1 614 866-2339 (24-hour FAX); e-mail: dx@universal-radio.com; web: <http://www.universal-radio.com>

Please note that this 2000-01 edition is not available from Radio Shack.

New VOA Programs

Zimbabwe has been visible in the news recently, and the VOA has introduced a new program, **Zimbabwe Forum**, that looks at the current election campaign and the future for the country. While the elections themselves will be over by the time you receive the journal, the press announcement states the program will continue after the elections. The program airs at 1730 UTC (daily, I think) and is available on the Internet for on-demand listening.

Women in Business is a monthly feature focusing on issues relating to women in

business and entrepreneurial positions. Sarah Long, a 14-year VOA veteran, hosts the program. Even though the program has an entrepreneurial bent, promotional information suggests the program is of interest to women working for someone else, as well as a business owner. Shortwave listening is predominantly a male pursuit; this might be the opportunity you need to interest your wife or girlfriend in the hobby! **Women in Business** airs the second Sunday of each month at 0333 UTC and repeated every four hours thereafter. The program is archived for on-demand listening.

The Sunday 0333 timeslot is home to **Kaleidoscope**, VOA's program on American arts and culture, on the other Sundays of the month. Susan Logue visits museums, theatres, and concert halls, attends festivals, and profiles some of the people who have shaped American culture and continue to shape it today. **Kaleidoscope** is also archived for on-demand listening.

Our World, VOA's science and technology program, airs in the Saturday 0333 timeslot. The program has a similar feel to **Communications World**, with a mix of news items and longer interviews and features. As is the case with **CW**, the program has a leisurely pace, and the host, Rob Sivak, keeps his English simply structured, minimizing the use of American idioms. Archived editions of the program are also available. Sivak effectively includes studio guests and background music to add some aural diversity to the program.

Encounter is a two-person debate of the week's issues in the news, hailed as the "Fastest 25 minutes in International Radio". **Encounter**, hosted by Neal Levon, airs at 0033 Sundays and every four hours thereafter. It's also available on the Internet for on-demand listening; though the program's URL link on the NewsNow webpage is hard to find. The VOA's webmaster highlighted this program used a "cute" scrolling Java applet that's more trouble than it's worth.

Issues in the News is a roundtable of journalists reviewing the week's news; Fred Barnes of the *Weekly Standard* newspaper is shown as the host, but a recently sampled edition had a different host from the *Chicago Tribune*. Interestingly, one pundit in this edition had unflattering things to say about the effectiveness of President Clinton's foreign policy. *Issues in the News* airs Sundays 0133 and every four hours thereafter.

I'd be remiss if I didn't mention *Communications World* in this list; while it certainly isn't new, it's a part of these longer-form features in the NewsNow program stream, airing at 0133 Saturdays and repeated every four hours. Check the *Communications World* website, <http://www.trsc.com/cw/>, for other short-wave airings on VOA via USB and LSB, and via WWCR and WBCQ.

These programs inject much-needed variety into the VOA's schedule, as there's a limit to the amount of *News Now* one can stomach. If you live outside the USA, and enjoy these programs, I encourage you to contact the program hosts to register your support. Hopefully positive reinforcement will motivate the VOA to continue to add variety to its programming. Many of these features have an Internet website of archived audio files and text transcripts, and can be reached off the VOA's NewsNow homepage <http://www.voa.gov/newsnow/>. E-mail links to the program producers are also provided, or you can contact any VOA producer by snail mail at the Voice of America, Washington, DC 20237, USA.

While these programs can all be found on the NewsNow web page, this location isn't intuitively obvious if you aren't a regular News Now listener, and instead are browsing the website for general information. The novelty of the scrolling highlights applet where you will find these programs listed would be lost if you have a text-only Internet connection.

Radio Australia: Watch This Space

The

tion, parent of *Radio Australia*, is less than three months away from offering an extensive selection of on-demand programming from its various programming services via the Internet. The enabling software for this project is currently in beta test, per an E-mail from ABC Online. Much of the content airing on Radio Australia should be available, including current affairs, sports, regional, rural, international, youth and the arts.

Also, Radio Australia now is streaming five additional language services in a second live programming stream: Vietnamese, Khmer, Tok Pisin, Standard Chinese, and Indonesian. These services air for 10½ hours per day; the balance of this second stream is the current English language service. The URL for all live and Radio Australia-produced on-demand programming is http://www.abc.net.au/ra/hear/hear_us_internet.htm.

BBC World Service Highlights

Who runs the world?

In July the *BBC World Service* looks at the complex web of influences and interests that underlie the decisions affecting us all and asks who really pulls the strings in the year 2000. The *Who Runs The World* theme is taken up by various World Service programs including sport, religion, science and music.

Challenging the Global Order is a four-part series of 30-minute interviews airing Saturdays 0130 and Tuesdays 1500, featuring four distinguished speakers from various "think tanks". This program is part of the *Essential Guide* series.

Health Matters picks up the theme on Tuesday, July 25th, 0130 UTC, as it looks into the workings of the World Health Organization. The WHO has a new head,

and is trying to be more scientifically based, rather than bureaucratically based. The program is repeated Wednesday July 26th, 1505.

Discovery has a companion program on Saturday, July 30th, 0105 UTC, repeated Tuesday, August 1st, 1505. Richard Black unravels the internal workings of The Codex Alimentarius, a Rome-based organization responsible for international agreements in food safety.

Sports International considers the governing bodies of international soccer and the Olympics in its take on the **Who Runs the World** theme in a three-part series beginning Thursdays, July 13th at 0105, repeated Fridays 1505.

Focus on Faith includes a debate on key religious world leaders on Wednesday, July 26th, 0130, repeated Thursday 1530.

Drama and the Arts

Saturdays, 2300, and Mondays, 0530: **Play of the Week** highlights:

July 8th/10th: **Vox Bopp** is a wry and lyrical tribute to the Hale-Bopp comet. A mix of real and fictional characters and incidents is woven together to show how lives were altered by the comet's visitation.

July 15th/17th and 22nd/24th: **Henry IV—Part I** is considered Shakespeare's most memorable history play, introducing Sir John Falstaff, one of the bard's most enduring characters. Two of the most famous British theatrical families, anchored by Timothy West and Julian Glover, are featured in the production.

July 29th/31st: **Bones** takes a look at Britain's role in the African slave trade, with a play based on the discovery of a mass grave of shipwrecked slaves in North Devon in February 1997.

Other Features

Heritage, the occasional series on archaeology hosted by Malcolm Billings, returns

for a four-part run beginning on Friday, July 14th, 0105, and repeated Mondays, beginning July 17th, 1530. You can vicariously participate in expeditions in Mexico, Britain, Egypt, and India. This is one of my personal favorite series.

July brings the annual visitation of the **Proms** concerts on the World Service with regular airings Sundays 1505, beginning July 16th, with additional concerts Wednesday, July 19th, 0005, and Friday July 28th, 0005.

Meridian—Music features A Bach Pilgrimage, a six-part series beginning July 26th. American musician and scholar Joshua Rifkin seeks to discover the real Bach in a tour of the places where the composer lived and worked, including Eisenach, Ohrdruf, Arnstadt, Muelhausen, Weimar and Coethen. Tuesdays, beginning July 26th, 1405; also, Thursdays, beginning July 27th, 0005.

Wimbledon Live will feature special frequencies for live broadcasts from July 3rd to July 7th from 1500 to 1800; 9410 kHz will probably be the best in eastern North America; also, 17725 will be used from 1500 to 1700, and 17595 from 1700 to 1800. The ladies' singles final will air Saturday, July 8th, 1305 on the usual Americas frequencies; the men's singles final will air Sunday, July 9th, at 1330, in place of all usual features.

That's All, Folks

My mailbox is still open for comments and suggestions regarding future topics for the column. Thanks to those who have already taken pen to paper and fingers to keys. I hope I hear from you next!

Until next month, 73 DE Richard



Shortwave Center

Jerry Lineback • 506 South Lawrence Avenue • Scranton, KS 66537 • jalinebk@satelephone.com

The Wellbrook K9AY Antenna: A User's Review

By John Bryant, Stillwater, OK, May 2000

The Wellbrook K9AY Antenna consists of two chassis mounted in substantial plastic boxes: the Operator's Unit and the Antenna Head Unit. The user supplies the necessary wire loops, mast, lead-ins, etc. to create the complete classic "Christmas tree-shaped" K9AY antenna. The Operator's Unit provides a rotary Nulling Control and a five position rotary switch for changing beam-direction of the antenna through the four cardinal points and an omni-directional setting which engages both loops. This latest model of the Operators Unit also includes a toggle switch for engaging/disengaging the low noise amp and a small red LED indicating whether 12 VDC. power is applied to the unit. The rotary switch (instead of two toggles), the switching capabilities of the amp and the LED are all welcome additions to what was already a user-friendly product.

Antenna Configuration

My current installation of the Wellbrook K9AY employs an imported black telescoping fiberglass mast produced by German radio amateur, DX9SQ, which rises to 33 feet when fully extended. I have installed guys at mid-mast height and my loops, which are equilateral with 28 feet per side, are attached at the 26 ft. height of the mast. The Antenna Head Unit is mounted approximately three feet off the ground. My grounding system is composed of ten 18 in. long metal rods surrounding the base of the mast in two concentric rings. The outer ring is about three feet in diameter. My grounding situation here in Oklahoma is very good, with the rods going directly into moist clay soil. I erected the loops parallel to my two 500 ft. long Beverage antennas, which run approximately 90 degrees to each other. This was

primarily done so that I might compare, as nearly as possible, apples to apples and oranges to oranges between the two antenna systems. I should note that the beverage wires run no closer than 75 feet to the K9AY and I maintain both ends of the beverages in a grounded condition while using the K9AY. I do not believe that there is any significant coupling between the two antenna systems.

General Operation And Effectiveness

Wow!!! I am deeply in love with the Wellbrook K9AY! After five months of use, I am still continually amazed at the directional capabilities of the antenna, especially on the broadcast band. Despite my now rather extensive experience with this antenna, I still find it hard to believe that an antenna that can be fit in a 30 foot cube of space can perform *substantially* better than 500 foot terminated Beverages on medium wave. It does. While Wellbrook make no claims of directional characteristics at much above the broadcast band, I can usually detect mild directional characteristics as far as the upper extent of the 60 Meter band—5.100 MHz. The directional characteristics on 90 meters—3.3 MHz—are quite pronounced, being clearly evident on signal after signal.

Long Wave

I am not really an expert at DXing low frequency signals. I loaned the K9AY to Bill Bowers, one of the leaders of the North American "lowfer" hobby, for about two weeks so that he might evaluate that aspect of it. He was quite impressed and has reviewed it in a recent *Lowdown*, the journal of the LWCA. While the antenna was at Bill's, we spent a couple of hours making front-to-

back ratio measurements on both MW and long wave. Since my interests are primarily in MW and SW right now, I left my notes on long wave for Bill's use. However, we were achieving nulls of about 20 dB quite easily. **A caution:** We were measuring these "nulls" on Non-Directional Beacon channels; there was usually another beacon in the "null" of the dominant beacon. I would guess that the absolute nulls were running more nearly 30 dB. In any case, though, the directional characteristics on long wave were very significant and enabled us to hear two separate NDBs on the same channel quite well, when they separated by either 90 or 180 degrees of azimuth. I would guess that any "lowfer" who chases NDBs and who has not yet experienced DXing with a true cardioid pattern antenna will feel that he has an entire new hobby as soon as he tries this K9AY.

Medium Wave

My primary interest in the K9AY antenna is for use in DXing international medium wave signals from the North American NW Coast during my visits there in the summertime. There, we use 1000 to 1500 ft. Beverages to DX MW signals from across the Pacific. These long antennas limit our choice of DXing sites rather severely, since we must find property which is accessible for a specific distance back from the beach and yet is an isolated enough location that tourists and local people won't stumbled into the antennas. This spring, both Guy Atkins and I tested the Wellbrook K9AY while at our favorite Washington State DXpedition site. We independently concluded that the K9AY performs at virtually equal levels on medium wave when compared to 1000 ft. Beverages that we normally use there.

Except for the 10 day DXpedition to coastal Washington, my MW DX testing of the K9AY antenna has involved attempting to DX Mexican and other Latin American signals from my home in central Oklahoma. From a this location, Latin America spreads out over almost 180 degrees of the horizon with the Leeward Islands in the Caribbean bearing about 100 degrees from me and upper Baja California bearing west at 270 degrees. Since I am almost 1000 kilometers from the Mexi-

can border, most of my local dominant signals are from various outlets in the central part of the United States. Unfortunately, many US stations are almost perfectly "off the back side" of my box loop antennas, making a Latin-directed MW hobby very difficult from here. In a my area, most channels on the lower half of the dial are dominated by regional and national clear channel US stations. Using the K9AY antenna, I can receive clear reception from at least one Latin signal on almost all of these frequencies during the early morning and early evening DX time periods. On many frequencies in the "low band" I have multiple Latin signals previously masked by 50 KW US stations. In essence, the cardioid pattern of the K9AY has given me an entirely new lease on MW hobby life here in Oklahoma. Now, if it could just grow hair on my head....

I have not DXed domestic medium wave stations since the early 1960s. However, I suspect that people who do and who have a even a small suburban lot to erect the "corner-of-the-yard" version of the K9AY are going to throw away their Viagra prescriptions and get back to a *real* hobby. An electronically rotatable cardioid pattern that works on MW and takes up very little real estate.... **Wow!**

While the antenna was at Bill Bowers' shack, I made quite a few front-to-back measurements on MW, using Bill's W-J HF-1000 with an outboard meter accurately calibrated in dB. Even at mid-day, it was difficult to find a signal which was "alone" (having no weaker signal in the null of the dominant.) I did manage to find three singleton stations in the low band and measured nulls in the 25 to 30 dB range. However, my guess is that there is still some residual energy from secondary stations or even adjacent channel stations that partially infilled the theoretical null. In truth, no matter the accuracy of the instrumentation, I don't think that its possible to realistically measure the depth of a null on MW in central North America outside of a giant Faraday cage. What counts for me is that I hear *lots* of stations, **easily**, that I could never hear before.

Shortwave

I mentioned previously that the directional characteristics of the antenna are noticeable all of the way to 5.100 MHz. I must say, tho', that the terminated beverage antennas, which are aimed directly at my favorite Tropical Band targets, prove to be superior to the K9AY on most occasions. However, since my Oklahoma beverages are over 500 feet long and require significant portions of the cow pasture in which I live, the fact that the Wellbrook K9AY works almost as well as my beverage array is really quite remarkable. In fact, the K9AY is the first antenna, other than the beverages, on which I can successfully DX the very unusual signals from Indian regional stations which may be heard here with great difficulty for about 30 minutes at dawn and dusk during the winter half of the year. Except for the beverages, no other antenna, active or passive, has done as well as the K9AY at detecting these signals. In fact, the K9AY often "hears" the Indian signals as well as does the beverage array. The only difference is the K9AY tends to hear more band noise on these frequencies than does the very narrowly directional beverage. On the international shortwave bands above 5 MHz, the K9AY performs very well. It tends to be a very quiet antenna and does, I understand, offer some possibilities of nulling local noise even on these frequencies.

What I have not done yet, nor to my knowledge has anyone else, is cut a set of loops to the proper length to operate well on 60 meters. It is my understanding that the largest circumference loop that should be used for a particular frequency is .25 of the wavelength. That would be about 49 feet or about 16 feet per side. My loop and most of the others currently in use are almost double that circumference. I look forward to some experimentation with smaller loops late this summer. Even using the oversized loops as at present, I likely would abandon my beverages entirely, even for shortwave, were it not for my interest in the DXing the very difficult weak long-range signals from the Indian Subcontinent on the lower bands. I certainly don't expect to use my beverages here in Oklahoma for MW DXing in the future. I never thought that I'd say that.

