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Japan Radio NRD-535D Communications Receiver



Japan Radio Co., Ltd.



SPECIFICATIONS

Dimensions	13" x 5.2" x 11.25"
Weight	20 Lbs. (24 Lbs. ship)
Frequency Range	90 - 30000 kHz
Power	100/120/220/240 VAC 50/60 Hz 35VA max 12 VDC 25W max
Antenna Impedance	50 or 600 ohm
Selectivity (6dB)	AUX (12 kHz) WIDE 6 kHz INTER 2 kHz NARR 1 kHz [FM] >12 kHz
Sensitivity	5 μ V 1.6-30 MHz SSB/CW S-N+N=10dB
Image Ratio	>70 dB (1.6 - 30 MHz)
Dynamic Range	106 dB (@300Hz BW)
IF Rejection	>70 dB (1.6 - 30 MHz)
Frequency Accuracy	$\pm 10 \times 10^{-6}$ or better
Frequency Stability	± 2 PPM per hour after 1 hour
Intermediate Freqs	1st IF = 70 45399 MHz 2nd IF = 455 kHz 3rd IF = 97 kHz
BFO Variation Range	455 KHz ± 2 kHz
PBS Variation Range	± 1 kHz or more
Notch Attenuation	-40 dB or more
Audio Output	1 W at 4 Ohms
Digital Interface	4800 baud (8,N,1)

With the introduction of the NRD-535D, Japan Radio Company once again "re-writes" the standard by which other advanced receivers are measured. The NRD-535D has all the features shortwave listeners have been waiting for. General coverage reception from 90 to 30000 KHz in AM, USB, LSB, CW, RTTY, FAX and narrow FM modes. A new triple conversion superheterodyne circuit is employed to provide superb sensitivity and image rejection. Japan Radio has designed a special high-speed 1 Hz step PLL synthesizer to provide you with 1 Hz tuning resolution never before available (display resolution is 10 Hz).

Japan Radio's reputation for extreme stability continues with only ± 2 PPM drift (after 1 hour) making the NRD-535 the inevitable choice for the demanding non-voice modes such as Morse code, RTTY and FAX. Four independent filter positions are available. The WIDE position features a 6 KHz (@ -6dB) filter. The INTERmediate position features a 2 KHz (@ -6dB) filter. The NARRow position features the CFL-233 1 KHz filter. The AUXiliary position is not filled, a +12 kHz bandwidth results. The AUXiliary positions can be used to mount the CFL-218A, CFL-231, CFL-232 or CFL-251. Any filter may be used with any mode (except FM). This is an exceptional feature that offers maximum flexibility to the listener.

The ergonomic keypad features both MHz and KHz input. The dual width noise blanker can be used to reduce or eliminate impulse noise (like auto ignition or the "woodpecker"). Other front panel controls include: SQUELCH, AF and RF GAIN and TONE. An AGC button permits the selection of AGC FAST, SLOW or OFF. The DIMMER button offers four brightness levels. A built in 24 hour clock timer is provided. The TIMER permits unattended listening/recording. The receiver can be programmed to be turned on at a particular time (on a set frequency, mode, bandwidth, etc.) and then turn off at a programmed time. A timer-out terminal connection is provided on the back of the set to activate a tape recorder. The NRD-535D contains a built-in RS-232 computer interface (4800 baud, B, N, 1). Cable and software are not supplied.

The NRD-535D offers Pass Band Shift (PBS). This effective control varies the apparent intermediate frequency for the IF filter by ± 1 kHz without changing the receiving frequency. This function provides a powerful means of eliminating or reducing troublesome adjacent channel interference. Because of the overcrowded nature of today's HF spectrum, annoying heterodynes can be found with increasing regularity. The Notch Control permits the listener to go into the signal and sharply "slice out" the offending tone with little loss in fidelity to the desired station. Notch attenuation is > 40 dB.

The NRD-535D includes the CFL-243 Bandwidth Control Option. You can adjust this control to narrow the IF filter in 10 Hz steps without varying its center frequency, ensuring effective interference rejection. This control functions in the SSB and CW modes. It is a powerful tool to extract a desired signal from the crowded passband. Perhaps the most exciting feature in the NRD-535D is the CMF-78 Exalted Carrier Selectable Sideband (ECSS) circuit. Often when receiving an AM signal you will encounter interference from an adjacent station. The interference will manifest itself on either the upper or lower sideband of the signal you are trying to hear. The ECSS feature will select the sideband that is not affected and deliver the signal to you with high tonal quality.

The Japan Radio NRD-535D is designed to meet the exact needs of the most demanding broadcast or utility DXer. One year limited warranty. Universal is a factory authorized dealer for Japan Radio Co.

SUPPLIED OPTIONS

- Japan Radio CFL-243 Bandwidth Control
- Japan Radio CMF-78 ECSS Unit
- Japan Radio CFL-233 1000 Hz Filter

PRICING

NRD-535D List Price \$1995.00

NRD-535D Discount Price

Order #1535 \$1689.00

Shipping/Handling/Insurance \$13.00

▶ The NRD-535D is expected 04/19/91. We are accepting orders now. Specializations subject to change.

OTHER OPTIONS

Order#	Price	Item
+ 0063	\$109.95	Japan Radio CMH-530 RTTY Demodulator
+ 2308	59.95	Japan Radio 62CJD00139 Printer Cable
+ 0851		Japan Radio 62CJD00150 Serial Cable
+ 0852	179.95	Japan Radio NVA-313 Speaker/Audio Filter
◇ 1225	139.95	Japan Radio CFL-218A Filter 1800 Hz -6dB
◇ 0193	139.95	Japan Radio CFL-231 Filter 300 Hz -6dB
◇ 0290	139.95	Japan Radio CFL-232 Filter 500 Hz -6dB
◇ 1225	139.95	Japan Radio CFL-251 Filter 2400 Hz -6dB
◇ 1223	79.95	Japan Radio CGD-135 High Stability Crystal Oscillator

Universal Radio
1280 Aida Drive DEPT. NASW
Reynoldsburg, OH 43068
Toll Free: 800 431-3939
In Ohio: 614 866-4267

NASWA Notes

Bob Brown
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Lansdale, PA 19446
Compuserve 74756,1557



This has been quite a month. A quick glance at page 3 will give you some indication as to how busy it's been at headquarters. Over 100 new members in one month, and they are still coming in! Bill Oliver ran out of samples with all the requests and he had to get extras printed! Welcome to all the new members and we look forward to your active participation in the club.

I have heard from some new members who are a bit confused or overwhelmed by some of what they read in the *Journal*. Abbreviations and terminology are often confusing to the newcomer. Please don't hesitate to ask if you have questions. I may pass your letter along to another staff member to answer if appropriate, or I may direct you to a book or reprint that will help you.

Speaking of reprints, Don Moore has sent me a new reprint catalog and I will be getting it ready for publication during the beginning of March. We hope to have it ready for the Winter SWL Festival. And for those of you that have been patiently waiting for the new NASWA Country Book, I'm pleased to report that it's in its final stage and should be ready in a couple of weeks.

Shortwave In The Classroom

Charles Yarbrough Jr. is Assistant Professor of Speech at Wingate College, Wingate NC. He has been teaching an International Radio Broadcasting class for almost 2 years now and has had great success and interest in the class. Chuck sent along this semester's course syllabus which details the 15 week course. In his letter he wrote:

"I am currently writing a feature article for Fine Tuning's Proceedings 1991 on Shortwave Radio as a Teaching Tool. While I am familiar with many ways various teachers use shortwave to aid in their classroom activities, I need to find out approximately how many teachers use shortwave in their classes. I am interested in teachers at all educational levels—primary, secondary, college, and even special workshops people might give."

In addition, Chuck is interested in contacting SWLs and DXers in the Piedmont North and

South Carolina area in order to see if a joint NASWA/SPEEDX member group meeting would be feasible. He has talked with Woody Seymour, SPEEDX Dist. Mgr., and he would like very much to see such a meeting.

Chuck invites anyone to stop by the campus and check out the SW receiving facilities and "tune around" for awhile. You can reach Chuck at this address: Charles G. Yarbrough, Jr., Box 2519 Wingate College, Wingate, NC 28174. Phone (704) 233-8189, an answering machine is active between 5pm and 8am.

Calendar Of Events

March 19 - N.E. Ohio SWLers. Cuyahoga County Library, 9089 Brecksville Rd., Brecksville, OH (Rt. 21, just South of Rt. 82). 7:00 PM. Mike Fanderlys (216)661-2443

March 20 - Meeting of the Boston Area NASWA Chapter, GTE Labs, Waltham, Mass. Please contact Paul Graveline (508) 470-1971 for additional information.

March 22-24 - Fourth Annual Winter SWL Festival, Kulpville Holiday Inn, Kulpville, PA. Registration form available from Box 591, Colmar, PA 18915

April 21 - Morton Kasday will host a get-together of the New York City and metro area DXers. For information send an SASE to Box 6624, Jersey City, NJ 07306.

April 27 - Washington Area NASWA Chapter. Second quarterly meeting. Hunan Gate restaurant, Arlington, VA. 2:00PM contact Mike Stone (703) 534-0342

Members are invited to submit items to be included in this calendar to Bob Brown.

Help Wanted

This month, **Kris Field** received a letter requesting some help in contacting SWL's who may have material suitable for a radio show being put together in Ireland. The letter reads:

"Hi, my name is **Bernard Evans**, and I've been working on radio here in Ireland for about eight years. Some of you may know me through my work for Radio Dublin. I'm currently involved in putting together a show for national radio on the topic of radio as a medium in itself. I am looking for studio quality recordings of archive radio from the fifties and sixties as well as radio from more exotic locations of the world. Also, in the same context, jingles and advertisements. If you can help or assist me in any way, please contact me, though with the delays involved since posting this and the ones further to be encumbered by future correspondence, I would ask that you start now rather than later, also letting me know where applicable the cost, copyright, mode of tape, quality, etc. All correspondence ASAP please to: **Bernard Evans**, 46 Walkinstown Drive, Walkinstown, Dublin 12, Ireland. Telephone 01 507465. Many Thanks. **Bernard Evans**."

In The Press

A couple of interesting press items came in this month. **Mike Stone** sent along an article on the Jan. 30 passing of **John Bardeen**, 82, the last of the three surviving physicists who developed the transistor. **Bardeen**, along with **William P. Shockley** and **Walter H. Brattain** developed the transistor in 1948 at the Bell Telephone Labs in Murray Hill, NJ. They shared the 1956 Nobel Prize for their work. **Bardeen** won a second Nobel Prize in 1972 for his research in superconductivity.

John Carson sent an article from the Feb. 13th **Norman (Okla.) Transcript** telling about how the VOA has increased broadcasts beamed to the Middle East. Arabic broadcasts are at 15 1/2 hours a day, up from 7 hours before the invasion, and 18 hours a day in English, double the pre-invasion total. The article goes on to say that when the VOA was inaugurated on Feb. 24, 1942, its main purpose was the delivery of U.S. propaganda. But VOA officials say its primary focus today is to provide dependable news. "Our propaganda campaign centers on telling the truth," said

VOA Director **Richard Carlson**. "We know that **Saddam Hussein** listens to us," said **Sidney Davis**, director of programming for the radio service.

And amongst all the clippings sent to me concerning hobbyists talking to the press about shortwave, there was one that appeared in the Feb. 3 **Janesville (Wisc.) Gazette** about our own **Gerry Dexter** that had an appropriate ending. "In his basement, **Dexter** mans the controls of three foreign-made digital radios. A simple wire antenna system strung between trees in his backyard filters the rest of the world out of the brisk air of southeastern Wisconsin. Behind him, an old English-made model sits on a large end table as if for moral support. No LEDS. It no longer works, but it means a lot. That's what shortwave radios ought to look like. It's got the romance. This is just a machine," **Dexter** said, pointing at his most recent model. "It's got no soul."

Special DX Test From Northern Ireland

On behalf of the NU/FT Special Broadcast Committee (**Rich D'Angelo**, Chairman), **Jerry Berg** has been trying to set up a special North American test from Northern Ireland. He has received confirmation from the station and it looks like it is going to happen. The broadcast will be from the Northern Ireland Shortwave Relay Service on Sunday, March 17, 1991 (St. Patrick's Day), at 0400-0600 UTC on 6273 kHz. Reports should be sent to: **Mr. Andy Craig**, 105 Bushmills Road, Coleraine, Co. Londonderry BT52 2BS, Northern Ireland, U.K. Enclose US \$1 for return postage.

ANARC SWL Ham Net

Tune in Sunday mornings at 10 A. M. Eastern Time on 7240 LSB for the latest in shortwave listening, DX tips, and up to the minute hobby news. Contributors share their DX tips via their own amateur radio stations or by telephoning a "gateway" station who then broadcasts the relayed tips. Net Controls **Bob Brown KW3F** and **Dave Kirby N8JQX** host an always lively gang of DX monitors. (Best heard in the eastern half of NAM)

Welcome to the following new NASWA members -

Manzanek Alois, Harker Heights, TX
Tsunaaki Ashimori, Hyogo, JAPAN
Donald A. Baralt, Blue Bell, PA
Paul A. Batutis, Orange, MA
Leonard J. Bauer, Burbank, CA
Wendell Bloom, Oxford, OH
Robert F. Briskie, Ashland, WI
James L. Britton, Brockway, PA
William J. Brodbeck, Platteville, WI
William J. Brosnan, Narberth, PA
Thomas W. Buchanan, Hartsville, SC
L. R. Byers, South Bend, IN
James M. Byers, Tucson, AZ
Tom Ceresini, Drexel Hill, PA
Gerald J. Cesaro, Turnersville, NJ
Joseph Chen, Pasadena, CA
Paul C. Cipriano Jr. Esq, Margate, NJ
Jim Clark, Okemos, MI
John Costello, Prospect Park, PA
Susan Dardine, Springfield, PA
Joe Derose, Bel Air, MD
Tom DiSantis, Winston-Salem, NC
Randy Doyle, Winslow, AR
Joel Dubin, Chicago, IL
T. E. Duskey, San Diego, CA
Robert F. Dvorak, Santa Fe, NM
Robert Elston, West Chester, PA
M. B. Ferner, Avon Lake, OH
Tim Flannery, Islington, ONTARIO
Mike Franzen, Wayzata, MN
Steven Friedlander, Stamford, CT
George L. Gibbs, San Gabriel, CA
Onil Gionet, St. John, NEW BRUNSWICK
Neal Goldstein, Middletown, CT
Stuart Goret, Cincinnati, OH
Paul S. Gundlach, Fallsington, PA
John W. Hansen, Gaithersburg, MD
Robert Harring, Hudson, NY
Roger D. Hays, Lubbock, TX
David Higgins, Altoona, PA
Tom Hill, Philadelphia, PA
David W. Hollenbeck, Bad Axe, MI
Robert W. Holler, Toledo, OH
Elston S. Hubbard, Toledo, OH
Judson A. Hughes, Wayne, PA
Rae Irland, Lanett, AL
Jonathan Jockusch, Dallas, TX
John Karakasas, Charlotte, NC
Ted Kintner, Lansdale, PA
Robert J. Kirby, Richardson, TX
Jack C. Klinge, Carrollton, TX
Barry G. Knapp, Lafayette, CO
Eugene M. Krupa, Eddystone, PA

Jim Lane, Toronto, ONTARIO
Wolfgang Lemke, Lansing, MI
Charles R. Lighthart, Saratoga Springs, NY
Gary Maddox, Plano, TX
Paul McCarthy, Pittsburgh, PA
Brian Miller, Stafford, VA
Harold Mishler, Perkasia, PA
Gunnard W. Modin, San Francisco, CA
Matthew K. Momoh, Houston, TX
Emanuele V. Morso, Wheaton, IL
R. F. Murphy, Kingwood, TX
Elizabeth Natale, Pilot Knob, MO
Lyle Newton, Norwood, NY
James M. Norris, Boonton, NJ
John Ohnimus, Louisville, KY
Takao Okuyama, Yamagata, JAPAN
Leonard Pacifico, Duncansville, PA
Marie A. Pascoe, Trafford, PA
Mario Petrone, Franklin Park, IL
Thrifty Photography, Philadelphia, PA
Zara Pippitt, Tancho Santa Fe, CA
Mr. George R. Quay, Allentown, PA
Benjamin Radcliff, Princeton, NJ
Steven Rapaport, Brookline, MA
Ed Rebmann, Perrysville, OH
Dr. Jerry Redding, Atlanta, GA
Jack L. Reed, Bausman, PA
Joseph Robertson, Carson, WA
Joseph J. Rosa, Winchester, MA
Tom Rowe, St. Paul, MN
Kathleen M. Russell, Indianapolis, IN
Mark B. Sawyer, Bow, NH
Robert A. Schambach, Whittier, CA
Steve Schmidt, Glendale, AZ
Ronald R. Sherwood, Clayton, SC
Elliot Siede, Brooklyn, NY
Eric Silverman, Dresher, PA
Donald D. Smith, Kansas City, MO
Edward J. Spuzello, Des Moines, IA
James M. Stoffe, Fresco, CA
The SWL Radio Co., Evansville, IN
John Taylor, Fairbanks, AK
Samuel Tiner MD CM, Narberth, PA
Charlie Torardi, Wilmington, DE
Joe Vargo, Livonia, MI
Katherine Wagner, Camp Hill, PA
Richard Wakulat, MD, Charlevoix, MI
William F. Wetterau, Albany, NY
Ken Widener, Germantown, TN
Mike Wiegmann, Indianapolis, IN
Richard P. Williams, Philadelphia, PA
Danny W. Wilson, Birmingham, AL
David Yahne, Louisville, KY

DXer's Forum

Kevin Atkins
6165 Lakeside Drive
Pinson, AL 35126
Compuserve 71021,3212



In the spring, a young man's thoughts turn to Papua New Guinea and Indonesia—if he's a DXer, that is. Although I stopped thinking of myself as "young" about a decade ago, I still get excited around this time every year. Our propagation series will continue next month, but since March this year brings us not only the spring equinox, but the Moslem holy month of Ramadan (beginning the 17th) as well, it seems an appropriate time to do a...

New Guinea Update

by Kevin Atkins

New Guinea is the stuff of daydreams. Thanks to Jules Verne, *National Geographic* and the Sunday Jungle Movie Matinee, many of us developed a fascination with one of the planet's last frontiers long before we discovered shortwave. Even those who can't find it on a map have some mental picture of what this place must be like. Perhaps it is this fascination that leads many to specialize in DXing this part of the world.

Childhood fantasies aside, there are a number of very practical reasons to be interested in New Guinea from a DX standpoint. The main island (the second largest in the world) and surrounding smaller islands comprise portions of two countries by political definition—Papua New Guinea in the east, and Indonesia (the province of Irian Jaya) in the west. But by the NASWA radio-country definition, there are seven countries here, six of which are currently active on shortwave, and all of which have stations that are reasonably consistent verifiers. If you're at all interested in counting countries, this is an area you shouldn't ignore.

Since this is such a popular target area among DXers, a great deal has been written about it here and elsewhere. But a number of changes have occurred recently in the New Guinea radio scene, particu-

larly on the Papua New Guinea side of the border. Thus the word "update" in the title of this article—after some background for those who are new to this specialty, we'll take a quick station-by-station look at the many stations currently broadcasting from the area, plus a couple that are currently (and hopefully temporarily) inactive. Rather than rewrite a primer on DXing this part of the world, I would refer you to several excellent articles on the subject listed at the end of our tour.

When To Listen

If you've been following along with Bryant & Clark here in the Forum the last couple of months, you know that there are two daily periods of enhanced reception applicable to DXing New Guinea from North America—dawn (at the receiver) enhancement, and the less spectacular (but still quite useful) sunset (at the transmitter) enhancement. As with DXing in general, conditions vary greatly from day to day; on 'good' mornings, you can hear PNGs from the moment of sunset at the transmitter until a half-hour or so after sunrise at your location (or until they sign off at 1300 UTC, whichever comes first). On a 'bad' day, you can't even hear them at dawn. The importance of checking every day at dawn cannot be overemphasized—you can always go back to bed if the bands are flat.

What You'll Hear, If You're Persistent

Programming from the Papua New Guinea side of the border is a QSLer's delight. While the language will normally be Pidgin or a local dialect, there are many English "borrowings" in these that make it possible to follow the program. A great deal of music is played, and while it includes indigenous "sing-sings" and choral arrangements, U.S. pop and country-western music is quite popular. The stations do seem to keep fairly good records of what songs they play, making song titles a good program detail for QSLing. The station IDs are often rendered in some semblance of their English pronunciation, but it is helpful to keep the WRTH open to the Papua New Guinea page for the ID texts in the local dialects, too.

Across the border in Irian Jaya, things get a little more difficult. Indonesian doesn't have many English borrowings. Fortunately, "Radio Republik Indonesia" sounds pretty much like you'd expect. A true 'local' ID will include the name of the individual studio, i.e. "Radio Republik Indonesia Sorong". Most of the music is Indonesian pop, although country & western seems to be crossing the border—RRI Wamena has been known to track entire Conway Twitty albums! One programming item you can usually count on is the relay of the national network news from Jakarta at 1200, 1300, and 1500 UTC, preceded by a few moments of the signature tune "Song of the Coconut Islands" (Rayuan Pulau Kelapa). Stations sometimes give local IDs immediately before the relay, and almost always do so right after the

relay. The relay always ends with a short piece of orchestral music.

What's New At NBC?

The National Broadcasting Commission of Papua New Guinea runs two services: the *Karai* national network, and the *Kundu* provincial service. The *Karai* service is currently active on only one shortwave frequency, 4890 kilohertz. Long the easiest PNG to log in North America, this station has become a DX catch in its own right in recent years. The 10 kilowatt transmitter has been inoperable for some time, and the station currently uses an old 2 kW transmitter formerly used by the *Kundu* service station Radio Central.

Significant changes in the *Kundu* service have been rumoured in recent years. In 1988 the NBC acquired a number of 10kW NEC transmitters from Japan to replace the aging equipment at some of the 19 *Kundu* outlets. Installation was held up for quite some time, but according to information received from NASWA member Gordon Darling in Papua New Guinea, the last of these are currently being installed. Vastly improved signals have been noted from what are apparently new transmitters at some of the *Kundu* service outlets; others seem, inexplicably, as weak as ever.

Also in 1988, the NBC announced a proposed frequency allocation plan that would shift several of the *Kundu* service outlets to the 120 meter band (which, incidentally, is where many of them started out) and allow a minimum 15 kHz channel separation within Papua New Guinea (Table 1). Most DXers have mixed feelings about this; those that make the move to 120 meters would undoubtedly be harder to

TABLE 1
Proposed Frequency Plan For NBC Kundu Service

Station	Current Frequency	Proposed Frequency
Radio West New Britain	3235	2435
Radio Manus	3315	2465
Radio North Solomons	3325	3320
Radio Simbu	3355	2490
Radio Western Highlands	3375	2450
Radio East New Britain	3385	3380

TABLE 2
Kundu Service Stations Listed By NASWA Radio Country

Admiralty Islands

Radio Manus, 3315

Bougainville Island

Radio North Solomons, 3325

New Guinea Territory

Radio Enga, 2410

Radio West Sepik, 3205

Radio Morobe, 3220

Radio Madang, 3260

Radio East Sepik, 3335

Radio Simbu, 3355

Radio Western Highlands, 3375

Radio Eastern Highlands, 3395

New Britain

Radio West New Britain, 3235

Radio East New Britain, 3385

New Ireland

Radio New Ireland, 3905

Papua Territory

Radio Gulf, 3245

Radio Southern Highlands, 3275

Radio Central, 3290

Radio Western, 3305

Radio Northern, 3345

Radio Milne Bay, 3365

hear, but they would also be made more challenging DX targets by that very fact. Also, several interesting frequencies in the 90 meter band would be 'cleared' by the move. At this point, no one can say when, or if, the plan will be implemented. The safest course would be to log and verify them now, just in case some of them prove too difficult later.

Kundu Countdown

We'll start at the bottom end of the 75 meter band and tune downward, stopping for a visit at each of the Kundu service outlets, then take a look at the Radio Republik Indonesia (RRI) stations in Irian Jaya. Degree of difficulty is naturally biased toward the southeastern U.S.; watch Sheryl Paszkiewicz's Tropical Band Loggings column and see what DXers in your geographical area are reporting.

3905 Radio New Ireland. Inactive for a while last spring, Radio New Ireland is back this year and putting a good signal into North America. Ham QRM is a problem, of course, but on good mornings this station can actually force the hams to move elsewhere. This is the only SWBC station in the NASWA country of New Ireland.

3395 Radio Eastern Highlands. Subject to Latin QRM in the pre-dawn hours,

Radio Eastern Highlands usually manages to break through at dawn. Those in the central and western portions of North America might have to contend with interference from RRI Tanjung Karang about 200 Hz below.

3385 Radio East New Britain. This station has long been the best-heard PNG on this side of the Pacific. It may have to share that title with some of the new 10kW transmitters, though. There is often a heterodyne from RRI Kupang about 100Hz away, but the PNG usually dominates the frequency.

3375 Radio Western Highlands. While not in a league with East New Britain, this station enjoys a clear channel and is often reported.

3365 Radio Milne Bay. Thanks to the continuing encroachment of Radio Rebelde on the tropical bands, this one will be a little more challenging for most. It is separable from the Cuban on 3366 when conditions are good.

3355 Radio Simbu. Simbu should be reliable during the spring, with the AIR regional that uses this frequency well out of season, and New Caledonia sadly inactive.

3345 Radio Northern. I cannot say with any certainty that this station is active, although I've seen no report that it's not.

RRI Ternate dominates the frequency here; I last heard Radio Northern here in 1989, when their transmitter drifted down to 3344.8 and was separable from Ternate in LSB. This is undoubtedly one of the toughest PNGs to log in North America. At last report, installation of their 10kW transmitter was being held up because of a legal problem; hopefully, their signal will improve when it is installed.

3335 Radio East Sepik. Like Radio East New Britain, this station has long provided good reception in North America on its relatively QRM-free frequency, and continues to do so.

3325 Radio North Solomons. This station is the only SWBC station in the NASWA country of Bougainville Island, and it is currently off the air. The island of Bougainville has been a battleground between government security forces and secessionist rebels for some time, and the NBC closed the station last year. PNG-watchers kept an eye on the frequency in case the rebels decided to start a 'Radio Free Bougainville'-type operation, but nothing has been heard to date. At this writing, there is a report that the government and the rebels have reached an agreement, but there has been no official word on the future of Radio North Solomons. As of mid-February, it remains off the air. It was by no means an easy catch here in the Southeast because of interference from the Guatemalan on 3324.8, but it was possible (and hopefully will be again) in USB. In the meantime, take solace in a logging of RRI Palangkaraya, which is the only thing currently heard on 3325.

3315 Radio Manus. The sole representative of the NASWA country of the Admiralty Islands, Radio Manus is a consistent performer on a relatively clear channel.

3305 Radio Western. This is one who's signal seems significantly improved in recent months, presumably due to a new 10kW transmitter. Pre-dawn reception may be hampered on the East Coast by TGNA on 3300. Further west, RRI Dili is a potential problem. Dili's signal strength and modulation varies wildly, though, and a log of Radio Western should be no problem in LSB.

3290 Radio Central. East coast listeners might have some difficulty with Radio Central because of QRM from the Ecuadorian Radio Centro prior to their sunrise. Otherwise, it is audible more often than not.

3275 Radio Southern Highlands. This remains one of the weaker PNGs; fortunately, it is on a clear channel and should be audible on a good day.

3260 Radio Madang. Madang is a steady performer, also on a clear channel. It should present no problem.

3245 Radio Gulf. Like Southern Highlands, this is one of the weaker PNGs, and often suffers from UTE QRM.

3235 Radio West New Britain. Long plagued by UTE QRM, this station was reborn with one of the new transmitters in December 1990. The difference was obvious, and West New Britain now puts a consistently good signal into North America. Cedric Marshall and David Clark in Ontario recently reported that this station was already announcing a frequency of 2435 kHz at sign-off—the frequency it is assigned in the aforementioned new frequency plan.

3220 Radio Morobe. Like Radio Central; Morobe shares a frequency with a Latin—the Quechua service of HCJB. East coast listeners might have QRM before sunrise.

3205 Radio West Sepik. This station apparently received one of the new transmitters early-on; its signal strength improved significantly last year. It is QRM-free in the eastern part of North America during this time of the year; those in the west might have a het from RRI Bandung.

2410 Radio Enga. The 120 meter band was once full of PNG stations. If the proposed frequency plan is implemented, it might be once again. But for now, the only one is Radio Enga. After a long period of inactivity because of a tribal land dispute, Radio Enga returned last year, and while it is not an easy catch by any means, it has been heard throughout the continent. Conditions on 120 meters are more predictable than those on 90—they're usually mediocre, that is—but not always. Enga is another reason to get up every morning and DX; the one day you hear it will make up for all the times you didn't.

RRI's In Irian Jaya

6069.8v RRI Jayapura. While Jayapura is Irian Jaya's major city, and RRI Jayapura is the lead station for all RRI's in the province, a logging of the station in North America is not easy. They have also used 5043 kHz in the past, but recent loggings have been restricted to this 49 meter band frequency, fading in at transmitter sunset. Expect tremendous interference from CFRX, the 1kW Canadian on 6070.

5500.5 RRI Biak. This station seems to be inactive at this writing, but when on the air it is fairly regular in season, owing in part to its clear out-of-band frequency. It has also been observed on 5451 kHz in the past.

5055.4v RRI Nabire. Long considered a rare catch, Nabire has gotten a bit easier in recent years for some reason—perhaps a badly needed transmitter tuneup! A reportable log still requires good conditions in most of North America, though, because of interference from several nearby stations. Those whose sunrise time permits might catch this one on 6127.5 kHz, where it has been observed after closing down 5055.4 at 1300 UTC.

4874.6 RRI Sorong. The 10kW transmitter at Sorong is easily the strongest short-wave voice from Irian Jaya, and often rivals the signal of the 50kW RRI Ujung Pandang on 4753/4719. Although the Chinese station Voice of Jinling on 4875 causes some interference, Sorong is usually quite listenable in LSB. Last year they began an English program, from 1100-1130 UTC Sundays, featuring pop music and short story readings in heavily-accented English.

4871 RRI Wamena. Here we have the promised "equal and opposite reaction" to Nabire's improved signal; reception of Wamena seems far less reliable than it was a couple of years ago. It is still possible, but east coast listeners will need a good opening to hear it. They are apparently alternating between 4871 and 4866 kHz, and have even been observed switching in the middle of a transmission. Perhaps the switch is not intentional at all, but indicative of a transmitter problem.

4789.8v RRI Fak-Fak. Currently enjoying a clear channel, Fak-Fak is still no powerhouse, but is audible most mornings at dawn.

4607.3 RRI Serui. Although the transmitter is only rated at 500 watts, Serui often sounds like a million bucks, thanks to their way-out-of-band frequency. Word-for-word copy is often possible during equinoctial periods.

3985.8v RRI Manokwari. This RRI has a healthy signal, but reception is usually dependent upon ham activity around the frequency. It may take a few tries to catch the hams elsewhere, but Makokwari should be possible throughout North America.

3904.8 RRI Merauke. Merauke is without a doubt the rarest station in New Guinea. Referring back to Table 2, notice the now-10kw Radio New Ireland on 3905. As if that weren't enough, add ham QRM. Finally, depending on the time and the QTH, RRI Banda Aceh in Sumatera might further confuse the issue. Merauke has been logged in North America, but no more than a handful of times in recent years. Three of that handful were reported last year, all during the Spring equinoctial period while Radio New Ireland was inactive. The easternmost reception, I am ridiculously pleased to say, was reported by Jerry Lineback and I, on DXpedition in western Alabama. We struggled for nearly three hours with audio at mere threshold level. Kirk Allen reported similar reception in Oklahoma about a week later. The best reception was reported by John Bryant and David Clark, on DXpedition in Washington state. Try watching the frequency precisely at Merauke sunset. If the hams are still asleep, and New Ireland is off the air, who knows?

Hooked? Read On...

DXing Papua New Guinea, by Dr. Harold Cones and Charles Rippel, appeared in the January, 1988 issue of the DXer's Forum. *DXing The Indonesian Radio Countries* by Bill Sparks appeared in the December, 1987 Forum. Both of these articles are worth a seasonal re-read (or order them from the Reprint Service if your collection doesn't go back that far). Also, the 1988 edition of *fine tuning's Proceedings* features an extensive article entitled *DXing New Guinea*, co-authored by Harold Cones, Charles Rippel, and John Bryant. ■

DX Target:

Radio Tampa

By Richard A. D'Angelo

Until I received a QSL card from this station I was under the impression it was known as Radio Tampa, which is how it appears in the World Radio Television Handbook. However, the station's literature consistently uses the Tampa spelling, so I will use their spelling. Radio Tampa was established on July 1, 1954. Less than two months later, they commenced shortwave broadcasts. It is owned by Nihon Shortwave Broadcasting Company, Ltd., which owns affiliated companies such as Radio Tampa Service Company, Radio Tampa Institute of Securities, The Nihon Shoken Shimibun Company, and NSB News Service Company. Now in its 37th year of broadcasting, Radio Tampa celebrated its 35th birthday with a special word wide satellite linkup with other radio stations. Events such as this have made Radio Tampa a very successful broadcast organization.