The "Ultimate" K9AY Antenna System?

My use of the Wellbrook K9AY antenna here in Oklahoma rather closely models my use in the Pacific Northwest. In both cases, the DX signals of interest come from about 180 degrees of the horizon, while interfering signals almost all come from the back-side half-circle. Given that the deepest null of a cardioid pattern is fairly narrow, I began wondering if having four loops (eight directions) with one antenna for each 45 degrees of azimuth would be useful in real DXing situations. Despite laying myself open to further charges of obsessive/compulsive disorder, I figured that the additional cost would be worth it, if I could benefit from the additional directional choices at least ten percent of the time. Andy Ikin of Wellbrook was kind enough to provide me with an Operators Unit that can control two separate Antenna Head Units... one for each two loops. (All four loops are mounted on the same mast, making a nice Christmas tree.)

My only formal test of the 8-way vs. the 4-way system consisted of two pre-dawn hours DXing Mexican MW stations from here in central Oklahoma. I checked 12 different frequencies, most below 1000 kHz. Of those 12, having a choice at 45 degrees was a significant advantage on nine of the channels. The three where it "was not an advantage" were all stations which so dominated their frequencies that they were totally dominant through 135 degrees of azimuth or so.

On the 9 channels where the 45 degree choice made a difference, it was *always* the advantage of achieving a more complete null on the dominant signal to be able to hear the desired signal more clearly. It also seemed that this extra nulling capability was the most useful when trying to ID a station in the very worst pile-ups.

Assuming that the stations were evenly distributed around the horizon, the above leads me to believe that the extra two loops would make a difference on about 40% of my DX targets. In subsequent months, that 40% to 50% has proven to be the case. **Good Enough For Me.**

My findings make sense for people who DX MW, with the dense pile-ups coming from all angles of the compass. The cardioid pattern has a fairly sharp null and a very wide, more than semi-circular peak. I would guess that lowfers who DX NDBs would also find the extra nulling control an advantage, though I don't know by how much.

Other Notes

Both Bruce Portzer and I noticed a distinct directional "peak" in sensitivity while on our DXpedition. This was quite unexpected. The published horizontal (or azimuthal) sensitivity patterns of the K9AY antenna indicate a broad, even front lobe of almost 270 degrees of azimuth mated to a very sharp vee-shaped rearward null. That matches what we were hearing, except on weak signals which were otherwise in the clear. Sometimes, these stations were significantly stronger on just one wire. Since the wires were only 45 degrees apart in azimuth, that really shouldn't have been happening. This effect was most noticeable on the 5 or so Russian long wave stations that we logged. Whether this was a unique effect of our superb ground plane or beach-front location, or whether this peak has been missed by DXers who are limited to only four directional choices, we had no way to determine. As other DXers with four-loop arrays gain experience, we should all be alert to this phenomenon.

Concerning the 4-loop array coupled with the DK9SQ antenna mast: the extra weight and downward tension from the extra two loops has caused my telescoping fiberglass mast to partly re-telescope during two of our storms here in Oklahoma. I had no such trouble when only two loops of 20 ga. wire up. After having the same thing happen the first night on the Washington coast, I secured each joint of the telescope with a stainless steel hose clamp. Problem solved.

I should also note that the experience with K9AYS at the Newfoundland DXpeditions, while good, do not appear to have been quite so wonderful as mine. My guess is that differing ground conditions may be to blame. The ground plane in Oklahoma was excellent: very moist clay. The ground in Washington was even better: Sandy soil completely satu-

rated with brackish seawater. Ground conditions at the site in Newfoundland are a mixture of dry sandy soil and rock, as I remember. I am unsure whether the K9AYS in Newfoundland were amplified, as is the Wellbrook version. The Wellbrook amplifier seems to not be needed much when doing domestic/Mexican DX here in Oklahoma, but it made a world of difference in hearing weak trans-Pacific signals on the Washington Coast. Also, Jean Burnell noted that their 2500 foot beverage was always superior (on MW) to any other antenna for the direction in which it was pointed. I'm sure that is true. I don't ever expect to entirely give up my addiction to beverage antennas. When I have the opportunity to string out at least 1500 or more feet of wire toward an area of interest, I'm certainly going to do so.... unfortunately, those opportunities are very rare, even here in the world's largest cow pasture.

Conclusion

The K9AY antenna as produced by Wellbrook Communications is a marvelous antenna for medium and long wave DXing. Even though I have not used a K9AY antenna cut for shortwave frequencies, my medium wave version is second only to my 500 foot beverage antennas when DXing the Tropical Bands. The Wellbrook units are very well built and appear to be optimized for the needs of serious DXers. I recommend the Wellbrook K9AY enthusiastically and without reservation.

The only current source for the Wellbrook version of the K9AY Antenna is from the manufacturer:

Wellbrook Communications
Wellbrook House, Brookside Road,
Brangsgore, Christchurch, Dorset
BH23 8NA. UK.
Tel. 01425 674174 Int.+44 1425 674174
URL <<http://www.wellbrook.uk.com>>

The proprietor of Wellbrook is Andy Ikin and he is one of the "good guys." Andy Ikin e-mail sales@wellbrook.uk.com or aikin@globalnet.co.uk

The DK9SQ telescoping mast may be obtained in North America at: <<http://www.bright.net/~kanga/kanga/dk9sq.htm>>

AWR Goes Satellite

June 6, 2000 News Release

Adventist World Radio (AWR) began around-the-clock daily satellite radio service to Europe, North Africa, and most area of the middle East this week, according to Don Jacobsen, AWR President. "Test broadcasts started on June 1, 2000," said Jacobsen, "and the digital stereo network will be in full operation by June 9. We are delighted!"

The satellite service, provided by Merlin Communications International, has a dual purpose, says Bert Smit, AWR region director for Europe. During a 24-hour period, 11 hours are used to feed AWR programs to a leased radio facility in Rimavska Sobota, Slovakia, for rebroadcast on shortwave transmitters to the Middle East and Africa. "This will decrease the time from production to airing," says Smit, "as well as the uncertainty of mailing programs from one country to another and international postage costs."

"The other 13 hours on the 24-hour system are being used by local Adventist radio stations across Europe to relay their programs from station to station in their own languages, on their own national networks." There are currently more than 40 local

Adventist radio stations in Europe.

Ten stations in Romania and nine in Italy are the first networks to join AWR's satellite service in Europe. The station in Sarajevo, Bosnia, is among those that can rebroadcast the satellite programs. Currently, many commercial stations in the Czech Republic now rebroadcast the Czech Voice of Hope program featured on the network.

"This first AWR satellite system in Europe features programs in 11 languages," Smit said, "and it is available free to any stations wishing to air the programs." The 24-hour feed will also be available worldwide as a live stream on the AWR Web site, allowing for 100 listeners simultaneously in both Real Audio and the new G2 format. The AWR Web site is found at www.awr.org.

The AWR Europe satellite network is the second international network established by AWR. The first began in 1998 in the Americas and today supplies Spanish programming to more than 40 Adventist-owned stations in Latin America. Nearly an equal number of additional Spanish stations also down link the AWR network programs for local re-broadcast.

BBC Atlantic Relay Station: Ascension Island

Via George Glotzbach, Santa Fe, NM

The position of Ascension Island at 8 degrees south and 14 degrees west makes it an ideal site for Short Wave broadcasting to Africa and South America. Reversible arrays allow coverage of Africa during the day and South America during the night. Construction of the Atlantic Relay Station began in 1965 and it was fully operational by late 1967.

The BBC Transmitting Station and the Power Station are located at English Bay. The Power Station provides electricity for the transmitters and most of the island. The Transmitting Station and Power Station pro-

vide employment for around eight British and sixty six St. Helenian staff. In addition, the BBC provides other essential services on the Island. The School and Hospital are currently operated by the BBC.

Ascension Island is about 7 miles across and has a population of around 1200. The climate is quite equable and temperatures of 22 to 35 degrees c and rainfall of around 300 mm/yr are normal. A constant sea breeze throughout the year keeps conditions cool. Most of the Island consists of volcanic ash or rock deposits. In the central high region there is increased rainfall and sufficient soil to support a small farm.

Transmitting Station

The station originally comprised of four Marconi BD272 250kw short wave transmitters and twenty dual-band arrays. The station was upgraded in 1989 by the installation of a further two Marconi transmitters and four new arrays. The transmitters in use were designed in the early 1960's and require manual band changing and tuning.

An automatic control system is used for all transmitter, programme, and aerial switching operations that are required by the daily transmission schedule. The station is manned around the clock with two staff on each shift who carry out band changes, transmitter tuning, routine maintenance, and repairs.

A 500 watt medium-wave transmitter (1485 kHz) at the transmitting station and a 400 watt VHF transmitter (93.2 MHz) located on Green Mountain transmits BBC World Service in English to the local population.

Programme Feeds

Programmes for the World Service originate in Bush House Studios in London. The programme feeds from Bush House are uplinked by Cable & Wireless, UK to the Intelsat-706 satellite. It is received on two 4.5 meter dishes at the Satellite Earth Station located close to the transmitter building on Ascension. A secondary system is also provided using a 10 meter dish, pointed currently at Panamsat-3 Satellite and can be used to receive programmes in the event of failure of the primary satellite and twice yearly solar interference.

The Atlantic Relay Station currently broadcasts English (for Africa, Central and South America), French, Hausa, Portuguese, Somali, and Swahili (for Africa) and Portuguese and Spanish (for S. America). Prior to the installation of our satellite receiving station in 1985, a combination of pre-recorded tapes from London and shortwave radio links provided the necessary programme feeds.

Aerial Field

The original aerial field contains 20 arrays

supported by 10 masts which range in height between 46 and 99 meters. Each of these arrays can cover two adjacent short-wave bands and has a typical gain of 15 db. The masts are arranged to provide forward bearing of 207 to 306 degrees and reverse bearings of 27 to 114 degrees. Many of these arrays have automated groundwork switches.

The four arrays built in 1989 are supported by a line of five self-supporting towers, the tallest of which is 136 meters high. Three of the arrays cover two SW bands and one covers three SW bands. Each of these newer arrays is reversible and can be slewed left and right, giving a total of five possible forward bearings between 55 and 115 degrees, and five possible reverse bearings between 235 and 295 degrees.

An aerial switching matrix is located close to the transmitter building. The six transmitter RF output feeders enter the matrix and the 29 aerial feeders leave the matrix. The station control system is capable of selecting any array to any sender as required by the transmission schedule. In practice each sender has a choice of typically ten different arrays.

Power Station

The Power Station was originally fitted with seven English Electric v-16 11 kv diesel alternators, each rated at 930 kw. Today, the station is equipped with seven Allens VS12-FX turbo-charged engines giving an operating capacity of 9.1 MW. The typical maximum demand from all consumers is usually around 4.7 MW and of that total, around 3.5 MW is consumed by the transmitting station.

As there is no natural source of fresh water on the island, the power station incorporates a desalination plant for sea water. The current desalination plant consists of four reverse osmosis plants and two ten stage flash distillation plants. On average, two million gallons of fresh water is produced each month. Diesel oil is consumed at a rate of approximately 20 tonnes per day. Four large storage tanks standing above English Bay have a capacity of 9700 tonnes or 14 months supply.



Adrian Peterson's Diary

Dr. Adrian M. Peterson • Box 29235 • Indianapolis, IN 46229

The "Nauen" Station in Germany

The town of Nauen is situated about 25 miles west of Berlin in what was at one stage East Germany. Located here is an old and historic radio station with what could be described as four sub-sites. This facility was established in 1906 under the callsign POZ with the installation of a 20 kw. spark transmitter made by Telefunken. Almost a century later, what has happened to this site?

Over the years it was used mainly as a communication facility, though at times also for radio broadcasting. In 1945, the radio equipment was removed, taken to Russia by train, and buried at a lonely site somewhere in the USSR. A few years later, radio equipment was again installed at Nauen, and into the 1950s it contained 28 transmitters and a bevy of antennas.

When the two Germanys were re-united in October 1990, Deutsche Welle took over this historic old site, and it was finally and fully de-activated in the Spring of the next year. At the time, suggestions were made that the old main building would become a radio museum.

Just two kilometers away is the site that was established for the old Radio Berlin International. The first transmitter, a 50 kw. unit, was installed at this sub-site in 1959, and five years later a 100 kw. unit was added.

Radio Cook Islands

"Radio Cook Islands"—A radio station operated by the local newspaper; one of the world's most exotic radio stations, and one that so many DXers wanted to QSL. Radio Cook Islands with its sea shell trumpet call as a tuning signal. Just 500 watts on the tropical band channel 5045 khz.

Many DX programs and DX magazines around the world reported some years ago the demise of the shortwave service from Raratonga

Subsequently, three transmitters at 500 kw. were also installed at this RBI sub-site.

When Deutsche Welle took over all RBI facilities in East Germany on October 2, 1990, five transmitters were in operation, using 32 antennas that stretched for nearly one kilometer. One kilometer east of the RBI site was another sub-site with a single transmitter at 100 kw. and an experimental rotating antenna that could also be slewed horizontally. This transmitter was made in East Germany and installed in 1964.

The 4th sub-site at Nauen is more recent, where Deutsche Welle has installed four new transmitters, the 500 kw. Alliss units made in France. Each transmitter is housed as a separate unit, attached to just the one rotatable antenna.

When Deutsche Welle took over all of the RBI sites in the former East Germany, they were all in use for a short period of time as temporary relay units of Deutsche Welle (for which QSL cards were issued).

So what is left at old Nauen? Everything is gone except several old buildings, and one older transmitter at 100 kw. is still on the air. However, the new sub-site is indeed very active, with the four new transmitters at 500 kw. in daily usage.

(RARE-a-TONG-ga) in the Cook Islands. A fire in May 1993 destroyed the transmitter building owned by Cable & Wireless. This building housed, among many other major items of electronic equipment, the old and small transmitter used by Radio Cook Islands for their shortwave service. Thus Radio Cook Islands has been off the air shortwave since then, and reports indicate that there is no move to re-instate this exotic little station.

The Cook Islands lie in the South Pacific about halfway between New Zealand and Hawaii. They are made up of some eight main islands which cover a total of less than 100 square miles. The capital city is Avarua, which is located on the main island of Raratonga, and the total population of some 30,000 people are mostly Polynesian.

Captain Cook, in the year 1773, is credited as being the first European explorer to visit the Cook Islands, after whom they were named. This island paradise is made up of volcanic mountains rising from the ocean floor, together with white coral reefs encircling most of each island. Whether seen from the air or from tourist beaches, they present exquisite scenes of visual, tropical beauty. For the DXer, a radio is of course a necessity, but in the Cook islands, so is a camera.

Way back in the wireless era at the end of World War 1 the callsign for the maritime communication station at Raratonga in the Cook Islands was VMR. A few years later additional stations were erected at Aitutaki and Mangala, with the callsigns, VLF and VLG.

Many years later, in the 1950s, the callsign VLF was used for a short while for one of the refurbished 100 kw transmitters at the Radio Australia facility located at Shepparton in Victoria. The callsign VLF was also the Australian callsign for the American communication station at North West Cape in Western Australia, though the American callsign is NMC. In addition, VLF is also the Line Callsign for a current 100 kw transmitter operated by Radio Australia at Shepparton.

The callsign VLG was taken over in 1941 as the callsign for the 10 kw home service shortwave transmitter at Lyndhurst in Victoria. Today this is the Line Callsign of a 10 kw transmitter located at Brandon in North Queensland which carries the Pacific service of Radio Australia.

The first broadcast station in the Cook Islands was an unofficial wartime project as a service for allied troops. A New Zealand radio engineer modified a longwave aircraft

beacon on the island of Raratonga back in 1944, and operated it as a temporary radio broadcasting service.

In April 1954 a radio broadcasting service was inaugurated using spare time on a local communication transmitter. This station went on the air as Radio Raratonga with school broadcasts lasting an hour each, twice weekly. This service on the tropical band channel, 3390 kHz, was so popular that entertainment programs were soon added using the channel 6180 kHz. The transmitter power was usually 100 watts, though on occasions the 500 watt transmitter was used. The original callsign was ZK1ZA, which in reality was an amateur callsign. Subsequent shortwave callsigns were in the series ZK2-ZK6.

The original transmitter location was at Black Rock, but in 1961 a new facility was constructed, closer to Avarua, the capital city, and just 3-1/2 miles from the original location.

Programming on shortwave was usually in parallel to the main mediumwave channel. This was made up of local productions, as well as many relays from the BBC London, Radio Australia and Radio New Zealand. On one occasion, in 1976, Radio Cook Islands broadcast a special DX program for the benefit of the annual DX convention in New Zealand.

When the shortwave transmitter was destroyed in the fire, that left only the one mediumwave and two FM channels on the air in the Cook Islands. The islanders living in the capital city area can hear the two stations quite clearly, and those living on the outlying islands can readily hear their official AM station, 5 kw on 630 kHz; but the international listener can now no longer tune in to the Cook Islands on shortwave. It is gone forever.

Back in 1989, the Ontario DX Association printed 500 QSL cards for Radio Cook Islands, using the same original design. The AWR historic collection in Indianapolis contains three QSL cards from the Cook Islands, all in the earlier printing, and all for ZK5 with just 500 watts on 5045 kHz. 

Listener's Notebook

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

COPYRIGHT NOTICE Items credited to BBCM are copyright by the BBC Monitoring Service and may not be reproduced without BBCM permission.

AFGHANISTAN *Radio Voice of Shari'ah*

0100-0330	Pashto/Dari	7087v Sa-Th
0330-0800	Pashto/Dari	7087v Fr
1300-1800	Pashto/Dari	7087v
1530-1545	English	7087v
1545-1600	Arabic	7087v
1600-1615	Turkmen	7087v
1615-1630	Uzbek	7087v
1630-1650	Urdu	7087v
1650-1710	Russian	7087v

(BBCM)

ALGERIA *Radio Algiers*

0500-0100	French	11750 irreg
1500-1800	Tamazight	7245
1600-1700	English	11715 15160
1700-1800	Spanish	11715 15160
1900-2000	Spanish	11715 15160
2000-2100	English	11715 15160

(BBCM)

AZERBAIJAN *Radio Baku* is again on an traditional 6110 ex 9165, May 30 at -1759 s/off, May 31 at 0215- s/on. It seems they on 6110 at 0215-0300, 1000-1500 and 1600-1800 (Timofeyev May 30/31/ Cumbre DX/Francis)

CANADA Current data on Canada's 49 Meter SWBC stations:

CFVP (Independent) 100 watts, Calgary Alberta Canada, 6030 khz, Relays: CKMX 1060am, 24 hours per day. Address: PO Box 2750, Station M, Calgary, Alberta, Canada, T2P-4P8.

CFRX (Independent) 1 kw, Toronto Ontario Canada, 6070 khz, Relays: CFRB 1010am, 24 hours per day, Xmtr: Elcom Bauer, Antenna: Omni. Currently CFRX is experiencing audio problems, resulting in low audio output, the xmtr is being "driven hard" at 1.25 kw. Address: c/o Ontario DX Association, PO Box 161, Station A, Willowdale, Ontario, Canada, M2N-5S8.

CHNX (Independent) 50 watts (500 watts nominally), Halifax Nova Scotia Canada, 6130 kHz, Relays: CHNS 960am, 24 hours per day, Antenna: 1/4 wave Dipole, v/s Scott Snailham (Evening Producer) is a SWL. Address: PO Box 400, Halifax, Nova Scotia, Canada, B3J-1K1.

CKZN (CBC) 1 kw, St. John's Newfoundland Canada, 6160 khz, Relays: CBN 640am, 0000- 0406, 0825-0000 (24 hrs except 0406- 0825), Xmtr: Elcom

Bauer, Antenna: Dipole with reflector aimed North to the Labrador Sea/North from St. John's, for off-shore fishermen and Labrador residents. Local programming from Goose Bay studio's 0830-1130, Engineer Keith Dunford is a SWL. Address: PO Box 12010, Station A, St. John's, Newfoundland, Canada, A1B-3T8.

CKZU (CBC) 1 kw, Vancouver British Columbia, Canada, 6160 khz, Relays: CBU 690am CBC Radio 1, 24 hours per day, Xmtr: Elcom Bauer, Antenna: Dipole. Address: PO Box 4600, Vancouver, British Columbia, Canada, V6B-4A2. Return postage is always gratefully appreciated. (Talbot/Cumbre DX/Francis)

CHINA *China Radio International* uses relay stations in Canada, France, French Guiana, Russia, Spain, Cuba and Mali

0000-0030	Hakka	15100 15260 15400
0000-0100	Portuguese	11650 15420
0000-0100	Russian	7110 9725
0000-0100	Spanish	11880 17720
0030-0100	Chaozhou	15100 15260 15400
0100-0200	English	9570
0100-0200	Spanish	17720
0200-0300	Mandarin	15435
0200-0300	Spanish	17720
0300-0400	English	9690
0300-0400	Russian	15110 15435 17755
0300-0400	Spanish	9560 11765
0400-0500	English	9560 9730
0500-0600	English	9560
0830-0930	Indonesian	6995 15135 17680 17735
0900-1000	Mandarin	11600 11685 11700 11905 12015 15440 17785 17860
0900-1100	English	11730 15210
0930-1030	Malay	6995 15135 17680
0930-1530	Japanese	7190 9855
1000-1100	Cantonese	11915 15440 17860
1000-1100	Mandarin	8450 11685 12015 17785
1000-1100	Russian	7110 7820 9695 9725
1030-1130	Cambodian	6550 15165 17680
1030-1130	Indonesian	6995 11955 15135
1100-1130	Esperanto	7170 8450
1100-1200	Cantonese	11685 11875 15440 17785
1100-1200	Mongolian	5145 5850 12405
1100-1200	Russian	7110 7820 9725
1100-1200	Vietnamese	9550
1100-1300	Korean	5965
1130-1200	Burmese	6550 9880
1130-1200	Tagalog	6995 11700
1130-1230	Thai	7360 8450 9785
1200-1230	Tagalog	6995 11700 12110
1200-1300	Cambodian	6550 9440 17685

1200-1300	Cantonese	15125	1800-1830	Hungarian	9860 11775 11810
1200-1300	English	9715 9760 11675 11980 15415	1800-1830	Persian	9550 9670 11740 15595
1200-1300	Mongolian	4815 5145 5850	1800-1900	German	7590 11980 15130
1200-1300	Vietnamese	9550	1800-1900	Russian	8035 9535 9795 11650 11685 11945
1200-1400	Mandarin	9365 11685 11875 15260 17785	1830-1900	Bulgarian	9860 11775 11810
1230-1330	Lao	7360 8450	1830-1900	Italian	9965 11850
1230-1330	Malay	6995 11955 15135	1830-1900	Persian	9550 9670 9785 11740
1300-1400	Burmese	6550 9880 11780	1830-1930	Arabic	12035 15550
1300-1400	English	7405 9570 11675 11900 11980 15180	1830-1930	French	7170 9645 11660 11760
1300-1400	Russian	4815 5145 5850 7110 7820 12405	1830-2000	Mandarin	9645
1300-1400	Vietnamese	9550	1900-1930	Albanian	9965 11810
1330-1430	Indonesian	6995 15135	1900-1930	Portuguese	9535 11825
1330-1430	Thai	7360 8450	1900-1930	Romanian	7305
1330-1500	Korean	5965	1900-1930	Turkish	11790
1400-1430	Tamil	11575	1900-2000	Cantonese	7255 9730
1400-1430	Turkish	11750 15165	1900-2000	Czech	9585 11775
1400-1500	Amoy	11650 11685	1900-2000	English	9440 11750
1400-1500	Cambodian	6550 9945 15180	1900-2000	German	7590 11980 15130
1400-1500	English	7405 9700 11675 11825 13685 15110 15125	1900-2000	Russian	9795 11630 11650 11685 11945
1400-1500	Mongolian	4815 7110	1930-2000	Albanian	9965
1400-1500	Sinhala	11900 15145	1930-2000	Czech	7305 9585
1400-1500	Vietnamese	9550	1930-2000	Portuguese	11810 13775 15500
1430-1500	Tagalog	6995 12110	1930-2000	Romanian	11720 11775
1430-1500	Tamil	11575 15165 15210	1930-2030	French	7170 9630 9645 11660 11835
1430-1530	Lao	7360 8450	2000-2030	Esperanto	9965 11810
1500-1530	Bengali	5220 11810 15300	2000-2030	Polish	6150 11775
1500-1530	Pashto	9570 9665 11880	2000-2030	Serbo-Croat	11680 13650
1500-1530	Persian	9570 11750	2000-2100	English	7590 9440 11790 15110
1500-1600	English	7160 9785	2000-2100	German	7550 15575
1500-1600	Hindi	11675	2000-2100	Mandarin	9535 9965 11650 11750 11870 13775
1500-1600	Mandarin	6550 11825	2000-2100	Russian	7255 9795 11945
1500-1600	Russian	4815 7110 9730 11650	2030-2100	Bulgarian	6150 13650
1500-1600	Vietnamese	9550	2030-2100	Hungarian	11680 11720 11775
1530-1600	Bengali	5220 6995 11810 15300	2030-2100	Italian	7265 11810
1530-1600	Nepali	7215 8450 9535	2030-2100	Polish	9585 11850
1600-1630	Swahili	5250 11600	2030-2130	French	7170 9670 11760 12010
1600-1630	Turkish	6550 11685 15270	2100-2130	Albanian	6150
1600-1700	Arabic	15490 17580 17880	2100-2130	Arabic	5965 7150 7590 9535 11790 11965 15110 15125
1600-1700	English	9565 9870	2100-2130	English	5965 7150 7590 9535 11790 15110 15125
1600-1700	Hakka	5220 9770 11825	2100-2130	Italian	9585 9965 11680
1600-1700	Hindi	6995 11675	2100-2130	Serbo-Croat	9550 13650
1600-1700	Russian	9730 9885 11570 11780 11875 11945 13655	2100-2200	Korean	9640
1600-1700	Urdu	7175 7590	2100-2200	Spanish	7225 9515 11775
1600-1700	Vietnamese	6010 7360 8450	2130-2200	Arabic	5965 7590 9535 11790 11965 15110 15125
1630-1700	Swahili	5250 11600 12000	2130-2200	Hungarian	6150 9570
1700-1730	Swahili	5250 15125	2130-2230	French	9670 11610 11760 11975
1700-1800	Cantonese	7590 9770 11675	2200-2230	Portuguese	11650 15110
1700-1800	English	5220 9570 9670 9695 11910 13700	2200-2300	English	7170 9880
1700-1800	Russian	9730 9795 9885 11650 11685 11780 11875 13655	2200-2300	Spanish	7225 9515 11775 13650
1730-1800	Hausa	15550	2230-2300	Esperanto	9860 11700
1730-1830	Mandarin	7170 9630 9645 11660 11760 11835	2230-2300	Italian	11680 11775
1800-1830	Hausa	11790 15550	2230-2300	Mandarin	6140 6550 7335 9460 15100 15260 15400
			2230-2300	Spanish	7225 9515 13650

2300-2359 Cantonese 6550 7335 9460 15100
15260 15400
2300-2359 English 5990
2300-2359 Mandarin 11975
2300-2359 Russian 7110 9725
2300-2359 Spanish 11650 11880
(BBCM)

CLANDESTINE—AFRICA A confusing bunch of reports re *National Radio of the Saharan Democratic Republic* (which I previously called Polisario Radio), some claiming it has moved to new 7100, others that it's still on 7460. It could be anywhere by time you read this, but those seem two good starting places. Sked appears to be 0600-0700 and 2100?-2400, languages Arabic and Spanish. [various]

Radio Liberte heard again on shortwave. The Ugandan-backed Radio Liberte which is run by the DR Congo rebel group, the Movement for the Liberation of Congo, was heard by BBC Monitoring on 20th June for the first time since early April. It was observed on 15725 kHz with a news bulletin in French at 1900. (BBCM/DX Listening Digest/Hauser-OK)

New "*Radio VOP, Voice of the People*" is being heard 1700-1730 and 1915-1945 on 7215 kHz. Programming is mainly in Shona and Ndebele, with some English. The radio's output is devoted to the current political scene in Zimbabwe, in particular the forthcoming parliamentary elections.

Radio VOP has not been heard to announce an address or any other contact details or any details of where it is broadcasting from. It has also not been heard to announce details of any party or organization that is operating or sponsoring the station. (BBCM/DX Listening Digest/Hauser-OK) [Speculation abounds in the DX press re the transmitter site, with RN's Madagascar and Merlin's Ascension plants high on the suspicion list.—AQ]

Voice of Oromo Liberation is sometimes referred to as "SBO" after its title in the Oromo language, "Sagalee Bilisumma Oromoo." It supports the Oromo Liberation Front and other groups opposed to the Ethiopian government. It currently hires airtime via Deutsche Telekom facilities in Juelich, Germany. Address: SBO, PO Box 510610, 13366 Berlin or SBO, Prinzenallee 81, 13357 Berlin, Germany E-mail: SBO13366@aol.com, Web Site: www.oromoliberationfront.org

1700-1800 Oromo 15715 Th/Fr/Su
(BBCM)

Voice of the Democratic Path of Ethiopian Unity (Amharic: Finote Demokrasi Ye-Ethiopia Andinet Dimts) states that it was established to safeguard the national integrity of Ethiopia, bring about unity based on equality of the Ethiopian peoples, preserve

the sovereignty of the Ethiopian peoples, bring about a democratic system in Ethiopia, ensure the preservation of the human rights of Ethiopians, ensure the supremacy of the law, bring about justice and ensure equality of gender, religion and nationalities, and contribute to the struggle aimed at bringing about social justice. It reportedly uses a hired Deutsche Telekom transmitter in Germany. Address: Finote Democracy, P O Box 88675, Los Angeles, California 90009, USA, E-mail: efdpu@finoteorg, Web Site: <http://www.finote.org>, Address: Finote Democracy, Postbus 10573, 1001 EN, Amsterdam, Holland

0700-0800 Amharic 21550 Su
0800-0900 Amharic 21550 Su
1600-1700 Amharic 15105 We
1830-1930 Amharic 15715 We

(BBCM)

CLANDESTINE—MIDEAST 7095 *Voice of Iraqi Kurdistan* found at 1512, but probably begin earlier. // 4085 khz. Mentions of the Kurdish Democratic Party, Mr Barzani, Iran and Suleimanya. Voice of the People of Kurdistan also on 4060.5 kHz. 7095 is stronger than 4085 kHz. (Lam Jun 13/Cumbre DX/Francis)

Voice of Palestine, Voice of the Palestinian Islamic Revolution (Arabic: sawtal-filistin, sawt al-thawrah al-islamiyah al-filistiniyah) operates from Iran. programs are critical of the Palestinian Authority.