Radio Tampa broadcasts on six shortwave frequencies with two different services. The First Program is broadcast daily from 2020-1730 UTC on 3925 kHz (call sign JOZ); 6055 kHz (JOZ2); and 9595 kHz (JOZ3). The Second Program operates every day from 2300-1300 UTC on 3945 (JOZ5); 6115 kHz (JOZ6); and 9760 kHz (JOZ7). All frequencies are 10 kilowatts. There are over over 46 million radio sets in Japan capable of tuning in shortwave broadcasts. That averages out to 1.15 shortwave receivers per household. The station estimates that it has over 20 million listeners in Japan each day.

The station carries a wide variety of programming with a strong emphasis on news and information. Programs include news, economic analysis, stock market coverage and stock quotation reports from Tokyo and Osaka, medical science, social welfare, sports, agriculture, religion and music. The total weekly airtime is split among the major categories of programming with approximately 48.9% of the broadcast day devoted to news and information, 23.4% to entertainment, 16.9% to education, and 10.8% to culture. An extremely popular feature among the thousands of youngsters that listen to the station is the 60 minute weekday feature at 5:00 p.m. local time where listeners can phone in or write in their favorite music requests for the station to play.

The station can be heard regularly on the west coast of North America. Reception is a lot more difficult on the east coast; however, try around 0900 UTC during the winter months. European DXers generally report favorable results around 2100 UTC. The First Program on 9595 kHz is the easiest frequency and service to hear on the east coast of North America. The station is a good verifier and readily responds to reports in English. Return postage in the form of IRCs or mint stamps should be included with your report. Address your reports to:

Radio Tampa
9-15 Akasaka 1-chome
Minato-ku
Tokyo 107, JAPAN

ラジオたんぱ

Good luck with this target, and don't forget to send your reports to the *Journal!*

Easy Listening

Richard D. Cuff
213 Parkview Avenue
Allentown, PA 18104-5323
GENIE R.CUFF
MCI Mail 375-4854
CompuServe 71207,1604
Prodigy NCH70A

War in the Gulf

The situation in the Gulf has caused changes in many broadcasters' schedules. One of my past BBC recommendations, *News and 24 Hours* on Sunday, has become an hour-long program at 1300. The *News and 24 Hours on Sunday* title has disappeared, with the program simply being a news program. As mentioned in last month's column, the BBC excels at trying to ferret out the "Why's" of a situation. The American media typically repeat the events themselves without analysis.

Sundays, 1300 at 9515 kHz

Radio Vilnius

While their status may change from day to day, Vilnius was back on shortwave, earlier this month, broadcasting from an undisclosed location. Their own building was occupied by Soviet troops as of the time of my tune-in. Really a fascinating broadcast; the head of the English Service gave out her home phone number in case listeners wanted to phone with comments! They apologized for not having their usual array of recorded features, as all their equipment was in their occupied building.

Vilnius' English language release directed towards North America contains news about Lithuania daily, normally focusing on the status of the infrastructure given the Soviet attempts to squelch Vilnius' independence movement. Each day's broadcast also has a commentary. The broadcast concludes with a rotating feature program, including a report on sporting events involving Lithuanians and a mailbag program for starters.

Radio Vilnius' presenters believe Lithuania deserves to be independent. For example, the mailing address is given as "...Vilnius, Lithuania" with no mention of the USSR.

The dynamics of Lithuania's political situation clearly make this a station worth following.

Daily, 2300 on 7400 kHz (among others)

Swiss Radio International

Switzerland becomes a very interesting country in times of war, as Switzerland has long positioned itself as a politically neutral country. This neutrality is borne out in the United Nations and International Committee of the Red Cross/Red Crescent presence in the country.

Swiss Radio International's English language broadcasts reflect this political disposition, which gives SRI a slightly different slant than most of its fellow western European broadcasters.

Weekdays, SRI's half-hour North American broadcasts begin with live news, followed by *Dateline*, a current affairs program. While *Dateline's* perspective is global, the stories normally focus on the impact of events on Swiss and European life. One recent broadcast discussed the Swiss Tourism Authority's change in marketing tactics necessitated by reduced airline travel due to the Persian Gulf War.

Saturdays on SRI bring *Swiss Shortwave Merry-Go-Round*, a good beginner-level shortwave hobby program. Strongly recommended for newcomers to the hobby, as the program hosts will discuss some of the fundamentals of radio wave propagation, target areas, for example.

Sunday's program has cultural features.

SRI's half hour speeds right on by, and, in my opinion, would benefit from a time extension to 45 minutes or an hour in length. It's a very solid effort.

0200 and 0400 UTC Daily, 9885 kHz among others.

United Arab Emirates Radio, Dubai

I had figured UAE Radio would be devoting its entire 30 minute English broadcast on war news, given their location. I was surprised when after 10 minutes of news, one recent evening, UAE Radio then went into the latest installment on a continuing feature on the

culture of the New World! The day's broadcast focused on the practice of slavery in the United States during the 18th and 19th centuries, and how the culture spawned the musical styles of jazz and the blues. The presenter started sounding like he was reading text from an encyclopedia, but redeemed himself later in the feature by presenting two musical selections illustrating the blues as sung at the turn of the century.

I don't mean to denigrate UAE Radio's efforts. They have a reputation for fine feature programming to support what's considered the most politically neutral easily listenable program in the Gulf region.

Daily, 0330 on 11945 kHz among others.

Radio as an Educational Tool

An interesting aspect of the Philadelphia regional NASWA group is the diversity of reasons people listen to shortwave broadcasts. Some like to snag that rare Indonesian station...others like exotic music...others want different perspectives on world news. The GENie Shortwave Listening bulletin board has had a recent discussion about people learning languages by listening to shortwave broadcasts.

Starting with this issue, I'll occasionally highlight examples of foreign language broadcasts for those looking to develop or sharpen language skills.

This month's language: Esperanto

Since, by definition, it's difficult to locate any native Esperanto speakers, shortwave listening offers an easy way to hear spoken Esperanto. Several broadcasters were mentioned on GENie, with the two easiest catches being Radio Havana Cuba and Swiss Radio International.

Radio Havana Cuba broadcasts in Esperanto to North America from 0800-0830 on Sundays on 11835 kHz. Other likely catches include Sundays, 1700-1715 on 11760 and 11820 kHz, and Sundays, 2230-2300 UTC on 11910 kHz.

Swiss Radio International's Esperanto schedule in the WRTH shows 0115-0130 and 0315-0330 UTC Thursdays and Sundays on 6135, 9650, 9885, and 12035 kHz. The 0115 broadcast also is shown on 6095 and 17730 kHz.

Music on Shortwave

Dan Cashin of Havertown, PA offers the following suggestions, all on the Canadian Broadcasting Corporation's Northern Quebec Shortwave Service:

0100 - 0300 UTC Sundays, Finkleman's 45's
0400 - 0600 UTC Sundays, Saturday Night Blues

0400 - 0600 UTC Mondays, Jazz Beat

CBC's Northern Quebec Service is on 9625 kHz throughout its broadcast day.

Dan also points out that the Northern Quebec Service broadcasts all 90 minutes of **As It Happens**, an excellent news/interview program, weekdays from 2330 - 0100 UTC.

Humor on Shortwave

Since much humor is topical in nature, and uses domestic politics and politicians for fodder, humor doesn't often travel well via shortwave.

One exception is **Double Exposure** from the CBC. The satire focuses extensively on Canadian politicians, but Canada's proximity to the USA helps us understand some of the Canadian political references.

The Northern Quebec Service has **Double Exposure** at 1637-1700 UTC Saturdays on 9625 kHz; **Radio Canada International** targets the USA with **Double Exposure** on UTC Mondays at 0037- 0100 UTC on 5960//9755 kHz.

Please Write!

This is now my third "Easy Listening" column, and I've received only a small amount of reader feedback. Your input is earnestly solicited, whether positive or negative, as I want this column to provide the maximum benefit to NASWA members. Should I include more information on learning foreign languages? Sporting Events? If there's something you'd like to see more of in this column, please jot it down on a post card or use one of the E-mail formats listed in the masthead. Thanks in advance for your input.

I look forward to seeing many of you at the Winter SWL Festival.

Until then,

73 DE Richard

African Destinations

Dr. Harold Cones
2 Whits Court
Newport News, VA 23606
Compuserve 71570.411



It was 1912. Alfred Wegener published it first. Using a variety of proofs, he concluded that the continents were once part of a single landmass that had broken apart and the segments were now slowly moving over the surface of the earth like huge ships sailing on a molten sea. He theorized that convection currents cooling the early planet heaped the hardening crust into a single huge continent, which he called Pangaea ("all land"). Pangaea was surrounded by the world ocean and all remained that way, he concluded, until about 200 million years ago, when forces deep within the earth, coupled with the earth's rotation, broke Pangaea into two smaller masses, Laurasia and Gondwanaland. Rather quickly, Laurasia broke into most of the familiar land masses of the northern hemisphere and Gondwanaland became the land masses of the southern hemisphere.

It is a pretty crazy idea in 1991--imagine how it was received in 1912! Wegener's Theory of Continental Drift was initially ridiculed, but then scientists began to uncover puzzles that could only be explained by his ideas of drifting continents. Today's interpretation of Wegener's work, called Plate Tectonics, is quite sophisticated and involves not only drifting continents but also drifting oceans. These plates move over the earth, bumping into one another here, causing mountain ranges to rise up, and tucking under each other there, creating volcanic activity.

Plate activity may be determined in a variety of ways, the most common being earthquakes. Earthquakes occur at plate boundaries, especially where plates are trying to move past one another. A classic example is California, where the northward moving Pacific Plate and the southbound North American Plate slide past each other. The San Andreas Fault, a rift line of fractured rock, marks the meeting point of these giants and the point of most intense geological activity.

Scientists feel that the breaking-up process is still going on. For instance, the rift that forms the Red Sea is thought to have opened up only 20,000 years ago, separating the Arabian Peninsula from Africa proper. The same tectonic activity, it is believed, also formed the Gulf of Aden. A third "split" began from the same point but did not fully develop since the causative pressure was released through the other two splits. This "unfinished" split, an area of thrust-up, faulted and folded mountains with sunken continental blocks between them, forms the Rift Valley system of East Africa. Trace the route of the Rift Valley with your finger on an African map: first the highlands of Ethiopia and Uganda, still very active geologically, and then the lakes--Lake Tanganyika between Zaire and Tanzania, Lake Malawi (formerly Lake Nyasa) between Malawi, Tanzania, and Mozambique, as well as Lake Edward, Lake Albert, and Lake Turkana. Some even suggest that the Dead Sea of Israel and the Gulf of Aden should be considered part of the Rift Valley system.

The countries that either contain or border the Rift Valley are Ethiopia, Uganda, Kenya, Tanzania, Zaire, Malawi, and Mozambique. All these countries are active on shortwave and could represent a unique "cluster target" for your QSLing or general listening. The following information should help you in your quest--frequencies and times suggested represent your best bets but not all possibilities.

Ethiopia: Ethiopia has long been considered the cradle of man and ironically is now the center of human loss in the African droughts. The Ethiopian government station, The Voice of Ethiopia, is the only chance to log this country. Broadcasting from the highlands city of Gedja with a 100kW signal, this station is best heard between 1500 and 1600 UTC on 9560 MHz.

Uganda: Radio Uganda runs a somewhat

intermittent 20kW transmission from the capital city of Kampala. Modulation is often bad, but check 4976 kHz around the 2100 sign off.

Kenya: The earliest of early man roamed Kenya, as evidenced by the fossils found by Louis and Mary Leakey. Kenya once formed the heart of the African British Empire and The Voice of Kenya still sounds very British. Listen for Kenya's 250 kW signal broadcasting from Nairobi in English on 4934 kHz between 2010 and 2110 UTC.

Tanzania: The country with the beautiful capital name, Dar es Salaam, broadcasts daily in English on 4785 khz between 0300 and 0430. Reception of Radio Tanzania may take some patience and careful tuning.

Zaire: Zaire provides two stations for which to hunt, neither in English: La Voix du Zaire, sometimes heard broadcasting from Lubumbashi between 0430 and 0500 UTC on 7203kHz and the university run Radio Candip, infrequently heard (low power) on 5066 kHz around 0330.

Malawi: One-fifth of Malawi is covered by Lake Malawi. Considered one of the most picturesque countries in Africa, Malawi finds itself adding tourism to its list of cash crops.

Music from this country is among the best and should be listened for on 3380 kHz between 0500 and 0600 UTC.

Mozambique: Mozambique has the rather dubious distinction of being the last European colony to gain freedom. Simply vacated by the Portuguese in 1975, Mozambique has made great strides in educating its population and entering the world market. The country has a national shortwave service as well as several provincial stations. Your best bet to hear the country, however, is the 25kW national outlet from Maputo, broadcasting on 4865 kHz between 0330 and 0400.

So, here is an interesting part of the world that is not only making economic and personal freedom progress after the days of European colonialism, but is also a very active area geologically. Much of the area's success will depend on how the broken landscape given it by plate tectonics is used to best advantage.

* * *

The Last Days Of Radio ELWA

by: *Jerry Klinck*

This month we are privileged to hear from a former staffer at ELWA in Liberia - Miss Kathy Johnson of West Seneca, NY. Miss Johnson, a SIM missionary, was in Liberia during the last days of Radio ELWA, a station we have enjoyed monitoring for many years. She has agreed to share with us some of the last days events, including a chronology leading up to them. It appears that ELWA as we knew it, is history.

"SIM'S Radio ELWA went on the air in January, 1954. It was begun with the permission of the Liberian Government to 'teach the tenets of the Christian faith'. Shortly after the broadcasts began, the foundations were laid for what would eventually become a campus which would include not only the enlarged radio facility but also ELWA Academy with 170 students, a printing and publishing operation, a center for literacy programs as well as ELWA Hospital. In fact, one year ago, we were asking God for the opportunity to contact the Liberian President concerning land for expansion. Today, ELWA's transmitters are silent and SIM property has been destroyed.

"In April, due to the worsening civil war, we began a partial evacuation of SIM personnel. In May and June, evacuations continued and many of our operations were

• TO MAKE CHRIST KNOWN TO AFRICA •

ELWA

QSL no. 15.155 mct. at 2117 GMT

on April 22, 1963

Remarks: Thanks for your report



BOX 192 • MONROVIA LIBERIA • SUDAN INTERIOR MISSION

shut down. As the war continued, atrocities including the beheading of people and the burying alive of children were increasing. Many ELWA staffers were afraid to go to sleep in their own homes. Two injured men dragged themselves to ELWA Hospital as the war came to ELWA in dramatic fashion. In late June, Taylor's forces approached the ELWA Campus.

"By early July, refugees seeking shelter from the war numbered over 4,000 on campus. The Academy was turned into a temporary shelter and, with the war at our doorstep, SIM Area Director Jon Shea ordered Radio ELWA shut down. Our multi-lingual broadcasts were regrettably ended early that afternoon and July 6 became the first complete day since January of 1954 with no ELWA broadcast. Ministry to refugees expanded rapidly, with more than 9,000 hungry and frightened people crowded onto the ELWA campus. Housing, feeding and security for them became our top priority. By mid-July, the number of refugees had reached 22,000 and there was firing all around the campus. On July 22nd, Taylor's forces entered the compound at 10:00 A.M. as church services were beginning. The mission leaders began to negotiate to keep the soldiers off the ELWA campus and the soldiers agreed that our boundaries would be secure but, if anyone were to try to leave, the would be shot.

"On July 20th, a commander arrived and ordered ELWA back on the air so Taylor could address the nation. The next day, intense fighting started near the northeast corner of the campus. Government soldiers retreated

past ELWA, while blasting Taylor's forces with a large, vehicle-mounted weapon. Reports of refugees being hurt were received as heavy fighting now surrounded the campus. When the shooting quieted down, missionaries and national leaders asked the Patriotic Front commander for safe passage through his territory. In one of the war's miracles, 22,000 refugees moved out from our campus in two hours, with no casualties! The missionaries remained long enough to evacuate 20 patients from ELWA Hospital taking them to the still functioning Bong Mine Hospital, some 50 miles away. On July 27th, Patriotic Front leaders ordered 5 missionaries to return to ELWA to put the station on the air for them to broadcast a message taped by Taylor. The next day, the last SIM missionaries left ELWA.

"As for me, I had been teaching at a village a couple of hundred miles from Monrovia when things began to deteriorate badly. Three hundred villagers nearby had just been killed after offering food and gifts to the troops.

"At the same time, many of the Christians in our village had said that they would die to protect us. It was becoming obvious that we were more and more of a threat to their safety as well our own. Fortunately, we made the decision to leave when we did. We were able to leave by car but, had we waited another twelve hours, we would have been forced to go on foot, which would have posed two

distinct problems: White people are more easily seen in the bush than population and, we don't move as quickly. It would have been very long and difficult. As it was, we left with just the clothes on our backs, everything



else was lost.

"This is about the time that the ELWA staff was being evacuated, all the Americans, that is. On July 30 the station was shelled by rockets and was severely damaged. The attacks were apparently by both the rebels and government forces. We originally thought

Listener's Classroom

Dr. Charles A. Wooffen
11424 Great Branch Drive
Chester, VA 23831-1663
Compuserve 76476.1556



One of the questions that Ben Mancine asked in his last letter was, "What the heck are French language broadcasters saying at the start of their shows? It sounds like 'shoes-on-detour' to me. And what does it mean?"

The December issue of *The Journal* discussed language identification almost exclusively. I say almost because Ben's question brought to mind the one thing that I left out: some of the wording used in station identification.

The words to listen for in determining a station identification are (in English), "this is. . .," "you are listening to. . .," "you are tuned to. . .," or similar meanings.

Arabic: "Huna. . .," "Hadha. . ." (don'tcha just love those gutturals?)

Dutch: "Hier is. . .," "U luistert naar. . ."

French: "Ici. . ." (ee cee) Vous écoutez. . . (your "shoes-on-detour," Ben), (voos ay koo tay) "Vous êtes à l'écoute de. . ." (vooset a laycoot duh).

German: "Hier spricht. . .," "Hier ist. . ."

Hindi/Urdu: "Yeh. . .hai"

Indonesian: "Inilah. . .," "Disini. . ."

Italian: "Qui. . .," (kwee) "Parla. . ."

Japanese: "Kochirawa. . ."

Persian: "Inja. . ."

Portuguese: (almost similar to Spanish, but more defined in the speaking than the writing. Never write to Portuguese stations in Spanish. It's not considered proper form.) "Aqui. . .," "Fala-vos. . .," "Fala. . .," "Estao ouvindo. . ."

Rumanian: "Aici. . ."

Russian: "Govorit. . ."

Spanish: "Aquí. . .," (ah kee) "Esta es. . .," (ess tah ess) "Escuchan. . .," (ess koo chahn) "Habla. . ." (ah blah).

Swahili: "Hii ni. . .," "Hapa. . ."

Thai: "Thini. . ."

Turkish: "Burası. . ."

Standard Chinese: ". . .po tien tai," ". . . guangbo diantai."

Then there are the ones who don't use the above patterns. Stations like Albania: "Ju flet Tirana." Austria: "Radio Österreich

International." Radio Finland: "Täällä Suomen Yleisradio." The Voice of Greece: "Edo Athine. Elliniki Radiophonia Tileorassi." Iceland: "útvarp Reykjavík." And those are just the European stations.

By and large, Ben, this should be enough to get you started in language identification. I'd suggest that you obtain the latest copy of the *World Radio TV Handbook*. At the end of each frequency section there is an example of the language used in the announcements.

On another note, Jim Norris wrote asking about why some receivers have more than one row of numbers. He discovered additional numbers, at the side, correspond to numbers engraved on, or near, a knob on the receiver. The reason, Jim, is that this combination of the wave-range switch and the dial gives you the clue to the total range of bands that your radio is able to receive.

These ranges can differ not only from country to country, but also manufacturer to manufacturer. Standard around the world are two bands, or ranges: the medium wave (known as "AM" in the USA, the standard broadcast band elsewhere) and the shortwave band. On better quality receivers both the medium wave band and the shortwave band are split up into a number of ranges, which will be indicated MW1, MW2 and/or SW1, SW2, SW3, etc.

There are two other bands available, though not worldwide. The first one is the long wave band, the use of which is restricted for broadcasting to Europe and the Middle East. Here you can hear navigational beacons on the long wave band. The second band is the FM band (frequency modulation), known also as the VHF band, which is widespread around the world. As FM usage grows, those areas of South America, Asian, and African countries that used to be without that service will be covered.

At one time, up until fairly recently, radio waves were exclusively expressed in metres. (A metre indicates the length of one complete wave.) I'll leave you with that thought. 73's



The Noise That Annoys

Most of us are in search of that elusive signal; that rare catch that we might log but once in a lifetime (or at least it *seems* like once in a lifetime). Any number of things seem to confound us in this quest. Though most SWLs would agree that it is the challenge that makes our hobby interesting, there is such a thing as *too much* challenge.

Most of us deal with the challenge of noise by ignoring it. It is so pervasive that after time we don't even think about it. When we are unable to hear KOL Israel or our favorite Indonesian, we simply chalk it up to the Gods of the ether, or propagation, or whatever other vague villain we are fond of. But like most other things that we face in our hobby (with the possible exception of Radio Tirana) there are steps that can be taken to lessen the problem. The first step is to learn more about "noise."

A Rose By Any Other Name

"Noise" is a term that is used (and misused) about as often as the term "long wire antenna." But most people who use the term don't really understand what it means. In this month's column I will attempt to identify the various kinds, causes, and sources of noise, and give some recommendations for reducing noise in your receiving system.

There are, in fact, many different kinds of noise. Some are man-made, while others come from mother nature - even outer space. Ham radio operators device these types of noise into two broad categories: QRN, or noise originating in nature, and QRM, or noise originating from man.

Noise and Radio Astronomy

The first serious research into QRN came about in the 1920s. Bell Telephone Laboratory investigators were

trying to determine the cause of periodic interference to trans-Atlantic radiotelephone circuits. Using early directional antennas they made a most startling discovery: the signals were coming from almost directly overhead! At the risk of making fantastic - even laughable claims - they repeated their experiments over and over again. But they always obtained the same results: the signals were coming from outer space! Whether or not all of these signals are signs of intelligent life has yet to be determined (but I'd love a QSL!). The fact was that many of the signals could be traced to our own solar system. Jupiter, the giant gaseous planet, was found to be one of the highest radio-emitters in our cosmic neighborhood. Soon investigation all over the world began into mapping the universe not by visible telescope, but by radio telescope. Essentially an elaborate radio receiver and antenna system, a radio telescope is actually designed to receive noise! To each his own, I guess...

After decades of research much has been learned about the natural noise we hear on the shortwave bands. Much of the hiss we hear is from our own galaxy, as with the case of Jupiter and the Sun. Some of the weaker hisses we hear actually come from the remnants of exploded stars thousands and even millions of light-years distant. Suffice to say that not much can be done about this noise... Fortunately, it rarely becomes strong enough to completely block the high-powered signals of today's transmitters (we leave that up to sunspots).

An Evil Hiss

Another kind of hiss noise that might be described as natural, is that of internal device noise. This kind of noise is actually a side-effect of amplification, and occurs more in today's solid state

devices than in the "fire bottles" of yesterday. In this kind of noise, the atoms of the semiconductor materials and intentionally added impurities become increasingly agitated with temperature, and introduce the unwanted and random flow of electrons. Happening up to thousands of times a second, these little chain reactions result in a hissing noise at the speaker. If they occur early in the R.F. or audio amplification stages, they can be amplified right along with the desired signal, causing distortion, or under extreme circumstances covering up the desired signal entirely.

You can easily determine how much device noise your receiver exhibits by a simple test: disconnect the antenna, and short the antenna connector (center pin to outer shield, or one post to the other). Turn up the audio gain and tune across the bands. Whatever noise you hear now is coming entirely from the amplification devices in your receiver (barring strong local signal sources like computers, TV sets, etc.). Ideally there shouldn't be much noise resulting from this test. Commercially, noise figures are measured in a similar way: first, a test signal is applied, and the resulting audio output is measured. Then the signal is removed, the antenna shorted, and the resulting audio (which is now just noise) is measured. The numbers are then plugged into one of several formulas, and a noise figure is derived. The better the noise figure, the better the receiver. This kind of noise, by the way, can be cut down by selecting low-noise components, and by carefully selective circuit design. The more selective a circuit is, the less noise gets through.

Shot in the Dark

Shot noise is a second kind of noise generated by both tubes and semiconductors. Shot noise results when a single, high velocity electron suddenly cuts loose and zips through the semiconductor medium. It literally sounds like a miniature gunshot (no ricochet, of course). Shot noise becomes more of a problem at VHF frequencies and above.

On an Impulse

One of the most annoying - and common - kinds of noise is known as impulse

noise. Impulse noise is characterized by sudden, high intensity pulses of energy. Depending on how the impulses were generated, this noise can exist in a narrow band of frequencies, or all across a spectrum of frequencies. It has been well observed that during spring and summer months lightning occurs at the highest seasonal levels, and with these peak levels comes a peak level of impulse-type noise. Lightning always generates characteristically broad impulse noise, beginning below the VLF band and extending well into the microwave bands. Each of the impulses generated by lightning can carry incredibly high levels of energy, and can travel immense distances. The result is that a lightning storm hundreds or even thousand of miles away can often cover a weak radio signal, or at least make it so difficult to listen that most people give up.

Lightning isn't the only cause of impulse noise. Fluorescent lights, arc welding equipment, electric motors, leaky power pole insulators, and automobile ignition systems create large and seemingly constant amounts of impulse noise. In the case of automobiles the noise is usually transient - it lasts only as long as it takes the automobile to pass by your location. Other types, though, linger, and unless steps are taken to limit them they can destroy the pleasure of shortwave listening.

Several circuit designs commonly found in modern receivers help limit impulse noise to tolerable levels. Noise limiter circuits are designed to filter out the characteristic narrow, high energy short duration pulse. Quality noise limiter circuits allow the user to adjust the amount of filtering, as too much filtering can distort or mask true signal energy.

The automatic gain control found on many receivers can also be used to limit short duration noise. Most automatic gain controls have two settings - fast and slow. In the fast mode, the receiver gain responds very quickly to changes in signal level. This means that quickly changing signals - like impulse noise - will cause a rapid adjustment in receiver gain. So a suddenly increasing signal level from impulse noise will result in a very fast automatic lowering of receiver gain. The result is that much less of the noise signal will get through than before.

The best way to eliminate noise is to keep it from ever entering the receiver. In shortwave reception, this can best be done by utilizing horizontally polarized antennas. Horizontal dipoles have long been known to pick up less noise than vertical antennas. This is because most man-made noise is vertically polarized. Noise in a horizontal polarization simply doesn't travel very far - the earth tends to absorb it.

Noise That Isn't Noise

Many things that SWLs call noise isn't really noise. Purely defined, noise is a random emission of energy. Many forms of man-made signals aren't really noise, but are quite undesirable nevertheless.

In the early days of radio the only man-made interference to contend with was other radio signals from nearby. That was before television, industrial electronic controls, and computers. Each of these devices create their own radio signals - unintentionally. But because these signals are true radio signals they cannot be dismissed as noise, nor can they be dealt with in the same way as pure noise.

The Evil Computer

Through popular fiction the computer has often been maligned as an evil entity. There is one place that this reputation is deserved - the radio room. Because of the many oscillator and clock circuits within computers they are all miniature broadband transmitters. While F.C.C. regulations have lessened the amounts of R.F. interference computers generate, they can still cause havoc when operated near a shortwave receiver.

The Symptoms

Television noise usually results from the horizontal oscillator (at around 15 KHZ) generating harmonic signals at multiples of the original frequency. Computer noise is similar, but usually appears with more frequency throughout the bands, and is often quite strong. Most people don't need the TV on in the same room while they listen to the shortwave receiver, but many people do use computers while they listen to the

shortwaves, for such purposes as frequency logging, CW and RTTY decoding, or propagation prediction. The first step is to identify the interfering culprit.

While listening to the shortwave receiver, turn off and on each piece of electronic gear in the radio room. As soon as the spurious signal disappears you have located the offending item.

Then What?

After you have located the spurious signal source, you have several options available to you. In the case of television interference you can simply switch off the television while listening to shortwave, or move the shortwave receiver away from the television. Most importantly, make sure that the receiver is connected to a good ground. More than anything else, this often eliminates the reception of local spurious signals.

With computer interference, a little more perseverance is called for. As with television interference, grounding the receiver often helps. But in the case of computer interference it is often necessary to ground the *computer* as well. This isn't always easy, as computers don't come with grounding posts. It is still possible, though, to ground the computer - simply locate a cover or back panel screw that connects to the chassis. Connect a heavy wire (14 gauge, for example) to this screw, and connect this same wire to your shortwave receiver, then to an earth ground. The reason for connecting the wire to both the computer and the receiver is to bring the cases of each to the same ground potential. By doing this you prevent any R.F. current from flowing from the computer into the receiver - it is simply carried away to ground.

Intermod

When two signals mix they create two more signals. One is the mathematical difference between them; the other is the mathematical sum of the two. The shortwave receiver is capable of receiving both of these new signals the same as any other. There are two principle ways that such signals can be created: from strong local transmitters

(such as commercial AM stations - this is often called "intermod"), and from the internal circuitry of the receiver itself (often called imaging).

In the case of the a strong local signal source (such as the AM transmitter) the frequencies mix within the receiver, and the offending signal can often be blocked from the receiver by the use of tuned "band stop" filters. If the signals can't get into the receiver they can't mix. Many amateur radio publications contain circuits for this purpose.

When the receiver itself mixes two signals internally, the resulting signal that appears above the original signal is known as an image. It can occur due to poor receiver design, or from a receiver overload caused by feeding too strong a signal into the receiver. Once the signal is in the receiver, it mixes with the I.F. oscillator as is normal. But then the resulting new signal gets back into the I.F., where it is mixed a second time, and produces a second new frequency. For example, let's assume that our receiver has an I.F. frequency of 455 KHZ (a rather common I.F. frequency). Let's further assume that we are receiving a 650 KHZ signal from our antenna. The receiver mixes the 650 KHZ and 455 KHZ signal to yield a sum frequency of 1105 KHZ. But let's also assume that some of this 1105 KHZ signal gets back into the receiver's I.F. section. It will mix a second time with the 455 KHZ signal to yield a frequency of 1560 KHZ. So if we tune up 455 KHZ from our 650 KHZ signal, we will find a second copy of our signal where it shouldn't be! This second signal is an *image* of the first.

There is a simple formula to determine the image frequency of a receiver. To use it, all that is necessary is the I.F. frequency of the receiver (the first I.F. frequency if it is a dual or multiple conversion receiver). Take the I.F. frequency, double it, and add it to the original received frequency. This will yield the image frequency. To determine if you are receiving an image, then, tune to this new frequency and look for a signal with the same characteristics.

About all you can do in the case of images is to be careful of the level of signals allowed into the receiver. This

can be accomplished with a step variable or step attenuator. Although available as accessories from many sources, these attenuators are also featured as *part* of many new receivers. The presence of an attenuator, by the way, doesn't mean that the receiver is poorly designed. Even the best receiver can be overloaded by a very strong local signal.

Signals Disguised as Noise

Lest I neglect some of the most annoying noise sources available to the SWLs, mention is due of jamming and Over-The-Horizon-Backscatter-Radar (the "woodpecker"). Jamming comes in several flavors, and comes and goes with the same governments that sponsor it. Jamming can be a single very loud tone, a series of random tones, or raucous noise sounding like a diesel engine or bagpipes being played by orangutans. Sometimes jamming is simply a second program transmitted on the same frequency as the signal being jammed. There is not much that can be done to avoid this problem; you can try to receive a the same program on a different frequency (it's hard to jam all of the frequencies used in modern multiple broadcasts). Or you can try to receive a later broadcast beamed to a different location (often jamming is only toward a targeted area).

Some rather effect filters are now available to attenuate the woodpecker. This rat-a-tat-tat signal can drive a person to tears when it appears on top of their favorite station. It doesn't usually stay long, fortunately. Instead the woodpecker appears to move around - ironically probably to prevent someone from jamming it!

One last class of signals should be discussed. Facsimile and multiplexed RTTY signals sound horrible to the uninitiated. Facsimile can sound like a broken phonograph record of someone sneezing. Multiplexed RTTY signals can sound like you're standing next to a DC-3 revving its engines. These are not noise (they do carry intelligence) but are actually signals. They cannot be filtered away, and with the proper equipment can actually be decoded and enjoyed.

NASWA Portraits

Jerry Klinck

43 Lein Road
West Seneca, NY 14224



Hi and welcome to another visit with a fellow NASWAN. But first, remember when these looked like this? Fifteen cent IRCs and 3-4 week OSLs are a thing of the past, as I



have found out. I did a mini-survey which I hope will encourage those new and those renewing with regards to our hobby. It points out the need for patience in QSLing. With regard to the 22 African and 26 Asian QSLs received here in the past year, not counting relays or followups, the average time from reporting to QSL received was 87 days. Some things are worth waiting for! Now, off we go to Danbury, Conn.!