0330-0430 Arabic 7250 9610
(BBCM)

CONGO Rep. 5985 *RTV Congolaise* 1855 Talk about Congo and Nigeria situation by man in English. 1900 French program. "Radio Congo" ID heard several times. Fair (Takeno May 27/Cumbre DX/Francis)

CONGO (KINSHASA) 7205 Lubumbashi, tuned in at 2000, and I was surprised by the signal; I think this is much stronger than the listed 10 kw. Heard lots of Afropop and messages in FF for families and others, Lubumbashi often mentioned. At 2027, the PT prgm from BBC-Meyerton was spoiling the game, but Lubumbashi could still be heard faintly underneath. It's Lubumbashi for sure. Although I didn't hear an ID, they were talking about "La Comit Central de Lubumbashi," "L'universit de Lubumbashi," "Les tudians Kantangais," etc. This was followed by readings from letters rcvd from citizens with messages for other family members. (Schtomans via HCDX/Cumbre DX/Francis)

COSTA RICA 6970 *RFPI* 0350 Great signal in English for this time of day here. This must be a frequency shift from 6975?? (Cattermole Jun 13/Cumbre DX/Francis)

FINLAND YLE Radio Finland

0000-0100	English	11985 13770 Su
0000-0115	Finnish	11995- to 0015
0100-0115	English*	11985 13770
0115-0150	Finnish	11985 13770
0150-0200	Swedish	11985 13770
0230-0245	Russian	6120
0245-0415	Finnish	6120
0415-0430	Swedish	6120 9655 9860 11755 15445
0430-0515	Finnish	6120 9655 9860 11755 15445
0515-0530	Finnish	9860 11755 15445
0515-0530	Russian	9655
0530-0600	Finnish	6120 11755
0530-0600	German	9560
0600-0630	Finnish	6120 9560 9655 11755 15250 21670
0630-0645	English*	15250 21670
0630-0645	Swedish	9560
0630-0700	Finnish	6120 11755
0645-0700	Swedish	9560 9655 11995 15250 21670
0700-0800	Finnish	6120 11755 17615 21670
0800-0830	Finnish	6120 9560(Su) 11755 17615 21670
0800-0900	English	9560 Sa
0830-0845	Russian	17615 21670 Mo-Fr
0830-0920	Russian	17615 21670 Sa/Su
0830-1000	Finnish	6120 9560(Su) 11755
1000-1100	Finnish	6120 11755 21800
1000-1100	Swedish	13755 Su
1030-1045	German	15460
1045-1100	French	15460
1100-1200	Finnish	6120 11755 21800(to 1150)
1100-1200	German*	15460 Sa/Su
1150-1200	Swedish	21800
1200-1300	Finnish	6120 11755 15400 17670
1300-1330	Finnish	6120 11755 15400 17660
1300-1330	Russian	6180
1330-1400	Finnish	6120 6180 11755 15400 17660
1400-1500	Finnish	6120 11755 15400
1400-1900	Swedish	9630
1500-1615	Finnish	6120 11755 21810-to 1600
1600-1630	Russian	9695 Mo-Fr
1600-1645	Russian	9695 Sa/Su
1615-1630	Swedish	6120 11755
1630-2000	Finnish	6120 11755
1850-1900	Latin	6120 11755 Sa
1930-1945	English**	6110
1945-2000	German	6110
2000-2015	Russian	6135
2000-2130	Finnish	6120 6135-(2015-2030) 11775
2130-2230	Finnish	9865 11845
2300-2359	English	11985 13785

* final six minutes of program = news in Latin (Sunday)
** final six minutes of program = news in Latin (Saturday) (BBCM)

GERMANY Ostdeutscher Rundfunk Brandenburg (ORB) is the public broadcaster for the German federal state of Brandenburg, with headquarters at Potsdam-Babelsberg. Since 1993 ORB uses no mediumwave transmitters but is preparing for its very first shortwave broadcasts. On the occasion of the Berlin "Love Parade" the ORB youth program "Fritz" will be carried on shortwave as follows; ID will be "Fritz Love Radio."

July 7:

0000-0500	3965
0500-0600	3965
1600-1800	5965 15755
1800-2100	3965 15755
2100-2200	3965
2200-2400	3965 9405

July 8:

0000-0100	3965
0100-0600	3965 9525
0600-1000	5850 13810
1000-1100	5850
1100-1600	5975
1600-1800	5965
1800-2400	3965

July 9:

0600-1100	5850
1100-1600	5975

Address: ORB—Fritz, P.O.-Box 90 90 00, 14439 Potsdam; email redaktion@radiofritz.de; URL <http://www.fritz.de>. (Ludwig-GER) [Tell you what, I haven't sent a reception report in 16 years, but I don't think I can live without a card that says "Fritz Love Radio"-AQ]

GREECE Updated Voice of Greece schedule, mainly in Greek with lang inserts:

0000-0350	7450A 9420K 12110K 15630A
0400-0550	7475K 9375K 11645A
0600-0700	7475K 9375K 9420A 15630A
0700-0800	9375K* 9420A 9775DL* 15630A 15650K
0900-0900	9420A 15630A
0900-1000	9420A 9770DL15630A
1100-1200	9420A 15630A
1200-1800	9420A 15455DL 15630A
1800-2050	9420A 15630A
1800-2200	17705DL
1900-1950	7475K 9375K
2000-2050	7475K
2000-2055	17565GA
2055-2200	7455A 9375A 17565GA
2200-2250	9375A 12105A
2300-2350	7475K 9380K 9420A 12105A

DL = via Delano and GA via Greenville relays* = 9375 & 9775 carry En nx (Green-UK/BC-DX/Bueschel-GER)

GUATEMALA 5955 *Radio Cultural* has reactivated this channel. 0346 // to 3300 with English religious program. Decent signal, but QRM. Not on at 0835 re-check. 5955 is a low power channel run by the station for DXers, according to station engineer Wayne Berger. (Johnson Jun 9/Cumbre DX/Francis)

IRAN *Voice of the Islamic Republic of Iran* External Service

0000-0030	French	9022 9560 11970
0000-0030	Mandarin	15400 15490 17600
0000-0130	Arabic	6200 9705 11710
0030-0130	Bengali	6005 6185 11835
0030-0130	English	9022 9835 11970
0030-0130	Spanish	6020 6175 9650
0100-0230	Tajik	7180
0130-0230	Arabic	9705
0130-0230	Spanish	6020 6135 6175 9650
0130-0230	Urdu	9525 11880 13640
0230-0300	Hindi	15165 17700
0230-0300	Uzbek	7180
0230-0330	Arabic	9885 11680 13775 15150
0230-0330	Pashto	6005 6190 11880
0230-0330	Spanish	6065
0300-0330	Armenian	11860
0300-0430	Dari	7180
0330-0430	Arabic	7290 9610 9885 11680 13775 15150 17610
0330-0430	Swahili	15125 15260 15595 17570
0330-0530	Azeri	13590
0430-0530	Arabic	13775 15125 15150 17610
0430-0600	Turkish	15260 15365
0530-0630	Arabic	13775 15125 15150
0530-0630	Bosnian	15235 15510 17585
0530-0630	Hausa	17600 21470 21810
0530-0630	Spanish	15260 17785
0630-0730	Albanian	15235 15585
0630-0730	Arabic	15125 15150
0630-0730	French	17590 21645 21775
0630-0730	Italian	9022 15084 17560 17605
0730-0830	Arabic	15125 15150 21645
0730-0830	German	15084 21775
0830-0930	Malay	15084
0830-1030	Arabic	15125 15150 17550-(from 0930) 21645
0930-1000	Armenian	9615 11700 15260
1000-1100	Swahili	17570 17780
1030-1100	Arabic	13675 13790 15125 15150 17550
1100-1230	English	15385 15430 15585 21470 21730
1100-1300	Arabic	13675 15125 15150 17550
1200-1300	Italian	15084 15115 17605
1230-1330	Malay	15200 15585 17555 17715
1230-1330	Pashto	7165 9585 9790 11870 1007
1300-1330	Arabic	13675 15125 15150
1330-1430	Mandarin	11670 11805 15370 15535 17605 1007
1330-1430	Urdu	7270 9565 9665 11660 11950 13605 13785 15115

1330-1500	Dari	9580
1330-1530	Arabic	9860 13675 15125 15150
1400-1500	Russian	11680 11930 11960 15280
1430-1500	Urdu	9565 9665 11950 13605 13785 15115
1430-1530	Bengali	7115 9525 9740 11985
1430-1530	Pashto	7270
1500-1530	Hindi	7145 9710 9850 11775
1500-1530	Kazakh	7200 9585 9755 11745
1500-1600	Uzbek	5955
1530-1630	Arabic	9860 15125 15150
1530-1630	English	7115 9635 11775
1530-1630	Russian	7165 7230 9740 9755 9865 11675 11925
1530-1730	Urdu	7270
1600-1730	Tajik	5955
1600-1730	Turkish	7290 9022 9515
1630-1700	Arabic	9860
1630-1730	Armenian	6175 6200 7230
1630-1730	Pashto	6015 6150 7140 7190 7195 9525
1630-1830	Azeri	6160
1700-1830	Arabic	9860
1730-1830	Bosnian	7295 9545 9610 11660
1730-1830	German	9022 11680 11765 13685
1730-1830	Russian	6035 7115 7205 7305
1730-1830	Swahili	9655 11995
1830-1930	Albanian	7295 9610 11660
1830-1930	French	9022 11680 11860 11900 13685 15205
1830-2130	Arabic	9705 9860
1930-2000	Italian	7295 9545 11660
1930-2030	English	9022 9575 11670
1930-2030	Hausa	9855 11715
1930-2030	Russian	6045 7125 7175 9740
2030-2130	Albanian	11660 13790
2030-2130	Spanish	9022 11765
2130-2230	Bosnian	9660 11660 13790
2130-2230	English	11740 13745
2130-2359	Arabic	6200 9705 11710
2330-2359	French	9022 9560 11970
2330-2359	Mandarin	15400 15490 17600 (BBCM)

ITALY RAI *International - Radio Roma*

0000-0050	Italian	6010 9675 9840 11755 11800
0050-0110	English	6010 9675 11800
0050-0110	Spanish	9840 11755
0110-0125	French	6010 9675 11800
0110-0125	Portuguese	9840 11755
0130-0230	Italian	6010 6110-a 9675 9840 11755 11765-a 11800
0230-0305	Italian	6010 9675 9840 11755 11800
0305-0325	Spanish	6010 9675 9840 11755 11800
0330-0350	Russian	7235 9670 11800
0350-0410	Ukrainian	7235 9670 11800
0415-0425	Italian	5975 7150
0415-0435	Amharic	15250 17780

0425-0440 English 5975 7150
 0435-0510 Italian 15250 17780
 0445-0505 Lithuanian 9670 11800
 0510-0530 Romanian 9670 11800
 0510-0530 Somali 15250 17780
 0535-0555 Arabic 15250 17710
 0535-0555 Russian 11800 15290 17780
 0600-1300 Italian 9670 11800 11920-s
 (1000- 1100) 17710
 21520

1330-1355 Arabic 9670 11880
 1335-1355 Albanian 7240 9585
 1352-1730 Italian 9670 17780 21520
 21535 21710 Su

1400-1415 Slovene 7240 9585
 1400-1425 Italian 17780 21520
 1415-1435 German 7240 9585
 1435-1455 Croatian 7240 9585
 1500-1520 Turkish 11910 9585
 1500-1525 Italian 9670 11880
 1520-1540 Greek 9585 11910
 1530-1555 French 7240 9670 11880
 1540-1600 Bulgarian 9585 11910
 1555-1625 Italian 7240 9670 11880
 1605-1625 Russian 11800 15290 17780
 1630-1655 Arabic 11880 15330 17780
 1630-1655 French 9670 11910
 1700-1800 Italian 9670 11910 15230
 15320-a 15330 17660

1805-1825 German 6040 7135 9530
 1810-1825 Czech 5990 7240
 1825-1840 Slovak 5990 7240
 1830-1905 Italian 17780 21520
 1840-1900 Polish 5990 7240
 1910-1930 Serbian 6135 7240
 1910-1930 Somali 11880 15240 17640
 1935-1955 English 5970 7290 9750
 1935-1955 Hungarian 6135 7240
 2000-2020 Danish 9585 11740 Su/Tu/Th
 2000-2020 Esperanto 9585 11740 Sa
 2000-2020 Russian 6035 9670 11800
 2000-2020 Swedish 9585 11740 Mo/We/Fr
 2025-2045 Arabic 6110 7290
 2025-2045 English 7125 9710 11880
 2050-2110 Portuguese 6110 7290 9710 11880
 15240

2110-2130 Spanish 6110 7290
 2115-2135 Romanian 5970 7165
 2135-2155 Arabic 6110 7290
 2135-2155 Czech 5970 7165
 2155-2210 Slovak 5970 7165
 2200-2225 English 9675 11900 15240
 2210-2225 Polish 5970 7165
 2230-2359 Italian 6010 9675 9840 11755
 11800

(BBCM)

MADAGASCAR 3287.7 *Radio TV Malagasy*, Antananarivo, 2025-2035, Malagasy talk heard in parallel with stronger 5009.5. Only this late on Sat-

urdays and Sundays. (Petersen Jun 10/Cumbre DX/Francis) 5009.7 RTV Malagasy (pres) 0315, slow vocals, man in language, very good (Tomasko Jun 11/Cumbre DX/Francis)

MALAYSIA 5979.5 *Radio Malaysia Sabah*. Tune in at 1257 with vernacular call-in program, Local nx at 1315. No relay of Radio 1 at 1300. Abrupt sign off at 1330. Fair (Lam Jun 13/Cumbre DX/Francis)

NEW ZEALAND *Radio New Zealand International*

0000-0705 English 17675
 0706-1000 English 11720
 1000-1305 English 11720
 1305-1505 English 6100 occ. sports
 1506-1650 English 6145 occ.sports
 1650-1850 English 6145
 1851-1950 English 11725 Mo-Fr
 1855-1950 English 11725
 1951-2359 English 17675

(BBCM)

NIGER *La Voix du Sahel* noted back on 5020.22 @2104 w/musical program and talks before and between songs. Indirect ID's. (Liangas-GRC)

PERU A new station has been heard on 6858v, not listed in WRTH 2000, *Radio Cultural Huancabamba "La Superior"* with folk music and Peruvian cumbias, from 2300 as late as 0200 sign-off (Hernandez-VEN/Banda Tropical/Club DXistas de la Amistad/June 21/DX Listening Digest/Hauser-OK)

PORTUGAL *RDP Internacional* Lisbon updated schedule, all programs in Portuguese:

0000-0200 9715 11655 13660 13700 15295 Mo-Fr
 0500-0645 9815 11960 15585 Mo-Fr
 0645-0700 9815 11850-Sines 11960 15585 Mo-Fr
 0700-0800 9815 11850-Sines 11960 Mo-Fr
 0700-0830 12020 13610 21655 21830 Sa/Su
 0800-1000 9815 11960 Mo-Fr
 0830-1000 11995-Sines 12020 13610 21655
 21830 Sa/Su
 1000-1200 12020 13610 21655 21830 Sa/Su
 1000-1200 9815 11960 21655 21725 21830 Mo-Fr
 1200-1300 15610* Mo-Fr
 1200-1400 12020 13610 15610# 17615 21655
 21800# 21830 Sa/Su
 1300-1500 15610* 17760 Mo-Fr
 1400-1700 13770 15555# 15610# 17615 21655
 21800# 21830 Sa/Su
 1500-1600 15610* Mo-Fr
 1600-1900 13770 15445# 15555# 15610* 17680
 21655 21800# Mo-Fr
 1700-1900 13770 15555# 15610# 17615 17680
 21655 21800# Sa/Su
 1900-2000 11945* 13625* 13770 15555# 15610#
 17615 17680 21540* 21655 21800#
 Sa/Su

1900-2300* 11945* 13625 15610* 21540* Mo-Fr
 2000-2300 11945* 13625* 21540*
 2300-2400 9715 11655 13660 13700 15295 Mo-Fr

Transmissions in Port/Tetum to Timor via Taiwan:

1000-1100 11550
 1400-1500 15345
 2200-2300 11550

* Time period reserved for special transmissions.#
 Prolongation til 2300 possible. (Green-UK, Jun 17/
 EDXP/Bueschel-GER)

SINGAPORE *Radio Singapore International*

0900-1200 Malay 7235 9665
 1100-1400 Mandarin 6000 6120
 1100-1400 English 6150 9590
 1200-1400 Indonesian 9665

(BBCM)

SOLOMON ISLANDS 5019.92 *Solomon Islands Broadcasting Corporation*

is on the air. I monitored them at 0753 with a lot of noise/splatter from Cuba's Radio Rebelde on 5025. Not particularly strong (the previous night was stronger), but included a long talk by a woman, lots of mentions of Honiara and Guadecanal. (Salmaniw Jun 8) 0920 "Message to Australian and Canadian nationals who wish to be evacuated from Honiara, call the high commission, even if you've already done so. Make your way to Honiara (airport? more likely wharf) as soon as possible. You are restricted to one bag per adult and one carry-on bag per child. Extra bags will be left behind." this message repeated numerous times one after another, then music, ID "On Radio Hapi Islands, I'm Rob [something]." time check for half past eight, program about business in Solomon Islands (Brandi Jun 11/Cumbre DX/Francis)

According to an SIBC newscast on Jun 22, Radio Hapi Isles will reduce its hours as of Monday, Jun 26th, due to the continuing "financial, security, and political situation in the country." Instead of being on from 5:30am to midnight local, the station will cut back to 6am to 10pm local (0500-1100 UTC). (Valko Jun 22/Cumbre DX)

SRI LANKA Occasionally I am getting *SLBC* on 9770 instead of 9730 in En at 0030-0430 and at 1230-1530. This new freq was heard yesterday and today after about 2 weeks. (Jacob-IND/EDXP/Paduala-AUS)

SLBC has cut down on SW operation. Nothing during morning here at 0100 on 4902, 4870, 4940, only Tamil on 5020. However, evening operation is as before, 1100 onwards on 5020, 4940, 4902 till 1730, while 4870 s-off is at 1600. The modulation levels are best on 4870 and worst on 5020.

The limited use is due to high electricity costs. The govt minister of broadcasting has announced a

reorganizing committee for *SLBC*. I will be adding my 2 cents worth—of course, why SW on tropical bands should be maintained, not for DXers but for neighboring countries; also a reorganized home service relay at least on a 35 kW Ekala transmitter. I would like to get on the *SLBC* advisory board; if you feel I should wish me luck! (Goonetilleke-SRI/NU Jun 18/EDXP/Bueschel-GER)

TANZANIA 7280 & 5050, *Radio Tanzania*, Dar es Salaam, at 1400 with Afr mx, ID at 1445 and 1459 before nx bulletin; fair, while 5050 distorted audio. (Mahendra Vaghjee-MAU, NU Jun 18/EDXP/Bueschel-GER)

6015 *Radio Tanzania Zanzibar*. Following a tip from Noel Green heard here 2312 with continuous local pop music, brief identification in local language 2330. Fair signal on a clear channel. Noel heard 11734 with different programming earlier in the evening, testing new transmitter? (Barraclough May 29/Cumbre DX/Francis) 11734.1 Voice of Tanzania, Zanzibar, 2045-2158 Male announcer with long talk in Swahili at 2045 tune in to 2103. Then slow chants and more commentary to 2158 when it was wiped out by Radio Free Liberty signing on on 11730. Bad interference from R. Rossii on 11735 until 2100. (Ford Jun 14/Cumbre DX/Francis)

UKRAINE 13590 *RUI* has silenced 6020, it seems they have sacrificed it to use this transmitter for the American service instead, so 13590 should originate until 0400 from the Brovary site near Kiev. The European service from 0400 is operated at Kharkov, instead. (Ludwig/Cumbre DX/Francis)

UNITED STATES OF AMERICA *Radio Free Asia RFA* uses International Broadcasting Bureau (IBB) transmitters in Holzkirchen (Germany) and Saipan/Tinian (Mariana Islands); and relays in Almaty (Kazakhstan), Dushanbe (Tajikistan), Hawaii (KWHR), Palau (KHBN), Ulaanbaatar (Mongolia) and Yerevan (Armenia)

0000-0100	Lao	7550 9395 11830 12015 15545
0030-0130	Burmese	13680 15660 17525 17645
0100-0300	Tibetan	9365 11975 15225 15695 17730
0100-0130	Uygyur	9350 11520 15405
0300-0400	Mandarin	13670 13760 15150 17495 17525 17615 17880
0400-1000	Mandarin	15260 15665 17495 17525 17590 17615
0600-0700	Tibetan	17510 17535 17720 21500
1100-1300	Tibetan	7470 11590 13625 15695 17855-(from 1200)
1100-1200	Lao	9355 9545 13750 15560 15660
1200-1300	Cambodian	9355 9930 13675 13750 15185 15660
1300-1400	Tibetan	7470 11590 13625 15695 17855

1400-1500	Cantonese	9445 11950 13625	1400-1430	Urdu	7285 9715 15295 17775
1400-1500	Vietnamese	9455 9635 9930 11510 11520 11765 13775 15660	1430-1500	Hindi	9715 15295 17775
1400-1500	Korean	7380 11715 13720 15690	1430-1500	Mandarin	5060
1500-1600	Burmese	9920 11750 15695	1520-1550	Dari	6190 7285 9715
1500-1600	Tibetan	7470 11510 13835	1530-1600	Uyгур	5060
1500-1600	Mandarin	9905 11765 11945 13690 15510 15680 17640	1550-1630	Uzbek	6190 7285 9540 9715
1600-1630	Uyгур	7460 9370 13625	1630-1700	Persian	5975 6025 7285 9540
1600-1700	Mandarin	7540 9455 9905 9910 11750 11795 11850 11945 13690 13735 15510 15680 17640	1700-1730	Arabic	6190 7285 9540
1700-1800	Mandarin	7540 9355 9455 9905 9910 11520 11710 11740 11750 11795 11850 11945 11955 13690 13735 15510 15680 17640	1700-1730	Turkish	9540 9545
1800-1900	Mandarin	9355 9775 9875 11520 11710 11740 11945 11955 13680 15680 17640	1730-1830	Uzbek	6190 7285 9540 9545 9715
1900-2000	Mandarin	9355 9455 9550 9775 9875 9905 11520 11710 11740 11945 11955 13680 15680 17640	1830-1900	Persian	6190 7285 9540 9545 9715
2000-2100	Mandarin	7455-(Su) 7540-(Su) 9355 9455 9550-(Su) 9775-(Su) 9875-(Su) 9885-(Su) 9905 11520 11700 11740 11935 11950-(Su) 13625 15515 15680	1900-1930	Arabic	6190 7285 9540 9545 9715
2100-2200	Cantonese	9355 11785 13675	1935-2030	German	5025 5035 5060 9545 11905 15180
2100-2200	Mandarin	7540 9455 9550 9775 9910 11700 11740 11935 11950 13625 13800 15430 15515 15550 15680	2030-2100	English	9540 9545
2200-2300	Cantonese	9355 9955 11785 13675	2130-2200	English	9540 9545
2200-2300	Korean	7460 9455 11670	2330-2359	Mandarin	5060
2230-2330	Cambodian	9930 11520 11570 15175 15485	(BBCM)		
2300-2359	Mandarin	9910 11785 13800 15430 15550 15680	VATICAN CITY STATE <i>Vatican Radio</i>		
2300-2359	Tibetan	7470 9365 9875 15695	0030-0100	Portuguese	7305 9605
2330-2359	Vietnamese	11540 11560 11580 11670 13720 15560	0040-0100	Hindi	9650 12055
(BBCM)			0100-0120	Tamil	9650 12055
UZBEKISTAN <i>Radio Tashkent</i> , some programs in Uzbek for Uzbeks abroad identify as "Radio Vatan- dosh" (Vatandosh=Homeland)			0100-0230	Spanish	7305 9605 11910
0000-0030	Uyгур	5060	0120-0140	Malayalam	9650 12055
0100-0130	English	7190 9375 9530 9715	0140-0200	English	9650 12055
0130-0200	Dari	7190 9715	0210-0230	Armenian	7345 9645
0200-0230	Pashto	7190 9715	0230-0250	French	6185 7305
0230-0330	Uzbek	7190 9375 9530 9715	0230-0250	Slovene	4005 5883v
0600-0650	Turkish	15165 15200	0230-0300	Russian	6185 7345 9605 9645
1200-1230	English	7285 9715 15295 17775	0240-0310	French	9660
1230-1300	Urdu	7285 9715 15295 17775	0250-0310	Croatian	4005 5883v
1230-1300	Uyгур	5060	0250-0315	English	7305 9605
1300-1330	Hindi	7285 9715 15295 17775	0300-0320	Ukrainian	6185 7345
1330-1400	English	7285 9715 15295 17775	0310-0325	Czech	4005 5883v
			0310-0340	English	9660
			0315-0400	Spanish	7305 9605
			0320-0340	Belarusian	6185 7345
			0340-0400	Slovak	4005 5883v
			0340-0400	Hungarian	4005 5883v
			0340-0400	Lithuanian	6185 7345
			0340-0400	Swahili	9660 11625
			0400-0405	Arabic	9645 11715
			0400-0420	Latvian	6185 7345
			0400-0420	Polish	4005 5883v 7250
			0405-0430	Amharic	9660 11625
			0420-0440	Romanian	6185 7345
			0430-0500	French	9660 11625
			0440-0500	Bulgarian	6185 7345
			0440-0500	French	4005 5883v 7250
			0500-0505	Swedish	7345 9645
			0500-0520	English	4005 5883v 7250
			0500-0530	English	9660 11625 15570
			0505-0510	Danish	7345 9645
			0510-0515	Finnish	7345 9645
			0520-0530	Italian	4005 5883v 7250

0530-0600	Latin Mass	4005 5883v 7250 9645 11740 15595	1710-1730	Hungar. Mass	4005 5883v 7250
0530-0600	Portuguese	11625 13765 15570	1720-1740	Lithuanian	9585 11715
0600-0615	It/Fr/En	4005 5883v 7250 9645 11740 15595 Mo-Fr	1730-1745	Czech	4005 5883v 7250
0600-0630	French	11625 13765 15570	1730-1800	English	13765 15570 17515
0610-0645	Rom. Mass	7250 9645 Su	1740-1800	Latvian	9585 11715
0615-0745	Ukrain. Mass	9770 11740 Su	1745-1800	Slovak	4005 5883v 7250
0630-0700	English	11625 13765 15570	1800-1820	Polish	4005 5883v 7250 9645
0645-0700	Arabic	5883v 7250 9645 15595 Mo-Fr	1800-1820	Romanian	6185 7365
0730-0800	Italian Mass	7250 Su	1800-1900	Portuguese	13765 15570 17515
0830-0900	Latvian Mass	11740 15595 17515 Su	1820-1840	Bulgarian	6185 7365
0900-0930	Italian Mass	5883v We	1820-1840	German	4005 5883v 7250 9645
1000-1040	It/Fr/En	5883v 9645 11740 15595 21850 Mo-Fr	1840-1900	Latin Mass	4005 5883v 6185 9660 11625 13765
1000-1130	Latin	5883v 9645 11740 15595 21850 Su	1845-1850	Danish	7250 9645
1015-1030	Italian	5883v Su	1900-1920	Albanian	7250 9645
1030-1050	French	11740 Sa	1900-1920	Italian	4005 5883v 1050
1050-1200	Spanish	11740 Sa	1900-1940	Spanish	9660 11625 Sa
1100-1130	Portuguese	21850 Mo-Fr	1920-1930	Esperanto	4005 5883v Su
1130-1200	English	15595 17515 Fr	1920-2000	Esperanto	7250 9645 We/Th
1130-1200	Spanish	21850 Mo-Fr	1920-2000	Italian	9660 Mo
1200-1300	Italian	5883v 9645 11740 15595 21850	1930-1950	French	4005 5883v 7250 9645
1230-1300	Russian	15595 17630	1950-2010	English	4005 5883v 7250 9645
1230-1315	Mandarin	6020 17515 21620 Mo-Fr	2000-2020	Russian	7305 9585
1230-1315	Mand'n. Mass	6020 17515 21620 Sa	2000-2030	English	9660 11625 13765
1300-1315	Spanish	9645 11740	2010-2030	Spanish	4005 5883v 7250 9645
1315-1330	Portuguese	9645 11740	2030-2045	Portuguese	4005 5883v 7250 9645
1315-1345	Japanese	7340 13765 17515	2030-2100	French	9660 11625 13765
1345-1405	English	15500 17515 21620	2045-2100	Arabic	4005 5883v 7250 9645
1400-1415	German	5883 9645 11740	2100-2210	Italian	4005 5883v
1405-1450	Vietnamese	13765 17515	2130-2200	Japanese	9585 11830
1415-1430	Polish	5883 9645 11740	2200-2245	Mandarin	7305 9600 11830
1430-1500	Italian	5883 7250 9645 Fr	2245-2315	English	9600 11830
1430-1500	Multi(music)	5883 7250 9645 Sa-Th	2315-2359	Vietnamese	7305 9600
1450-1510	Hindi	12065 13765 17540	(BBCM)		
1500-1530	Latin Mass	5883v 7250 9645	VIETNAM Voice of Vietnam, certain frequencies are relayed from transmitters in Russia (r) and in Sackville, Canada (c)		
1510-1530	Tamil	12065 13765 17540	0000-0030	Cambodian	7285
1530-1550	Malayalam	12065 13765 17540	0000-0100	Vietnamese	9730 13740
1530-1600	Arabic	11625 15595	0030-0100	Lao	7285
1530-1600	Italian	5883v 7250 9645	0100-0130	English	9695c
1550-1600	English Mass	12065 13765 17540 Sa	0130-0230	Vietnamese	9695c
1550-1610	Armenian	11715 15185	0230-0300	English	9695c
1600-1615	French	4005 5883v 7250 9645 15595 1050	0300-0330	Spanish	9795c
1610-1620	Swahili	15570 17515 Su-Fr	0330-0400	English	9795c
1610-1640	Russian	6205 9585 11715 15185	0400-0500	Vietnamese	9795c
1615-1630	English	4005 5883v 7250 9645 15595 1050	0830-0930	Mandarin	9840 12020
1620-1635	Somali	15570 17515 Sa	0930-1000	Indonesian	9840 12020
1630-1650	Slovene	4005 5883v 7250	1000-1030	English	9840 12020
1635-1700	Amharic	15570 17515	1030-1100	Indonesian	9840 12020
1640-1700	Ukrainian	9585 11715	1100-1130	English	7285
1700-1715	Croatian	4005 5883v 7250	1100-1130	Spanish	9730 13740
1700-1720	Belarusian	9585 11715	1130-1200	Russian	9840 12020
1700-1730	French	15570 17515	1130-1200	Thai	7285
			1200-1230	Cambodian	7285
			1200-1230	Japanese	9840 12020
			1230-1300	English	9840 12020
			1230-1300	Lao	7285
			1300-1330	French	9730 13740
			1300-1330	Russian	7285