"I was ten years old in 1961 when I got my first taste of shortwave radio with a two-bander (AM & SW) which had enough sensitivity to pull in VOA, Radio Peking, Cuba, Moscow, and occasionally Czechoslovakia. Two years later I earned enough by mowing lawns to purchase a Lafayette HE-40.

"I knew little about longwires so I used the attached whip and got a few more stations. Without knowledge of schedule broadcast times it was a real 'hit & miss' experience. Also I remember it was difficult to get many Euro stations with Moscow jamming all over the bands. I traded my receiver for a CB and that was the end of SW till 1974.

"I purchased another tabletop receiver from Lafayette, the HA-800. I used a longwire this time but still had no idea of scheduling and I sold that radio a few years later. I always had the interest, but I didn't have the desire to follow through with learning more about the hobby.

"Early in 1990 I bought a Magnavox 1875 and got reacquainted with SWling again and with a current copy of Passport to World Band Radio, I was on my way. A couple of months later I purchased a DX-440. I bought a Grove TUN-4 indoor antenna system, primarily because I live in an apartment which is nestled between two office buildings. I use a 20' longwire.

"In April, 1990, my fiancé and I were looking at antiques at a local shop and I happened to find

an operating Hallicrafters S-108, which was made in 1959. I remember that my father told me when I started, back in 1964, that Hallicrafters was one of the best radios that you could buy, so I bought the radio.

"In the past few months I've made use of all the information I could find. I've ordered reprints from the NASWA Company Store, scanned the shelves at the local library, and listened to DX shows.

"One of the misconceptions about DXing that I learned early, is that just because you send off a reception report doesn't necessarily mean that



you'll get a reply. In light of that, I've been sending follow-ups. I also look at the QSL column in The Journal to give me an idea of what kind of responses other people are getting.

"I break up listening into several areas. I try for EG broadcasts first of all, then SP and FR. One of my target areas is Africa. I've hit about 30 countries this year, but only six have verified my reception reports. In other words, Africa will take patience.

"I also go for utility stations like the Coast Guard frequencies. Unusual broadcasts such as test transmissions I try to find as well. Unfortunately, living in an apartment complex is limiting on reception. I use an indoor amplified antenna setup that works quite well but it has a tendency to amplify the neighbors electrical appliances as well.

"I'm employed at an aerospace products company where I am a quality control inspector and also am in the administration for the warranty/repair section."

Many thanks to Richard Wallace for the interesting profile. Till next time - 73 and GREAT DX!

CARING FOR YOUR QSL'S AND STILL HAVING LUNCH MONEY LEFT

JERRY BERG

There are two reasons why I feel qualified to write on this topic. First, when it comes to my own collection, I have made the full range of mistakes, and suffered the consequences.

Second, as Chairman of ANARC's Committee to Preserve Radio Verifications, I have handled about 20,000 QSL's belonging to others, including some of the hobby greats. Having compared their mistakes with my own, I am content in knowing that they weren't any smarter than I was.

Although wind, rain and fire are definitely to be avoided, the biggest obstacle to keeping QSL's in good condition is usually their owners. Our QSL's are in much greater danger from what you and I are likely to do to them than from any force of nature. We are, in short, our own worst enemies.

You would be surprised how QSL's, even those from the 20's and 30's, hold up when they are not abused. A card that has enjoyed ordinary care won't look much different from the one you found in the mailbox yesterday. Preserving QSL's so that they will look good and bring you enjoyment for many years is really quite easy. All it takes is modest foresight and a little common sense.

The concept of "preserving" anything, including QSL's, will mean different things to different people. To the professional archivist, some of the ideas presented here may not seem the best advice. If your goal is museum quality preservation, be prepared to spend a lot of money on archival quality storage materials.

But most of us are more interested in enjoying our QSL's today than worrying about their afterlives. Thus I write not as an archivist, but as someone who wants to keep his QSL's in good shape and maybe have a little money left over for lunch. My apologies to those wishing a stricter approach.

A FRAMEWORK FOR DISCUSSION.

We will need to consider storage, display, preservation and accessibility.

1. STORAGE. Where you store your collection is most important. The basic rule is to avoid extremes of light and temperature.

Constant exposure to bright sunlight will cause almost any printed material to discolor and fade, and dampness or dryness can do serious damage to paper products. So it is best to avoid locations where there are wide swings of temperature or dampness. A good rule of thumb is that conditions that are uncomfortable to people will also be harmful to paper.

How to store your QSL's is also important. If you don't care about display, you may want to just keep them in a box. Those who toss their veries in a box might seem a bit reckless, but leaving cards and letters in their natural state and stacking them up someplace safe is probably doing them more of a favor than you think. Some well preserved collections I have seen consist of letters just placed one behind another in a cardboard box. The aesthetics aren't much, but the cards and letters holdup well, provided they are kept in a dry, stable environment.

It is good to remove letters from envelopes before storing them, however. The CPRV has handled many QSL letters that have been stored in their original envelopes. They were in excellent shape, but if they had been unfolded early they would have avoided stress on the creases when they were eventually opened up.

2. DISPLAY. Album mounting is the easiest and most practical way to display QSL's. The album provides a measure of protection, and facilitates transportation.

Some DXers mount their QSL's on the wall. We have all seen pictures of shacks "papered" with QSL's. But how have those QSL's been attached? If they are mounted with pins, they are probably okay, but if they have a cellophane tape loop on the back there will surely be problems removing the tape later.

Wall display can be attractive, but it is not a good approach to long term care of one's QSL's. They will get dusty and dirty, and will eventually curl and discolor. If you want to mount your QSL's on the wall, mat or frame them, or cover them with plastic.

Finally, some collectors just put their QSL's in folders and file them away. QSL's can be

displayed quite easily when filed in folders and arranged by state or country. Just pull out "Tristan" and gaze away.

3. PRESERVATION. This is an area where things can get pretty esoteric (and pretty expensive). You may, for example, decide to use acid free storage and mounting materials, or special tapes, photo corners or other supplies. Or you may wish to mount your QSL's so as to minimize damage from handling, and use plastic covered album pages.

Let me briefly discuss a related issue, the composition of paper and the effects of chemical impurities on the survivability of QSL's. Paper is made from cellulose, which is constructed of ribbon-like glucose molecules bonded together into long chains and then built up into sheets that are held together in layers. These cellulose units, called microfibrils, crystallize into bundles and then into fibers. Water and other chemicals are added to the fibers and the whole is then processed into sheets of paper.

It is the additives, along with impurities and unstable plant products, that are the culprits. They have a deleterious effect on the paper and lead to its eventual deterioration. Environmental and atmospheric acids and pollutants have a like effect.

These additives are referred to collectively as acids. The bonds which hold the cellulose chains, microfibrils, bundles and fibers together are attacked by these forces, and the deterioration process is on. The underlying chemical reactions are the main cause of the deterioration. If only one-half of one percent of the bonds holding the cellulose chains together are broken, the paper will be virtually useless.

There are all kinds of acids that effect paper--impurities; the alum-rosin sizing that is used in the manufacturing process; acidic gases and pollutants from the atmosphere, like sulfuric acid and sulfur dioxide, both of which have a high attraction to lignin; and acids from adjacent acidic materials. Typically during the deterioration process, brown discoloration occurs and the paper becomes brittle.

Lignin is particularly harmful. It is the large molecule which binds the cellulose together in trees. The paper yield per tree is increased to 95% by using the lignin. It is only 35% if the lignin is not used. Lignin hastens the demise of paper by breaking down into many different acids and peroxides. (The brown color of shipping and packing containers comes from the lignin in the paper.)

Some high-quality (and high priced) archival papers are denoted as "lig free." Others contain alkaline buffers to neutralize acids. Some papers are commonly referred to as "acid free," although this nomenclature can be deceiving without further explanation.

If all of this makes you want to place your QSL's in a hermetically sealed container and never look at them for fear of poisoning them forever, relax. These forces are largely beyond our control, and can be stemmed only with a level of effort that is beyond most of us. The point is that paper products, including the QSL's in your mailbox, are under attack by unseen gremlins all the time, and it behooves us not to make the process any worse by our own carelessness.

4. ACCESS. How conveniently do you want to get to a particular QSL? If you don't care, you could just toss your veries into a bag and rummage whenever the urge strikes you. On the other hand, if you like everything in order you might have separate albums for QSL's from different parts of the world, groupings of QSL's from the same station, etc.

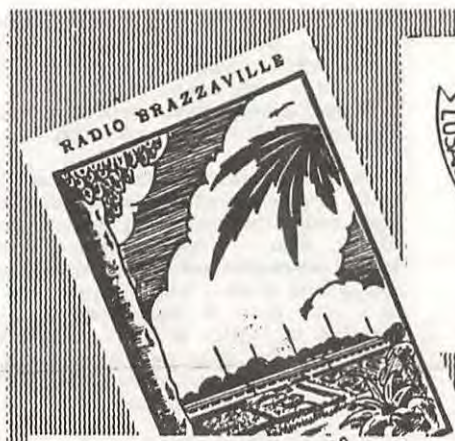
MOUNTING TECHNIQUES

1. THE ALBUM ITSELF. How large an album page should you use? My suggestion is to use pages larger than 8-1/2 x 11". This will permit you to mount letters without having to fold them, and still leave a border area. It will often permit you to mount both a letter and accompanying card on the same page.

There are many, many different kinds of album pages. You should use pages with plastic covers, both to protect the QSL and help keep it in place. The plastic cover also provides a convenient place on which to mount a station sticker.

The primary hazards associated with plastics in archival work are from the chemical composition of the material itself (the plastic should be chemically inert), and from any additives or coatings that have been added in the manufacturing process. A plastic that is chemically safe by itself can be rendered unsafe by the introduction of a deleterious additive or coating. Many different plastic materials are used in the manufacture of mounting supplies--cellulose acetate, polyesters, polyethylene, polypropylene, polyvinyl chloride (PVC), etc.

Just as "acid free" is the password for safety in paper products, "Mylar" is the standard in archival plastics. Mylar is the brand name of



THANK YOU for your reception report dated *January 28/58* which we very much appreciate. We shall be glad to hear from you again.

Lusaka broadcast daily to Abbeville from 15.00-17.00 hours G.M.T. (15.30-16.30 Sundays) on 81.5 (2110 km), 41.4 (7.120 km) and 78.6 (3.814) metres, and from 08.00-10.30 hours G.M.T. on Sundays to Europeans.

Northern Rhodesia Broadcasting Station,
P.O. Box 250,
Lusaka,
Northern Rhodesia.

Memorandum
Broadcasting Officer.

ZQP-411 9-58

this is WTR **AFRS**

KEY STATION OF THE ARMED FORCES RADIO NET WORK

OFFICES 1st FLOOR
STUDIOS 2nd FLOOR
RADIO TOKYO

SUKHO
USAKA
MIMUDA
MAGDYA
SAPPURAI
SENDAI
NHGATA
SAGROU
TSURUGA
KANUYA
FUKUOKA
KUMAMOTO



DuPont's polyester film. It is strong, uniform, stable and inert. The latter quality is the reason for Mylar's acceptance in conservation work. Mylar contains no plasticizers that can migrate into adjacent materials, so there is no reaction with inks, adhesives, paper ingredients, etc. It will also withstand extremes of heat and cold.

There is one type of album that you definitely should NOT use, at least not without special precautions: albums with so-called "magnetic pages."

These are the commonly available pages that have narrow ribs of adhesive to hold the card or photo in place. If you use such pages as they come out of the package, I suggest that you RUN, DON'T WALK, to your QSL albums and carefully remove all your QSL's, praying while you work. You may be lucky and still have time before these QSL eaters grab your veries for good.

"Magnetic pages" may be useful for photographs, which are on sturdy stock and have no information on the back. But they can be deadly to QSL's, particularly letters

and particularly if the QSL has been mounted on the pages for a while. Those little ribs grip more firmly as time passes. Eventually you may reach the point where the QSL cannot be removed without damaging it, quite the opposite of the "easy in, easy out" approach you thought you were getting. Also, to the extent that storage deficiencies like dampness affect your QSL's, the damage is compounded by the use of magnetic pages. A letter that is a little weak from dampness may not survive the trauma of removal from a magnetic page.

One way around the dangers of magnetic pages is to use a piece of plain paper as a backing to the QSL. Cut the paper to the same size as the QSL, place the paper on the ribs, put the QSL on top of the paper and then lay the plastic face sheet over the QSL.

2. AFFIXING THE QSL's. Avoid the use of cellophane tape ("Scotch," "invisible" or "magic" tape, as it is variously known). The adhesive used with such tape is very corrosive, leaves a residue and eventually turns yellow and brittle. Most of us have probably used cellophane tape on our QSL's at some point,

and have later learned the unfortunate results the hard way.

There are alternative tapes available, but tape of any kind should be avoided whenever possible. For mounting QSL's on album pages, use mounting corners. The ordinary type that is available at any stationery store is inexpensive and come in black, white and sometimes other colors. I use two for each card, four for a letter.

Do you want to mount the QSL's so that one or both sides are visible? If you are using album pages with paper inserts, as I do, you will be able to see only one side of the card. Many hobbyists like to display both sides, however, using the plastic page cover without any paper insert. The problem is how to affix the card to the plastic cover. Paper corners are not suitable because the back part of the corner, when viewed from the back of the page, is unattractive. Some DXers have used staples, but that is not fully satisfactory either.

One solution is to use see-through plastic corners. Or you could make a small hinge or loop out of a removable (not cellophane) tape. These products are described below under "Supplies."

SOME DO'S AND DON'TS

1. **DON'T** use magnetic pages unless you use "backing" paper to protect the QSL from the adhesive ribs.
2. **DON'T** use cellophane tape. It looks good at first, but over the long haul it won't stand up and it will damage the QSL.
3. **DON'T** deface the QSL. This may seem pretty basic, but you'd be surprised at the fate that has befallen some QSL's. Don't fold them, punch holes in them, staple them, stick things on them or write on them.

But a P.S. here. I must acknowledge one example of "defacing" that was actually rather nice. In a collection donated to CPRV, the DXer used a mechanical numbering device to place a small number on each QSL. The number corresponded to an entry in a book containing the details of the logging—date, time, frequency, etc. I have to admit that it worked well and it didn't really detract from the appearance of the QSL's. So much for hard and fast rules.

4. **DON'T** remove the stamps, and **DO** save interesting envelopes.
5. **DON'T** use metal paper clips. They rust. Use the plastic kind.

SPECIALIZED SUPPLIES AND TECHNIQUES.

1. **WHERE TO LOOK.** There is an entire industry out there providing supplies to professional and amateur archivists. You will find some of these items in your local stationery store, but the extent of the products available from specialty houses surprised me.

There are companies that supply all kinds of storage and preservation items to stamp collectors, postcard collectors and other hobbyists, as well as libraries and museums. They often advertise in stamp, postcard and other "collector" magazines. I am going to mention three who produce informative catalogs which are available for the asking. Looking through the catalogs will tell you more than you ever wanted to know about archival supplies.

Light Impressions

439 Monroe Avenue, Rochester, NY 14607-3717, 1-800-828-6216 (in NY, 1-800-828-9629). Ask for their illustrated "Archival Supplies Catalog." They also produce an interesting brochure, "Mounting Techniques," covering procedures and materials for organizing photos and documents in albums. The brochure is free. Light Impressions will also provide free copies of their catalogs and brochures for workshops and conferences.

University Products, Inc.

P.O. Box 101, Holyoke, MA 01041, 1-800-628-1912 (in MA, 413-532-3372). Ask for their illustrated "Library and Media Center Supplies and Equipment Catalog," which contains a large section on archival and preservation materials.

Conservation Resources International, Inc.

8000-H Forbes Place, Springfield, VA 22151, 703-321-7730 [in Canada: Archival Conservation Resources (CANADA) Ltd., P.O. Box 2506, Ottawa Station D, Ottawa, Ontario, Canada K1P 5W6]. CRI also has offices in England and Australia. This catalog is less extensive than the others, but it contains a detailed article about what paper is, how it is made, how and why it deteriorates and what you can do about it. Some of the above discussion of these topics is based on the CRI article.

2. **SUPPLIES.** The following is a brief description of some interesting supplies for the amateur archivist. Some of these items can be found in local stores. All are available from one or more of the suppliers listed above, and all tend to be priced on the high side.

Containers: Even if you just toss your QSL's in a box you can still go first class. All kinds of archival-quality storage boxes are available, constructed of acid free and lignin free materials. Envelopes, portfolio boxes, file folders, etc. that are made of such materials are also available, as are plastic envelopes, sleeves and bags.

Albums: A number of manufacturers offer albums with acid free coverings--overkill, in my opinion, but available to those who are so inclined. Some also come with slipcases, which is a nice touch.

If you prefer an album that will hold 50 or 75 pages rather than 25 or 30, keep in mind the desirability of D-ring construction. The main advantage of D-rings is that they let you flip pages easily, without bending them, and they allow the already-turned pages to lie neat and flat. D-rings make the handling of large albums much easier.

A category of albums that is not always found in the "album" section of stationery catalogs is the so-called display binder. They look like regular albums but they have "multi-rings," a row of 30 or so metal rings running the length of the spine (as opposed to the two or three rings usually found on regular albums). These binders will hold only 25 or 30 usually plastic covered pages, but the pages are commonly available in larger than usual sizes, like 11 x 14", 14 x 17" (the size I prefer) or even 18 x 24". The large page size makes them especially handy for displaying letters or putting together a display of station ephemera that cannot fit on an 8-1/2 x 11" page. Display binders come in both soft and hard cover designs.

Plastic covered pages: The variety of plastic covered pages is almost limitless. Be careful, though, because the plastic sheet protector and the paper insert that goes inside it do not invariably come as a single unit--sometimes you buy them separately. As noted earlier, if you use the paper inserts you will be able to see only one side of the QSL.

A quick check at your local stationer's will familiarize you with what is available, but the archival catalogs have some interesting specialty products, including such things as sheet protectors with plastic insert tabs attached, nice for indexing the contents of the page.

Also available are plastic pages with "pockets" for cards or photos of approximately postcard size. These often permit you to see both sides of the item inserted. You are out of luck if your QSL is a little oversize, however.

Corners: The usual paper variety is available at any stationery store. You moisten the back, press it in place and you're all set.

There are also two other types commonly available on the archival scene. One is a regular paper photo corner that contains no adhesive. I am not sure why one would use these except that they are made from special acid free paper and they are very professional in appearance. They must, however, be attached to the page with a piece of tape or an adhesive, too much of a chore for most of us.

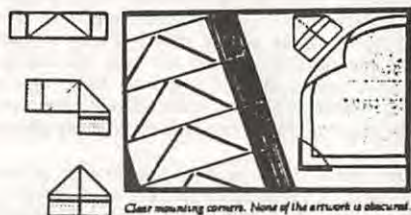


FIGURE 1. CLEAR MOUNTING CORNERS

The other special type of corner is the clear plastic variety shown in Figure 1. They are made of clear polyester. When you take them from the box the "corner" is actually a scored plastic strip which you fold into a corner. On the back of each "foot" of the corner is a self-sticking 3M adhesive that has been approved by the Library of Congress as a non-yellowing permanent adhesive for conservation use. Remove the paper covering from the adhesive and press the corner into place. The adhesive does not come into contact with the material mounted.

These see-through corners are a little awkward to work with at first, but they are probably your best bet if you want to mount your QSL's so as to see both sides. Affix the corners directly to the sheet protector, without using a paper insert. Two corners per card is plenty.

Mounting corners should not be used with brittle or fragile papers because they may place too much stress on one section of the paper and tear it. For ordinary cards and letters, however, they work fine.

Tapes: If you must use tape, what are the alternatives? One is removable tape, commonly available as "Scotch Removable Magic Tape" (No. 811). It is available in 1/2", 3/4" and 1" widths. I do not know what

the **CDRV** page

COMMITTEE TO PRESERVE RADIO VERIFICATIONS

JERRY BERG, Chairperson • 38 Eastern Ave. • Lexington, MA 02175 • (617) 861-8481

WI Wonderful Isle of Dreams **OD**

Isle of Dreams Broadcasting Co.

January 26, 1930

Shortwave from Miami Beach?! Station WIOD. "Wonderful Isle of Dreams," came on the air in the 1920's. Located on a small "island" near the city, the station's 1 kw. MW signal on 1300 kHz. was well known. But their reach extended even further when

Mr. John T. Tweedie,
Box 148 E.,
R.F.D. #1,
Asbury Park, N. J.

Dear Sir:

This letter is to verify your receipt
W.I.O.D., and to thank you for your courtesy in
to operate on a frequency of 1300 kilo
wave length of 230.8 meters.

Enclosed are some interior views of the
which may interest you.

Sincerely

ISLE OF DREAMS BR

Jesse H. J.
Manager

Radio
Station
W.I.O.D.
(Wonderful Isle
O'Dreams)
at
**MIAMI BEACH
FLORIDA**

W4XB

W4XB's Transmitter is Located on Collins Island, a Small Island Situated in Biscayne Bay

In the same building as W4XB also located a 1,000-watt transmitter broadcasting on 100-watt transmitter meter for the Miami Police Department and waiting on 8 meters when the Police Department Miami Beach 9.87 M

Operated by Isle of Dreams Broadcasting Co. Transmitter Collins Island, Miami Beach, Fla. Studio News Tower, etc. Transmitter Collins Island, Miami Beach, Fla. Studio News Tower, Miami, Fla.

they put shortwave station W4XB, 6040 kHz., on the air in the early 1930's. It carried WIOD programs. In 1939, when the government replaced the experimental "X" calls for all U.S. shortwave stations, W4XB became WDJH. It left shortwave the next year when stations were required to either go to 50 kw. or close down, and its equipment was sold to WRUL. +++ Till next time -- *B*

A Committee of the Association of North American Radio Clubs

Company Store

Richard A. D'Angelo
2216 Burkey Drive
Wyomissing, PA 19610



The NASWA Coffee/Tea Mug project is now complete. A handful of mugs will be available at the Winter SWL Festival in world famous Kulpville, PA 22 - 24 March 1991. Thanks to all those that have written saying how pleased they were with the mugs. The artistic credit goes exclusively to our designer Guy Atkins. It was a fun project. Who knows, perhaps a new idea or design will lead to another mug in the near future!

WINTER SWL FESTIVAL

Dave Turnick and I are still looking for a couple of brave souls to help man the club table at the upcoming Winter SWL Festival. The Company Store will have Sweatshirts, T Shirts, Spectrum Logs (International and Tropical Band editions), Perpetual Propagation Predictors, the System, a small handful of mugs and the latest catalogue available for sale at the FEST. Stop by the club table and say "hi". We hope to see you at the FEST.

PRICE HIKE

We warned you, hi! Effective 1 March 1991 new prices are in effect for the entire clothing line available through the Company Store. We are hopeful that we can hold these prices for the remainder of the year. Here's the scoop:

- T Shirt (S, M, L and XL) - US\$12.00
- Sweatshirt (S, M, L and XL) - US\$21.00
- Poplin Cap with Leather Strap - US\$8.50
- Nylon Windbreaker Jacket with Lining (S, M, L and XL) - US\$26.00

Each garment is available in extra, extra large (XXL) for an additional charge: the T Shirt for US\$1.00; the Sweatshirt for US\$3.00; and the Nylon Windbreaker Jacket with Lining for US\$4.00. The Lined Windbreaker Jacket is also available in XXXL and XXXXL for the same additional US\$4.00 charge.

Due to some new arrangements with our supplier, the Company Store can now pass along a US\$1.50 savings per garment on multiple orders. Finally some good news along the pricing front. For example, if you order a T Shirt and Sweatshirt which normally costs US\$33.00, if purchased individually, you can now purchase those items together for only US\$31.50. That helps take the sting out of higher prices. In fact, if you order the entire clothing line, in the standard sizes of S through XL, the total tab comes to the same US\$63.00 with the new prices as it did with 1989's prices. Not bad! Orders to metropolitan areas in Canada still require an additional US\$4.00 per order for shipping.

Hobbyists attending the Winter SWL Festival will have a last opportunity to purchase these items at 1989's prices. That's right - Sweatshirts (US\$20.00) and T Shirts (US\$11.00) will be in supply at the FEST. Sorry, we will not have any Lined Windbreaker Jackets or Poplin Caps available at the FEST. As always, we will take orders at the FEST but at the new prices.

REPRINT NEWS

Dave Turnick reports some recent activity in reprint orders. However, Dave has the situation well in hand. Orders are moving through the Sinking Spring production facility in record time. Keep Dave busy and off the streets. Send him a reprint order today! The Reprint Service Catalogue is available for only US\$1.00 worldwide. The catalogue features approximately 100 reprints from the pages of *Friend* (the good old days). Articles covering receivers, antennas, propagation and many other topics can be found in the Reprint Service Catalogue. Order your copy from the Company Store today.

73 - RAD

Make checks payable to either Richard D'Angelo or The NASWA Company Store

NASWA Awards

Richard A. D'Angelo
2216 Burkey Drive
Wyomissing, PA 19610



All Continent "ORP" DXer (Lowest Powered Station From Each Radio Continent)
Richard E. Hankison, Prairie Village, KS - 50 KW Endorsement sticker
Terry Palmershein, Puyallup, WA - 2 KW Endorsement sticker!!!

All Germany DXer (10 Different Shortwave Broadcast Stations From "Germany")
Donald M. Hosmer, Dearborn, MI

Antarctic DXer (At Least 1 Shortwave Broadcast Station From Antarctica)
Terry Palmershein, Puyallup, WA

Asian Continental DXer (30 Different Asian Broadcast Countries)
Cris Hazzard, New Hope, PA

Asian Continental DXPert (50 Different Asian Broadcast Countries)
Terry Palmershein, Puyallup, WA

Ecclesiastic DXer (15 Religious Oriented Shortwave Broadcasters)
David J. Turnick, Sinking Spring, PA

Master British Commonwealth DXer (40 Radio Countries That Are Or Have Belonged To British Commonwealth)
Sheryl Paszkiewicz, Manitowoc, WI - 60 Country Endorsement Sticker!

South American Continental DXer (10 South American Broadcast Radio Countries)
David J. Turnick, Sinking Spring, PA

Tropical Band DXer (50 Shortwave Broadcast Countries between the Tropics of Cancer and Capricorn operating below 6000 Khz)
Donald M. Hosmer, Dearborn, MI - the first one of these I've seen in a long time!

World Wide DXer (50 Different Shortwave Broadcast Radio Countries)
Stephen J. Price, Conemaugh, PA
William Peake, Buffalo Center, IA

Award Tidbits

A big welcome to first time Awards Program participant Steve Price.

Don Hosmer's latest haul brings his NASWA award count up to 25. Nice going Don! With the reports you have outstanding for the Radio Moscow sites I expect to see some Soviet awards from you in the near future. Terry Palmershein earned more awards than I have room for this month, so check out the April column for the rest of his achievements. Terry asks about new awards in the pipeline. Four new ones are planned. Details will be released very soon.

NASWA members may be interested in some other clubs award programs that cater to shortwave interests. Harold Woering (48 Campbell Drive, Easthampton, MA 01027-2724 USA) is Chairman of the SPEEDX Awards Program. Harold has done an excellent job. The program is open to non-members too. A comprehensive pamphlet listing all the SPEEDX awards is available from Harold for just US\$2.00. In addition to Shortwave Broadcast (SWBC) awards, SPEEDX offers a number of awards for utility station hunters. Check it out. Next month I'll talk about the first award program designed exclusively for Pirate and Clandestine station QSLers.

Remember, each award costs US\$2.00 in North America and US\$3.00 overseas (additional overseas awards applied for at the same time cost only US\$2.00 each). Endorsement stickers are available for US\$0.50. International Reply Coupons (IRC's) at a rate of US\$0.50 are also acceptable.

Listener's Notebook

Dan Ferguson
P.O. Box 2604
Dale City, VA 22193
CompuServe 76702,771

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All times, dates, and days of the week are UTC (GMT), dates are MM/DD or MM/DD/YY.

ALGERIA - "The Voice of Palestine" heard in Sri Lanka on 15205 since 1/22 in Arabic *1400-1800*, sometimes to 1900. (Victor Goonetilleke on RNMN 2/7 via Mike Fern)

ARGENTINA - R.Belgrano is opening 1300 on 11781 kHz. Normal s/off is 1900, but often extends Sundays for sports. (Jack Jones in NU)

AUSTRIA - The English version of the Austrian media program "Shortwave Panorama" has been suspended from 1/27 because of extended coverage of the Gulf war. Having worked on that show in the 1970's, I know that producer David Hermges has managed to compile a lot of features each week on a minute budget. Whether the program returns after the Gulf war really depends on listener demand. So, if you have a comment, drop a line to Austrian Shortwave Panorama, Radio Austria International, A-1136 Vienna, Austria. (Jonathan Marks on RNMN 1/31, via Mike Fern, Covina, CA)

AUSTRALIA - Australian Broadcasting Corporation coverage of the Gulf War has provoked a major row. News analysis is at the heart of the controversy. Prime Minister Bob Hawke was very critical of the ABC on Tuesday, viz: "I find it difficult to summon the language to describe my contempt for their analysis." Also Tuesday, in Parliament, the Minister for Defense, Senator Rowe, attacked the ABC and Radio Australia for not providing a message service for Australia's sailors in the Gulf. The Senate later passed a resolution condemning the ABC. On 1/23, the Minister for Communications, Kim Beasley, summoned the ABC's managing director, David Hill, and informed him that the Navy and RA will jointly operate a service for sailors in the Gulf and their families. Expect to start after 1/27. The Navy will produce a one-hour program which RA will transmit from Darwin between *1300-1500*. [No frequencies given - mf] (Mike Bird on RNMN 1/24, via Mike Fern)

- R.Australia has added 25750 kHz to the "Gulf Links" program 1430-1530 //21775. (Paul Norton?, Ireland, on R.Nederland Media Network 2/7, via Mike Fern) [It's called Gulf Links because of the world class sand traps at the target end. --mf]

AZAD KASHMIR - Quite an amazing development was outlined on the February 7th edition of 'Media Network'. On Thursday, 1/31 at 1400, a monitor in India detected the appearance of a new station testing on exactly 5000 kHz which, as it turns out, is calling itself *The Voice of Independent Kashmir*. A regular schedule began on February 2nd, with 30 minute broadcasts in Urdu and Kashmiri being noted opening at 0235, 0705, 1105, 1435 and 1635. Programs seem to be calling upon the people of the disputed Jammu and Kashmir region to rise up and liberate the area from Indian control. The station may be Pakistani controlled Azad Kashmir. Days prior to the appearance of this new operation, Azad Kashmir Radio was heard mentioning the new station and its frequency during a news commentary. Further, the newscasts of the *Voice of Independent Kashmir* make frequent reference to Azad Kashmir Radio which is said to have stronger signals now and may have a new, higher power transmitter. (Kanwar Sandhu on RNMN 2/7, via WRR/ODXA/dmc and Mike Fern) ID sounds like "Sabareh Furiya pe Kashmir". (Mike Fern) VIK, heard several times a day on exactly 5000 kHz, must be using a high power transmitter, maybe from Islamabad. It now announces an address for reports: P. O. Box 102, Muzaffarabad, Azad Kashmir, Pakistan. (Manosij Guha, RNMN 2/14, via Mike Fern)

BANGLADESH - R.Bangladesh on new 15657 from *1358 w/IS, Urdu px & mx to 1430*, //17825 stronger, but audio weak. RB has English 1815-1900* w/nx & SAs mx; vy weak on 9577, strong on 12030, 1/29. (Ernie Behr, Kenora, Ont) RB in English 1230-1300 includes an Islamic perspective on the Gulf War. Heard in Europe on 15607 kHz. (RNMN 1/31, via Mike Fern)

BELGIUM - BRT, Brussels, has replaced 9925 with new 13720 to NA after 2230. 13675 to SA has been replaced by 13685. (Philip Yant, Pinelands BBS SWL Conference) But was back on 13675 on 2/21. (Bill Matthews, Columbus, OH)

BOLIVIA - R.San Miguel, Riberalta, 3310 kHz, hrd 0116-0300* w/variety of pgms, few IDs; drama, Bolivian mx. ID at vy long s/off 0256 is "R.San Miguel, Emisora Apostolica". R.Aboroa, Riberalta, hrd by MacHarg 2/6 on 4719.8 at 1145 w/tlk, live mx, woman reading poetry. (Rich McVicar & Ken MacHarg, DXPL, via Mike Fern)

BULGARIA - DXPL has rec'd 1st issue of Bulgarian DX Club bulletin, edited by Ivan Penev. DXing was forbidden under the communist regime; in 1975 there were 4 active Bulgarian DXers; two were falsely accused & sent to jail. "Our number is steadily rising. We are still very active, although we really need some help from abroad. We will be grateful to all our friends who are willing to give it", writes Penev. The bulletin contains a loggings column (there are some very good listings in this first bulletin); news from the DX world; Balkan news; a QSL corner, and a Bulgarian radio section. The BDXC is looking for new members. A copy of the bulletin is available for 3 IRCs in Europe, 4 IRCs elsewhere. Address is Ivan Penev, P. O. Box 47, Sofia 11, Bulgaria 1111. (Mark Irwin on DXPL 2/9, via Mike Fern) [Don't mention DX or radio on the envelope; we don't know that Bulgaria has legalized private associations. --mf]

CAMEROON - R. Cameroon, Yaounde; is scheduled 0430-0600 on 4850; 0600-0650 on 4850, 6060; 0650-1630 on 6060; 1630-2400 on 4850 kHz.