1330-1400	Cambodian	7285	1800-1830	English	9730 13740
1330-1400	English	9730 13740	1830-1900	French	9730 12070r 13740
1400-1430	Japanese	9840 12020	1900-1930	English	9730 13740
1400-1430	Lao	7285	1900-1930	Russian	12030
1430-1500	Cantonese	7285	1930-2000	French	9730 13740
1430-1500	Indonesian	9840 12020	1930-2030	Vietnamese	12030
1500-1530	Mandarin	7285	2000-2030	Spanish	9730 13740
1500-1530	Thai	9840 12020	2030-2100	English	13740 13750
1530-1600	Cantonese	9840 12020	2100-2130	French	13720 13740
1600-1630	English	9730 13740	2130-2200	Japanese	9840 12020
1630-1700	Russian	9730 13740	2200-2230	Mandarin	9840 12020
1700-1730	English	12070r	2230-2300	Cantonese	9840 12020
1700-1800	Vietnamese	9730 13740	2300-2330	Thai	9840 12020
1730-1830	Vietnamese	7440 12070r	2330-2359	English	9840 12020

(BBCM +Hambly-BC/DX Listening Digest/Hauser-OK)

NASWA Awards

Dr. Harold Cones • 2 Whits Court • Newport News, VA 23606 • hcones@cnu.edu

Howdy and welcome to the latest NASWA Awards column. Business is slow but a dedicated few have struggled to the mailbox to get their applications in and they shall be rewarded with NASWA green certificates suitable for framing or impressing friend and enemy alike. Dave Glow's applications almost broke the back of the postman with 14 awards! And we have a new Senior DX Centurion and a new DX Centurion. So here they are, the latest in NASWA's 26 year award history:

Paul Buer

36 endorsement: All VOA DXer
15 endorsement: All Germany DXer

Richard Davis

50 endorsement: Senior Ecclesiastic DXer
40 endorsement: All American DXer
30 endorsement: All VOA DXer

Robert Gearing

European Continental DXpert
All VOA DXer

Dave Glow

African Continental DXer
All American DXer
All VOA DXer
Antarctica DXer

Arab World DXer

Asian Continental DXer
DXer de Pacifica
Master European DXer
North American Continental DXpert
Senior Ecclesiastic DXer
South American Continental DXer
Soviet Sphere DXer
Senior British Commonwealth DXer
Senior DX Centurion

Terry Mefford

World Wide DXer

Konnie Rychalsky

European Continental DXpert
European Senior DXer
North American Continental DXpert
South American Continental DXer
DX Centurion
World Wide DXer

Summer time is traditionally slow radio time so it might be a good chance to go through your logs and organize everything. You might find that you have the makings for another NASWA award and did not realize it. And we can all profit from a bit of organization. Lets keep those application rolling in!



QSL Report

Sam Barto • 47 Prospect Place • Bristol, CT 06010



ARMENIA: Voice of Russia 9965 via Kamo cd. w/ schedule, calendar and a 70th Anniversary sticker in 10 wks.

ASIATIC RUSSIA: Radio Vlaanderen (Field-MI)

International 9865 via Petropavlovsk

f/d cd. in 2 mo. (Field-MI). China

Radio 5895 via Petropavlovsk EG/RS cd.

in 2 mo. Addr: Kamchatka Radio, RTV

Center, Don Radio, ul. Sovietskaya 62-G,

683000 Petropavlovsk-Kamchatskiy, Russia.

(Field-MI). Deutsche Welle 15600 via Vladi-

yostok cd. in 2½ mo. (Field-MI). Voice of Rus-

sia 17565 via Komsomolsk-on-Amur rcvd. "Radio

Moscow" and "Voice of Russia" cds. for differ-

ent days of reception plus a

personal ltr. from Tanya

Stukova in 5 wks. I

like those types of per-

sonal ltrs. (Field - MI).

So when is she due to visit

you?...Sam. Radio Canada

International via Irkutsk



NOTES: Gene Borokowski says that

he is pleased with his new

QSLs from Cyprus and Vietnam.

They are both new countries QSLed

for him.....Great!...Sam. Bill Wil-

kins, in response to a question from

Marlin Field says that the address for

WQA767 is as follows: WQA767, Attn: Joe

Blair, Dallas Fort Worth International

Airport, P.O. Drawer 619428, Dallas Fort

Worth Airport, TX 75261-9428....This comes

from a 1997 issue of Popular Communications.

Hope this is still good. I'm going to try it.

rcvd. cd. w/ station pennant. v/s Bill Westenhaver.

CHINA, PEOPLE'S REP. OF: Radio Canada In- (Field-MI).

ternational 9535 via Xian cd. w/ schedule, sticker and a station

pennant in 1 mo. (Field-MI).

CUBA: China Radio International 5990 and 9570 cd. w/ New Year's paper

cut in 2 mo. The site was listed on the card as "test Transmission"

w/ no specific site. (Field-MI).

ENGLAND: Radio Canada International 11710 via Woofferton cd. w/ sked.

and sticker in

1 mo. (Field-MI)

GERMANY: Radio Vil-

nius 6120 via

Juelich f/d cd.

in 24 ds. (Boro-

kowski-NY).

GOA: All India

* Radio 11740

via Panaji QSL

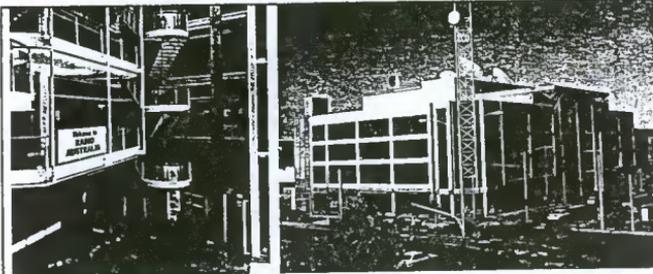
was rcvd. after

4 f/up rpts. I

now have all of

my 243 coun-

tries QSLed!



RADIO AUSTRALIA...in touch with the world.

Truly a great accomplishment!....Sam.

HAWAII: Que Huong Radio

17510 and 9930 via
KWHR ltr. rcvd. in 1
wk. v/s Nguyen Khoi,
Station Manager. Addr:
2670 South White
Road, Suite 165,
San Jose, CA 95148
(Field-MI).

IRAQ: Radio Iraq International 13680 p/d QSL folder
confirming my 1992 reception.

Station says that the US embargo is
suffering the Iraqi people.(Price-PA).

KOREA, DEMOCRATIC PEOPLES REP. OF: Radio Pyongyang

13760 f/d "Mountain Vista" cd. in 207 ds. w/ pen-
nant, holographic calendar, report forms and news-
papers. (Borokowski-NY).

MOLDOVA: Voice of Russia 9665 f/d "Russian Artifacts"
cd. in 55 ds. w/ schedule. v/s Elena Osipova. (Borokow-
ski-NY). 7180 p/d cd. in 2 mo. (Field-MI).



VERIFICATION SIGNERS: Radiodifusora Portuguesa Internacional

11660 Addr: Avenida Eng. Durante Pacheco 6, P-1070 Lisboa.

True Light Station - China Radio 9450 via Petropavlovsk

v/s Richard E. Adams, Director. Addr: 53 Min Chuan West Road,

9th Floor, Taipei, Taiwan

104. Luterische Stunde Radio

7360 via Moscow or 15485 via

Samara Addr: PF 1162, DE-27363

Sottrum, Germany. **Radio Rossii**

13705 via Ekaterinburg Addr:

Main Center for control of Broad

casting Networks, 7 Nikolskaya

Street, Moscow 103012. v/s Ana-

toly Titov, Chief Engineer. **Uni-**

versal Life Radio 5905 via Kras-

nodar or 7370 via Moscow. Addr:

PF 5643, DE-Wuerzburg, Germany

.....via PLAY DX.....Sam.



INDIA: All India Radio 4990 via **It-**
anagar f/d cd. in 3 mo. (Field-MI)

NEW ZEALAND: Radio New Zealand International 17675 via **Rangitaki** f/d cd.
of "New Zealand - Land of the Sheep (and men with High Boots)" in 38
ds. w/ stickers and schedule. (Humenyk-ONT).

PERU: Radio Coremarca 5645.0 (x - **La Voz de San Antonio**) rcvd. cd. of
* Bambamarca w/ date typed on it along with a personal ltr. This was on
my 12th try. v/s Prof. Virgilio Carranza Tello. (Field-MI).

RUSSIA: Voice of

Russia 9810
cd. in 10 wks
(Field-MI).
13665, 15470
and 12020 cd.
w/o sites in
2 mo. Marlin,
your correct.
The station
seems to be
QSLing w/o
listing any
sites. This
seems to be



RADIO ORIENTAL

La Emisora más querida
4780 Kz. SW 1360 Kz AM

Tena provincia de Napo - Ecuador - casilla 260 - Telf. 886033



CONFIE EL CERTIFICADOR DE SINTONIA

A su distinguido oyente: GEORGE L. GLOTZBACH de S. ANA. FE.....

NEW MEXICO que ha escuchado desde 12:48. a 1:30 P.M. en nuestra frecuencia de 4780 Kz.

el día 04. de Enero del 2000

Tena, 25 de enero del 2000

http://www.cbs.org.tw
fax:886-2-25982294
E-mail:cbs@cbs.org.tw

台北國際之聲 Radio Taipei International

very noticable on their QSLs for foreign language broadcasts....Sam.

SINGAPORE: In the May bulletin it should read Swiss Radio International instead of Radio Singapore International for Marlin Field's QSL....Sorry....Sam.

SRI LANKA: Deutsche Welle 15250 via Trincomalee f/d "Cologne" cd. in 34 ds. w/ program schedule.(Humenyk).

TAIWAN: Radio Australia 11500 f/d "Sunset over Shepparton" cd. w/ schedule in 5 wks. (Field-MI). Far East Relay via CBS Taipei

11725 personal note w/ schedule in 4 mo.(Field-MI).
TUNISIA: ERTT Tunis 12005 via Sfax f/d "Map/Logo" cd. w/ f/d ltr. and * other goodies for a FR rpt. This was over a 15 year period and a few mortgage payments. I owe the QSL gods big for this one!(Price).
USA: WTIR 1680 f/d certificate of reception in 7 mo. for SASE. Addr: 301 Plymouth Drive, N.E., Dalton, GA 30721-9983. (Sgrulletta-NY).

RTBF

via D'Angelo

This is to verify your reception report of

Emission TEST "la pianiste"
from 17h to 18h GMT, 20/12/93
15.7.15. Bg

Thank you very much

VERIFICATION SIGNERS: Voice of America 12065 via Petropavlovsk Addr: B/K 4353 Cohen, Washington DC 20547. Far East Broadcasting Association 11600 v/s Mrs. Doreen Dugathe, Secretary. Addr: P.O. Box 234, Mahe, Seychelles. Slovak Radio 11990 Addr: P.O. Box 55, SK-81005 Bratislava, Slovakia. Wales Radio International 17650 v/s Jenny O'Brian, Secretary. Addr: Pros.Kairon, Crymch, Pembrokeshires, A41 3QE, Wales, UK.

Trans World Radio - Swaziland 4775 v/s

Mrs. 1. Stavropoulos, Secretary. addr: P.O. Box 64, Manzini.

Radio Tatarstan 11665 Addr: Ul. Gorkogo 15, Tatarstan 420015, Russia

British Broadcast-

ing Corporation Asia Relay Station 5975 (Thailand) v/s Miss Jaruwan. Addr: P.O. Box 20, Muang Nak-khon Sawan 6000, Thailand....via PLAY DX....Sam.

台北國際之聲



WJNZ 1680 personal ltr. was rcvd. after sending rpts. to at least 3 different addresses.(Field-MI). Radio Taipei 9680 via WYFR f/d "Blessings from Gods" cd. in 188 ds. w/ inflated globe, schedule, stickers and postcard.(Humenyk-ONT)

WTAW 1660 f/d "Yep, that's Us / Tower" cd. in 3 wks. for SASE (not used) Addr: P.O. Box 3248, Bryan, TX 77805.(Sgrulletta-NY). WBCO 7415 f/d "Planet / Logo" cd. in 16 ds. (Humenyk-ONT).

YEMEN: Yemen Radio and Television Sana'a 2 f/d beautiful cds w/ personal ltr. and postcards after numerous rpts. for a 92 reception.(Price).

ZANZIBAR: Voice of Tanzania - Zanzibar 11734 f/d cd. in 5 years after numerous reports and dollars. (Price-PA).

Only 3 pages this month - one of our shortest QSL Columns. However, there were many fine QSLs to go over. Next month there will be a few more pages....Sam.

Sam



http://www.cbs.org.tw
fax:886-2-25982294
E-mail:cbs@cbs.org.tw

Scoreboard

Fred S. Kohlbrenner • 214 West Marshall Road • Lansdowne, PA 19050 • fkohl@ix.netcom.com

Hello, and welcome once again to the NASWA SCOREBOARD. This month we highlight our members North American totals. The next deadline is August 15th for the September issue of the *Journal*. The spotlight then will be on Oceania. Please update your totals at least once a year to remain on the SCOREBOARD, and remember to use the NASWA Country List for counting totals. Also, please begin sending your contributions to my new address: 214 West Marshall Road, Lansdowne, PA. 19050

Name, State	Total		N America		Best N America QSL
	c/H	c/V	c/H	c/V	
James Young, CA	251	233			
Martin Field, MI	243	242	25	25	CFRX 6080
Dan Henderson, MD	242	234	24	24	CKFX Vancouver
William Flynn, OR	241	227	27	27	Greenland
Jerry Berg, MA	240	238	25	25	ZNX32 Barbados
Gerry Bishop, FL	238	223	23	23	CKFX
John Sgrulletta, NY	236	236	23	23	CKFX
Harold Cones, VA	234	232			
Don Hosmer, MI	227	195			
Nobuaki Takahashi, Japan	226	201	18	15	CFVP Calgary
Richard A. D'Angelo, PA	222	216	21	21	Gronlands Radio
Sheryl Paszkiewicz, WI	222	214	20	20	El Salvador
Richard Davis, NM	220	212	24	22	Panama HOH7
Paul Buer, FL	218	206	24	22	CKFX
Jerry Klinck, NY	218	196			
Rick Krzemien, CA	217	212	19	19	Belize/Greenland
Christos Rigas, IL	217	197	21	20	R. Free Grenada
Fred Kohlbrenner, PA	217	193	21	20	El Salvador
Jerry Lineback, KS	214	109	21	21	Turks
Charles Washburn, ME	207	170	23	21	Panama HOLA
George Maroti, NY	195	163	17	16	R. Miskut
Stephen Price, PA	193	172	17	16	Dominica
Bob Fleck, TX	188	165	20	19	Grenada
Jim Renfrew, NY	187	153	20	18	R. Venceremos
Ross Comeau, MA	184	156	17	15	R. Miskut
Allan R. Loudell, DE	184	155	18	17	Belize
Gary Froemming, AZ	181	44	16	6	WWVL
Andy Rugg, Quebec	178	157	22	20	KNLS
Bill Bergadano, NJ	177	117			
Bob Raymond, NH	174	147	19	18	WIBS Grenada
Mark Humenyk, Ontario	169	137	14	14	WMLK
Robert E. Gearing II, FL	155	122			
Darren White, MS	154	110	17	15	R. Belize
Norm Constanti, MO	142	107	15	12	4VEH Haiti
George L. Glotzbach, NM	131	97	13	11	TGMI Guatemala
Jill Dybka, TN	129	99	14	13	CKZN
Gary R. Neal, TX	123	114	15	13	CHNX 50w
Ronald J. Hunsicker, PA	110	98	19	16	R. Swan
Gene Borowski, NY	93	83	11	9	R. Reloj
Bret Pollack, MD	82	54			
Ed Krucenski, FL	59	27	72		