- R. Cameroon, Garoua; 0430-0650 on 5010; 0650-1630 on 7240; 1630-2300 on 5010 kHz.
 - R. Cameroon, Bafoussam; 0430-0650 on 4000; 0650-1630 on 5955; 1630-2300 on 4000 kHz.
 - R. Cameroon, Bertoua; 0430-0650 on 4750; 0650-1630 on 7165; 1630-2300 on 4750 kHz.
 - R. Cameroon, Buea; 0430-0650 on 3970; 0650-1630 on 6005; 1630-2300 on 3970 kHz.
 - R. Cameroon, Douala; 0430-0650 on 4795; 0650-1630 on 7150; 1630-2300 on 4795 kHz.
- (WBI 1/25/91)

R.Bertoua, noted on 4750.15, from 0540 French tlk, 0600 English nx, strong 1/16. Not Zaire, as in my tentative report of 12/23. (Ernie Behr, Kenora, Ont)

CANADA - The Toronto Globe & Mail for 2/2 reported the RCI employees expect to hear about 2/15 whether Canada's Dept of External Affairs is willing to finance RCI after 3/30. RCI costs \$20 million a year to run. Globe & Mail says all languages other than French and English may get the ax. (Richard Langle, New Brunswick, on RNMN 2/7, via Mike Fern) [Ian MacFarland told me on the phone 2/4 that the figure of \$13 million is being bruited about. --mf]

CHINA - CPBS heard with a listener phone-in request show 0507 1/13 on 15550 & 15120 kHz. (Bruce MacGibbon on Japan DX Corner 1/20, via Mike Fern)

- Nei Mongol PBS, Hohhot, is sked in Chinese at 0950-1500 on 3970 and 7105v kHz, and 2140-0545 on 3970, 7105, 9520, and 9750 kHz. The latter two freq unconfirmed. (WBI 1/18/91)
- CPBS Minority Svc in Tibetan heard on 5420 at 1035-1045 w/M&W reading world nx. Fair signals. Off 1055; watch 11375 for summer sked after 3/1. (Mike Fern, Covina, CA)

- R. Beijing QSLd 7170 kHz to Europe as via USSR. (Bill Matthews)

COLOMBIA - Radiodifusora Nacional de Colombia, heard again on 11792.1, from 2200 in Spanish to 2305* w/NA; vy strong 1/26, but 2/3 back on 11821.6. (Ernie Behr, Kenora, Ont) Caracol outlet on 6075 (NF?) // 6150 0630-0710; fair w/beer & bank spots; talk show w/call-ins. World nx 0700. QRM from DW. 6150 has QRM from RCI. 6075 may be old R. Sutatenza xmtr in Bogota. (Mike Fern 1/30)

COSTA RICA - Adventist World Radio/R.Lira, contrary to report in Feb LN, now says "3 new SW xmtrs will be installed before June 1991", including a daytime English service on 13 MHz, per AWR amnt 1/13. (Ernie Behr, Kenora, Ont)

CUBA - R.Havana in English to Europe 1900-2100 on 15435, well heard in southern New Zealand. (Arthur Cushen, RNMN 2/7, via Mike Fern, Covina, CA)

CYPRUS - British Forces Broadcasting Service is on 6840 USB *1700-2300* with BFBS & BBC material. This appears to be the feeder for the BFBS FM network in Saudi Arabia. (Harold Cook, UK, on RNMN 2/7, via Mike Fern) Somewhat inconsistently noted here prior to 0400 w/BBC material, BFBS news at 0400. Sometimes w/numbers QRM. (df)

CZECHOSLOVAKIA - Radio Prague International poor in English at 1930 on new 9605 1/17. (Bruce MacGibbon on Japan Dx Corner 1/20, via Mike Fern)

R. Prague International sked, till 5/5/91:

0000-0027	English	NA	7345	9540	11990
0030-0100	French	NA	5930	7345	9540
0100-0130	English	NA	5930	7345	9540
0200-0227	Spanish	NA/CA/SA	5930	7345	9540 11990
0230-0300	Cz/Slvk	NA/SA	5930	7345	9540 11990
0300-0330	English	NA	5930	7345	9540
0400-0430	English	NA	5930	7345	9540
0600-0630	French	Europe	6055	7345	9505
0630-0700	German	Europe	6055	7345	9505
0730-0800	English	Asia/Pac	17840	21705	
0800-0830	Cz/Slvk	As/Pac/ME	17840	21705	
1300-1400	German	Europe	6055	7345	9505
1500-1530	Cz/Slvk	Europe	6055	7345	9605
1500-1530	Cz/Slvk	NAfr	11685	(or 11650?)	see below)
1500-1530	Cz/Slvk	ME	13715		
1700-1730	German	Europe	5930	6055	7345 9605
1730-1757	Cz/Slvk	Europe	5930	6055	7345 9605
1730-1800	French	Europe	5930	7345	
1800-1827	English	Europe	5930	6055	7345 9605
1830-1900	Spanish	Europe	5930	6055	7345 9605
1900-1927	Cz/Slvk	Europe	5930	6055	7345 9605
1930-1957	English	Europe	6055	9605	
1930-2000	French	Europe	5930	7345	
2000-2030	German	Europe	6055	9605	
2000-2030	Spanish	Europe	5930	7345	
2030-2057	French	Europe	5930	6055	7345 9605
2100-2130	English	Europe	5930	6055	7345 9605
2200-2225	English	Europe	5930	6055	7345 9605
2230-2257	French	NA	7345	9540	11990
2300-2327	Spanish	NA/CA	5930	7345	9540 11990
2330-2357	Cz/Slvk	NA/SA	5930	7345	9540 11990
0700-1300	Inter-Pgm	Europe	6055	7345	9505

(station, via John Carson, Norman, OK)

R.Prague Intl has ancd it has begun carrying messages from family & friends to the Czechoslovak chemical defensive operations unit stationed in Saudi Arabia. Aired in svcs beamed across or near the ME, the messages can be head in Czechoslovak bcsts at 0800-0830 & 1500-1530. (Bill Matthews, who gives 11650 rather than 11685 for the 1500-1530 bcst.)

DENMARK (via Norway) - R.Danmark does not send QSL cards anymore, but the last several reports I've given have been answered with long and informative Danish letters by Erik Kofie, who handles all the correspondence and the DX shows. Not all D.Danmark bcsts are on SSB (see Feb LN). All programs continue to be in Danish; only English is IDs at start, at xx45 & just before end of NA at xx54. (Carl Helge Nielsen, Webster Groves, MO)

ECUADOR - Radio Nacional Espejo, Quito, celebrates its 50th anniversary in May 1991. The sw xmtx on 4680 has been reactivated w/new tubes. When the sw xmtx is on the air, stn gets abt 20 DX reports a month, most from Sweden. Manager Marco Caicedo says reception reports are very useful; comments on reception quality are appreciated; sometimes the engineers adjust the xmtxs because of info in the reports. Unused Ecuadorian stamps for return postage are particularly welcome. IRCs almost totally useless as they're very difficult to exchange. Rpts in Spanish are best. ID is "Esta es R N E, Radio Nacional Espejo, estaciones Ecuatorianas en 1310 kilociclos onda larga, 4635 [sic] kilociclos onda corta, banda internacional de 62 metros, en Quito, con 18 estaciones propios en todo el pais." Channel should be clear; try evenings 2200-0400 UTC. Mailing address is Casilla 352, Quito. (DXPL via Mike Fern)

LV del Upano, Macas, excellent throughout Ecuador on 5040 kHz around 0249; closes 0300 without NA. R.Cumanda, El Coca, 3332 at 2330 w/mx & ID "Desde El Coca Esta Es Radio Cumanda". R.Ecos del Oriente, Lago Agrio, 3270 around 0045; exc sigs, many greetings & a listener mailbox, "Correo del Oriente". LV del Napo, Tena, reliable in Quito; try them at s/off 0300 on 3280. (Quito Log Book, Rich McVicar & Ken MacHarg on DXPL 2/9, via Mike Fern) Quoting Play-DX, Pedrop Arunategui, Lima Peru, heard R.Gonzanama, Loja, 0050 1/1 w/New Years pgm on 4270.6 NF ex 4255. Rich McVicar says this is not on the Ecuadorian gov't list despite the call of HCAA3 in WRTH-91. (DXPL via Mike Fern)

R.Gran Colombia has returned to 9411 [sic, he means 4911 -mf] kHz, as heard in New Zealand around 1100 UTC. (Arthur Cushen on RNMN 1/31, via Mike Fern)

EGYPT - Radio Cairo current English transmissions are:

0200-0330 to NA on 9475 & 9675 [9900 also worth checking - mf]; 1215-1330 to South Asia on 17595 kHz; 1630-1830 to Central & South Africa on 15255 kHz; 2030-2200 to West Africa on 15375 kHz; and 2215-2245 to Europe on 9900 kHz. (RNMN 1/17 via Mike Fern)

FRENCH GUIANA - RFO Cayenne, 5055 kHz hrd in the clear in Quito w/outstanding sigs 2/7; no QRM from TIFC. (Quito Log Book on DXPL, via Mike Fern)

GREAT BRITAIN - BBC is using new 15590 for World Service [assume English - World Service no longer means English, but non-European external service -- df] after *0300; very good in New Zealand 0600 & 0700. (Arthur Cushen, RNZI Mailbag 2/3, via Mike Fern) BBC in Arabic on 13660 at 1540-1600; had correspondents' reports or interviews, music 1545-1559; Big Ben 1600, preceded & followed by "Huna London". Weak to fair 2/14. (Mike Fern)

HUNGARY - From an interview on RCI's SWL Digest with Len Scott of Radio Budapest: Radio Budapest is undergoing a complete reevaluation; resulting changes to be in place by 6/30. Likely staff reduction of approx 50 employees, some for political reasons. The Italian, Spanish & Turkish programs will probably be dropped. The Central Editorial Board to be abolished. Priority to be given to Hungarian broadcasts. English to continue, though not necessarily in the same format. May go to eight 15 minute shows a day, some target areas may change. Will probably cut back on number of frequencies -- maybe 3 instead of 6. The separate DX programs will probably end, to be folded into regular broadcasts. They have requested funding from the Ministry of Foreign Affairs, but that ministry has lost some 200 million annually in visa fees, after the fees were dropped. Station would like listener input. Letters to Radio Budapest, Budapest, Hungary. With changes to be in place by 6/30, decisions will have to be made some time before that, so if you have any comments, get them in now. (via Mike Fern, Covina, CA)

ICELAND - Reykjavik heard in Icelandic 1215-1245 on 11418, 13830, and 15770 kHz. 11418 is best in New Zealand. (Arthur Cushen on DXPL 1/19, via Mike Fern)

INBS hrd on 11402, 13855, 15770 at *2300-2336*v in Icelandic to NA; all good on USB. But, since 2/5 am hearing **INBS** only on 6218 USB, from 2130 past 0700 w/Icelandic domestic prog, talks, news, lots of pop mx; fair to good signal. May be in use 24 hrs. Directional bcsts at 1850, 1935, 2300, etc., no longer heard. (Ernie Behr, Kenora, Ont) Took me quite a while to figure out this was Iceland. (Bill Matthews)

INBS is using 3295, 6128, 9268 kHz till their long wave xmtr is repaired. (Jonathan Marks, RNMN 2/21)

INDIA - AIR solid 0100 on 15110 in Quito w/ENGL news. (QLB, DXPL 2/9, via Mike Fern)

Mr. Manoj Guha has in the past produced frequency charts of the AIR Domestic & External Services which, based on monitoring of the services, have been very useful. The charts have not been produced for some months. Now, Harold Sellers has a note from Mr. Guha, stating that "Yes, I'm re- doing the AIR charts into a publication called 'The India Radio TV Handbook' which should be ready early 1991." We'll pass along further details when available. (Harold Sellers / dmc in WRR/ODXA)

INDONESIA - RRI Bukittinggi, 3232, pounding in 1430-1445 w/Islamic mx, very like Indian mx. Thought at first it might be Nepal, but then ID in Indonesian. Also Gorontalo on 3265, weak & gone by 1445. Both 2/14. Padang on 4003 2/15 1420-1500 w/solid signals; mostly Indo pop mx, frequent IDs and, I think, public service anmts. (Mike Fern, Covina, CA)

- One of the few Indo 'RPD' stations heard with some regularity in ENA has been **RPDT2 Luwu**, at Palopo on 3654.2 kHz. Now, it seems the station operator has pulled up stakes and moved the operation to the town of **ToliToli** on the northwest corner of the island. This would explain why the signal suddenly reappeared again, on the same frequency, in late January after several months' absence. We have this hot news thanks to an outstanding piece of DXing by Kirk Allen of Ponca City, Oklahoma, as relayed to us by John Bryant who has listened to Kirk's tape of a January 27th (or 28th?) logging with the assistance of one his university architecture students who hails from Manado. John says the tape is outstanding (studio quality at times!) and there is a totally readable ID as "Radio Pemerintah Daerah Tingkat Dua Buol ToliToli, town of ToliToli, Kabupaten of Buol ToliToli, Sulawesi Tengah". Fantastic! Local news items and chatter about the upcoming 1992 election were also heard. John says the news-reader even sounded the same as the one familiar to him from Luwu loggings. (via John Bryant)...and whomever is on 3654.2 was heard here with a weak signal on February 4th from 1230 with a possible newscast given by a woman, switching to talk at

1235 by a male announcer making several references to Indonesia at 1235 until fade-out approaching 1245. (dmc) (WRR/ODXA/dmc)

- RRI Jambi, 4927 kHz (recently close to 4926.8 /dmc), is back on the air with a vengeance after low-modulation problems for several months and some days when it was off the air completely. During a geomagnetic storm ('K' index = 5) on February 1st, the bird chirp interval signal was noted at 2155 (have not heard this IS for at least 10 years!) preceding music (possible anthem) at 2157 and woman with opening ID: "Inilah Radio Republik Indonesia, stasiun Jambi". This was followed by local musical notes (not SCI) at 2159, another local ID and local news (not a Jakarta relay) at 2200 with the female news-reader making numerous references to Jambi. Later, there was standard Sumatran early-morning fare...Koran, religious talk, other discussions and music. The signal eventually faded out just prior to 2300. Again on February 5th, the musical note IS was heard commencing at 2158, even though conditions on this date were mediocre by comparison with the 1st. Hearing audio on the 5th was another indication that the station has definitely spruced up the transmitter. (Cedric Marshall) (WRR/ODXA/dmc)

INTERNATIONAL WATERS - Abie Nathan on RNMN, 2/14, says the Voice of Peace on 1539 kHz has cut operations to 14 hours daily. "We have no people, because all the British disk jockeys that we had have left the country. ... We are short of personnel, disk jockeys and broadcast engineers. ... all we have is to keep using the jingle of 'Give Peace a Chance' all the time, every 15-20 minutes. (via Mike Fern)

IRAN - Schedule of the Voice of the Islamic Republic of Iran (VOIRI):

0130-0230	Spanish	LA	9022	15084		
0230-0330	Arabic	NA/A	9022	15084		
0330-0730	Arabic	ME	6150	7230	11820	
0400-0500	Turkish	Eur/ME	7110	9022	15084	
0530-0600	Spanish	Europe	7110	9022	15084	
0630-0730	French	Europe	7110	9022	15084	
0930-1130	Arabic	ME	9525	9685	11745	
1130-1225	English	ME	9525	9685	9705	11745 11790
1230-1330	Urdu	ME/SAs	9525	9685	9705	11745 11790
1330-1430	Pashto	ME/SAs	9525	9685	9705	11745 11790
1430-1525	Bengali	ME/SAs	9525	9685	11745	11790
1430-1530	Urdu	ME/SAs	9705			
1430-1630	Persian	Asia	15084			
1530-1630	Russian	Eur/ME	9022	11790		
1530-1630	Urdu	ME/SAs	9705			
1700-1800	Turkish	Eur/ME	7230	9022		
1715-2130	Arabic	ME	6150	7215	9610	
1800-1845	German	Europe	6030	9022		
1830-2100	Persian	Eur/ME	4990	15084		
1845-1930	French	Europe	6030	9022		
1930-2030	English	Europe	6030	9022		
2030-2130	Spanish	Europe	6030	9022		
2130-2230	Arabic	Eur/ME	6030	9022	9610	15084
2230-0130	Persian	Eur/ME	15084			
2330-0130	Turkish	Eur/ME	9022			(During Ramadan only)

(WBI 1/18/91)

IRAQ - A lot of changes in Iraqi SW operations. It's a bit more than I'm capable of following, but here goes:

R.Baghdad hrd on 17940 & 15600 since 1/13, vy strong 1500-1800 in Arabic, obliterating Voice of Free Iraq; same pgm also on 11900, all via Kuwaiti xmtrs. ID: "Idha'at-ul-gumhuriya al-Iraqiya fi Baghdad". Not hrd since 1/17, but back 1/22, all freqs jammed by noise & hets. 1/24 Riyadh was also on 17940 from 1500 w/ID & Quran, mixed w/Baghdad. (Ernie Behr)

A new transmitter first heard 1/17 on 8350.3 kHz seems to be an emergency program feed to the Kuwait xmtr sites. (Andy Sennitt & Jonathan Marks, RNMN 1/24, via Mike Fern)

Iraq radio was down to one mw net by 1/23, from *0230-2345* on 4 or 5 MW freqs, plus the Kuwait xmtrs on 6055 & 11990. Two other Iraqi xmtrs have been shadowing -- directly interfering with -- the Voice of Free Iraq on 15600 & 17940 kHz. They are also heard when the Voice of Free Iraq is silent. The General Program and the Voice of the Masses share the single network most of the time, but split occasionally. (The General Program is a true home service, but the Voice of the Masses has historically taken a Pan-Arab line.)

Iraq's foreign service seems to have folded. The 2100 broadcast to Europe disappeared well before 1/17. The 0230 broadcast to North America was heard this week on 11830 kHz on

1/19 only. The Voice of Peace has also disappeared. So have Iraqi broadcasts to Asia. (The Iranian News Agency BBCMS, on RNMN 1/24 via Mike Fern)

Radio Baghdad's main transmitting site, built in 1985, is probably off the air. Falash-el-Deen has 16 500kw transmitters and its own generating plant, but was running at 60% of capacity before the war. The Iraqi frequencies still in use come from the Babylon site (2 x 500 kw).

The Baghdad government radio ID takes the form "Idha'atu-i-gumhuriya al-Iraqiyya fi Baghdad", always mentioning the city at the end. The Voice of Iraq ID sounds like "Idha'atu il Iraq in forma". (Andy Sennitt & Jonathan Marks, RNMN 1/24, via Mike Fern)

The Kuwait SW xmtrs on 11990 & 6055 kHz left the air Saturday. (Sarat Wirakorn?) of Sri Lanka still hears 1134 kHz, which had been parallel to 6055/11990/17940. He also hears 1224 kHz in Nazaria, which carries an Iraqi xmsn beamed to Iran. (RNMN 2/7, via Mike Fern)

A new Iraqi xmtr is being heard on 3980 // 8350.3 carrying the single Iraqi domestic radio. It is not being heard well in Europe because of QRM from VOA on the same channel. It was first spotted in Sri Lanka by Asanta Sirimana of Colombo, who first heard it about 1/27. It is heard from *1500-0100* in Sri Lanka, //8350 & 1224 kHz. It is jammed by a USB-only signal, but a good communications receiver can get good copy from SB. (Victor Goonetilleke & Richard Measham(WBI) on RNMN 2/7, via Mike Fern)

-- Mother of Battles Radio hrd on 17940, 15600 & 11990 since 1/26, 1400 past 2300 in Arabic, also //6055 till 1500 f/o: war mx & IDs: "Huna Id Ha'at-ul-Umm al-Mar" (spelling?); also hrd 2/3 UTC from *0225 w/NA & Quran, but at 1400-2300 all freqs were silent, after massive B-52 bombing raid on Kuwait 2/3. (Ernie Behr, Kenora, Ont) "Huna Idha'atu omm 'el marek" began weekend of 1/25-27 w/skcd 0230-0015. Svc began w/mx (w/no IDs) on 17940 on Friday. Then IDs were hrd Saturday, then "Voice of the Masses" on Sunday; "Mother of Battles Radio" again on Monday. Switching errors indicate pgms produced in Baghdad, though xmtrs in occupied Kuwait, on 6055, 11990, 15600, 17940, are used. Regular Baghdad Home svc is on MW & 8350 kHz only. (Jonathan Marks & Richard Measham(BBCMS) on RNMN 1/31, via Mike Fern)

I heard this 1/28 at 1815 w/armchair level on 17940. ID is "Tthaat Umm Al-Maahrik". Also heard on 11900 much weaker. Pgm was Arabic mx w/speeches & commentaries stating that a brother Arab nation is being destroyed & a lot of Arab blood is being spilled. Stated that Arabs & Muslim people of the world, not Bush, will decide when the war is over. Continued to bcst all afternoon; was on as late as 2200 UTC. Weak jammers also on both freqs. (Hans Johnson, MD)

Mother of Battles Radio went off air abruptly 0748 2/3, per BBC report, & not heard since; probably wiped out by B-52 bombers. (Ernie Behr, Kenora, Ont)

Mother of Battles Radio has been off the air since 2/3 at 1748, when all frequencies left the air abruptly without any reason being given. 6055 returned with very poor signals the night of 2/3 and the morning of 2/4. Nothing more has been heard since 0500 2/4.

On Tuesday, news reports from Riyadh suggested that Arab forces had decided it was time to bomb the existence [sic, never heard it called that before -mf] out of Radio Baghdad. A US military source was quoted as saying that a bombing campaign aimed at knocking out transmitter sites had been successful. (J.Marks on RNMN 2/14, via Mike Fern)

IRAQ (clandestine) - Voice of Free Iraq, s/on 0240 (vice normal 0330) 1/18 & 1/19. Freqs are 17940, 15600, 9568 kHz. (WBI 1/25)

V.Free Iraq hrd 1/4 from *1427 w/NA & AA pgm to 2013*, on 17940, 15600 & 9568v; ID: "Saut ul-Iraq al-Hurr"; 9 MHz varied almost daily: 1/5 on 9569.3, 1/6 on 9567.9, 1/10 on 9569.2, 1/12 on 9566.6. Usually clear till 2015*, since bubble jammer stayed on 9570. From 1430, 1/17 VoFI was on 9567.9, but bubble jammer on 9570 stopped abruptly at 1814 & was never heard again, probably knocked out by bomb or missile. Since 1/21 VoFI hrd on 9570 & 15600 in Arabic at 1430-2020*; 1/26 on new 17960, clear past 2300, //15600 under Baghdad; 1/30 on new 9995 2100-2200 f/out, //9570 & 17960 past 2330. Xmtrs on 17960 & 15600 perhaps from Egypt, but 9570 could be Qatar's old 100 kw unit; time signal hrd on VoFI sounds identical to that of Qatar on 9585. (Ernie Behr, Kenora, Ont)

Voice of Free Iraq has anncd several changes in recent days, but the anncd changes do not always agree with what I'm hearing. At s/off 2019 1/25 ancd 17920, 15665, 15630, 9570 kHz, and MW 1053 & 1167. 1/25 ancd they would s/on 0400 (probably UTC) & continue for 24 hours. May be 24 hr sked by now. Although I hear Baghdad in Arabic on 17940 & 15600, I only hear Voice of Free Iraq on 9570 - nothing on the other freqs. On 1/26 stn finally made the mistake I was waiting for & revealed its location. After the news at 2015 the wrong news theme tune was played. R.Cairo's news theme was played several times before it was stopped & followed by a passionned speech by a woman, appealing to the Iraqi Army & people. As part of its deception, station usually plays R.Baghdad's news theme tune. Only ID I've heard is "Sowt al-Iraq al-hur. (Hans Johnson, MD)

Since 1/26 the anti-Hussein clandestine stn which first called itself the Voice of Free Iraq (9575, 15600, 17940 kHz) has used the slogan Radio of the Iraqi Republic from Baghdad, The Voice of Free Iraq. As of 1/30 sked was 1300-0100. It also uses the same musical IDs as Baghdad, and the Iraqi national anthem. Freqs as of 1/30 freqs were 9570, 9995, 15600, 17960 kHz. (Richard Measham(WBI), on BBC Outlook 1/30 & RNMN 1/31, via Mike Fern)

Heard 2/6 in Arabic 2000-2400 f/out on 17960, 15600 & 9570, all good; also on 9995 very weak till 2200. (Ernie Behr, Kenora, Ont)

ISRAEL - The Voice of Israel Arabic service has been on additional frequencies since 1/18. It's now on 15100 and, at times, 12077, in addition to the usual 9815, 5900, 1026, 738, and 675 kHz. (WBI 1/25) No times given. (df)

According to a 2/4 report on local WBBM-780, American listeners can call 1-900-568-NEWS to monitor English or Hebrew newscasts from Israel. (Karl Forth, Chicago, IL) With the "900" number, I presume there is a per-minute charge for this. (df)

Kol Israel home svc news in English at 0500 with air raid warnings & other local news, on 9435; repeated at 0700. (Arthur Cushen on RNZI mailbag 2/3, via Mike Fern)

Jamming was noticed "last night" (2/6/ or 2/5) on Kol Israel's Arabic svc on 15100, and on 12025, which was unoccupied. Andy Sennitt used two receivers to establish that the two jammers were in sync, which means they were at the same site. (Jonathan Marks & Andy Sennitt on RNMN 2/7, via Mike Fern)

The Voice of Israel Network B and the military's IDF Radio linked into a single network when the war started on January 17th. A special channel has also been set up solely to relay warnings of incoming missiles, since not everyone can hear the sirens. The frequency is to be silent except when an incoming missile is detected. And the all-clear will also be carried, of course. (SCDX 2125)

I'm hearing Israel in English on 12.025 along with presumed Iraq in Arabic w/Iraq being jammed. Time is 2239 UTC Jan 22. (Bob Brown, via Pinelands BBS)

ITALY - RAI has a special broadcast for the Gulf in Italian on 21850 & 17900 kHz from 1200-1400. AT 1400-1545* an Italian language newscast is repeated over & over, on 17900 only. (Agostino (Fandara?), Rapallo, Italy, on RNMN 2/7, via Mike Fern)

- A new station in Naples, Radio Antena di Lancia, is testing on 26590 w/10 watts. Addr: Davide Capobianco, Via di Viale, Villa Santa Maria 14, I-80122 Napoli, Italy. (DXPL 2/9 quoting Dario Monferini in Play-DX, via Mike Fern)

JAPAN - R.Japan again increased b/c time for its ME svc 1/17, on account of the start of the Gulf War. New bcsts include 4 hrs in Japanese, 4 hours English, 30 minutes in Arabic. These relayed via Sri Lanka as follows: Japanese at 0000-0100 on 15210, 0600-0700 on 17820, 2000-2100 & 2200-2300 on 15210 kHz. English at 0100-0200 on 15210, 0500-0600 on 17820, 2100-2200 & 2300-2400 on 15210 kHz. Arabic at 1200-1230 on 17820 kHz. (Tooru Yamashita, ABI, on Japan DX Corner 1/27, via Mike Fern)

JORDAN - Radio Jordan Arabic svc and 1/17 it would go to a 24 hour sked. (WBI 1/25) Amman on 9560 *0145-0230* 1/30 & *0115-0145* 1/31, all Arabic, mainly mx and, I think, poetry with a musical background. Arabic news 0200. Selections 1/31, the day after Jordan protested air attacks on the Baghdad-Amman highway, marked by very somber mx. Good sigs west coast both nights. Amman Home Svc in Arabic on 11955, apparent gray line reception from 0330-0345, 2/4, faded from S4 to S2 in seconds. Arabic news on the half hour, and possibly between mx selections as well. (Mike Fern)

Radio Jordan noted in English on 9560 kHz from 2120 to 2205*, well past the nominal 1730* for the relay of the domestic English svc. The sked of the EE service relay has been a bit erratic lately, but this is by far the latest I've heard them - the actual close-down of the domestic service on medium wave and FM. Further monitoring may reveal if this evening's extended English transmission was a fluke or a change in the nominal schedule. (Richard Langley, Frederickton, NB, 2/14, on Usenet)

KOREA - On 1/19, Radio Korea added a 2 hour transmission aimed at the Middle East and Africa. It's at 0600-0800 on 9670 & 15575 kHz. The English and Korean transmissions to NA at the same time have been dropped. So has the Italian transmission at 0600-0630 on 15575 kHz. R.Korea's total daily broadcast time remains unchanged. They've started a program of messages to Koreans in the Middle East from their families. (Tooru Yamashita, ABI, on Japan DX Corner 1/27, via Mike Fern) Sounds like some of the Latins Ralphus used to report. (df)

LAOS - Lao National Radio sends the following undated sked:
Oudomxay, 4250 kHz, 2230-0130, 1100-1400; Xiengkhouang, 5000 kHz, 2300-0100, 0330-0530, 1000-1155; Vientiane, 6130 kHz, 2130-0230, 0400-0700, 0900-1600; Pakse, 6600 kHz, 2300-0200, 0400-0600, 1000-1400; Luang Prabang, 7000 kHz, 2300-0200, 0400-0600, 1000-1400;

Savannah, 7100 kHz, 2230-0100, 0430-0600, 1000-1400. Vientiane also on 7145 kHz at 2300-0230, 0400-0630, 1130-1400 in Thai, Khmer, Vietnamese, French & English, 30 minutes each. Also at 1100-1130 on 11870, 11960, 15420 & 15190 in French. [This last via USSR, see Feb LN. - df] The sked says IRCs are not accepted by the local post office. Addr: B.P. 310, Vientiane, Lao PDR. (Gordon Darling, Boroko, PNG)

LATVIA - Radio Riga International has English news 0530, 1230 & 1930, on 5935. times variable. (RNMN 1/24 via Mike Fern) Latvian Radio heard in Quito on 5935 & 5920 kHz 1/24 at 0355 w/nat. anthem Dies Sete Latvii, "Bless Latvia, O God", & a revised IS - a piano seems to have replaced the harp. (QLB, DXPL, 1/26, via Mike Fern)

LESOTHO - BBC relay on 3255 kHz heard w/good signals in English w/African news & pop mx show at 0330. (QLB, DXPL, 1/26, via Mike Fern)

LIBERIA - On 1/19 only, heard on 9625 v/weak under CBCNS, what sounded like ELWA IS at 2159. The IS seemed familiar, but nothing else heard due to QRM. Is ELWA back on the air? (Ernie Behr, Kenora, Ont) I understood (cf Feb LN) the station was destroyed. (df)

LITHUANIA - quoting transcript of Radio Vilnius, personnel have moved to temporary studios in Vilnius. Station can broadcast only one program at a time, so all frequencies carry the same program 24 hours. Freqs are 666, 1107, 1134, 1557, and 9710 kHz. 6100 is inactive, since the Kaunas transmitter has been operating continuously on 9710 since 1/13. The USSR radio authorities have discontinued the Radio Vilnius overseas sw relays & home svc relay from Balashika, near Moscow. The 2230 & 2300 broadcasts continue on 9710 kHz. The original broadcast center is still occupied by Soviet troops. Address for the station now is Lithuanian DX Club, P. O. Box 1646, Vilnius, or use the Telex number 261143, mentioning the Lithuanian DX Club. Jonathan Marks says the telex number works, but 9710 is not getting out. (RNMN 1/24, via Mike Fern)

- Radio Vilnius resumed bcsts [via Soviet xmtrs in the Far East] at 2300 1/26. The bcst started w/out the usual IS, but some chorus singing. The bcsts had been stopped 1/13 when Soviet troops occupied the Lithuanian TV & broadcast center. Moscow replaced the Vilnius transmissions with music. The 1/26 bcst had a special message from the editor-in-chief of R.Vilnius' external svc explaining why the station had not been broadcast the past two weeks [K and Y must not listen to Media Network! - mf] RV then ancd address (Radio Vilnius, Vilnius, Lithuania) Fax number is 0122,221571. "It sounds almost like R.Vilnius, but some people point out that it's probably a fake, so we may have to monitor the broadcasts carefully for a while." (Tetsuyo Kondo & Tooru Yamashita on Japan DX Corner 1/27, via Mike Fern) WBI gives fax number as 0922,221571 in one place, but 0122,221571 in another place. Pay the phone company & take your chances. Whatever the number is, WBI quotes them as asking that faxes be noted as for Radio Vilnius. (df)

The Landsbergis government's station at Kaunas, on 9710 kHz, was heard in Quito at 0355 1/24. A soviet station blocking the frequency left 0400. Kaunas played the Lithuanian anthem (Lietuva Tieme Nemosu) "Lithuania, Land of Heroes". (Rich McVicar on DXPL 1/26, via Mike Fern)

The relays of R.Vilnius by soviet controlled sw xmtrs resumed 1/25 on 7400, 9750, 15180, 17690, 17720 kHz. Vilnius ancr s/off w/"And now it's goodbye, and may Soviet paratroopers never mess up your lives as they tried to do with ours. (Jonathan Marks & unnamed Vilnius ancr, RNMN 1/31, via Mike Fern)

MALTA - Voice of the Mediterranean transmits on 9765 at 0600-0800, and on 11925 at 1400-1600, as well as on 1557 MW. SW is 250 kw, omni-directional. Uses facilities of Deutsche Welle Cyclops relay station. Addr is P. O. Box 143, Valletta, Malta. (Richard Vella Laurenti, Managing Director, via John Carson, OK)

MALAYSIA - Voice of Malaysia, in English hrd 0800 on 15295; sigs often quite good in Quito. (QLB via Mike Fern)

MONGOLIA - Ulaan Baatar has dropped English at 1200; now heard 0910-0940 Tu/Fr on 11850, 12015, 1445-1515 on 9795, 13780. 1940-2010 on 11850, 12050. (Arthur Cushen on RNMN 1/31, via Mike Fern)

NEW ZEALAND - A few North American listeners have been sending private US\$ money orders (the kind some landlords want) for the R.New Zealand International T-shirts. These money orders cannot be cashed in New Zealand. RNZI now has a regular bcst in Hindi for Fiji [no time given]. (Tom King on RNZI Mailbag 2/3, via Mike Fern)

"CQ Pacific", produced by the New Zealand Radio DX League and New Zealand Association of Radio Transmitters, at 0800-0830 Mondays on ZLXA, 3935 kHz. (Arthur Cushen, RNZI Mailbag 2/3, via Mike Fern)

NICARAGUA - (cf LN 2/91) R.Informaciones de Centro America at 1153, 1/21, app the new R.RICA listed in WRTH-91; heard on 4901 during pre-s/on runup. Mx (guitar, marimba, piano, orch) w/quick ID by M or W every minute or so. Nicaraguan NA at 1200 (no sign of the old "Sandino" NA these days), opening anmt w/location as Managua; ancd FM fqy & 4920. Was on 4901 at start, moved up & down a bit & landed closer to 4902. Mostly talk after s/on & pretty far gone by 1210. (Jerry Berg in NU) And on 4920 1/23 at s/on 1200 with an ID for "Radio Informaciones de Centroamerica". The programming seemed intended for all Central American listeners - not just those in Nicaragua - as there were greetings to listeners in Guatemala, Panama, etc., and there was a program of press reports from major newspapers in several Central American countries. Reception on the 23rd remaining good until past 1230 but it has not been heard since on this, their previously-announced target frequency. (Cedric Marshall via WRR/ODXA/dmc) Using only 1300 watts now, but will use full 10 kw in April. Sked now Monday - Friday 1200-1300 w/news mag format. Has license for 10 kw on 1100 kHz, but not the money. Owner Luis Enrique Mejia Godoy is a Nicaraguan singer & composer. He backs the Sandinistas, but the stn is not a Sandinista organ. Director Digna Bendanya told Jeff White the station will feature Nicaraguan and LA mx. Target area is rural Nicaragua & CA. Rpts wanted, will be acknowledged on the air & w/QL cards. Address is: Radio RICA, Apartado 38, Colonia 14 de Septiembre, Managua. (Jeff White on RNMN 2/14 via Mike Fern)

PAKISTAN - R.Pakistan sked for W90, tentative for M-91:

0045-0215	Urdu	S/SE As	17640	21730	
0100-0245	Bangla	S/SE As	15190	17895	
0230-0245	English	S/SE As	9545	15115	17725 (Slow speed news)
0300-0345	Swahili	E/SE Afr	15115	17725	
0330-0415	Farsi	E/SE Afr	15605	17710	
0400-0445	Gujrati	E/SE Afr	17725	21575	
0430-0645	Urdu	ME/SAs/WAf	15605	17555	21580
0515-0615	Arabic	ME/WAf	17870	21745	
0700-0745	Turkish	Turkey	9495	9860	
0715-0815	Burmese	SEA	17785	21475	21595
0715-1100	Urdu	Europe	17565	21520	
0900-0945	Tamil	SAs	13665	15515	
1015-1100	Indonesian	Indonesia	17785	21475	21595
1100-1115	English	Europe	17565	21520	(Slow speed news)
1115-1130	English	Europe	17565	21520	
1115-1230	Hindi	SAs	13665	15515	
1200-1300	Arabic	ME/WAf	17555	21530	
1230-1445	Bangla	SAs	15295	17895	
1315-1545	Urdu	E/SAs/WAfr	13665	15605	17555 21670
1600-1615	English	E & SE Afr	17725	21480	
1600-1615	English	ME/SAs/WAf	13665	15605	17555 21530
1615-1630	English	E & SE Afr	17725	21480	(Slow speed news)
1615-1630	English	ME/SAs/WAf	13665	15605	17555 21530 (Slow speed news)
1645-1745	Turkish	Turkey	11610	13665	15270
1645-1715	Urdu	Europe	11570	15605	
1700-1745	Farsi	ME	9520	11670	
1715-1800	English	Europe	11570	15605	
1800-1900	Urdu	SAs	11600		
1800-1900	Urdu	Europe	11570	15605	
1915-2015	French	ME/WAf	11940		
1915-2015	French	Europe	11570		(via Gordon Darling)

English to Europe at 1700-1800 is on new 9370, as well as 11570. (WOR via Harry Riddell) (WRR/ODXA/dmc)

PAPUA NEW GUINEA - On 1/19 & 20, Cedric Marshall noted that Radio West New Britain, 3235 kHz, cited 2435 kHz during s/off anmts 1257. Anmt still noted several times since, through early February, but it's now too far past sunrise in Ontario to hear PNG's to 1300 s/off. 2435 is the destination freq under a new freq plan anncd several years ago, though there's no indication it's been used yet. With the 10 kW upgrades of the regional stations now probably completed (except Radio North Solomons - see below), the freq shuffles to the 120 mb and within the 90 mb may be getting closer to fruition, subject to agreement with international regulatory bodies. (Cedric Marshall / dmc) (WRR/ODXA/dmc)

The 1/30 'The Toronto Globe & Mail' had a Canadian Press report that "Canada will be asked to take part in a multi-national peacekeeping force on Bougainville Island in PNG, a government minister from the South Pacific country said yesterday [Jan. 29th]. Foreign Minister Sir Michael Somare said he will ask Canada to play a peacekeeping role on Bougainville. Last week, government officials and secessionist rebels reached an agreement aimed at ending a civil war on the island." That raises question as to whether Radio North Solomons, 3325 kHz, at Kieta, will be upgraded and reactivated on the present site, or perhaps relocated. Meanwhile, short broadcasts produced by R.N.Solomons staff are being carried at 0815 on R.E.New Britain, 3385 kHz. (Harold Sellers / RNMN) (WRR/ODXA/dmc)

PARAGUAY - R.Nacional on 9735, has new studios & announcing new address since last fall: Montevideo y Estrella, Asuncion. (Ernie Behr, Kenora, Ont)

PERU - R.Frecuencia Lider, Bambamarca, hrd on 4418 at 0133 w/music, a bank ad, hymn. (QLB, DXPL 1/26, via Mike Fern)

PHILIPPINES - FEBC at 0000 on new 15450, ex 15490. (A.Cushen, RNMN 1/31, via Mike Fern)

QATAR - QBS Doha on 9585, from 1800 TS, Arabic nx & mx past 2100; also 0100 past 0200; good 1/17 & 28. (Ernie Behr, Kenora, Ont)

ROMANIA - R.Romania Int'l ancd recently that, out of 10's of thousands who have joined the R.Romania Int'l Listener's Club over the years, 242 have earned. (Bill Matthews) But Bill Matthews isn't one of them! <grin> (df)

SAUDI ARABIA - The U.S. forces network in Saudi Arabia calls itself Desert Shield Radio and is heard in Riyadh on 105 & 107 MHz. (Jerome Van der Linden, on RNMN, via Mike Fern) (It has bright young women ancrs, which must drive conservative Saudis up the wall. Likewise Dubai, which has women ancrs in its Arabic svc. (Mike Fern)

- Ext. Service sked for BC Service of the Kingdom of Saudi Arabia (BSKSA):

0400-0500	Somali	Africa	15430	17845	
0400-0600	Turkish	Europe	11685	15060	
0500-0600	Swahili	E.Africa	15245	21505	
0600-0800	Holy Koran	Mo.Asia	11730	21505	
0800-1000	Holy Koran	So.Asia	21505	21670	
1000-1200	Indonesian	Indonesia	17895	21640	
1000-1400	Holy Koran	Africa	15170		
1200-1400	Urdu	S.Asia	11825	15345	
1400-1600	French	Europe	9705	9720	
1400-1600	Persian	ME	9640	11825	
1500-1900	Holy Koran	Africa	7250		
1600-1700	Bengali	S.Asia	11825	15345	
1600-2100	English	Europe	9705	9720	
1700-1800	Turkmen	Eur/ME/SAs	7145	9730	
1800-1900	Bambara	Africa	7245	15335	
1900-2100	Holy Koran	ME/Africa	7250	7275	11935 (WBI 1/18/91)

The BSKSA domestic svc in Arabic from Riyadh noted on 9720 1/18, dual other known BSKSA freqs, 7280, 6040, 6020 and 1521 kHz. 9720 also noted w/domestic svc 0940 1/20, dual 21505 & 1449(v) kHz. The 9720 frequency was formerly used by the anti-Saudi Arabian "Holy Mecca Radio", believed to have been broadcast from Iraq. (sorry, I misplaced the credit on this. df)

-- In the freqs around 6600 kHz, used for allied tactical support, and presumably monitored by the Iraqis, a strange station has appeared. Andy Sennitt first heard it Monday evening. It's been on around 1930 each night since. A short message in Arabic, about 90 seconds, is given. Station then moves up 5 or 10 kHz & repeats. (voice over translation): "My brother and hero Iraqi soldier. This is an invitation card from the commander of the Allied forces and joint operations. You are invited to join the Allied forces, where you will enjoy a traditional Arab welcome, security, safety, and health care. You will be able to return to your family as soon as the situation in which Saddam has put us comes to an end. Brother Iraqi soldier, this is an open invitation to you and your brother fighters. I hope you will accept it as soon as possible." (Jonathan Marks & Andy Sennitt on RNMN 2/14, via Mike Fern)

SRI LANKA - Coincident with the outbreak of the gulf war, Radio Japan expanded its transmissions to the Middle East on January 17th, originating from the new 300 kW relay transmitters. Radio Japan is now broadcasting to the Middle East daily for twenty-three and-a-half hours. The additional transmissions are:

- * In Japanese: 0000-0100 on 15210; 0600-0700 on 17820; 2000-2100 and 2200-2300 on 15210
- * In English: 0100-0200 on 15210; 0500-0600 on 17820; 2100-2200 and 2300-2400 on 15210
- * In Arabic: 1200-1230 on 17820 (Radio Japan DX Corner) (WRR/ODXA/dmc)

SUDAN - Suna news agency says at two days of Sudanese-Libyan information talks in Tripoli it was agreed to study a proposal by Sudan on the use of jamming to confront the "foreign information invasion". (WBI 1/18/91)

SWEDEN--The Swedish government has allocated around 58,000 dollars to Radio Sweden for a six month test of broadcasts in Lithuanian. The service began on January 28th, with a five minute news bulletin at 19:25 hours, at the end of the regular Russian broadcast, on 1179 and 6065 kHz. (SCDX 2125) It's on 1179 & 5975 kHz. (WBI 2/1/91)

The new broadcast in Lithuanian is followed at 19:30 hrs by our broadcasts in Estonian and Latvian. We added a new transmission in those languages starting Monday the 4th. The new transmission is on 1179 kHz only, with Estonian at 21:30 hrs and Latvian at 21:45 hrs. It replaces programs in Spanish and French on that frequency. (SCDX 2125)

SWITZERLAND - The Red Cross Broadcasting Service has scheduled add'l xmsns because of the Gulf War, but has no plans to bcst lists of prisoners of war. A 150 kw xmtr on 7210 at Schwarzenburg is used. The regular sked is 1100-1240 on the last Sunday of the month UTC, repeated at 1700-1840 Monday. Starting 2/10 there will be an add'l xmsn on the 2nd Sunday, also repeated next day. (Patrick Piper, RCBCS on RNMN 1/24, via Mike Fern) [Times not given, so must be the same. -- mf]

SYRIA - R.Damascus has English 2005-2105 on 12085 & 15095; also 2110-2210 on 9950 & 12085. (Bill Matthews)

TUNISIA - RTV Tunis on new 17500 from 1500 in Arabic to 1855*, //15450 past 2300; both vvy strong. (Ernie Behr, Kenora, Ont)

UNITED ARAB EMIRATES - Voice of the UAE's external English service has been temporarily replaced by an Arabic language external service program. Full SWBC sked is:

Domestic Service:

0200-0400	Arabic	ME/Asia	9695	17855	21515	21725	21735
0400-0630	Arabic	ME/As/ANZ	9695	13605	21735	25690	
0630-0800	Arabic	Eur/ME	13605	15315	17855	21735	
(no s/on till 0900 during Ramadan)							
0800-1300	Arabic	Eur/ME	17855	21515	21735	25690	
1300-1500	Arabic	Eur/ME	15315	17855	21515	21735	
1500-1600	Arabic	Eur/ME	11815	17855	21515	21735	
1600-1700	Arabic	Eur/ME/As	9695	9780	11815	11965	11985
1700-2000	Arabic	Eur/ME/As	6170	9695	9780	11815	11965 11985
2000-2135	Arabic	Eur/ME	6170	9780	11965	11985	

External Service:

0000-0200	Arabic	America	6170	9505			
2200-2300	Arabic	America	6170	9600	15100		(replaces English)
2300-2400	Arabic	America	6170	9600	13605		(replaces English)
2200-2300	English	America	6170	9600	13605		(Inactive)
2300-2400	English	America	6170	9600	13605		(Inactive)

(WBI 1/25/91)

Dubai English 0330-0400 on 11945, 13675, 15400, 15435 kHz. (Arthur Cushen on RNZI Mailbag 2/3, via Mike Fern)

USA - The Voice of America has borrowed a 50 kw portable AM station from the US military and set it up in Bahrain on 1350 kHz to improve MW coverage in Iraq. The station has tested successfully at 1/2 power, but full power operation revealed a couple of bugs. The VOA's 1260 kHz outlet on Rhodes has a very wide coverage pattern (Turkey to Egypt). It does not put a solid signal into Baghdad. The Bahrain booster exploits the fact that W is far more popular than HF among ordinary listeners. It's on the air 2300-0200 with English language programs. (Bill Whitacre, VOA Engineering, on RNMN 1/31, via Mike Fern)

USA (maybe) Heard 2/11. Dr. Gene Scott disclosed during a svc on KVOH that "We will be adding additional shortwave frequencies, possibly within the month. I know the frequencies but can't tell you yet." Said the new broadcasts would be directed to "New England and Old England," and "The relentless Fund ... completes the steps that take this voice worldwide." Said the 4-hour daily transmission on KVOH alone costs \$5000 a week. Dr. Scott is urging his

church members and network listeners to buy shortwave receivers. The University Network may begin selling them through its headquarters store if it can work around the warranty and repair problems. (Mike Fern) Easy work around is don't sell receivers that fail. <g> (df)

USSR - Although the Radio Moscow World Service in English absorbed the Great Britain & Ireland, Africa & ECNA services from 1/1, R.Moscow continues a separate series of broadcasts to West Coast of NA. Sked as determined so far is: 0400-0500 on 9895, 11980, 12020, 12050, 15180, 17700, 17720 kHz; 0500-0600 on 9895, 11980, 12020, 12050, 15180, 17720; 0600-0700 on 9505, 9795, 11980, 17720; 0700-0800 on 5905, 7175, 7260, 7270, 7345, 9505, 9795, 9825, 11980. (WBI 1/18)

Radio Station Peace & Progress noted in English from 1/13 at 0130-0200 on 9750 & 7400 kHz. S/on anmt says broadcast in the 7, 9, 15, 17 MHz bands. The bcst, presumably for NA, possibly started 1/1, when there were a number of changes to the R.Moscow external services, including RP&P. (WBI 1/18)

The RSFSR, headed by Boris Yeltsin, has objected strongly to cuts in its nationwide (Archangelsk to Anadyr) programming schedule. It had been broadcasting via Gosteleradio's #1 channel; Mayak, its #2 channel; and a third nationwide network. "Radio Rossiya" is now available only on All-Union Radio's Second Program (which is actually the third program). Its managers complain that the Second Program can only be heard by 40-60% of the Russian [sic, not Soviet] population. Because they have been bounced from the First Program and Mayak, they aren't reaching the audience they want. Radio Rossiya is on the air 1100-1400 & 1900-2100. Frequencies include 15750, 15630, 11990, 11840, 11830, 11690, 9585 & many more. (Richard Measham(WBI) on RNMN 2/7, via Mike Fern)

Bilingual tape with translation, of Leonid Kravchenko, named by Mikhail Gorbachev as director of a new company to control Soviet radio and television, on RNMN 2/14: "To my mind the External Service of Radio Moscow is too big in terms of the number of languages and of the time it spends on the air. One has to admit that, in the past, the External Service of Radio Moscow played certain ideological functions, and was too politicized. That's very true. However, today, my friends abroad have been telling me that some programs draw such an awful picture of life here that one has the impression that everybody should be afraid of that society, system and political order. It's very sad that my colleagues have begun to talk to foreign audiences in such a way. It seems that we have begun to lose the sense of national dignity and patriotism the people of any country must have." Marks: So, are they trying to turn the clock back? (via Mike Fern)

Heard 2/8: SBB feeder, 5970, //AM 6020, both *1100-1600* w/Soviet home svc. PWB[sic]R 91 indicates 6020 may be Khabarovsk. Reading world news at 1000 gave "Schwarzkopf" the full German pronunciation. Mx at 1108. UnID, 5690, woman reading Russian, poor audio quality, off abruptly 1049, weak to fair signals. (Mike Fern, Covine, CA)

- Radio Rossiya noted with ID 1358 on 11990. (Bill Matthews)

ARMENIA - R.Yerevan on 9840 *2100 IS & Armenian px to 2230, vy strong over QRMoscow 1/17. R.Yerevan relays on 7400, 9750, 15180, 17690, 17720, now heard 0230-0259 in Armenian & English since 1/12, 1 hour earlier. (Ernie Behr, Kenora, Ont)

VATICAN - Vatican Radio now using 9600, ex 9615, at 2145-2330, including English 2205-2225 //11830. Vatican Radio's 60th birthday was 2/13. (Arthur Cushen on RNZI Mailbag 2/3, via Mike Fern) VR now using new 6245, ex 6248, making Pyongyang on 6250 audible around 1500 in Western Europe. (Marcel Roberts on RNMN 1/31, via Mike Fern)

YUGOSLAVIA - Current sked for Radio Yugoslavia:

0000-0030	Spanish	Americas	7220	9620	11835
0030-0100	French	NAm	9620		
0100-0145	English	NAm	9620	11735	
0700-1100	Yugo.langs	Eur/Aus	7215	9620	25795 (Sa/Su)
1300-1330	English	FE/NA/SAs/Au	9720	17725	21635 21715
1500-1530	Russian	Asia/Eur	7165	9620	15175
1545-1630	Bulgarian	Eur	5995		
1630-1700	Arabic	Naf	7250	9620	11835
1700-1730	French	Afr/Eur	7215	9630	15165
1730-1815	German	Eur	7215	9620	
1730-1800	Albanian	Eur	5995	7265	
1800-1830	Greek	Eur	7220		
1830-1900	Arabic	As/Naf	7250	9620	11835

1900-1930	Russian	Eur/As	6005	7165	7240	
1930-2000	English	SAs/Af/Eu	6165	7165	15165	17840
2000-2030	Spanish	Eur/SA	7220	17740		
2030-2100	German	Eur	5980	5995		
2030-2115	Italian	Eur	7220			
2100-2130	Yugo.langs	Eur/Aus	5955	6100	15105	
2130-2200	French	Eur/Af	5955	9620	15165	
2200-2245	English	Eur/Af	5955	6100	15165	
2300-2400	Yugo.langs	SAs/Atlantic	7240	9620		(Richard Cowan in ADXN)

CLANDESTINE

ANGOLA - A *Voz da Resistencia do Galo Negro* (V. of the Resistance of the Black Cockerel), announced as broadcasting from Jamba, is sked in Portuguese & vernaculars at 0500-0830 on 9700, at 1100-1430 on 11830, and 1800-2230 on 7100 kHz. There's English Su/Tu/Th at 2015-2045. (WBI 1/18)

LAOS - Monitoring research 1/7-20/91: The Radio Station of the Government for the Liberation of the Lao Nation noted in Laotian & H'mong at 0100-0300 & 0700-0900 on 10200 kHz between 1/7 & 1/23. Not heard when checked between 1/24-30. The 100 watt xmtr was in the rugged mountains of northern Laos. "The radio station was detected by a Soviet satellite and closed down amid fears it would come under air attack as the Laotian government knew its location, the source said." Said the transmitter also needed repairs. Said it will be installed deep in the mountain range of northern Laos. (WBI 2/1/91)

MISCELLANEOUS - The Orange County Register reported 1/25 that the DX-440 has been dropped from the Radio Shack line. [The \$145 Christmas promotion was a flush job, not just a discount.] The DX-370 [Larry Magne's "MG of digital radio"] replaces the DX-440 in the Radio Shack line. Sangean America has told me that the ATS-803A is still in production. A new shipment is due in the US on 2/14. (Mike Fern)

SHORTWAVE ONLINE - I'm beginning to see a lot more shortwave broadcast related material on computer networks and bulletin board systems (BBS). The networks provide a convenient way to communicate with other listeners, especially for those of us who can't seem to manage to get things on paper and in the mail. Using a local BBS that carries the SWL Echo, your messages reach the entire system in a very few days. Those with access to the Usenet (and there are numerous public access nodes) can find a lot of shortwave broadcast material in the newsgroup rec.radio.shortwave. On CompuServe, in the HamNet Forum, check the SWL message and library sections. Messages in CompuServe's forums are available for reading by others as soon as you post them, or you can use private forum messages or EMAIL. HamNet's SWL Library has files with station schedules, as well as other material. You can get a free starter kit for CompuServe with, if I recall correctly, an hour's free connect time, by calling 1-800-848-8199 & asking for representative #48. Former LN Editor Bruce MacGibbon is posting some good material on Prodigy. I'm not completely familiar with GENIE yet, but it has an area devoted to radio listening, as well. From time to time we'll have more on these methods for listeners to communicate.

WRTH - I have some good news and some bad news. The bad news is that WRTH-91 has completely sold out (ie. our warehouse in New Jersey doesn't have any left). The good news is that we're printing more copies, so if you want one and your friendly neighborhood bookstore tells you they're sold out, ask them to order one for you and don't take no for an answer. (Andy Sennitt, WRTH)

CREDITS: WBI = World Broadcasting Information, copyright by BBC Monitoring Service. DXPL = DX Party Line on HCJB. QLB = Quito Log Book on DXPL (Logs usually by Rich McVicar and/or Ken MacHarg) WRR = World Radio Report, by Dave Clark(dmc) in DX Ontario (Ontario DX Association). ADXN = Australian DX News.

DISCLAIMER - Any opinion expressed herein by me is my own, not that of the VOA, by which I am employed, but which I here in no way represent. (DF)

Material for LN may be submitted to the address on the masthead either on paper or as an MS-DOS text file on diskette (5-1/4 inch 360 K or 1.2 Meg, or 3-1/2 inch 720 K or 1.4 Meg) or by EMAIL on CompuServe (ID 76702,771). Stop by & visit the HamNet Forum, where there's a section devoted to shortwave listening. EMAIL can also reach me on CompuServe through the gateways from Internet and MCI Mail. Prodigy address is JDBM33A. GENIE mail address is D.FERGUSON14. I check CompuServe daily, the SWL Echo almost daily, Prodigy & GENIE less often. Thanks for your support. Dan

QSL Reports

Sam Barlo
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Bristol, CT 06010



PLEASE NOTE: Many of the illustrations in this issue of the QSL Column were supplied by Mr. Dario Monferini, Editor of the Italian DX bulletin **PLAY-DX**.

ALASKA: **KNLS** 6095 f/d cd. w/ ltr. in 21 ds. for ms. Schedule rcvd. (Hazzard-PA).

ALBANIA: **Radio Tirana** 11825 n/d cd. w/ station pin in 72 ds. (Foland-MI).

ANGOLA: **Emissor Regional de Huila** 4820.3 f/d cd. w/ ltr. * in 3 mo. for a PT rpt. (Barto-CT).

ARGENTINA: **Radio Continental** 9115 f/d "Logo" cd. w/ tourist info., sticker in 37 ds. for a SP rpt. and \$1.00. v/s Julio Valles. (Palmerheim-WA).

ARMENIA: **Radio Yerevan** 11790 f/d cd. in 77 ds. (Barr-IL).

ASCENSION ISLAND: **VOA** 21490 f/d "Crosley Transmitter" cd. in 13 ds. (Name?)

ASIATIC RUSSIA: **Radio Moscow** 17700 via **Khabarovsk** f/d "Bolshoi Theatre" cd. w/ calendar, sticker and a personal note in 40 ds. (Kurrasch-NY). 17825 and 21790 via **Irkutsk** f/d cd. in 58 ds. (Hosmer-MI). 17890 via **Chita** f/d cd. in 58 ds. (Hosmer-MI). 21690 via **Vladivostok** f/d cd. w/ calendar in 58 ds. (Hosmer-MI).

AUSTRALIA: **VIM6** 6140 via **Wanneroo** f/d "ABC" cd. in 100 ds. for 3 IRCs. (Kurrasch-NY). **VLO9** 9660 via **Brisbane** f/d "ABC" cd. in 112 ds. for 3 IRCs. (Kurrasch-NY). **VLRA** 2310 f/d "ABC Site Map" cd. in 39 ds. for ms. (Hosmer-MI). **Radio Australia** 21735 via **Carnarvon** p/d ltr. w/ info. sheets and schedules in 26 ds. (Dieterich). (Foland-MI).

AUSTRIA: **Radio Austria International** 9870 f/d cd. in 36 ds. **AZERBAIJAN:** **Radio Moscow** 15260 via **Baku** f/d cd. in 7 wks. (Klinck-NY). **BELGIUM:** **BRT** 9925, 13675 and 21815 f/d cd. in 138 ds. w/ schedule and other station info. (Levison-PA).

BONAIRE: **Trans World Radio** 9535 n/d ltr. in 36 ds. for 1 IRC. v/s Patty Lowell. Also rcvd. personal note w/ schedule. (Batson-WV). **BRASIL:** **Radio Educadora de Braganca** 4825 f/d prepared cd. w/ ltr. in 39 ds. for a PT rpt. and \$1.00. v/s Jose Rosendo de S. Neto. (Turnick-PA). **Radio Pioneira de Teresina** **ZYG595** 5014.6 p/d ltr. w/ brochure in 3 mo. for a PT rpt. v/s Luiz Eduardo Bastos. (Barto-CT). 5015 f/d prepared cd. in 78 ds. for a PT rpt. and \$1.00. (Paszkievicz-WI). (Levison-PA).

BULGARIA: **Radio Sofia** 11660 and 7115 f/d "Monument" cd. w/ schedule in 92 ds.

PLEASE NOTE: When submitting illustrations to this QSL Column, please try to make the illustrations as contrasting as possible. Good black and white tones are essential. Shades of gray can be worked with to a degree but I cannot work miracles! A recently serviced office copier usually works best. Try to stay away from the run-of-the-mill library copier. The quality is not usually that good...Sam.

CAMEROON: **CRTV Garoua** 5010 p/d ltr. w/ photo in 6 wks. for a FR rpt., tape, ms., and a \$2.00 donation to CATHCA. (Klinck-NY).

CANADA: **Radio Canada International** 5960 f/d cd. w/ sticker in 77 ds. (Kurrasch-NY).



RADIO SOUTHERN HIGHLANDS

(OVER BILONG MURUK)

PO BOX 104

TEL: 616-5200

P.O. Box 104

Papua New Guinea

SPECIAL OFFER: During the past several months, I have had many inquiries regarding what type of enclosures to include with reception reports. The usual are self photos, postage stamps, local postcards, etc... Several have stated that they use radio station materials. With this in mind I have come up with a package that should be very useful to our readers. Package # 1 includes the following: 2 staff photos, 3 pins, 2 station balloons, 10 sample QSL cards, 2 cloth arm patches, 1 pennant, 15 stickers, 3 calendars and 10 station badges. Package # 2 is the same

**POLSKIE RADIO
WARSZAWA**



as # 1 except that the station pennant is substituted for 10 additional station badges. The price...only \$5.00 plus \$.75 for postage! That's about \$.10 per item! For the first 10 NASWA members that respond, I will include a large Radio Kuwait sample QSL card. These were received just prior to the invasion. Send all orders to your QSL Editor....Sam.



CANADA: Radio Canada International 6150 rcvd.

ltr. in 8 ds. explaining their QSL policy.(Boulden)

CBC Northern Service 9625 n/d ltr. in 79 ds. w/ schedule and a door knob hanger! (MacHarg).

CELEBS: RRI Ujung Pandang 4753 f/d prepared cd. in 11 mo. for an IN rpt. * and ms. v/s Drs. H. Harmyn Hussein.(Lare-MI). **RRI Palu** 3959.8 p/d personal ltr. w/ f/d prepared cd. in 7 mo. for an IN rpt. and ms. v/s Akson Boole.(Palmerseheim-WA).

CHINA, PEOPLES REP. OF: CPBS 7516 via Peking and 5880 and 6225 f/d "Cotton Flannel Ornaments" cd. in 4 mo. for a 1980 reception.(Barto-CT). 7050 via Urumqi f/d cd. in 3½ mo. w/ schedule.(Barto). 5800 via Urumqi and 6665, 7440, 7516, 9080, 11290, 11610 and 5915 via Beijing f/d cd. in 2 mo.(Barto).

* **CPBS II** 11040 f/d "Horse" cd. w/ paper cuts in 26 ds.(Levison-PA). **HCP21** 7973

Radio Beijing (feeder station) f/d cd. in 3 mo. for reception of USB transmission

* in CH.(Barto-CT). **Radio Hangchow** 2475 f/d cd. in 3 mo. for 1970 reception from RVN.

* (Barto-CT). **Gansu PBS** 6005 f/d cd. in 3 mo. for 1983 reception.(Barto). **Radio Tsinan**

2350 f/d cd. in 2 mo. for 1970 reception from RVN.(Barto). **Voice of Jingling** 4875 via **Nanning** p/d "Zhonghua City Gate, Nanning" cd. in 1½ mo. Schedule was also rcvd. (Lare-MI). p/d postcard w/ schedule in 82 ds. for a CH rpt. and ms.(Klinck-NY).

Radio Beijing 7405 via Beijing f/d cd. in 2½ mo.(Barto). 4200, 7375, 7385, 7700, 9290,

9340, 9610 and 9820 f/d "Cocoanut Hair Ornament" cd.

w/ schedule in 2 mo.(Barto). 9860 and 11735 via Beijing f/d "Chicken Cloth Ornament" cd. in 3 mo.(Barto).

7470 and 9965 via Beijing and 9365 via Beijing f/d

"Dancing Statue" cd. w/ paper cuts in 2 mo.(Barto-CT).

9725, 7120 and 6560 via Beijing and 7820 via Xian f/d

cd. in 3 mo. for reception of a RS program.(Barto-CT).

6995, 8425, 12080, 15100, 15195 and 15520 f/d cd. in

3 mo. for reception of SP program in 1980.(Barto).

5295 f/d cd. in 3½ mo. for 1983 reception.(Barto).

7185, 7800, 7350 and 9880 via Beijing f/d cd. in 3 mo.

(Barto). 8260 and 9440 via Kunming f/d cds. in 3 mo.

(Barto). 9645 f/d cd. in 48 ds. for 1 IRC. v/s Fan Fag-

uang, English Department. Schedule and calendar were

rcvd.(Batson-WV). **Haixia 2** 5170 and 6400 via Beijing

* f/d cd. in 4 mo.(Barto). **Radio Wulumu** 5058 f/d cd. in

2 mo. for 1975 reception.(Barto-CT). **Jianpi PBS** 2445

f/d cd. in 2½ mo. for 1987 reception.(Barto). **Xilingol**

PBS 4950 f/d cd. in 3 mo. for 88 reception.(Barto-CT).

* **Wenzhou PBS** 2415 f/d cd. via Beijing in 27 ds.(Palmer-

seheim-WA). **Radio Foochow** 2200 f/d cd. in 3 mo. for 1970

reception from RVN. (Barto-CT)...more to follow.