Contributors' Page

Fred S. Kohlbrenner • 214 West Marshall Road • Lansdowne, PA 19050 • fkohl@ix.netcom.com

DEADLINE FOR CONTRIBUTIONS IS THE 10th OF THE MONTH

The following members sent in contributions:

Brian ALEXANDER, Mechanicsburg, PA	NRD-545 AOR AR-7030 100' LW
Gene BOROWSKI, Staten Island, NY	
Ralph BRANDI, Tinton Falls, NJ	R8 PR150 Dressler ARA60, 250' LW
Paul BROUILLETTE, Geneva, IL	R8 60' LW
Ross COMEAU, Andover, MA	R8 325' LW
Peter COSTELLO, Matawan, NJ	AR3030 DX-390 YB400 70' LW Tun-4A
Walt FAIR, Maracaibo, VENEZUELA	Sangean ATS-909 Realistic ant. and LW
Bill FLYNN, Cave Junction, OR	R8 R7A DX-Ultra inverted v
Bob FRASER, Cohasset, MA	Sony ICF-2003 ICF-SW100S 2m LW
Martin GALLAS, Jacksonville, IL	Sangean 818
George GLOTZBACH, Santa Fe, NM	R8B ARA-60
Hugh O. GRIFFIN, Jr., Portsmouth VA	DX150B DX160 LW
Bob HILL, Littleton, MA	Sony 2010 120' dipole at 35'
Mark HUMENYK, Weston ONTARIO	Magnavox D-2935 AN-60 DX-SWL sloper
Ron HUNSICKER, Wyomissing, PA	
Fred KOHLBRENNER, Philadelphia, PA	R8 NRD-525 Datong FL-3 ANC-4 Sloper
Harold LEVISON, Philadelphia, PA	R8 R70 YB400
Brian LIMBACH, Pittsburgh, PA	R-5000 Sony AN-1
Jerry LINEBACK, Scranton, KS	Icom 746 beverage antennas
Jack LINONIS, West Middlesex, PA	DX-375 DX160A NCX-20 65' LW Sloper
George MAROTI, Mt. Kisco, NY	R8B 2010 T2FD 30/45m dipoles
William McGUIRE, Cheverly, MD	DX-380
Bob MONTGOMERY, Levittown, PA	NRD-535D R388 DX Pro active antenna
Gary NEAL, Sugarland, TX	Grundig YB-400
Don NELSON, Beaverton, OR	(3) HF1000A's NRD-545 Collins 2050 R7A
Tim NOONAN, Madison, WI	Kenwood R-1000 random wire
Takayuki Inoue NOZAKI, Tokyo, JAPAN	NRD515 NRD535 FRG7000
Mike PACE, Tipton, IA	
Denis PASQUALE, New Brighton, PA	DX-440 with a 10 meter long wire
Sheryl PASZKIEWICZ, Manitowoc, WI	R8 NRD-525 60' LW Eavesdropper
Bob RAYMOND, Nashua, NH	R8B 20m 5/8 wave vertical
Betsy ROBINSON, Clinton, TN	Sony 2010 Indoor antenna
Chuck RIPPEL, Cornland, VA	WJ-HF1000A R8B R390A/SE-3 51S-1 LW's
Giovanni SERRA, Rome, ITALY	NRD-525 AD Sloper
Arnaldo L. SLAEN, ARGENTINA	
Nobuo TAKENO, Tokyo, JAPAN	NRD-535D 10m LW
George UHLER, Brookings, OR	DX-440 30' Loop Grove tuner
Charles WASHBURN, Robbinston, ME	
Gerald WITHAM, Keaau, HI	R8 ANC-4 135' LW

The above members sent in contributions to both the June and July issues of the Journal. Thanks to Fred Willshaw of NC we now have the address of Wales Radio International for George Glotzbach: Pros Kaironi, Crymych, Pembrokeshire, SA41 3QE, Wales, UK.

Effective immediately please send your contributions to me at the following new address:
214 West Marshall Road, Lansdowne, PA. 19050. 73s!



Tropical Band Loggings

Sheryl Paszkiewicz • 314 Riverview Drive, Apt 16 • Manitowoc, WI 54220 • spasz@dataplusnet.com

- 2310 AUSTRALIA CAAMA R 6/8 1056 EG by OM, poor (Line-KS)
 2325 AUSTRALIA CAAMA R 6/8 1056 EG by OM, poor (Line-KS)
 2485 AUSTRALIA CAAMA R 6/8 1056 EG by OM, poor (Line-KS)
 3205 NEW GUINEA R Sandaun 6/8 1049 OM in vern, fair (Line-KS)
 3215 SULAWESI RRI Manado 6/7 1051 Indo pops, poor (Line-KS)
 3215 USA WWCR 5/28 0120 rel pgm, weak (Fair-VEN)
 3220 PAPUA R Morobe 6/8 1049 OM in vern, fair (Line-KS)
 3235 NEW BRITAIN RWNB 6/7 1043 very poor on high side of ute (Line-KS)
 3245 NEW GUINEA R Gulf 6/7 1042 vern by YL, poor (Line-KS)
 3250 HONDURAS R Luz y Vida 5/28 0125 hymns, TC, IDs (Fair-VEN)
 3265 SULAWESI RRI Gorontalo 6/7 1052 Indo pops, fair (Line-KS)
 3275 PAPUA R S Highlands 6/8 1048 man in vern, fair (Line-KS)
 3279.5 ECUADOR LV del Napo 5/28 0140 Andean mx, TC, ID (Fair-VEN)
 3300 GUATEMALA R Cultural 5/28 0205 rancheros, rel mx, phone calls, fair (Fair-VEN)
 3310 BOLIVIA R Mosoj Chaski 0000 SP/Quechua ment Cochabamba, local mx w/children (Fair-VEN)
 3315 ADMIRALTY ISL R Manus 6/8 1046 EG pops, fair-good (Line-KS)
 3325 BOUGAINVILLE R Bougainville 6/8 1046 mixing w/Guatemala, het, poor (Line-KS)
 3335 NEW GUINEA R E Sepik 6/8 1045 local mx, good (Line-KS)
 3345 MOLUCCAS RRI Ternate 6/8 1044 woman in Indo, poor (Line-KS)
 3355 NEW GUINEA R Simbu 6/8 1044 local mx, good (Line-KS)
 3365 NEW GUINEA R Milne Bay 6/9 1038 man in vern under ute (Line-KS)
 3385 NEW BRITAIN RENB 6/8 1043 woman in vern, fair-good (Line-KS)
 3905 IRIAN JAYA RRI Merauke 6/8 1041 M & W in IN, mx, fair (Line)
 3905 NEW IRELAND R New Ireland 6/8 1041 man in vern, cock crowing, good level, mixing w/RRI (Line-KS)
 3976 KALIMANTAN RRI Pontianak 6/8 1055 woman in IN, fair (Line-KS)
 4000.1 SULAWESI RRI Kendari 6/8 1054 IN pops, poor (Line-KS)
 4606 IRIAN JAYA RRI Serui 6/8 1054 IN pops, fair-good (Line-KS)
 4635 TAJIKISTAN Tajik Radio 5/22 1842 local vocals, intl, anmts, poss ID, poor (Serr-IT)
 4753.3 SULAWESI RRI Makassar 6/9 1053 men in IN, good (Line-KS)
 4775 UNID 6/4 0125 SP Andean mx, SP talk (Fair-VEN)
 4785 BRAZIL unid 5/30 0100 hymns, talk (Fair-VEN)
 4789 IRIAN JAYA RRI Fak-Fak 6/9 1052 man in IN, poor (Line-KS)
 4810 ARMENIA Vo Armenia 5/23 2001 EG //9965 w/political cmtry, mx break, anmt, ID (Serr-IT)
 4845 MOLUCCAS RRI Ambon 6/9 1051 woman in IN, pops, ment Ambon, fair-good (Line-KS)
 4865 BRAZIL unid 5/28 0250 rel talk, hymns, abrupt s/off (Fair-VEN)
 4875 BRAZIL R Roraima 5/27 2340 ballads, echo ID, interviews, exc. (Fair-VEN)
 4875 IRIAN JAYA RRI Sorong 6/4 1042 woman in IN, poor (Line-KS)
 4885 BRAZIL R Clube 5/27 2345 ballads, anmt, ID, FC (Fair-VEN)
 4890 PAPUA Karai Natl R 6/9 1046 man in vern, good (Line-KS)
 4890 PERU R Chota 5/7 0209* talk, echo anmt, ID, no NA (Alex-PA)

- 4895 **COLOMBIA** *Colombia Estereo* 6/6 0805 heavy metal mx, 0826 Michael Jackson, ID 0853, mx thru bottom and top of hour, jingle (Mont)
- 4915 **BRAZIL** *R Anhanguera* 5/13 0255* talk, echo Ids, ads, jingles, good (Alex-PA)
- 4919 **ECUADOR** *R Quito* 5/28 0020 nx on Peru elections, EZL, ballads, ID (Fair-VEN)
- 4955 **COLOMBIA** *R Nacional* 6/4 2130 talk, ID, mx (Fair-VEN)
- 4960 **VANUATU** *R Vanuatu* 6/9 1046 talk in vern, NA (Line-KS)
- 4965 **ZAMBIA** *Christian Voice* 5/27 0257* Christian mx, Ids, EG, abruptly off (Alex-PA)
- 4976 **UGANDA** *R Uganda* 5/23 2017 Afropop, talk (Serr-IT) 6/3 *0300 choral anthem, local chorus, EG talk (Alex-PA)
- 5020 **COLOMBIA** *Ecos del Atrato* 6/6 0034 nx, mx, ID (Mont-PA)
- 5020 **SOLOMON ISL** *SIBC* 6/9 1048 pop vocals, BBC nx (Line-KS) 6/11 0920 "Msg to Australian & Canadian nationals who wish to be evacuated from Honiara. Call the high commission even if you've already done so. Make your way to Honiara (wharf?) ASAP. You are restricted to 1 bag per adult and 1 carry-on bag per child. Extra bags will be left behind." Mx & ID, TC (Bran-NJ)
- 5047 **TOGO** *R Lome* 5/23 2013* talk, instl mx, chant, ID (Serr-IT) 
-

We have begun to use a new labeling system this month that shows the renewal month and year. After your name on the label there will be a three or four digit number. The last two digits are the year and the first one or two is the month. If your number is "1000", your last issue will be October (10) 2000. If your number reads "702", your last issue will be July (7) 2002. As with all things new, there is probably a glitch or two in the labels, but we hope to have it all straightened out shortly. If you notice an error, please write to NASWA Headquarters, 45 Wildflower Road, Levittown, PA 19057 or e-mail <boliver@bboard.com>. You can also call (215) 945-0543.

FOR SALE: Customized beam headings (from/to) and distances (MI/KM) to more than 480 WRTH transmitter sites including new Russian republics. ITU Country Codes included. Send your location or coordinates. Price \$8.00. "Passport to World Band Radio" 1997, \$7.00. WRTH '97, \$10.00; '98, \$12.00; '99, \$16.00. Complete 1999 NASWA Journals, \$16.00. All items include shipping (overseas shipping extra). Cashiers check or money order only, please. Al Drehmann, 389 Laurel Heights Lane, Tryon, NC 28782. E-mail <ADrehman@juno.com>. Phone (828) 894-3398. No collect calls, please.

International Band Loggings

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

- 5905 **UKRAINE R Ukraine** Kiev in GM 0145-0200*, tlks, pips, abrupt s/off w/o ID'ing (Fair VENEZ 6/4)
- 6010 **MEXICO R Mil** Mexico City in SP 1005, U.S. oldies and SP tunes, g (Montgomery PA 5/29) 250 wts
- 6050 **ECUADOR HCJB** Quito in SP 2250, Andean mx, science info, ID, g (Fair VENEZUELA 6/4)
- 61151 **COLOMBIA LV del Llano** in SP 0830, rx mx, TC's every two songs, ID 0857 (Brandi NJ 6/8)
- 6145 **CANADA R Japan** relay in EG 0000, ID, financial nx, rpt on the two Koreas, g (McGuire MD 5/12)
- 6175 **CANADA BBC** relay in EG 0413, nx re military forces in Northern Ireland, exc (Pace IA 6/3)
- 6185 **MEXICO R Educacion** Mexico City in SP 1028, greetings, classical mx, tlks, g (Montgomery 5/28)
- 72399nf **ALBANIA R Tirana** in IT 1657*, local feature, songs, ID, IS, //6100 (Serra ITALY 5/22)
- 7345 **SLOVAKIA R Slovakia Int** in EG 1634, topical issues, nx, mx, ID, tlk, //6055 (Serra ITALY 5/25)
- 9375 **GREECE FTH** Athens in GK 2225, mx, cmntry, tlks abt Greek economy, g (Fair VENEZUELA 6/4)
- 9535nf **PHILIPPINES R Veritas Asia** in Bengali 1410, ID and fqy ancmts in EG 1425, mx interval and IS to 1430 prior to starting pgm in Telegu, exc, move from 9530 (Treibel WA 5/23)
- 9560 **CANADA China R Int** relay in EG 0430, tlk re floods in Szechuan province (Linonis PA 6/7)
- 9560 **HUNGARY R Budapest** in EG 0100, tlk re likely changes in HG govt ministries (Pasquale PA 5/13)
- 9655 **AUSTRIA RAI** Vienna in EG 0140, cmntry re Bosnian refugees leaving Austria, g (Pasquale 5/10)
- 9665 **RUSSIA V of Russia** via Armavir relay in EG 0130, highlights of 1966 Tchaikowski competition, g (Pasquale PA 5/10) ED: This one is a 1000 kw. xmtr!
- 9675 **PAPUA NEW GUINEA Port Moresby** in EG 1100-1245, Pacific nx, US and island mx on "Sunday Night Radio Show", g until 1245 f/o (Gallas IL 6/18)
- 9685nf **GREECE VOA** relay in Pashto 0145, nat'l & regional nx, ID, into Dari 0200, g (McGuire MD 5/12)
- 9700 **INDIA AIR Panaji Goa** in Sinhala *1257, IS, tlks in lang at 1300, weak (Alexander PA 5/20)
- 9710 **LITHUANIA R Vilnius** in EG 0936, ID, ancmts, pop mx, tlk on Lithuania, mail (Serra ITALY 5/28)
- 97374 **PARAGUAY RN** Asuncion in SP 1029, ID, into nx, QRM from BBC on 9740 (Montgomery 5/29)
- 9745 **SOUTH AFRICA AWR** relay Meyerton in EG 2041, ID, QTH, contemporary relig mx and sermon, occasional deep fades (Montgomery PA 5/10)
- 9795nf **UNITED KINGDOM Wales R Int** relay Rampisham in EG 0205, "Celtic Notes", ID (McGuire 5/27) ED: Listed as 1/2 hour pgm on Sundays (UTC) only.
- 9870 **MONACO TWR** relay Monte Carlo in EG 0644, IS, ID, fqy, sked, relig feature & mx (Serra 5/20)
- 9880 **CZECH REPUBLIC R Prague** in EG 0702, lcl nx, wx rpt, mx, ID, feature, QTH, //11600 (Serra 5/20)
- 9965 **ARMENIA V of Armenia** in EG 1958, ID, political cmntry, QRM China 2000, //4810 (Serra 5/23)
- 11600nf **SLOVAKIA AWR V of Hope** relay in EG 0130, ID, relig nx, fair w/co-channel QRM (Alexander 6/3)
- 11615 **CZECH REPUBLIC R Prague** in EG 0010, econ nx, ID, pgm on WW II, g (McGuire MD 5/24)
- 11715 **CANADA R Korea** relay in EG 1035, cmntry on how China's favored trade with US affects Korea's trade (Fraser MA5/29) rpt on Korean summit, ID, mention of Pope John Paul II (McGuire MD 6/12)
- 11720 **SOUTH AFRICA Channel Africa** in EG 0459, IS, ID's in EG & PT, drums, pips, TC, fqy, "Netweek Africa", QRM splats, f-g (Serra ITALY 5/28)
- 11720nf **NEW ZEALAND RNZI** in EG 0955, book review "A Policeman's Life", g (Fraser MA 5/14) in EG 1308*, apparently closed down hour later than listed, nx to 1304, ID, sked, mx and off (Fine VA 5/20)
- 11760 **OMAN BBC** relay in EG 0200, ID, pips, "The World Today", under co-channel RHC (McGuire 5/28)
- 11775 **ROMANIA R Bucharest** in EG 2350, Romanian libraries being linked by Internet, g (Pasquale 5/10)