NOTES: Steve Batson of 4012 Staunton Ave., Charleston, WV 25304 reports that his interest in shortwave listening has been renewed since November 1990. He uses a DX-440 and listens quite a bit to stations in the Persian Gulf area. **Brian Boulden** of 480 Pacific Ave., Fairfield, CA 94533 reports that he is having a great deal of trouble in QSLing the VOA! Out of 10 reports only 1 was QSLed and that one was sent to the Dept. of State instead of the usual VOA address! Somewhat unusual...Sam. **Louis Pennisi** of P.O. Box 1010, Lodi, NJ 07644 sent in his first report to the QSL Column. He says that he enjoys the Journal very much and that it is a great source of information. **Steve Price** of 1351 Oliver Ave., Coneaugh, PA 15909 says he heard his first shortwave station when he was 9 years old. Now that he is 20, his interest has peaked even more since the affairs in the Middle East have taken center stage....Sam.



CHINA, PEOPLES REP. OF:

Qinghai PBS 6260 f/d cd. in 3 mo. for 1979 reception. (Barto). **Xinjiang PBS** 4800 f/d cd. in 2 mo. (Barto). 4330 f/d cd. in 3½ mo. (Barto-CT).

CLANDESTINE: Voice of Democratic Kampuchea 15360 and 11675 f/d date, time and frequency cd. w/o station designation in 3 mo. via **Beijing**. (Barto-CT).

COLOMBIA: Ondas del Meta 4885 Christmas/New Years cd. w/ business cd. and verie statement in 141 ds. for a SP rpt. and ms. v/s Yolanda Plazas de Lozada. This was after 4 f/up rpts. (D'Angelo-PA).

COMOROS ISLANDS: Radio Comoro 3330 f/d prepared cd. in 5 years after * numerous f/up rpts. in FR w/ ms. v/s Ali Hamoi Hissani. Also rcv'd. a personal ltr. (Lare-MI)...Very nice QSL!

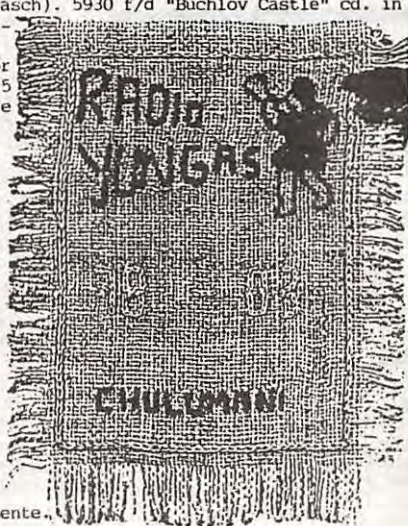
COOK ISLANDS: Radio Cook Islands 11760 f/d cd. in 6 wks. after a f/up rpt. for \$1.00. I also sent the station a Norman Rockwell Christmas book. v/s Tauraki Rongo Raea. (Eckert-PA).

CYPRUS: Cyprus Broadcasting Corporation 7180 f/d cd. in 59 ds. for a taped rpt. and ms. (Kremer-IN). f/d "CBC Complex" cd. in 31 ds. for 2 IRCs. (Brouillette-IL). **British Forces Broadcasting Service** 7125 f/d "Persian Gulf" cd. in 35 ds. via London for 2 IRCs. v/s Richard Astbury, Station Manager. (Brouillette-IL).

CZECHOSLOVAKIA: Radio Praha International 7345 f/d "Konopiste Chateau" cd. in 67 ds. (Kurrasch-NY). same in 59 ds. (Kurrasch). 5930 f/d "Buchlov Castle" cd. in 1 mo. w/ calendar. (Levison-PA). f/d "Wallenstein Garden" cd. in 43 ds. (Kurrasch-NY). 5930 and 7345 p/d cd. w/ calendar and Monitor Club pennant in 34 ds. (Peake-IA). 5930, 7345 and 11990 p/d "Kozel Chateau" cd. w/ schedule in 28 ds. (Peake-IA).

DUBAI: UAE Radio and TV Dubai 11945 f/d "Great Circle Map" cd. w/ schedule in 23 ds. (Kurrasch-NY). 21605 same w/ pennant and schedule in 21 ds. (Poland). 15400 same w/ pennant in 58 ds. (Peake-IA).

ECUADOR: HCJB 17890 f/d cd. w/ schedule in 46 ds. (Batson-WV). 21480 f/d "Special Quito Calling" cd. in 46 ds. (Washburn-ME). 15270 f/d "Mount Iliniza Norte" cd. w/ a personal ltr. from a member of the German section who also lives here in Koblenz in 25 ds. (Dieterich). 15155 f/d cd. in 2½ mo. (Boulden-CA). 21455 (SSB) f/d cd. in 19 ds. (Poland-MI). 11755 f/d cd. in 28 ds. (Poland). f/d cd. of "Chimborazo and Antisana" for various frequencies (Macharg). **Radio Rio Amazonas** 4870 p/d ltr. w/ sharp looking green and gold pennant in 326 ds. for a SP rpt. and ms. v/s Prof. Marco G. Diaz D., Gerente. (Stephens-AL).





VERIFICATION SIGNERS: Emissor Benquela 5041 Jose Cabral Sande, Director. Addr: C.P. 19, Benquela. Radio Integracao 4765 Claudio Onofre. Radio Satellite 6725 Sabino Llamas Chavez, Gerente. Addr: Jiron Cutervo 570, Santa Cruz, Cajamarca. Radio Cora 4914.5 Juan Ramirez Lazo, Director. Addr: Centro Civico, Lima. Radio Rio Amazonas 4870 S. ra Miriam Marino. Addr: Casilla 818, El Puyo...via PLAY/DX.

ECUADOR: La Voz del Upano HCVB7 5967.2 p/d ltr. in 4 mo. for a SP rpt. v/s Sor. Dolores M. Palacios, Directora. (Barto).

ENGLAND: BFBS 17695 p/d cd. in 19 ds. v/s Richard Astbury, Station Manager. (Dieterich). same in 44 ds. for \$1.00. (Lare-MI). p/d cd. in 2 mo. for ms. (Klinck-NY). same in 46 ds. for ms. (Frodge-MI). 7125 p/d cd. in 34 ds. for 1 IRC. (Wallace-CT). 21735 cd. in 73 ds. (Yamada-JPN). 13745 p/d cd. in 54 ds. for 1 IRC. (Name?). Radio Canada International 6050 via Daventry f/d "Film Year" cd. in 11 ds. (Peake-IA). HBC 9915 n/d form ltr. in 44 ds. for 1 IRC. (Batson-WV).

EURO PIRATE: Radio Orang Utan International 6206 f/d "Monkey" cd.

* w/ stickers and pennant in 29 ds. for 3 IRCs. v/s Freddy. The cd. stated that my rpt. was the greatest distance that the station had ever rcvd.

* (Maples). Live Wire Radio 6291

f/d fluorescent pink/black cd. in 27 ds. for 3 IRCs. v/s Bill Lewis. Also rcvd. personal ltr., data sheet and sticker. Addr: LWR, 21 Greenpark, Bath, Avon BA1 1HZ, England. (Maples-GA). 6276 f/d personal ltr. w/ sticker in 12 ds. for 1 IRC. (Dieterich).

* Voice of the Netherlands 6239 ltr. w/ info. sheet for \$1.00. (Dieterich).

THANK YOU: I would like to thank Tom, George and Kris along with all the others who replied to my request for information about the Princeton, NJ area. Thanks guys, your help was very much appreciated...Sam. Also, thank you for the information on the pirate stations.....Sam.

* Radio Vanessa 7495 f/d "Robot Women" cd. w/ personal ltr. in 17 ds. (Dieterich). Pirate Freaks Broadcasting Service 6240 f/d cd. w/ info sheet and sticker for 1 IRC. (Dieterich-GER).



FRENCH GUIANA: Radio Beijing 11695 f/d cd. w/ pennant in 2 mo. (Boulden). f/d folder cd. in 25 ds. w/ personal note and newspaper. (Kurrasch-NY).

GABON: Africa Number One 9580 f/d ltr. for a 1987 rpt. (Ambler-PA). 15475 f/d ltr. w/ cd. and calendar in 39 mo. (Weber-OH). p/d ltr. in 781 ds. for \$1.00. (Frodge-MI). 15200 same w/ cd. and schedule in 22 mo. for a FR rpt. and a tape. (Klinck). Radio France International 12015 via Moyabi f/d "La Seine" cd. w/ schedule in 27 ds. (Swedberg). 4890 same cd. in 46 ds. for 1 IRC.

GERMANY (East): RBI p/d cd. in 4 mo. (Hosmer-MI). (Swedberg). 6115 f/d cd. w/ sticker in 42 ds. (Dieterich). Deutsche Welle 13610 via Leipzig f/d "Reunification" cd. in 127 ds. (McLemore-FL).

GERMANY (West): Bayerischer Rundfunk 6085 f/d cd. w/ stickers in 19 ds. (Dieterich). Deutsche Welle 9605 f/d ltr. in 21 ds. for 1 IRC. (Batson). Sender Freies Berlin 6190 p/d cd. w/ stickers in 4 ds. (Dieterich). f/d cd. w/ several stickers in 24 ds. for \$1.00 (returned). (Palmerheim). f/d cd. in 35 ds. Also rcvd. stickers and other goodies for \$1.00. (returned). (Kurrasch-NY).



Thank you for your reception report of
via
21 09 '90 Dieterich

We are pleased to confirm that the station you heard is The Voice of Europe, operating on

7540

KHz

Your further reports as well as comments on our programs will be much appreciated.

THE VOICE OF EUROPE
"YOUR VOICE IN EUROPE"

GHANA: GBC 4915 f/d cd. in 48 ds. for 2 IRCs. (Barr-IL). f/d cd. w/ schedule in 44 ds. for \$1.00. (Swedberg). p/d cd. in 44 ds. (Peake-IA).

GREECE: Voice of Greece 11645 f/d "Monastery" cd. in 58 ds.

GUAM: KSDA 15610 p/d "Map" cd. in 58 (Blumstein). ds. w/ newsletter. (Peake-IA).

GUYANA: Guyana Broadcasting Corporation 3290 * p/d ltr. in 2 mo. after 19 years of f/up rpts! v/s Roy Marshall QSLed my 1970 reception and stated that they would return to shortwave in the near future. (Lay).

HOLLAND: Radio Nederland 6020 via Flevoland p/d "Space" cd. in 20 ds. w/ sticker and schedule. (Peake). same cd. in 39 ds. (Foland-MI). in 32 ds. for 1 IRC. (Carson). 11718 f/d cd. in 39 ds. for 1 IRC. (Batson-WV).

HONG KONG: BBC 17830 f/d "Chinese Junk" cd. in 26 ds. for ms. (Brouillette-IL). 11945 f/d large postcard in 41 ds. for \$1.00. direct from site. (Kurrasch-NY).

HUNGARY: Radio Budapest 9835 f/d cd. in 26 ds. (Levinsen-PA). f/d cd. w/ ltr. and goodies in 40 ds. for 2 IRCs. v/s Ilono Kiss. Rcvd. T-shirt w/ station logo. (Berglee-ND).

INDIA: All India Radio 9910 p/d cd. w/ magazine and schedule in 65 ds. for \$1.00. (refunded) via the Indian Embassy in Bonn. (Dieterich). 11620 f/d "Velha Goa" cd. in 60 ds. (Peck-NY).

IRAN: VOIRI 11790 rcvd. greetings cd. w/ schedule. (Swedberg).

ISRAEL: Kol Israel 9435 p/d cd. in 37 ds. (Dieterich). f/d cd. in 54 ds. w/ schedule for 1 IRC. (Batson-WV). f/d cd. in 60 ds. (Franzen).

VERIFICATION SIGNERS: La Cruz del Sur 4875 Rodolfo Moya J. Radio Padilla 3472 Moises Palma Salazar, Director. Radio AM IPB 4895 Kelly Cristina Rodrigues da Silva, Secretaria. Radio Nacional da Amazonia 11780 Luis Antonio Alves, Gerente. Radio Anhanguera 11830 Rossana F. da Silva. Radio Gazeta 9685 Anibal Horta Figueiredo, Engineer. Radio Tupi 4975 Elia Soares. Radio Cultura de Sao Paulo 17815 Jose Munhoz, Coordenador. Radio Nova Esperanca 9550 Luiz C. Villanova. Radio Guarujá 5980 Alberto Gonçalves de Souza, Gerente. Radio Transamerica 5965 Marlene P. Nunes, Secretaria. BFBS Cyprus 17695 Mike Townley, Engineering Manager. Radio Tchad 4904.5 Djimadoun Ngoka Kilamian. RRI Kendari 3999 H. Sjahbuddin BA., Management... via PLAY/DX.

ITALY: Voice of Europe 7538 f/d "Logo" cd. in 79 ds. for 2 IRCs. (Maples-GA). 7540 n/d cd. in 32 ds. (Dieterich-GER). RAI 9575 f/d cd. in 8 mo. for 2 IRCs. (Wallace-CT). 11905 f/d "Quattro Fiumi" cd. w/ magazine in 29 ds. (Fanderys-OH). Italian Radio Relay Service 9815 f/d cd. in 142 ds. for 2 IRCs. Schedule and brochure were rcvd. (D'Angelo).

JAPAN: JJY 10000 f/d cd. in 13 ds. (D'Angelo-PA). 8000 same in 17 ds. for ms. (Turnick-PA).

Radio Japan 5960 f/d cd. in 45 ds. for 1 IRC. (Batson-WV)...RCI relay? n/d cd. w/ calendar in 2 mo. (Boulden-CA). Radio Tampa 6055 f/d cd. w/ ltr., schedule and brochure in 1 mo. All material from the station spells the name as Tampa not Tanpa. (Klinck-NY).

KARELO-FINNISH REPUBLIC: Radio Petrolavoosk 4780 p/d "Metropol Cinema" cd. in only 5 yrs. * and 37 ds. for a rpt. on a Mayak program. This after several tries. (Lare-MI).


KENYA: Voice of Kenya 4934 p/d ltr. via the embassy in DC followed in 3 wks. by a f/d aerogram QSL for ms. (Klinck-NY).

KOREA, DEMOCRATIC PEOPLES REPUBLIC: Radio Pyongyang 9977 f/d cd. in 53 ds. w/ pennant,

schedule and post-cards. My rpt. was mailed from Puerto Vallarta, Mexico. (Bywater-CO). 9980 cd. w/ schedule, pennant and art prints in 3 mo. My first rpt. to this station - I consider myself very lucky. (Boulden-CA).

KOREA, REPUBLIC OF:

Radio Korea 9575 f/d cd. in 47 ds. (Foland). 6480 f/d "Olympic Park" cd. in 25 ds. (Dieterich)



NEWS
MUSIC

YOUR QSL CARD FROM

RADIO JAMAHIRIYA

VOICE OF THE
SOCIALIST PEOPLE'S LIBYAN ARAB JAMAHIRIYA

7263 14.7m
BROADCASTING DAILY IN ENGLISH ON 16090 KHz/20w
SHORT WAVES FROM 22.30 - 24.00 HRS. G.M.T.

COMMENTS AND SUGGESTIONS ON HOW TO IMPROVE THIS
BROADCAST ARE WELCOME. WRITE TO:

HEAD OFFICE
RADIO JAMAHIRIYA
P.O. BOX 323
TRIPOLI - LYBIA

EUROPEAN BRANCH OFFICE
RADIO JAMAHIRIYA
P.O. BOX 17
RAMBON - MALTA

NOTES: Greg Hart in Live Oak, FL sent in his New Years resolutions. They include DX more, send out more reception reports, report to the QSL Column and lose weight. Greg says his wife just laughed at the last one. HI! Don Hoemer said that his spending of \$5.00 for a registered letter to Zambia paid off. He may just try that approach with Grenada and Greenland. Don is now trying to verify the Yugoslav regional outlets. Vernon Hyson in Charlotte, NC has been trying to log Iraq for a local NBC station. Good luck...Sam. Jerry Klinck sent in some very nice words about the QSL Column. It was very enjoyable to hear from you Jerry. You always have a kind word...Sam.



- LEBANON:** King of Hope 6280 f/d cd. in 41 ds. for ms. via the California address. (Hazzard-PA).
LESOTHO: HBC 6190 f/d cd. direct from London in 54 ds. for ms. (Name?)
LIBERIA: VOA 6035 f/d cd. in 1 mo. (Lane-IL).
LIBYA: Radio Jamahiriya 15415 f/d cd. in 54 ds. via the Malta address. (Yamada-JPN).
LITHUANIA: 11790 f/d "Land of Amber" cd. w/ personal ltr. in 115 ds. for \$1.00... (Barr-IL).... Don't know if this was Radio Moscow or Vilnius.




- MALTA:** Voice of the Mediterranean 9765 f/d "Collage" cd. in 120 ds. for 3 IRCs. (Kurrasch-NY). p/d cd. in 374 ds. (Peake-IA). same in 240 ds. for 2 IRCs. (Carson). f/d cd. in 6 1/2 mo. for 1 IRC. (Wallace-CT). cd. in 7 mo. for \$1.00. (Kohlbrener-PA). f/d cd. in 47 wks. for ms. (Bywater-CO). f/d cd. in 73 ds. (Barr-IL). Deutsche Welle 11865 f/d "Reunification" cd. in 104 ds. (Kurrasch-NY).
MANCHERIA: Radio Harbin 2690 f/d cd. in 3 1/2 mo. for 1970 *reception in RVN. (Barto-CT).
MONACO: Trans World Radio 9480 cd. w/ paper pennant and schedule in 29 ds. (Mercer). f/d "Globe" cd. in 30 ds. for 2 IRCs. (Berglee-ND). f/d cd. in 51 ds. for 1 IRC.
MONSPERAT: Deutsche Welle 9545 f/d (Wallace-CT). "Radio Antilles" cd. w/ sticker and tourist info. in 280 ds. for 89 reception. v/s G. Heinrichs, Chief Engineer. (Stephens-AL).
MOZAMBIQUE: Radio Mocambique 3210.5 p/d cd. w/ schedule *in 9 wks. for a PT rpt., tape and \$1.00. (Klinck-NY).
NEW BRITAIN: Radio West New Britain 3235 f/d ltr. w/ new transmitter info. in 30 ds. for ms. v/s Valuka Lova, Provincial Station Manager. (Hazzard-PA). p/d ltr. in 49 ds. for ms. (Lare-MI).

- NEWFOUNDLAND:** CKZN 6160 f/d "Map" cd. in 18 ds. for ms. (returned). Schedule was rcvd. v/s Shawn Williams, regional Engineer. (Turnick-PA). p/d "CBC" folder in 21 ds. for Canadian SASE (returned). (Frodge-MI).
NIGERIA: FRON Kaduna 4770 p/d personal ltr. in 18 ds. v/s Johnson O. Alle. (Hazzard-PA). n/d ltr. in 76 ds. for \$1.00. (Washburn-ME). Voice of Nigeria 7255 f/d cd. w/ ltr. indicating site in 28 ds. for a taped rpt. and 2 IRCs. v/s B.O. Raji. (Berglee-ND). Radio Nigeria 3326 via Lagos 2 f/d cds. w/ a very nice personal ltr. in 28 ds. for ms. (Hosmer-MI).

- NORWAY:** Radio Norway International 25730 f/d "Special Verification Certificate" w/ schedule in 58 ds. v/s Sverre Fredheim, Head of External Broadcasting. (McLe-more-FL). 21705 f/d cd. in 46 ds. (Poland-MI).
OMAN: BFBS 11760 p/d "Logo" cd. in 46 ds. (Frodge-MI). Radio Oman 11890 p/d ltr. in 46 ds. for \$1.00. (Barr-IL).

NEW ZEALANDS NATIONAL RADIO READING SERVICE



Print Disabled Radio
 TURNING PRINT INTO SOUND

2XA, 1602 kHz.1kw.
 ZLXA, 3935 kHz.1kw.

Simlicasting

N.Z. RADIO FOR THE PRINT DISABLED INC.



PAKISTAN: Radio Pakistan 17640 f/d ltr. in 60 ds. for ms.
PAPUA NEW GUINEA: Radio Simbu 3355 f/d (Stephens-AL).
 ltr. and a 2nd personal ltr. v/s Gabriel Paiao. I have
 now QSLed all PNG stations!(Field-PA). Radio Southern
Highlands 3275 p/d ltr. in 26 ds. for \$1.00. v/s Andrew
 Meles, Provincial Station Manager.(D'Angelo-PA).
PARAGUAY: Radio Nacional del Paraguay 9735 p/d ltr. w/
 tourist info. in 31 ds. for a SP rpt. and \$1.00. v/s
 Lic. Augusto Ocampos Caballero, Director General.(Kurr-
 asch-NY). n/d ltr. in 36 ds. via registered mail for a
 SP rpt. and \$1.00.(Washburn-ME). f/d cd. w/ prepared cd.
 in 20 ds. for a SP rpt. and \$1.00.(Name?)
PERU: Radio Tarja OCKAE 4774.9 f/d form ltr. w/ f/d prepared
 * cd., postcard and a banknote in 39 ds. for a SP rpt. on a
 1986 reception. v/s Mario Monteverde Poinareda.(Palmer-
 sheim-WA).

PHILIPPINES: FEBA 11845 f/d cd.
 in 2 mo. for 3 IRCs.(Lay).

POLAND: Radio Polonia 7270 f/d cd.
 in 90 ds. w/ stickers and sched-
 ule.(MacHarg).

PORTUGAL: Radio Portugal 9705 f/d cd. in 24 ds. for 1 IRC.
 Rcvd. schedule and calendar.(Batson-WV).

RIO MINI: Radio Africa 7189 f/d cd. w/ schedule in 37 ds.
 for ms.(Turnick-PA). 7190 f/d cd. in 35 ds. from the CA
 address. Schedule and form ltr. were received.(Swedberg).

ROMANIA: Radio Romania International 17745 f/d "Pussy Willows
 in Bloom" cd. w/ schedule in 100 ds.(Levison-PA).

SAIPAN: KHBI 15115 f/d "DIY" cd. in 44 ds. for ms.(Stephens-
 AL). 13625 f/d cd. in 74 ds. for ms.(Barr-IL).

SAUDI ARABIA: BSKSA 15345 f/d cd. in 80 ds. w/ schedule and
 ltr.(MacHarg).

SEYCHELLES: FEBA 11860 f/d cd. w/ personal ltr. in 63 ds.
 for 3 IRCs.(Barr-IL). hens-AL).

SICILY: RAI 9515 via Caltanissetta f/d cd. in 103 ds.(Step-
 SOUTH AFRICA: Radio RSA 15365 f/d "Auchland Park" cd. in 63
 ds. for 2 IRCs.(Carson).

SPAIN: Radio Exterior de Espana 9630 f/d "Palacio Cristal"
 cd. w/ schedule, sticker and calendar in 45 ds.(Peck-NY).
 f/d "Barcelona Olimpiada" cd. w/ pennant in 108 ds. for
 \$1.00.(Barr-IL). Radio Beijing 9690 via Noblejas f/d cd.
 in 3 mo.(Barto-CT).

SRI LANKA: SLEC 9720 f/d cd. in 55 ds.(Yamada-JPN). 15120 p/d cd. in 14½ mo. for ms.
 after 2 f/up rpts.(Klinck-NY). 4902 and 4901.9 p/d cds. in 4 mo. for 1985 and 1990
 * receptions.(Barto). Radio Japan 9535 via Kcala f/d "Japanese Cranes" cd. w/ schedule
 in 31 ds.(Palmerheim-WA). 15210 same cd. in 40 ds. w/ schedule.(Kurrasch-NY).

SWEDEN: Radio Sweden International 21500 f/d "Reindeer" cd. w/ schedule and decal in 21
 ds. for 2 IRCs. v/s Wilhelm Von Arnold.(Collopy).

SWITZERLAND: Swiss Radio International 12035 f/d cd. in 15 ds. for 1 IRC.(Batson-WV).
Red Cross Broadcasting Service 6135 f/d cd. in 34 ds.(Foland-MI). Radio Beijing 3985
 via Peromunster and 6165 via Lenk f/d "Cloth Ornament" cd. via Beijing in 3 mo.(Bar-
 to-CT).

SYRIA: Syrian Arab Republic Broad-
 * casting Service 15095 f/d "Globe"
 cd. in 80 ds. w/ sticker and
 a copy of the Syrian Times news-
 paper.(MacHarg). f/d cd. in 113
 ds. via certified mail.(Barr-IL).
 12085 cd. in 1596 ds. w/ flag,
 newspaper and sticker.(Swedberg).
 17710 since receiving my first
 f/d cd. , I received 3 more - one
 for each of my follow up rpts.
 It isn't quite as exciting the
 fourth time!(Kremer-IN).

More reports to follow next month.
 Best of QSLing.....Sam.



RADIO Satellite E.U.C. JR. CUTERVO No. 870
 PROV. SANTA CRUZ
 CAJAMARCA - PERU

O.C. 48 MTS.

CERTIFICADO DE SINTONIA

La Empresa Unipersonal de Comunicaciones,
RADIO SATELITE Certifica que:
RICHARD A. D'ANGELO
 ha captado nuestra señal de transmisión en:
 EE. UU. de A. (U.S.A.)
 Santa Cruz, 3 de Octubre de 1980

ERNESTO LLANO CHAVEZ
 SECRETARIO

REPUBLICA DEL PERU
 OFICINA GENERAL DE REGISTRO Y
 TITULACION DE Bienes Raices
 C.A. C.A.

NASWA Scoreboard

Jerry Lineback
6361 Shore Drive
Douglasville, GA 30135



Jerry A. Lineback, Editor
6361 Shore Dr.
Douglasville, Georgia 30135

March, 1991

Greetings from your SCOREBOARD Editor. This time the SPOTLIGHT is on North America. Remember, C/H = Countries Heard and C/V = Countries Verified. This SCOREBOARD is arranged by Countries Heard. We received some favorable comments on arranging the list by Countries Verified as we did last time. Perhaps we will alternate. The next deadline will be May 15 for the June issue. The SPOTLIGHT will be on Oceania. Please update all totals at least once a year to remain on the SCOREBOARD. Country counts are according to the NASWA Country List, which is available from Headquarters.

Name, State	Total		NA		Best NA QSL
	C/H	C/V	C/H	C/V	
James Young, CA	238	225	23	19	Montserrat
John Tuchscherer, WI	237		28		CKFX 6080
Gordon Darling, P/NG	235	229	23	22	R. Swan
Sam Barto, CT	234	229			
Edward Kusalik, Alb.	231	227	23	22	Turks & Caicos
Marlin Field, MI	225	222	23	23	CFRX
Jerry Berg, MA	224	223	24	24	ZNX32 Barbados
Gerry Bishop, FL	224	210	21	20	CKFX
William Flynn, CA	224	208	25	25	Greenlands R.
Roland Schulze, Germany	224	206	20	19	R Victoria 250W
Harold Cones, VA	223	214	21	20	LV Mosquita
Terry Palmersheim, WA	221	204	19	19	Greenland
Nobuaki Takahashi, Japan	221	189			
Tom Gavaras, MN	219	216	21	21	Greenland
Mitch Sams, KS	218	171	19	18	CKFX Vancouver
Al Miller, OH	217	209	21	21	Belize
Steven Lare, MI	217	180	20	18	CKFX
Bill Harms, FRG	215	151	19	18	CKFX
C. Vernon Hyson, NC	214	203	26	26	Greenland
John Sgrulletta, NY	213	213	22	22	CKFX
Kevin Atkins, AL	211	185	20	19	Greenland
Rick Krzemien, CA	209	194	19	18	Greenland
Ron Howard, CA	209	190	21	21	ORTP Martinique
Paul Buer, FL	208	197	22	21	CKFX
Richard Davis, NM	208	197	22	20	Panama HOH7
Donald Hosmer, MI	208	163	20	17	Swan Is.
Kirk Allen, OK	207	198	19	19	Greenland
Sheryl Paszkiewicz, WI	206	195	19	18	CKFX
Del Fye, FL	206	191	20	18	El Salvador
Jerry Lineback, GA	205	108	20	12	Turks
Frank Orcutt, NY	199	157	21	18	LV del Junco
Robert Ross, Ont.	198	171	18	18	Greenland 3999
Mike Hardester, Okinawa	197	183	19	19	Turks
John Huniwell, NJ	194	189			
Tom Daly, NY	193	45	15	5	Windward Is. BS
Harold Sellers, Ont.	191	155	19	19	Greenland
Kent Willis, KY	191	143	17	14	Greenland
Fred Kohlbrenner, PA	184	150	19	17	Greenland
Henry Michalenka, RI	184	149	21	20	Turks
Jerry Klinck, NY	183	152	20	18	R. Americas
Tom Laskowski, IN	176	139	18	15	CKFX 10W

Name, State	Total		NA		Best NA QSL
	C/H	C/V	C/H	C/V	
Peter Tutak, WA	175	131	18	15	CKFX
Norman Bobb, MN	175		19	1	KGEI
Rev. John Eckert, PA	171	153	16	15	LV Mosquitia
Ichiro Maruo, Japan	169	101	7	5	Sani Radio
Kevin Klein, WI	166	73	16	9	Belize
Charlie Washburn, ME	165	139	23	19	HOLA Panama
Andy Rugg, Que.	164	150	21	19	KNLS Alaska
Greg Hart, FL	161	107	18	12	CKZN
Jim Renfrew, NY	160	121	18	17	XEUW 250 W
Jim Streitmatter, IN	160		16		CKZN
Kurt C. Cox, OR	153	117	18	14	Turks & Caicos
Carl Mann, NB	151	127	20	19	R. Haiti
Thomas Ross, IL	150	126	16	14	CKFX
Carl Radtke, WA	147	147	18	18	Grenada
David Edger, VA	147	120			
Bill Taylor, PA	146	109	15	13	CKZN
Peter Dillon, Greece	146	91	15	12	Belize
David Morby, NY	146	37	16	6	R. Luz y Vida
Roger Morby, NH	143	1	16		
Donna Robinson, IL	141	104			
Jim Smallwood, AL	140	112			
Cris Hazzard, PA	137	105	15	12	Radio 4VEH
Robert Landau, NJ	135	112	18	18	R. Juticalpa
Mark Humenyk, Ont.	133	78			
Dale Park, HI	131	37	14	5	Pirate KVHP
Joe Kremer, IN	129	82	16	11	R. Amanecer
Adrienne Barhydt, OR	117	72			
Joe Zobro, MI	115	87	15	13	R. Educacion, M
David Turnick, PA	109	94	13	11	R. Clarin
Larry Royston, HI	109	37			
Robert Carlsen, OH	106	87	13	12	
Bill Kurrasch, NY	106	66	14	7	Faro del Caribe
Edward Stroh, IL	100	82	14	12	R. Grenada
Richard Wallace, CT	99	49	10	5	LV Evangelica
David Galletly, NY	97	70	10	8	HRVC Honduras
Rev. William Peake, IA	69	50	10	8	CKZN
Bruce Orenstein, NY	66	66			XERMX R. Mexico

Thanks to all who contributed this issue. Please share your DX Totals with us through SCOREBOARD. Remember, May 15 will be the deadline for the next SCOREBOARD and the SPOTLIGHT will be on Oceana. Have a good spring DX season. 73s.

FOR SALE: Drale R7A with RV75 VFO (sold together only). Units are in immaculate condition. Comes with original boxes, manuals, and cables. RV75 VFO allows rock-stable reception with 2 kc/revolution tuning. Has standard filters installed. Price \$1099.00 or best offer. Kirk Baxter, P.O. Box 11201, Shawnee Mission, KS 66207. Phone (913) 338-3855.

WANTED: Old receivers such as Zenith, Scott, Hallicrafters, whether working or not. C. Blatter, 610 West Sunset Drive, Redlands, CA 92373. Phone (714) 792-4184.

FOR SALE: Customized Beam Headings (from/to) and Distances (MI/KM) to over 470 WRTH-91 transmitter sites. Useful in selecting alternate transmissions and choosing listening times based on distances. ITU Country Codes included. Send your location/coordinates, \$6.50. Also "Passport to World Band Radio" '89, \$8.95. "NASWA Journal" complete '89 and '90, \$8.95 a year or \$17.00 for both. "WRTH" '87, \$7.95; '90, \$8.95. All items include shipping. Al Drehmann, Route 2, Box 3-B, Tryon, NC 28782. Phone (704) 894-3398, not collect.

Contributors' Page

Vernon Hyson
9835 Lone Eagle Lane
Charlotte, NC 28215



LOGGINGS CONTRIBUTORS - MARCH 1991 - DEADLINE 10th of MONTH

The following members contributed loggings:

Frank ADEN, Jr, Boise, ID	FRG7 HQ180A CR2021 2 LW Inv V
Brian ALEXANDER, Mechanicsburg, PA	
Kirk ALLEN, Ponca City, OK	NRD515
Steve BATSON, Charleston, WV	DX440
Jerry BERG, Lexington, MA	HQ180A R390A 150' LW
Brian BOULDEN, Fairfield, CA	RJ641 Indoor LW
Terry CANTRELL, Hollywood, FL	R2000 AD Sloper
John CARSON, Norman, OK	NRD525 AD Sloper 500' Bev
Edward CICHOREK, New Brunswick, NJ	R5000 AD Sloper
David CLARK, Newmarket, ONT	NRD525 Antenna Farm
David COPP, Rockford, IL	NRD525 Eavesdropper
Rich D'ANGELO, Wyomissing, PA	R70 AD Sloper
John DAVIS, Johnstown, OH	NRD515 R390 R391 R3904 Inv V
David EDGER, Fairfax, VA	
Kris FIELD, Ambler, PA	NRD525 FL3
William FLYNN, Cave Junction, OR	Sony 2010 TUN3 140' LW
Karl FORTH, Chicago, IL	R70 HQ160
John FRANZ, Saginaw, MI	FRG8800 Random
Harold FRODGE, Midland, MI	R71A AP4 2 Random LW
Pete GRENIER, Sparks, NV	FRG7 MFJ1020A
Vincent HAVRILKO, PAFB, FL	FRG7700 AD370
Eric JOHNSON, Philadelphia, PA	R5000 AD Sloper
Hans JOHNSON, Columbia, MD	R71A AD370 MAP
Rufus JORDAN, Pittsburgh, PA	DX302 Transoceanic
W. KARCHESKI, Holden, MA	
Jerry KLINCK, West Seneca, NY	R5000 90m & 60m Dipole
Fred KOHLBRENNER, Philadelphia, PA	NRD525 FL3 Sony2010
Steven LARE, Holland, MI	
John LEARY, Fortville, IN	
Harold LEVISON, Philadelphia, PA	R70 D2999
Robert MONTGOMERY, Levittown, PA	R390 75' LW
Dale PARK, Honolulu, HI	R5000
Sheryl PASZKIEWICZ, Manitowoc, WI	NRD515
Martin PECK, New York, NY	R71A FRG7
John PRATH, Ft. Lauderdale, FL	NRD525 R71A
Robert D. SWAN, La Vale, MD	NRD525 AD370
Dan UNRUH, Ellensburg, WA	R71A Random
Richard WALLACE, Danbury, CT	S108 DX440 ICF2010
Steve WALLEY, Moreno Valley, CA	R600 ICF2010
Mike WOLFSON, Ashland, OH	R5000 125' LW
Robert ZILMER, Rio Rancho, NM	NRD525 R7

Good to see some new names every month along with the regulars! Don't be shy to send in your loggings - just follow the format of the Log Editors if you don't have some report forms. You can get your report forms from Bill Oliver at the Levittown address. If you have a computer, just format your reports to follow the forms layout. It's a lot easier to share your listening than to hear some of the stations - I'll trade you sending in reports instead of trying to hear Tristan on 3290 khz any day of the week.

The two late loggings last month got mixed in with this month's regulars - I have fixed my system to prevent this, but you are listed above. Thanks for your understanding. 'Till next month, Good DX, Happy Listening & 73's,

Tropical Band Loggings

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Hope everyone has a Happy Easter. In the corrections department, I think the loggings credited to Bob Brown of PA last month were actually those of Eric Johnson of PA. Sorry about that. Just a reminder to put your last name and state abbreviation after each log.

- 1620 PIRATE, WJDI, 12-25, 0326 w/"Free Fallin." ID & addr, PO Box 3821, Kingston NY 12401. Very good. (Berg-MA) 1/1, 0532-0539* IDs, pop mx, fake ads, "Pirate of New York," addr, s/off w/NA. (Alexander-PA)
- 2340 CHINA, Fujian 1, 1/13, 1335 in CH w/long tlk, ID, instl mx. (Lyon-MN)
- 2410 NEW GUINEA, R. Enga, 2/3, 1145-1206 PD w/tlks, song, "I'll be There," gospel-like, tlks, lots of QRN. (Field-PA) 1-19, 1222 w/island vcls, anmt 1236 & into sing-sing. (Clark-ON)
- 2541.9 UNID, Spanish station evenings 2200-0250+. Anybody else hearing? Driving me crazy, hi. (Leary-IN) Some kind of spur?--sp.
- 3180.4 LESSER SUNDAS, RRI Kupang, 1/30, 1350+ spur from 3204.4 w/distorted sig, pretty good lvl. (Allen-OK)
- 3200 SWAZILAND, TWR, 1/14, 0320 in Ndebele w/rel tlk, mx. (Klinck-NY)
- 3205t NEW GUINEA, R. Sandaun, 2/3, 1140-1155 w/EG/PD tlks, sing-sing, SIO=222. (Field-PA)
- 3215 SOUTH AFRICA, R. Oranje, 1/25, 0310 EG w/mx, tlk, weak but clear. (Edger-VA) Welcome to the column!--sp. 1/4, 0320 w/ID, pop mx. (Havrliko-FL) Gd to hear from you. 1/14, 0334 in AK w/mx, ads, anmts, (Klinck-NY)
- 3220 ECUADOR, HCJB, 12/30, 0300-0310 in SP w/cmtry, mx, 0300 ID. (Wallace-CT) 1/19, 0340 SP nx pgm. (Edger-VA)
- 3230.1 NEPAL, R. Nepal weak carrier here since mid-Dec., often covered by strong ute but 1/1 fair w/tlk, mx, //5005, using reserve 5 kW xmtr? Also 1/4, 1244 tlk, interlude on strings Nepali nx 1245, better than 5005 which had growly audio (Clark)
- 3235 INDIA, AIR Guwahati, 1/2, 1244 tlk, subcont chants, fade. Also 1/6, 1232 fair-good w/EG nx but PNG fading up fast to dominate channel by 1240. (Clark-ON)
- 3235 NEW BRITAIN, R. West New Britain, 2/3, 1140 PD tlks, lots of pauses & good sig, SIO=333. (Field-PA) 12/28, 1231 w/lcl & pop mx, tlk in PD, faded by 1249. (Karcheski-MA) Hrd by Cedric Marshall at my QTH 1/19 & 20, anncd 10 kW on 2435 at 1258. Hrd same myself 1/21, sounds like change is imminent but this anncd with Gordon Darling out of the country till Feb! (Clark-ON) 1/27, still here at 1140 w/tlks & lcl QRN. (Havrliko-FL)
- 3240 SWAZILAND, TWR, 1/25, 0255 IS, EG IDs, into rel pgm in Shona. (Klinck-NY)
- 3241.4 MOLUCCAS, RRI Ambon, 1/19, 1236 w/mx //4863.9, Moslem recit, peak at 1245, other Indo carriers on 2904.8, 2962.7 3579.5, 3460.2, 3654.2. (Clark-ON)
- 3245t PAPUA TERR, R. Gulf, 2/3, 1141 w/YL singing, poor. (Field-PA)
- 3249.8 HONDURAS, R. Luz y Vida, 1/14, 0330 EG rel pgm, SP ID. (Klinck-NY) 1/27, 0315 EG "Children's Bible Hour," ID. (Edger-VA) 1/4, 0339 SP tlk, guitar mx. (Havrliko-FL) 1/23, 0345-0400 SP cmtry, ID 0400. (Wallace-CT) 1/8, 1132, instls, FC, ment. Santa Barbara, "Onward Christian Soldiers" SIO=433. (Cichorek-NJ)
- 3255 LESOTHO, BBC Relay, 1/6, 0326 anmts, weak & utility QRM. (Edger-VA) 1/14, 0330 Africa Sce nx (Klinck-NY)
- 3260 NEW GUINEA, R. Madang, 2/3, 1141-1156 PD tlk, C&W mx, La Bamba, "Give it Up," SIO=333. (Field-PA)

- 3270 ECUADOR, R. Ecos del Oriente, 1/9, 0210 mx, full ID 0220, ads, one for clothes, 0300 s/off. (Johnson-MD)
- 3275 PAPUA TERR, R. Southern Highlands, 2/3, 1138 PD group song, tlks, good sig for this one here. (Field-PA)
- 3280 ECUADOR, LV del Napo, 1/16, 0205-0250 SP w/LA pops, ballads IDs, promos, poor sig. (Jordan-PA) 2/3, 1000 SP ID, tlks in Quechua. (Klinck-NY) 2/12, 1110 SP cmtry, mx, ID. (Lyon)
- 3289.8 ECUADOR, R. Centro, 1/18, 0620 LA vcls, ID as "Estacion 112." good sig. (Flynn-OR) Tnx for the loggings. Good to have some more representation from the West Coast--sp. 2/12, 1054 frequent IDs, excited ads, nx, TC. (Lyon-MN)
- 3289.9 NAMIBIA, NBC, 1/14, 0331 EG Western pops, anmts, ID. (Klinck-NY)
- 3290p PAPUA TERR, R. Central, 2/3, 1148 sing-sing at tune in during PNG scan, still on at rechecks, poor. (Field-PA)
- 3300 GUATEMALA, R. Cultural, 1/27, 0133 "Sounds of Silence," "The Air that I Breathe," (Davis-OH) Contribute often!-sp 2/8, 0300 EG ID, "Back to the Bible," "Thru the Bible." SIO=343. (Carson-OK) Tnx for the skeds & etcl--sp. 1/26, 0320 EG rel pgm, fair. (Levison-PA)
- 3306 TIMUR, RRI Dili, 1/4, 1250 "Paloma Blanca" in EG, IN pops, ID, SCI, Jak nx, unusually strong & exc. mod1 (Clark-ON)
- 3316 SIERRA LEONE, SLBS, 1/6, *0557-0610 EG w/short anthem, 2 mins of dead air, anmts, ID, rel choral mx, weak. (Alexander)
- 3320 SOUTH AFRICA, R. Orion, 1/27, 0123 ID, "If you Could Read my Mind." (Davis-OH) 1/3, 0245 Elvis mx, ad for John Deere tractors, AK nx, good. (Morby-NY)
- 3320 SOUTH AFRICA, R. Suid Afrika, 1/14, 0333 AK pop mx pgm. (Klinck-NY) 1/27, 0335 lite piano mx, EG vcls, anmts //3215 (Edger-VA)
- 3325 UNID, 2/3, 1144 sounds like sing-sing in progress, tlk 1204, is North Solomons active? (Field-PA) Don't think so but maybe you've just discovered otherwise!--sp.
- 3335t NEW GUINEA, R. East Sepik, 2/3, 1145 PD tlks, very weak during PNG bandscan. (Field-PA)
- 3336v INDONESIA, unid, 1/27, 1304-1410 Jakarta nx, pops, mx pgm from Deutsche Welle in EG! SCI to lcl nx, poss. ID 1401, "R. Pernerintah." anthem to 1404, next day on 3337, distorted & FMing. (Allen-OK) Good to have you back--sp.
- 3345t PAPUA TERR, R. Northern, 2/3, 1145 PD tlk but just audible above static. (Field-PA)
- 3345 UNID, 1/20, 1247, maybe R. Kashmir, sounds like subcont mx, poor to 1252 fade. Not the PNG station (Clark-ON)
- 3355 INDIA, AIR Kurseong, 1/6, 1230 EG nx, swamped by PNG at 1250 recheck but very good to that point. (Clark-ON)
- 3360 GUATEMALA, LV de Nahuala, 1/4, 1125 SP tlk, accordion mx, marimbas, good sig. (Lyon-MN)
- 3366 BRAZIL, R. Cult. Araraquara, 1/6, 0311-0335 PT nx, ID 0312 mx, FC. (Wolfson-OH)
- 3375 NEW GUINEA, R. Western Highlands, 2/3, 1141-1154 PD tlks, sig improved by 1153. (Field-PA)
- 3380 GUATEMALA, R. Chortis, 1/9, 0050 SP pgm abt family, 0056 ID mx, very weak. (Edger-VA) 1/5, 1145 vcls, ID, anmts, marimba mx, good. (Lyon-MN) 1/23, 1155 lcl mx, IDs (Klinck)
- 3385 NEW BRITAIN, R. East New Britain, 2/3, 1138-1155 PD sing-sing, booming in, SIO=433. (Field-PA)
- 3395 ECUADOR, R. Zaracay, 1/7, 0048 SP mx, ID, TC 0052, tlks. (Karcheski-MA) 12/31, 1107 Andean mx, ID, promo, ". .la gran emisora. ." (Frodge-MI)
- 3395 NEW GUINEA, R. Eastern Highlands, 2/3, 1150 island mx. SIO=322. (Field-PA) 12/19, 1210 tlk, mx, very good (Karcheski-MA)
- 3421.7y INDONESIA, unid, 1/28, 1357 very weak w/M tlk, FMing sig, maybe same as hrd sev yrs ago but not ID'd. (Allen-OK)
- 3460.2 UNID, 1/2, 1235 weak, suspect RPDT2 Aceh Timur rptd active here by John Campbell. RRI Medan 3374.2 also hrd. (Clark-ON)

- 3466.7 INDONESIA, unid, 1/28, 1359, yet another Indo weak, unable to copy anything, more stable than 3421.7, also poss. Indo on 3441.5. Wish we had more reliable info regarding these Indos. (Allen-OK)
- 3473.1v BOLIVIA, R. Padilla, 1/13, 2335-0015 very poor w/LA mx, love song, ID 0000, very little copy. (Allen-OK)
- *3654.3 SULAWESI, RPDP2 Buol Tolitoli, 1/28, 1325-1351 apparent new station, jazz mx, 16 note IS on guitar, ID, "R. Pemerintah Daerah Tingkat Dua Buol Tolitoli," nx abt Buol Tolitoli, anthem, another ID, pop mx, almost 100% copy (Allen-OK) Excellent work, Kirk!!--sp. Kirk also says perhaps this is Luwu's old xmtr?
- 3905 NEW IRELAND, R. New Ireland, 2/3, 1151 church choir, tuned to USB to avoid hams which were S9. (Field-PA)
- 3970 CAMEROON, CRTV Buea, 1/13, 2144 FR w/lcl mx not //Bertoua. (Klinck-NY)
- 4020 CHINA, R. Beijing, 2/11, 1344 in KK w/CH lessons. KK sked is listed in WRTH90 but not WRTH91, like Tuvalu! (Park-HI)
- 4200 CHINA, R. Beijing, 1/21, 1418 EG "Current Affairs," clx mx, a 10 kW feeder! Poor sig. (Park-HI)
- 4635t TADZHIK SSR, R. Dushanbe, 12/18, 0044 in lang w/mx, poor sig w/SITOR QRM, audible only in ECSS (Karcheski-MA)
- 4725 MYANMAR, Vo Myanmar, 1/12, 1243 lang w/lcl mx & YL anmts. (Klinck-NY) 1/19 & 20, 1247 tlk, lite vcls, sev ments of Myanmar, hrd past 1320 but ute QRM. (Forth-IL)
- 4750 CAMEROON, CRTV Bertoua, 1/1, 0051-0110* FR hilife vcls, tlk TCs, sev. ments of Cameroon & Bertoua, prob. on late for New Year, carrier cut in mid-song. SIO=252. (D'Angelo-PA) 1/13, 2122 FR w/Afr. pop mx pgm (Klinck-NY)
- 4750 TIBET, Xizang BS, Lhasa, 12/19, 1147 CH mx, tlk, TC 1200, time pips, nx, poor. (Karcheski-MA)
- 4755 BRAZIL, R. Educacao Rural, 1/30, 0000-0016 w/ID, tlk by 2 OM, vcls, SIO=252 w/static. (D'Angelo-PA)
- 4755 HONDURAS, Sani Radio, 1/21, 2330 tlk on military school in SP, natl nx, fair. (Edger-VA) 1/22, 2358 ID, LA pop mx. (Havrilko-FL)
- 4760 USSR, site? Mayak pgm, 1/2, 2200 IS. In past have hrd s/on here for R. St. Rodina at 0300. (Johnson-MD)
- 4765 CONGO, RTV Congolaise, 2/1, 2200 EG ID, EG nx, mx, good. (Morby-NY)
- 4766 CUBA, R. Moscow relay, 1/27, 0259 ID, tlk in RS, SIO=555. (Havrilko-FL)
- 4770 NIGERIA, R. Nigeria, Kaduna, 1/26, 0435 EG w/rel pgm, ID in EG. (Klinck-NY)
- 4789.7 IRIAN JAYA, RRI Fak Fak, 1/6, 1110 ending Jak nx, anthem, lcl ID, still fairly good 1335 recheck. (Clark-ON)
- 4795 CAMEROON, CRTV Douala, 1/6, 2109-2122 EG net nx //4850, 5010, back to own FR pgm 2116, SIO=252. (D'Angelo-PA)
- 4795.2 ECUADOR, LV de los Caras, 1/15, 0145 SP mx, IDs, anmts by MEW. (Klinck-NY)
- 4799.8 ECUADOR, R. Popular Independiente, 1/31, 0525 mx, IDs only as R. Popular. (Johnson-MD)
- 4799.8 GUATEMALA, R. Buenas Nuevas, 1/20, 1229 in lang w/tlks & IDs (Klinck-NY)
- 4800 ASIATIC RSFSR, R. Rodina via Yakutsk, 2/9, 1724 RS w/class mx, EZL w/talk over, Soviet rock mx, poor //4940, 4485. (Park-HI)
- 4810t SOUTH AFRICA, R. Suid Afrika, 1/16, 0336 AK tlk abt oil prices, TPs & ID 0400, SIO=332. (Peck-NY)
- 4815 BURKINA FASO, RTV Burkina, 2/7, 0625 nx abt war, ads for Nestea, hilife mx, ID, poor. (Carson-OK)
- 4819.9 ANGOLA, EP da Huila, 1/11, 2153 hilife mx, IS 2201, nx, 2214 mx break, RN ID 2216. (Johnson-MD) Nice one--sp.
- 4820 PERU, R. Atahualpa, 1/8, 0215-0240 SP cmtry, mx, ID w/ment of Cuzco. (Wallace-CT) 2/3, 1009 tlks, lcl mx. (Klinck)
- 4824.5 PERU, LV de la Selva, 1/15, 1015 Peruvian mx, SP anmts, ID. (Klinck-NY)

- 4830 BOLIVIA, R. Grigota, 1/6, *0948-1009 w/vcls, ID C953, "amigos oyente de R. Grigota. .6 min. para la 6 de la mañana." Vcls, hrd till Tachira s/on. (Allen-OK)
- 4835 GUATEMALA, R. Tezulutlan, 1/4, 0240 SF social anmts. (Edger)
- 4839 COSTA RICA, R. Reloj, 12/25, 1009 ID on this new freq. (Berg-MA)
- 4840 MANCHURIA, Heilongjiang PBS, 1/18, 1240 CH vcls, tlk by W. (Lyon-MN)
- 4840p PERU, R. Andahuaylas, 1/6, 1016-1037 w/comunicados, sports nx 1029, rapid tlk, poss. ID killed by QRN. Mensajes after 1030, best in LSB. (Allen-OK)
- 4844.3 GUATEMALA, R. K'ekchi', 1/20, 1243 w/lcl mx. (Klinck-NY)
- 4845 MAURITANIA, ORTM, 1/4, 2212 in AR w/tlk on Mideast situation. (Klinck-NY) tent on 1/20, 2235 w/tlk in Hassaniya & griot mx sounding like Qur'an. (Holotko/Peck-NY)
- 4850 CAMEROON, CRTV Yaounde, 1/2, 2235 FR w/AFR. songs, listener requests, very good. (Copp-IL)
- 4850 INDIA, AIR Kohima, 1/20, 1230 poss. //3355 w/EG nx but not // after 1235 when 3355 had Hindi nx. (Clark-ON)
- 4860 INDIA, AIR Delhi, 1/10, 0028 "National Hookup." IS, tlk in Hindi, EG nx to 0040*. (Johnson-MD) 1/3, 1245 EG ID, into Hindi w/lcl mx. (Klinck-NY)
- 4865 CHINA, Vo Jinling, 1/11, *1153-1205 temporarily here w/instls to 1155 ID, brief tlk, mx, 1200 pips, ID, nx. SIO-252 w/deep fades. (D'Angelo-PA)
- 4865 COLOMBIA, LV del Cinaruco, 1/2, 0400 mx, ID, weak. (Edger-VA)
- 4870 BENIN, ORTB, 1/2, 2254 FR w/EZL mx, pops, 2300 ID, NA to s/off, good. (Copp-IL)
- 4870 UNID, 1/20, 1315 time pips, Asian mx, weak & faded out. Also weak carrier on 4902, suspect SLBC. (Clark-ON)
- 4875 BRAZIL, R. Jornal do Brasil, 1/26, 0245 PF tlks, mx. (Klinck-NY) Think this one is Super R. Roraima--sp.
- 4875 CHINA, Vo Jinling, back here 1/21 good at *1155. (Berg-MA) 1/20, 1234 CH discussion. (Klinck-NY) 1/19 tlks at 1340. (Clark-ON)
- 4890t PAPUA TERR, NBC Port Moresby, 2/3, 1151 singing u/CW, exc. PNG conditions today. (Field-PA)
- 4894.6 VIETNAM, Vo Vietnam, 1/20, 1240 VT tlk, mx. (Klinck-NY)
- 4895 SARAWAK, RTM Kuching, 1/12, 1325 in lang w/tlk over plucked strings, vcls, echo effects, 5005 also hrd. (Lyon-MN)
- 4899v UNID, 1/27, 1136-1202 LA station here, mostly mx but one ID sounding like R. Siocon, poor. (Allen-OK)
- 4899.8 GUINEA, RTV Guineenne, 1/13, 2219 FR w/political discuss, ID 2230. (Klinck-NY)
- 4900p CHINA, Vo Strait, Fuzhou, 1/6, 1411 still audible w/CH vcls by YL. (Clark-ON)
- *4901 NICARAGUA, R. Informaciones de Centro America, 1/21, 1153 mx, quick ID, 1200 Nicaraguan anthem, anmt, QTH ref, ancd FM & 4920 kHz, drifted around to 4902, fade by 1210 (Berg)
- 4904.5 CHAD, RN Tchadienne, 1/27, 0426, tuning sig, anmts, FR mx. (Edger-VA) 1/26, 0448 FR mx. (Klinck-NY)
- 4910t CAMBODIA, Vo People Cambodia, 1/19, 2328-2355 nice peak but no ID, seems same lang as 5407.8, interesting vcls, ancr tlk, forgot to check for //6090. (Allen-OK)
- 4910 ZAMBIA, ZNBC, 1/14, 0356 IS, anthem, EG ID. (Klinck-NY)
- 4911 ECUADOR, Emisoras Gran Colombia, 1/2, 0113-0230 tlk, harp, IA mx, ads, jingles, promos, poor sig. (Jordan-PA) 1/26, 0306 w/tlk, ID, mx pgm. (Klinck-NY)
- 4914.9 BRAZIL, R. Anhanguera, 1/26, 0845 vcls, ID & freq 0902, tlk, poor. (Carson-OK)
- 4915 PERU, R. Cora, 1/26, 0325-0340 romantic instls, IDs, tlk abt Lima, ad string. (Jordan-PA) 1/27, 0445-0456* vcls, OA mx, canned IDs, s/off anmts, NA. (Alexander-PA)
- 4919.9 ECUADOR, R. Quito, 1/30, 0250 ID, tlk, mx. (Klinck-NY) 1/9, 0330-0340 cmtry, ID, ads. (Wallace-CT)

- *4920 NICARAGUA, R. Informaciones de Centroamerica, 1/22, 1200 ID ment. Managua, 106.1 MHz and 4920 kHz, sig not as good as when they were on 4901. Not hrd anywhere 1/25 or 1/26. (Berg-MA)
- 4925.8 RIO MUNI, RN de Guinea Ecuatorial, 1/6, 2150-2201* SP tlk, Afr. vcl, NA 2158, ex-5004, good. (Alexander-PA)
- 4935 BRAZIL, R. Capixaba, 1/30, 0021-0046 political speech, ad string, ID, vcls, 0037 more political tlk. (D'Angelo-PA)
- 4935 KENYA, KBC, 1/15, 0155 EG IS, ID, anthem, brief rel tlk. (Klinck-NY)
- 4939.6 VENEZUELA, R. Continental, 1/26, 0330 SP IDs, lcl mx. (Klinck-NY)
- 4940p ASIATIC RSFSPR, Yakutsk, 1/6, 1010-1103 RS, lite instls, choral folk mx, opera, tlk //4920, weak. (Alexander-PA)
- 4940 UKRAINE, Kiev, 1/24, 0500 mx, IS, ID. (Johnson-PA)
- 4955 BRAZIL, R. Marajoara, 1/7, 0440-0510 pops, ads, 2 IDs 0500, running late! SIO=222, needed LSB. (D'Angelo-PA)
- 4955 PERU, R. Cultural Amauta, 1/6, 1039-1101 w/bilingual pgm in SP/Quechua, thot hrd R. Cultural but no official ID (Allen)
- 4960.6t ECUADOR, R. Federacion, 1/17, 0046-0057 w/rustic vcls w/3 beats, M anncr, dead air 0057-0105, exc sig. (Flynn-OR)
- 4960 INDIA, AIR Delhi, 1/2, 0024 IS, chants, very weak & almost gone when //4860 for Hindi nx at 0030. (Clark-ON)
- 4965 BRAZIL, R. Alvorada, 1/6, 0948-1010 w/pops/ballads, ID, anmts, no sign of R. Santa Fe. (Alexander-PA)
- 4965 COLOMBIA, R. Santa Fe, 1/3, 0753-0823 lively LA vcls, ment Santa Fe, 0803 ad, ID, jingle, "musica de R. Santa Fe," mx, SIO=454. (D'Angelo-PA) 1/5, *1000-1023 opening anmts, IDs mx, very good. (Alexander-PA)
- 4975t BRAZIL, R. Iguatemi, 1/4, 0030 tent ID, raz. pops, in the clear. (Flynn-OR)
- 4976 UGANDA, R. Uganda, 1/6, 2045-2101* EG rock vcls, 2058 ID, s/off anmts, orch piece (anthem?) SIO=252. (D'Angelo-PA)
- 4990 INDIA, AIR Madras, 1/11, 2358 IS to s/on anmts in presumed Tamil, subcont mx. (Johnson-MD)
- 4990.7 PERU, R. Ancash, 1/15, 1026 tlk, ID, mx. (Klinck-NY)
- 5005.2 NEPAL, R. Nepal, 1/20, 1248 Nepali nx, ID. (Klinck-NY)
- 5009.3 MADAGASCAR, R. Madagasikara, 1/13, 0257-0310 IS, anthem, anmts, rel mx, tlk, fair w/ute QRM. (Alexander-PA)
- 5010 CAMEROON, CRTV Garoua, 1/30, 0520 lcl mx pgm, FR ID, tlk in lang. (Klinck-NY)
- 5011.2 ECUADOR, Esc. Radiofonicas Pop, 1/27, 0310-0316* rustic flutes, IDs, ment Riobamba, off amid HC mx, no NA. (Alexander-PA) 1/1, 1020, tlk, sev. TCs, ment. Chimborazo province, ID 1044. (Johnston-KY) 1/15, 1023 tlks, mx. (Klinck-NY)
- 5019.7 VIETNAM, Vo Vietnam down from 5019.9, 1/4, 1210 w/tlks, // 4894.6 fair & now separable from Nanchang 5020. (Clark-ON)
- 5020 NIGER, La Voix du Sahel, 1/30, 0527 FR ID, mx. (Klinck-NY) 12/17, 2039 poor w/mx, call-ins. (Karcheski-MA)
- 5020 SOLOMON ISLANDS, SIBC, 1/9, 1154-1200* EG mx pgm, ID, s/off anmts, orch NA, SIO=252. (D'Angelo-PA)
- 5023.1p BHUTAN, BBS, 1/24, 1310 domestic choral mx, weak but clear (Clark-ON)
- 5025 BENIN, Parakou, 12/17, 0550 mx in lang, FR ID, good. (Karcheski-MA) tent on 1/22, 0617-0631 FR mx w/drums & harp, IS 0629, poss. nx, good sig. (Flynn-OR) 1/22, 2130 FR pops, "R. Parakou" ID, tnx Schulze tip in FT 588 that they ID this way. (Johnson-MD)
- 5025.4 BRAZIL, R. Transamazonica, 1/19, 0937 ID, pops. (Alexander)
- 5026t UGANDA, R. Uganda, 1/13, 1606 lang, rel pgm, hymns by YL chorus, good. (Flynn-OR)
- 5034.4 CENTRAL AFRICAN REPUBLIC, RTV Centafricaine, 1/30, 0529 FR ID, political tlk by 2 M. (Klinck-NY) 1/10, 2120-2200 FR ID, cmtry, faded in & out. (Wallace-CT) 1/4, 2200 FR drama, ID. (Klinck-NY)

- 5041.1 ANGOLA, EP de Benguela, 1/6, 2155-2300* "R. Nacional de Angola" ID 2208, PT pop mx, s/off w/anthem. (Alexander-PA) 1/24, 2155 good over last sev days, pop mx, ID 2200, IS, nx. (Johnson-MD) 1/10, 2210 ID, lcl mx. (Klinck-NY)
- 5055.4 IRIAN JAYA, RRI Nabire, 1/19, 1235 tlk, fanfare, echo anmt, radio drama 1338, EZL 1350, //6127.5 till 5055 closed at 1357 w/lcl IS. 6127 on but fading, no SCI or nx 1400. 1st time hrd the 2 freq running //. (Clark-ON)
- 5059 ECUADOR, RN Progreso, 1/27, 0310-0335* HC mx, OM DJ, ID 0332, NA, good. (Alexander-PA)
- 5260 KAZAKH SSR, Alma Ata, 12/20, 0201 RS w/cmtry, question & answer segment, orch mx, tlks. (Karcheski-MA)
- 5290 ASIATIC RSFSR, Krasnoyarsk, 12/19, 2158 RS IS, bells, tlk, NA, mx, poss. nx. (Karcheski-MA)
- 5407.8t CLANDESTINE, Vo Democratic Kampuchea, 1/13, 2337 tlk in Cambodian, brief guitar btwn tlk, ment Kampuchea sev times, Hrd prob Cambodia 4910 same time frame. (Allen-OK)
- 5500 UNID, 1/5, 1342 w/mx, just caught as signal was fading out. RRI Biak reactivated? (Clark-ON)
- 5536.6 COLOMBIA, R. Nueva Vida, 1/24, 1014 nice copy w/clear ID, slogan. Also 5570 1/27 at 1040 w/clear ID, rel pgm. (Allen)

Looks like we have some room so. . . A reminder that the loggings appear in month/date order once again due to popular demand. Heard from Tropical Bands contributor MIKE HARDESTER, who is stationed at Camp LeJeune and so far hasn't been sent to the Gulf. Another serviceman, VINCENT HAVRILKO, sent in loggings this month; and we hope both of you stay stateside.

JERRY KLINCK is planning a big remodeling job so won't be doing much DXing until fall but that should be a good time to get back into it.

JOHN LEARY sent a great postcard sized photo of radio shack; he's got a lot of equipment at his disposal. John is W9WHM. MARTIN PECK says the logging of Mauritania marked Holotko/Peck was received on John Holotko's FRG-7 in Yonkers.

STEVEN LARE & KRIS FIELD sent a map and listing respectively of PNG, which definitely shows which stations are in which radio country. Thanks, both of you, and let's put this one to rest finally.

DAVID EDGER of Fairfax, VA, sent several nice logs as you can see. He uses a Kenwood R-5000, Sony 2010 and SW-1 antennas are dipoles, longwires and vertical. David's call is AA5NU.

JOHN CARSON in Oklahoma sent literature from Radio Prague, KNLS and Voice of the Mediterranean. Thanks a lot--didn't know Voice of the Mediterranean printed any info sheets.

Everyone is welcome to contribute to this column. A few guidelines would be to put your name and state abbreviation after each logging since these get cut into strips if you haven't already cut them. If you are sending logs for the April issue, try not to send anything heard before February. If you do cut your logs into strips, which is a great help, by the way, please leave some room between logs because it's very hard to handle spaghetti-thin strips of paper when sorting. And, of course, remember the basics such as date, time & frequency. Well, enough of that. The deadlines once again are the 10th of the month to Vern Hyson or the second to last Saturday if sending direct to me. Thank you to all the reporters this month and good DXing!