- 11815 **BRAZIL R Brasil Central** in PT 0250, pop mx (US and BR), ID, abrupt s/off TOH (Brandi NJ 5/31)
- 11870 **BOSNIA R Yugoslavia** relay in EG 0107, rpts on UN economics and culture, vg (Limbach PA 5/11)
- 11935 **SAUDI ARABIA BSKSA** Riyadh in AR 2300*, tlks, Holy Qu'ran readings, ID (McGuire MD 5/23)
- 11950 **UNITED ARAB EMIRATES R Dubai Home Service** relay in AR 2045*, tlks, Holy Qu'ran readings, NA, s/off, f (McGuire MD 5/21)
- 11985 **FINLAND YLE R Finland** in EG 0110, tlk on drug testing in Finnish schools, f-g (Pasquale PA 5/13)
- 120652nf **PHILIPPINES FEBC** in IN 2226, many repetitions of IS interspersed w/canned ID's, s/on ancmts 2230 and into gospel melody, weak to fair at best w/QSB and QRN (Hill MA 5/28)
- 12130 **SOUTH AFRICA AWR** in EG 1733, relig pop song, ancmts, ID, Bible reading, cmntry (Serra 5/24)
- 13590 **UKRAINE R Ukraine Int** in EG 0300, IS, ID, nx, cultural pgm re local poet, vg (Alexander PA 5/27)
- 13605 **AUSTRALIA R Australia** in EG 0947, "Encounter" re morality in public life, vg (Fraser MA 5/14)
- 13625 **SWEDEN R Sweden** in EG 0155, taped rpt, cmntry on Swedish media, f (Humenyk ONT 5/3)
- 13640nf **TURKEY V of Turkey** Ankara in EG 2315, TK/foreign press reviews, mailbag, vg (Limbach 5/10)
- 13685 **SWITZERLAND SRI** Sottens in IT 0919, mailbox pgm, ID, "Agenda", f-g (Serra ITALY 5/28)
- 13685 **FRENCH GUIANA China R Int** relay in SP 0255*, cultural pgm, ID, fqy, sked, g (McGuire 5/23)
- 13725nf **CANADA RTEireann** relay in EG *1830, chimes, ID, TC, nx, rpt on Israel & IRA, g (McGuire 5/22)
- 13730 **AUSTRIA R Austria Int** in GM 0400, nx bulletins, tlk abt European Union (Linonis PA 6/9)
- 13735 **SINGAPORE Swiss R Int** relay in FR 1230, nx, back-to-back taped features, g (Humenyk ONT)
- 13770 **FINLAND YLE R Finland** in EG 0135, rpt on FN organization's visit to Afghanistan (Limbach 5/7)
- 15160 **ALGERIA R Algiers Int** in EG 2000, nx, variety of US/Euro pops, //117501 (Alexander PA 5/13)
- 15180 **ROMANIA RRI** Bucharest in EG 2100, nx, cmntry, ID, lite instrum mx, vg, much weaker on //s 15105, 11940, 11740 (Alexander 5/13) in EG 2225, concert mx performance, f (Limbach 5/10)
- 15190 **PHILIPPINES R Pilipinas** Tinang in Tagalog/EG 1930, nx, religious pgm (Linonis PA 5/23)
- 15215 **SOUTH AFRICA Channel Africa** in EG 0622, African nx, "Network African Sports", f (Serra 5/20)
- 15220 **ANTIGUA BBC** relay in EG 1308, nx, cmntry on nuclear arms race, PM Putin, vg (Pace IA 6/4)
- 15315 **GERMANY Swiss R Int** relay Julich in EG *0959, IS, ID, world nx, "News Network" (Serra 5/19)
- 15330 **UNITED KINGDOM R Canada Int** relay Skelton in EG *0500, IS, ID, fqy, sked, "First Edition", national nx, mention of Peru, g (McGuire MD 6/6)
- 15355 **GABON R Japan** relay in IT 0533, local nx, "Medodie Giapponesi", f-g (Serra ITALY 5/28) in SP 0500, ID "NHK", fqy, sked, mainly national nx, g (McGuire MD 5/21)
- 15365nf **GERMANY Democratic Ethiopian Revival** relay via Julich in Amharic *1600-1700*, orations in staccato fashion, Horn of Africa mx, tinny muffled audio, targeting Ethiopia (Hill MA 6/4) ED: Sked calls for xmsns on Sundays and Thursdays only.
- 15425 **SRI LANKA SLBC** in EG 0135, "Back to the Bible" pgm, ID and into nx (Brandi NJ 5/31)
- 15435 **JORDAN R Jordan** Amman HS relay in AR 0302, regional nx, rpt on Barak, mx (McGuire MD 6/6)
- 15470 **CANADA RCI** Sackville in EG 2040, "Maple Leaf Mailbag", Int'l Broadcaster's Conf (Fraser 5/28)
- 15515 **AUSTRALIA RA** in EG 0445, business nx, stock rpt, ID, TC, "Pacific Beat", g (McGuire MD 5/18)
- 17675 **NEW ZEALAND RNZI** in EG 0300, Pacific islands and national nx, rpt on Fiji trouble, ID, mailbag, wx rpt, "Cadenza" pgm (McGuire 6/8, Linonis 6/8)
- 17760 **UNITED ARAB EMIRATES Abu Dhabi HS** relay in AR 2150, tlks, pips, regional nx (McGuire 5/24)
- 17895 **QATAR Qatar BC Service HS** relay in AR 2125*, regional nx, Koran chants, NA, g (McGuire 6/5)
- 17895 **INDIA AIR** Bangalore in EG 1008, nx, ID, ancmts, cmntry re Pakistan, reverb audio (Serra 5/19)
- 21480 **MADAGASCAR R Nederlands** relay in DT 1335, cmntry, fair w/multi-path echo (Fair VENEZ 5/28)
- 21725 **AUSTRALIA RA** in EG 0519, sports pgm, nx, ID as ABC News, live soccer (Serra ITALY 5/28)

NOTE: Judging from the light number of reports this time, I suppose we can blame the summertime doldrums (lots more to do outside these nice warm days) and the lousy propagation conditions due to the recent sunspot flare activity. 

We'd like to welcome the following new members.

**MICHAEL LAYTART, Woodside, NY
DAVID W. GRANT, Hillsborough, NC
JERRY JOHNSTON, Lexington, KY
FRED WILLIAMS, Charlotte, NC
RICHARD ROY, El Paso, TX
DANNY BLACKBURN, Saginaw, MI
GUY DUNN, Clifton, NJ
DANIEL QUADE, Finlayson, MN
ALLISON SMITH, Glenmont, NY
R. DAVID MASSIE, Ironton, OH
MR. T. HURKETT, Dedham, MA
JOHN MOSMAN, Fitchburg, WI
KEN BOYD, Regina, SK
R. EDBERG, London, ENGLAND**

**WORLD OF RADIO AND CONTINENT OF MEDIA
SHORTWAVE-ONLY SCHEDULE AS OF JUNE 9, 2000**

Days and times strictly UT. RFPI 25930-USB went off May 19 and is expected to be replaced by a 21 MHz channel, but perhaps not until July. RFPI frequency usage is flexible, so check each beyond the hours shown.

Wed 2330 WOR WBCQ1 7415
Thu 2030 WOR WWCR 15685
Fri 0930 WOR WWCR 7435
Fri 1900 COM RFPI 15049
Fri 1930 WOR RFPI 15049
Fri 2030 WOR WBCQ2 9330-CUSB [irregular]
Sat 0300 COM RFPI 15049 6970
Sat 0330 WOR RFPI 15049 6970
Sat 0300 WOR WWCR 3215
Sat 1100 COM RFPI 6970
Sat 1130 WOR RFPI 6970
Sat 1130 WOR WWCR 15685
Sat 1730 COM RFPI 15049
Sat 1800 WOR RFPI 15049
Sun 0130 COM RFPI 15049 6970
Sun 0200 WOR RFPI 15049 6970
Sun 0230 WOR WWCR 5070
Sun 0630 WOR WWCR 5070
Sun 0930 COM RFPI 6970
Sun 1000 WOR RFPI 6970
Sun 2300 WOR RFPI 15049
Mon 0026 WOR WWCR 9475 [may shift to Sun 2330]
Mon 0501 WOR WWCR 3210
Mon 0700 WOR RFPI 6970
Mon 1500 WOR RFPI 15049
Tue 1100 WOR WWCR 15685
Tue 1900 WOR RFPI 15049
Tue 2000 COM RFPI 15049
Wed 0300 WOR RFPI 15049 6970
Wed 0400 COM RFPI 15049 6970
Wed 1100 WOR RFPI [suspended]
Wed 1200 COM RFPI [suspended]
Wed 1730 COM RFPI 15049

Company Store

Bill Bergadano KA2EMZ • P.O. Box 484 • Colts Neck, NJ 07722 • ka2emz@cybercomm.net

All s/h charges for the following items are included unless otherwise noted. Please note the new proprietor and address.

Publications

Transmitter Documentation Project (TDP) A result of 10 years of research by DXer Ludo Maes, the TDP presents 80 pages of info listing SW broadcast tx'ers worldwide by country with station name, tx'er site, geographical coordinates, callsign and more	\$10.00 US/CA \$13.00 worldwide
Shortwave Listening Guidebook by Harry Helms. Covers equipment, antennas, propagation, station profiles, utilities, clandestines, QSL'ing, etc. 315 pages.	\$19.95 +2.00 s/h US/CA +3.00 s/h world
Limited Space Antenna Solutions by Frank P. Hughes. Covers the random wire, dipole, vertical, outdoor, loft and indoor antennas, antenna tuners, and grounds.	\$13.00 +1.00 s/h US/CA +2.00 s/h world
Inside Your Shortwave Radio by Ted Benson. Companion to your receiver's instruction manual, filling in what your manual leaves unclear.	\$13.95 +2.00 s/h US/CA +2.50 s/h world
Underground Frequency Guide (New to Company Store!) by Donald W. Schimmel. An in-depth look at illegal radio communications; pirate, spies and so much more! Lists hundreds of frequencies & diplomatic radio systems worldwide. A book no pirate or clanny enthusiast should be without!	\$11.00 +2.00 s/h all
Joe Carr's Receiving Antenna Handbook (Back in stock) A complete guide for high performance antennas from longwave all the way to the upper end of the shortwave spectrum.	\$19.95 +2.00 s/h US/CA +3.00 s/h world
The Vacuum Tube Era (New to our line!) Reviews the golden years of vacuum tube receivers, 1932-1981. If you feel real radios glow in the dark, this is for you! 141 pages.	\$17.00 +1.00 s/h worldwide
Shortwave Receivers, Past & Present by Fred Osterman. A comprehensive guide to over 770 shortwave, amateur and commercial communications receivers produced in the last 55 years! Over 800 photos. 473 pages.	\$22.95 +2.00 s/h US/CA +3.00 s/h world
NASWA Country List and Awards Program Booklet	\$3.00 PP US/CA \$5.00 elsewhere
The System Log Book Masters, QSL reports and log, program notes.	\$2.00 PP worldwide
Propagation Predictor Divides the year into 27-day segments for tracking solar patterns.	\$3.00 PP worldwide
Spectrum Log Covers Tropical and International bands.	\$8.50 PP worldwide
NASWA Reprints Catalog A catalog of 800+ pages of info available from past NASWA issues.	\$3.00 PP worldwide
QSL Signers by Al Quaglieri. The most comprehensive and up-to-date list of verification signers names, titles, and addresses available anywhere!	\$3.00 PP US/CA \$5.00 elsewhere

Make checks payable in U.S. funds to "The NASWA Company Store."



North American Shortwave Association
45 Wildflower Road
Levittown, Pennsylvania, 19057

First Class Mail
U.S. Postage
PAID
Levittown, PA
Permit No. 319

FIRST CLASS MAIL



ISSN 0160-1989

The Journal of the
North American Shortwave Association

Executive Director: Richard A. D'Angelo, 2216
Burkey Dr., Wyomissing, PA 19610

Publisher/Business Manager: Bill Oliver, 45
Wildflower Road, Levittown, PA 19057

Executive Council: Jerry Berg, Ralph Brandi,
Bob Brown, Dr. Harold Cones, Rich D'Angelo,
Fred Kohlbrenner, Bill Oliver

EDITORIAL STAFF

Managing Editor: Dr. Harold Cones, 2 Whits
Court, Newport News, VA 23606

Desktop Publishing/Graphics: Ralph Brandi,
P.O. Box 491, Lincroft, NJ 07738

Shortwave Center: Jerry Lineback, 506 S.
Lawrence Ave., Scranton, KS 66537

Easy Listening: Richard Cuff, 327 Springhouse
Road, Apt. 102, Allentown, PA 18104

Listener's Notebook: Al Quaglieri, P.O. Box
888, Albany, NY 12201-0888

Technical Topics: Joe Buch, N2JB, P.O. Box
1552, Ocean View, DE 19970-1552

QSL Report: Sam Barto, 47 Prospect Place,
Bristol, CT 06010

Distributing Editor: Fred S. Kohlbrenner, 2641
S. Shields St., Philadelphia, PA 19142

Tropical Band Loggings: Sheryl Paszkiewicz,
P.O. Box 152, Manitowoc, WI 54221-0152

International Band Loggings: Wallace C.
Treibel, 357 N.E. 149th St., Seattle, WA 98155

Net Notes: Tom Sundstrom, W2XQ P.O. Box 2275,
Vincentown, NJ 08088-2275

Scoreboard: Fred S. Kohlbrenner, 2641 S. Shields
St., Philadelphia, PA 19142

NASWA Awards: Dr. Harold Cones, 2 Whits
Court, Newport News, VA 23606

English Schedules: Mark J. Fine, 11252
Cardinal Drive, Remington, VA 22724-2032

Listener's Library: Skip Arey, N2EI
P.O. Box 236, Beverly, NJ 08010

Equipment Reviews: Alan Johnson, N4LUS
2490 Sharon Way, Reno, NV 89509

The Company Store: Dan Cashin, 1335
Harrington Road, Havertown, PA 19083

MEMBERSHIP FEES:

United States (First Class Mail)	\$26.00
Canada & Mexico (First Class Mail)	\$27.00
Overseas (ISAL Mail):	
<i>Central & South America and Europe</i>	\$30.00
<i>Asia, Africa and Pacific</i>	\$32.00
Overseas (Air Mail):	
<i>Central & South America and Europe</i>	\$36.00
<i>Asia, Africa and Pacific</i>	\$42.00

All remittances must be in U.S. funds and mailed to:

NASWA
45 Wildflower Road
Levittown, PA 19057
U.S.A.

NASWA  <http://www.anarc.org/naswa/>