International Band Loggings

Wallace C. Treibel
357 N.E. 149th Street
Seattle, WA 98155



- 5925 USSR R Tallinn in EST 0702, nx, Tallinn ID 0709, UTE QRM (Allen OK 1/13)
- 5955 COLOMBIA LV de los Centauros in SP 0350, jaunty pop mx, ID, ads (Jordan PA 1/26)
- 5975 COLOMBIA R Macarena in SP 1056, local mx pgm, frequent ID's (Klinck NY 2/5)
- 59816 GUATEMALA Union R AWR in SP 1145, religious talk, mx (Klinck NY 2/5)
- 5990 MYANMAR V of Myanmar in lang 1315, Asian pop mx, fanfare, tlk (Clark ONT 1/19)
- 6020 NETHERLANDS RN in EG 0030, nx re Gulf war, Media Network, g (Carson OK 1/25)
- 6065 SWEDEN RS in EG 2220, tlks re Soviet Baltic republics (Prath FL 1/19)
- 6070 CANADA CFRX Toronto in EG 0454, sports, ads, nx, wx (Carson OK, Havrilko FL)
- 6075 COLOMBIA Caracol Bogota in SP 0818, ID's, Lat Amer mx, g (Carson OK 1/19)
- 6085 CANADA Deut Welle relay in EG 0336, mx, nx, ID, IS, phone # (Batson WV 1/20)
- 6085 GERMANY Bayer Rundfunk in GM 0705, nx, waltzes & vocals, ads, ID (Jordan PA 2/1)
- 6121 ALBANIA R Tirana in EG 2038, tlk re new pluralistic system, f (Cichorek NJ 1/11)
- 6140 AUSTRALIA VLW6 Perth in EG 1608, "The Late Show", g (Flynn OR 1/9)
- 6150 COLOMBIA Caracol Neiva in SP 0600, ads, Lat Amer mx, exc (Aden ID 2/2)
- 6570 MYANMAR Defense FB Tanungyi in lang 1245, stringed mx, tlk, f (Forth IL 1/19)
- 6900 TURKEY Turk Met R in TK *0458, NA, lcl mx/vocals (Paszkiwicz WI, Alexander PA)
- 7115 BULGARIA R Sofia in EG *0400, nx, mx, cmntry (Levison PA, Unruh WA, Boulden CA)
- 7190 YEMEN Repub Yemen R in AR 0334, tlk, mx, ID on the hour (Klinck NY 1/11)
- 7255 BOTSWANA R Botswana in EG 0524, African mx, ID (Unruh WA 1/4)
- 7255 NIGERIA V of Nigeria in EG 0500, NA, ID, addr, mx, nx, sports (Franz MI, Peck NY Johnson PA) also in EG 2040, sked, TC, into FR 2100, drum roll IS (D'Angelo PA)
- 7275 SO. KOREA R Korea in KR 1040, KR pop mx, tlks, QRM from BBC, f (Peck NY 1/21)
- 7375 COSTA RICA RFPI in EG 0500-0805, DX pgm, "New Dimensions", pronos, "Earthwatch" cmntry on Gulf war, mx (Forth IL, Boulden CA, Carson OK)
- 7400 USSR R Vilnius via Kiev in EG 2300, nx, receipt reqs, ID (Unruh WA, Johnson PA)
- 7475 TUNISIA RIVT in AR 2230, tlks, cmntry, ID, Qu'ran (Peck/Holotko NY, Wallace CT)
- 7485nf ISRAEL Kol Israel in HB 0030-0457*, ezl mx w/few interruptions, ID and nx after pips on the hr (Treibel WA 2/17) Thanx to Frank Aden of Boise, Idaho for tip.
- 8350nf? IRAQ R Baghdad in AR *0230, bird call IS, NA, Koran recitns (Alexander PA 2/3)
- 9022 IRAN VOIRI in TK 0410, tlk by very nervous M, f (Peck NY) in AR 0249, ID, tlk (Havrilko FL) in SP 0154, nx, ID, mx (Wolfson OH) in EG 1930, nx, mx, ID, cmntry on Gulf crisis, freqs, mailbag (Cichorek NJ, Franz MI)
- 9355nf? ISRAEL Kol Israel in HB 2258, pop mx, pips 2300, ID, tlk re Scuds (Peck NY 1/31)
- 9370nf? PAKISTAN RP in EG 1730, nx, vocals, beamed to Europe (Paszkiwicz WI 1/1)
- 9395 GREECE VoG in EG 0315, nx, ID, mx, into GK lang (Batson WV, Peck NY, Jordan PA)
- 9420 GREECE VoG in EG 0340, nx, cmntry re GK-Albanian relations, p (Boulden CA 1/2)
- 9425 GREECE VoG in GK 0435-0450*, pgm of GK mx, ID, g (Carson OK 2/8)
- 9445 TURKEY VoT in EG 0400, TK mx, ID, nx (Kohlbrener PA, Frodge MI, Davis OH, Unruh WA) in EG 2300 similar pgm (Franz MI, Havrilko FL; Batson WV, Levison PA)
- 9475 EGYPT R Cairo in EG 0235, Egyptian film mx, Gulf rpt (Davis OH, Peck NY 1/31)
- 9475 NO. MARIANAS KHBI Saipan in EG 1310, interview w/Tokyo rpt, ID (Havrilko FL)
- 9505 JAPAN R Japan Tokyo in EG 1405, world nx, aid to Gulf area, exc (Walley CA 1/14)
- 9535 SUDAN N Unity R in AR/EG *1400, cmntry in EG, corruption, Sudan People's Forces, AR tlk 1457, lcl mx & chants, ID, mixing w/R Japan (Copp IL, Alexander PA 1/12)
- 9535nf SRI LANKA R Japan relay in EG 1457*, nx, freq changes, pips (Clark ONT 1/19)
- 9540 VENEZUELA R Nacional in SP 1114, world nx, ID, freqs, skeds (Forth IL 1/19)
- 9545 ANTIGUA Deut Welle relay in EG 0315, cmntry re US in Gulf war, exc(Unruh WA)
- 9555 PHILIPPINES R Veritas in Burmese 1145, vocals, tlk, ID, address, IS trumpet, f (Cichorek NJ 1/8) in EG 1326, ID after pgm in Burmese (Havrilko FL 1/21)
- 9560 ETHIOPIA VoE in EG 1500, nx, tlk re Ethiopian & Western mx, p (Swan MD 1/12)
- 9565 BRAZIL R Universo in PT 0050, relig pgm, hymn by chorus, //11905 (Flynn OR 1/9)
- 9570 CHINA R Beijing in EG 1615, "Current Affairs" beamed to Afr (Flynn OR, Unruh WA)
- 9580 AUSTRALIA RA in EG 1330, tlk re keeping Israel out of Gulf war (Havrilko 1/21)
- 9630 NETHERLAND ANTILLES R Nederland relay in EG 0752, "Media Network" (Park HI 1/1)
- 9635 VATICAN STATE VR in EG 0318-0330*, nx, ID, IS (Batson WV 1/23)
- 9640 ANTIGUA BBC relay in EG 0545, nx on Gulf war (Batson WV, Grenier NV 1/17)
- 9645 NORWAY RN in NO 2300, IS, tlk re war in Iraq, f-g (Holotko/Peck NY 1/20)
- 9645 FINLAND RF in EG 0000, nx, "Business '90" into SW 0019 (Batson WV, Boulden CA)

650 SWITZERLAND SRI in EG 0300, IS, ID, freq, Gulf nx, p (Jordan PA 1/29)
9655nf? GABON(p) VOA via Moyabi in EG *0258, IS, ID, nx, vp, //9585 (Jordan PA 2/3)
9650 CANADA R Korea relay in EG 1000, "Shortwave Feedback" (Cantrell FL 1/10)
9655 NORWAY R Denmark relay 0030, IS, ID, into DN pgming, g (Forth IL 2/5)
9655 SWAZILAND TWR in Chewa 0425, address in Malawi, ID (Paszkiwicz WI 1/3)
9710 PHILIPPINE IS. R Veritas in KR 2059, IS, ID in EG, into KR (Johnson PA 1/25)
9715 CONGO RTVC in FR 0658, IS, several ID's, lcl Af mx, DJ (Alexander PA 1/20)
9755 CANADA RCI in EG 0113, live from Jordan re Scud attacks on Israel (Grenier NV)
9785nf ALASKA KNLS High Adventure Ministries in EG 0400-0700, big band mx, ID, sermon by Dr. Gene Scott incl scathing attack on Iraq govt (Walley CA, Treibel WA 2/14)
9835 HUNGARY R Budapest in EG 0130, nx, cmntry on Gulf crisis, f (Levison PA 1/16)
9885 SWITZERLAND SRI in EG 0205, nx, "Swiss Merry-go-Round", //12035 (Carson OK 1/13)
11500 CHINA R Beijing in EG 2015, instrumls, ID, econ tlk, //9920 (Cichorek NJ 1/11)
11585 ISRAEL Kol Israel in EG 2253, tlk re chem warfare, ID (Holotko/Peck NY 1/20)
11600 CHINA R Beijing in EG 1300-1356*, nx, cmntry, mx, skeds & freqs (Zilmer NM 1/25)
11605 ISRAEL Kol Israel in EG 0000, IS, ID, war nx (Franz MI, Davis OH, Grenier NV)
11645 GREECE VOG in EG 2230, GK mx, ID, nx on war in Gulf, f (Carson OK 1/20)
11650 GUAM KTWR Agat in EG 1500, relig pgm "Telling the Truth" (Zilmer NM 1/29)
11665 GUAM KTWR Agat in Mandarin 0940, tlks, choral hymns, ID?, vp (Jordan PA 1/29)
11720 NETHERLAND ANTILLES R Nederland relay in EG 0290, nx, cmntry, jazz (Batson WV)
11734 TANZANIA Vof Zanzibar in SH 1618, tlks, drum rhythms, ID 1659 (Flynn OR 1/21)
11770 PORTUGAL R Free Afghanistan relay in Dari 0300, ID, Qu'ran chants (Peck NY 1/16)
11800 AUSTRALIA RA in EG 1450, "Innovations", into nx 1500, f (Carson OK 1/9)
11810 RWANDA Deut Welle relay in EG 1928, "Newslines Cologne", nx, ID, f (Cichorek NJ)
11810v IRAQ R Baghdad in AR 0515, patriotic mx, Gulf nx, ID's, AR mx (Jordan PA 1/17)
11821v COLOMBIA RN Bogota in SP 2210-2303*, LA mx, tlks, NA, //17863 (Alexander PA 2/3)
11840nf SRI LANKA R Japan relay in EG 0210, nx, ID, g (Johnson MD 1/9)
11855 NORWAY RNI in EG 2101, nx, "Norwegian Press Review" (Wolfson OH 1/14)
11860 IRAQ R Baghdad in EG 0247, mx, ID, Hussein speech (Batson WV 1/16) in EG 0420 nx, cmntry, ID, NA, and s/off 0430 (Frodge MI 1/15) Note: Probably silent now!
11870 COSTA RICA AWR in SP 2250, ID, Christian pgm from California (Davis OH 1/15)
11880nf ALASKA KNLS in EG 2035, ad, skeds, mx, address, ID (Wolfson OH, Johnson PA 1/13)
11880 SPAIN RNE in EG 0000*, nx on Iraq war, oil fires etc., exc (Unruh WA 1/22)
11925 SOUTH AFRICA RSA in EG/PT 0456, IS, ID in EG, NA, into PT pgming, g (Carson OK)
11930 AUSTRALIA RA in EG 1213, tlk on JP econ, ID, hit songs of 1990 (Klinec NY 1/13)
11935 ALBANIA R Tirana in AL 0233, mx/vocals, tlk, nx, g (Levison PA 1/23)
11940 JORDAN R Amman in AR 0454, tlk, folk mx, pips 0500, ID, f (Peck NY 1/26)
11945 UNITED ARAB EMIRATES R Dubai in EG *0330-0400*, theme mx, freqs, pips, TC, nx Items on Gulf war, pgm on Islam & the West, NA at s/off (Jordan PA 2/6)
11980 GUAM KSDA Agat AWR in KR 2034, tlk re the Bible and God, gospel mx, p (Park HI)
11990 IRAQ R Baghdad in AR 2150-2320, lively mx, tlks, patriotic vocals, boomy audio, prayer chants, jammers, RB now "Mother of Battles Radio", p (Jordan PA 1/28)
12020 MONACO TWR in EG/Kurdish 1559, music box IS, ID, theme mx, tlks, p (Park HI)
12050nf UNITED KINGDOM BBC London in AR 0300-0600, chants, sked, IS, ID (Jordan 1/17)
13605 AUSTRALIA RA In EG 1133, cleaning up the Gulf (Montgomery AL) in CH 1358, IS, ID, tlks (Peck NY 1/16) in EG 2200, international rpt, //15160 (Carson OK 2/3)
13615v BANGLADESH RB in AR 1645, sub-cont vocals, //17170, g (Flynn OR 1/15)
13630 COSTA RICA RFPPI in EG 0224, nx re Gulf war, mx, QTH, UN items, f (Levison PA) in EG 1153, pgm on Randy Steele's anti-war protest (Montgomery PA 2/3)
13660 UNITED KINGDOM BBC London in AR 1400, nx, AR mx, ID, f-p (Jordan PA 1/12)
13670 CANADA RCI in EG 1830, "SMW Digest", IS, ID, into FR 1900 (Batson WV, Park HI)
13685 SWITZERLAND SRI in Romansch/IT 0743, IS, nx re Iraq war, f (Carson OK 1/11)
13720nf BELGIUM BRT in EG 0030, "Brussels Calling", repl 9925 freq (Zilmer NM 2/7)
13745nf UNITED KINGDOM BBC London in AR 1615*, s/on buried R Australia (Treibel 2/12)
13745 AUSTRALIA RA In EG 1615, ID, cmntry, look back at Gulf crisis (Cichorek NJ 1/15)
13753 ISRAEL Kol Israel Home Service in HB 1600, //21610, 17545, 17590(zilmer NM 2/10)
15115 NO. KOREA R Pyongyang in EG 0015, pol cmntry, ID, mx (Franz MI, Kohlbrenner PA)
15120 SEYCHELLES FEBA in Farsi 1800-1830*, Farsi pgming, exc (Aden ID 1/29)
15120 INDIA AIR Delhi in EG 0240, Asian nx, EG from 0240-0250, ID (Walley CA 1/15)
15160 AUSTRALIA RA in EG 2230, mx sels, vocals, nx on the hr, g (Levison PA 1/13)
15260 ASCENSION IS. BBC relay in EG 2000, nx, TC, ID (Cichorek NJ, Karcheski MA)
15265 INDIA AIR Bangalore in EG 2159, ID, nx, cmntry, ex-15255, f-p (Park HI)
15290 PHILIPPINE IS. VOA relay in EG 2210, State Dept. advisory on Kuwait (Boulden CA)
15325 PORTUGAL R Canada relay in RS 1442, nx, cmntry, IS, ID, p (Cichorek NJ 1/15)
15345 TAIWAN VOFC Taipei in EG 0210, nx, "Focus on Investment in Taiwan" (Boulden CA)
15400 UNITED ARAB EMIRATES Dubai in EG 0330, cmntry on Iraqi prisoners (Davis OH 2/6)
15420 GUAM KTWR Merizo in IN 2150, relig pgm, ID, nx?, g (Carson OK 2/7)

- 15430 SAUDI ARABIA BSKSA in Somali 0407-0455*, ME mx, tlks re Gulf war, pips on 1/2 hr, M into nx, AR mx, NA at s/off, xmsn to E Africa (Jordan PA 2/6)
- 15540 BELGIUM RTBF in FR 1948, L Am mx w/vocals, annmnts, ID 2009 (Wolfson OH 1/6)
- 15560 NETHERLAND ANTILLES R Nederland relay in EG 0744, "Media Network"(Carson OK 2/7)
- 15575 SO. KOREA R Korea in RS 2330, ID, tlk re temples in Korea (Holotko/Peck NY 1/20)
- 15600 IRAQ R Baghdad in AR 1250, AR & patriotic mx, ID?, nx, polemics, f (Jordan 1/31)
- 15610 GUAM KSDA Agat in EG 2330, relig pgm, ID, pgm on diets (Cichorek NJ, Forth IL)
- 15750usb USSR R Moscow feeder in RS 1345, tlks, some EG rx played, //15630 (Zilmer NM)
- 17440 ICELAND Reykjavik in IC 1420-1451*, interview, Gulf war nx, ID (Cichorek 1/12)
- 17500nf TUNISIA RTM in AR 1735, ex-17610 due to WYFR interference? (Flynn OR 1/16) in AR/FR 0645, AR vocals, tlks in FR, ID in FR, nx in both langs, f (Jordan PA 2/3)
- 17525nf GREECE VoG in EG 1530, nx re Gulf war, repl 17535, //15650 (Zilmer NM 1/26)
- 17554 PAKISTAN RP in Urdu 1505, //13655 (Clark ONT) in EG 1600, IS, ID (Karcheski MA)
- 17575 ISRAEL Kol Israel in EG 2230, nx re arrival of Patriot missiles, advice on air raids (Prath FL, Zilmer NM) in EG 1126, call-in show (Cichorek NJ)
- 17605 NETHERLAND ANTILLES RN relay in EG 1830, tlk on Gulf war, g (Levison PA 1/26)
- 17620 FRANCE RPI in EG 1600, world nx, Club 95-16, ID, mx (Walley CA, Batson WV)
- 17710 VATICAN STATE VR in EG 0507, tlks on Afr topics (Johnson PA 2/4) in EG 1734, nx to Africa, "Looking Back at 1990", f (Unruh WA 1/1)
- 17720 USSR R Kiev in EG 0017, cmnts on birds & weather, Ukraine theater (Levison PA)
- 17730 BRAZIL Swiss R relay in EG 0218, "The Two Bobs", ?76135, f (Walley CA 1/13)
- 17730 VATICAN STATE VR in EG 1730, drums, ID, tlks on environment & youth (Park HI)
- 17745 SOUTH AFRICA RSA in FR 1843, tlk by M&W, mx, QRM from WYFR 17750 (Cichorek 1/11)
- 17770nf NEW ZEALAND RNZI in EG 0430, cricket match, sports nx, vg (Jordan PA 1/25)
- 17785 JAPAN RF Tokyo in IN 2358, tlk, ID, brief mx, f (Cichorek NJ 1/15)
- 17850 FRANCE RPI in EG 1602, rpts on French involvement in Gulf War (Grenier NV 1/17)
- 17865nf NO. MARIANAS KHBI Saipan in EG 0045, sermon, ID in SP/EG, p-f (Treibel WA 2/9)
- 17900nf ITALY RAI in IT 1530-1555*, pop mx, nx, IS, g (Flynn OR 1/22)
- 17940nf? IRAQ(KUWAIT) Voice of the Masses in AR 1500, tlk abt war, lcl mx, vocals, using Kuwait xmtx, //11990, 15600 (Zilmer NM 1/30, Flynn OR 1/22)
- 17960nf? SAUDI ARABIA(t) BSKSA in AR 2140, tlks, ME mx, f //9570 (Alexander PA 2/2)
- 21455usb ECUADOR HCJB Quito in EG 0143, tlk on rejection of children, g(Havrliko FL 1/24)
- 21490 AUSTRIA RAI in SP/GM 1350, waltz mx, ID, into MG 1400, f (Carson OK 1/15)
- 21605 UNITED ARAB EMIRATES Dubai in EG 1330, war nx (Klinck NY 1/17) in EG 1600 with readings from the Koran and from lectures, //21675, g (Levison PA 1/9)
- 21630 SWITZERLAND SRI in EG 1520, "Dateline", nx, cmntry (Carson OK, Zilmer NM 1/25)
- 21730 PAKISTAN RP in EG 0240, dictation-speed nx, audio muffled, //15115, p (Park HI)
- 21770 SWITZERLAND Red Cross BS in FR/EG 1659, trumpet fanfare, into EG 1718 (Park HI)
- 21815 BELGIUM BRT in DT 1631, mx sels, vocals, P annr between sels, exc (Levison PA)
- 21850nf ITALY RAI in IT 1200-1400, nx, cmntry, mx, ID 1353, //17900 (Zilmer NM 2/5)
- 25645 BELGIUM RTBF in FR 1445, pop & rock mx, nx, sports (Zilmer NM 1/27)
- 25740 GERMANY Deut. Welle in GM 1300-1355*, nx, cmntry, mx, //21560 (Zilmer NM 1/29)
- 25950usb ECUADOR HCJB Quito in EG 1920, cmnts on gospel radio stns in Canada (Levison PA)

CLANDESTINE STATIONS

- 6305 GUATEMALA? LV del Cid in SP 0531, tlk, ID, g (Karcheski MA) in SP 1216, Top 40 U.S. pop mx, ID 1216, exc (Havrliko FL 1/21)
- 6325 KAMPUCHEA/THAILAND V of the Khmer in KH 1155, regional vocals, f (Karcheski MA)
- 7100 ANGOLA? A Voz Resistancia do Galo in PT 2125-2324*, lcl Af choral mx, tlk, "Big Ben" chimes 2259, ID, ezl US ballads, anthem (Alexander PA 2/2, Johnson MD 1/17)
- 9045 EGYPT Iran's Flag of Freedom R in Farsi *0329-0523*, harangue, martial mx, bubble jammer, multi-lang ID incl EG, NA 0330 & s/off (Peck NY 1/26, Alexander/)
- 9940 GUATEMALA? LV del Cid in SP 1554, hrd here instead of 99417, g (Havrliko 1/25)
- 9965 GUATEMALA R Caiman in SP 1557, usual pgmng w/ment of Cuba, exc (Havrliko 1/25)
- 15100 EGYPT Iran's Flag of Freedom R in lang? *1629-1715, s/on w/multi-lang ID incl EG, anthem at 1630, tlk in lang, march & lite instrum mx, ME mx (Alexander 1/6)
- 15500 ANGOLA? A Voz Resist Galo Negro in PT 2050-2133, IS, NA, ID, experimental pgm, TC's, tlk re Angola, African mx (Paszkiewicz WI 1/19)
- 17540 EGYPT V of Unity in Pashto/Dari 1555-1610*, ME mx, //12230, 15685(Alexander 1/6)
- 17940 EGYPT? V of Free Iraq in AR 1617, tlks, mx, heavy bubble jam, p (Karcheski 1/6) in AR 2250, mx, tlk, jam, //15600 (Paszkiewicz WI 1/25) in AR 1425 with vg sig & no bubble jammer on this freq or //15600 (Clark ONT 1/19)
- *****

English Schedules

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Prepared 02/21/91 at 9:26 PM.

Thanks to **Ed Evans** of WCSN, **John Carson** (OK), **Jonathan Marks** (Holland), **Gordon Darling** (Papua New Guinea), **Joe Hanlon** (NJ), **Will Pickard** (OH) and **Richard Langley** (NB) for contributions this month.

Notes

On February 24 **Eric Johnson** (PA) and **Kim Elliott** (VA) heard **R Vilnius** on its return to the air via USSR relay sites. Regular programming was suspended for continuous news and comments on the state of the republic. It is fascinating, history-making listening.

R Damascus changed its frequencies twice since the first of year. On February 5 **Jonathan Marks** told us that **Radio Australia** has added a new frequency of 25750 for the Persian Gulf at 1430-1530 UT. Additionally, **Jonathan** said **Mother of All Battles Radio** has not been heard since February 1. The reason is unknown but one can easily draw at least two hypotheses.

Richard Langley advises that on February 13 **R Jordan** was heard with English at 2120-2205 on 9560, well beyond the normal 1730 domestic service sign-off. It now appears to be a one-time event but it may be worth keeping an ear on 9560 if the situation changes.

Chuck Oliver (TX) asks about the Arabic-speaking stations on 17940 and 17960 he hears (poorly) in the late afternoon and evenings. Chuck, these were the stations listed in last month's *Journal* by **David Alpert** and often dis-

cussed on *Media Network* and *World of Radio*.

At the end of January **R Canada Int'l** dropped its 22 m frequencies at 1515, 1715, 1800, 0100 and 0200; I heard no reason given. **Will Pickard** notes an additional **BBC Waveguide** airing Monday at 1635. Thanks for the telephone call and the positive comments on the column.

Will, the relays of the domestic service English broadcasts at 2130 and 2330 from **Radio Dubai**, noted in late January, were short-lived and disappeared during the second week of February. These broadcasts may return to SW should events in the Persian Gulf change. It is worth watching.

Bruce Macgibbon (OR) tells us that **R Moscow** is running a separate service to **WNA** at 04-08 UT unlike the other targeted services now incorporated into the **WS** (mentioned last month). Taking advantage of good conditions, **Bob Brown** and I checked this out and heard the **WNA** release starting out on 7 frequencies. The **NA** service closing announcement is still heard at 06 on **WS** frequencies. It appears that the consolidation into one service is not complete.

According to an interview heard on **RCI's SWL Digest** February 17, major programming reductions at **R Budapest** are forthcoming June 30. The final results are not yet determined, but Italian, Spanish and Turkish services will end and German output will be reduced. The English releases will be restructured, and it will affect the **DX** show. Watch *Listeners Notebook* for details.

Changes entered between 01/27/91 and 02/21/91.

ENGLISH LANGUAGE SW BROADCAST SCHEDULES: By Start Time
Compiled by Thomas R. Sundstrom, U2XQ

Start End Time Time (UTC) (UTC)	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Freq #8	Target Area	Notes	Record Last Updated
0000 0100	USA	VOA/NE	15225	11825	11805	6125					ME/N Af/Eu		02/02/91
0030 0055	Belgium	BRT	13720	13685							NA/SA		02/02/91
0100 0200	Canada	R Canada Int'l	11940	11840	9535						LA	Su-Ro	02/03/91
0100 0200	USA	VOA/NE	15225	11825	11805	6125	6095				ME/N Af/Eu		02/02/91
0200 0300	Canada	R Canada Int'l	11940	11845	9535						LA	Tu-Sa	02/03/91
0200 0300	USA	VOA/NE	15225	11825	11805	6125	5965				ME/N Af/Eu		02/02/91
0230 0430	Iraq	R Baghdad	11830	11810							NA/SA/Tnd/Pakis	not hrd since 1-19	01/31/91
0300 0400	USA	VOA/AF	21600	17715	15350	11835	9575	6035			Africa		01/29/91
0300 0330	USA	VOA/NE	17810	15160	11905	11825	5965				ME/N Af/Eu		02/02/91
0400 0600	USSR	R Moscow/WMA	17750	17720	15180	12050	12010	11710	9895		WMA		02/12/91
0500 0600	USA	VOA/NE	15205	11825	9715	9700	9670	7200	7170	6140	ME/N Af/Eu	#10 -0700	01/29/91
0600 0630	USA	VOA/NE	15205	11825	11805	9760	9700	7325	7170	6140	ME/N Af/Eu	& 5995 & 3980	01/29/91
0630 0700	USA	VOA/NE	15205	11825	11805	9760	9700	7325	7170	6140	ME/N Af/Eu	test xman	01/27/91
0800 1000	Australia	R Australia/NE	25750								ME		02/21/91
0800 0900	USA	KHLS	11715								As		01/29/91
0800 1000	USA	VOA/NE	21700	21570	15195	15160	11735				ME/N Af/Eu		01/29/91
1000 1200	USA	KCSH	13770								Eu	60 deg Sa-Su	02/11/91
1000 1100	USSR	R Moscow	17880	17840	17810	17590	15445	15345	15280	12055	World Service	#10 v Cuba	02/14/91
1030 1055	United Arab Emirates	R Dubai	21675	21605	15435	15320					Eu/N Af		02/10/91
1100 1300	Iraq	V of Peace/Baghdad	11860								ME	not hrd since 1-17	01/31/91
1100 1200	USSR	R Moscow	21800	21785	17850	17840	17810	15550	15460	15280	World Service	#10 v Cuba	02/12/91
1200 1300	USSR	R Moscow	21800	21785	17880	17840	17810	17780	17710	15550	World Service	#10 v Cuba	02/12/91
1300 1400	USSR	R Moscow	21785	21725	17880	17840	17810	17790	15550	15510	World Service	#384 v China	02/10/91
1400 1625	France	R France Int'l	21770	17650	11910	7125					SE As	#182 ME #6 Af	02/05/91
1430 1500	Australia	R Australia	25750	21775	17630	11930	11800	11720	9770	9580	As/Pac/PapIG	#5 Af	02/05/91
1500 1530	Australia	R Australia	25750	17630	11930	11800	11720	9770	9580	7240	As/Pac/PapIG	exc Mon	02/21/91
1500 1600	USA	KHLS	9615								As		01/29/91
1500 1630	USA	VOA/NE	15395	15205	9700	9645	7125				ME/N Af/Eu		01/29/91

1500 1600 USSR
 1515 1530 Canada
 1630 1700 USA
 1700 1730 Iraq
 1700 1750 USA
 1715 1730 Canada
 1730 1800 Ecuador
 1730 1800 USA
 1800 1830 Canada
 1800 1900 USA
 1800 1900 USA
 1900 2100 USA
 2000 2100 USA
 2005 2105 Syria
 2100 2300 Iraq
 2100 2300 Iraq
 2100 2200 USA
 2110 2210 Syria
 2200 2400 USA
 2205 2225 Vatican State
 2230 2300 USSR
 2300 2330 USSR

R Moscow
 R Canada Int'l
 VOA/ME
 V of Peace/Baghdad
 VOA/ME
 R Canada Int'l
 HCJB
 VOA/ME
 R Canada Int'l
 KILLS
 VOA/ME
 VOA/ME
 KILLS
 R Damascus
 R Baghdad
 V of Peace/Baghdad
 VOA/ME
 VOA/E As
 Vatican Radio
 R Vilnius
 R Vilnius

21450 17810 17790 17780 17670 15465 15345 15280 World Service
 21545 17820 15325 11935 11915 9555 CBE EU
 15395 15245 15205 11710 9700 9645 7125 6180 ME/N Af/EU
 11860 WE
 15395 15205 9700 9645 7125 6040 3980 ME/N Af/EU
 21545 17820 15325 7235 5995 CBE EU
 25950 21480 21455 17790 EU
 15395 15205 9700 9645 7125 6040 ME/N Af/EU
 17820 15260 Afr
 11945 As
 15205 9700 6040 ME/N Af/EU
 15205 11710 9760 9700 6040 ME/N Af/EU
 11910 As
 15095 12085 EU/NA
 13660 EU
 11860 RE
 15205 11960 11710 9760 9700 6040 ME/N Af/EU
 12085 9950 MA/Aus/NZ
 17820 17735 15305 15290 15185 11760 9770 7120 E As/SE As/Pac
 11830 9600 7125 As/Aus/NZ
 6100 EU
 17720 17690 15180 9750 7400 MA

#10 v Cuba
 #3-8 v Eu rlys
 not hrd since 1-17
 #445 v Eu relays
 #183 USB
 Salsu -1900
 not hrd since 1-17
 not hrd since 1-17

Changes entered between 01/27/91 and 02/21/91.

ENGLISH LANGUAGE DX SHOWS: By Day of Week
 Compiled by Thomas R. Sundstrom, W2KQ

Shortwave DX Program	Show Xmas Start Time	Start Time	Country	Station	Freq							Target Area	Notes re DX Show	Record Last Updated
					#1	#2	#3	#4	#5	#6	#7			
** DAY OF THE WEEK: Monday	1630	1600	England	BBC	15260	9515							MS: MA/CA/Carib	02/17/91
Wavesguide														
** DAY OF THE WEEK: Saturday	1800	1300	USA	WACR	15690									02/15/91
World of Radio														

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The definitive guide to the shortwave hobby by Harry Helms

The wait is over! The complete "A to Z" guide to SWLing—the new *Shortwave Listening Guidebook* by Harry Helms—is now available!

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Get your copy of *Shortwave Listening Guidebook* today! It's available from leading SWL equipment dealers or direct from HighText Publications for \$16.95 plus \$3.00 shipping and handling (\$4.00 foreign). California residents please add sales tax.

Improve the performance of your shortwave radio—put a copy of *Shortwave Listening Guidebook* next to it!



the GRAND TOUR with CANCER AND CAPRICORN 1991

This contest runs from 08.03.1991, 1800 UTC, to 24.03.1991, 2400 UTC. The contest is opened for all DXers all over the world regardless to their membership in other DX clubs. Membership in the DSWCI is not needed as well.

Primary contest frequencies are 5950 - 26100 kHz. Logs outside this band will be valued by half points.

Contest fee is 5 IRC or 3 US\$. Another payment cannot be accepted. Send together with this form to the following address:

Jaroslav Bohac, CSLA 2900/11, 400 11 Usti n.L., CZECHOSLOVAKIA.

Deadline: 31.03.1991. (Date of post stamp).

Each participant get a contest diploma with classification and score. The first three participants will be awarded non-cash prizes. Three additional prizes will be drawn into all participants regardless to their scoring.

In Part 1 listen please to any BC station from the respective country in a listening period of 15 minutes at least. For one country one log only. Utility, clandestine and unofficial stations are not allowed.

Scoring: 1000 points of each country is divided by a number of logs concerning the respective country. Point value of each country is rounded to two decimal places.

In Part 2 listen please to as many DX programmes as possible. The DX programmes must be produced by any BC station from the contest countries. For one country one DX programme only. Scoring by the same way as in Part 1.

Part 3 gives you a chance to raise your score answering the quiz questions. System of scoring: Full value of all correct answers is 1/10 of points reached in Part 1 + Part 2. Example If you reach 300 points in Part 1 and 400 points in Part 2, and 85% of your next answers in Part 3 are correct, your total contest score is then $300 + 400 + 8.5\% = 759.50$ points.

We wish you good luck!

- In case you want to participate in the next contest, make please an "X" mark.
- If you want us to send you more contest forms for the next Grand Tour, indicate a number of copies and enclose 1 IRC.

Press-Release

6th Clandestine-Contest

The 6th Clandestine-Contest will be held from March 29 to March 31, 1991.

Participants from all over the world will be listening to approximately 15 clandestine stations according to a detailed contest schedule.

After the results are compiled, each participant will receive an extensive result-list and a certificate indicating his own result. The best participants in several categories will also get prizes.

An eight-page booklet with the contest-rules and other informations about the contest is now available from the following address: Clandestine-Contest, Mathias Kropf, Mähr.-Schönberger-Str. 9, 6430 Bad Hersfeld 1, Federal Republic of Germany. Please don't forget to enclose return postage.

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