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the JOURNAL

NORTH AMERICAN SHORTWAVE ASSOCIATION

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COMITÉ INTERNATIONAL DE LA CROIX-ROUGE

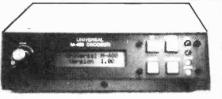
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The M-400 provides all the benefits of a reader, without the limitations. The M-400 is totally self-contained; there is nothing else to buy. It is compact and operates from 12 VDC making it a natural for auto or boat installations. The two line liquid crystal display provides a (40) forty characters readout (not just 8 or 16 like other readers). This super-twist LCD can be read from any angle, and the front of the M-400 is sloped to provide the optimum in viewing and operating convenience. A 4000 character scrollable buffer stores incoming text for your review. LED indicators for Mark, Space, Input and Data are provided. A gray, all metal cabinet provides a solid look of quality. For the shortwave listener, the M-400 provides all the standard reception modes ... and then some

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- . Baudot, the original RTTY mode, can be copied in all five speeds (45, 50, 57, 75 and 100 baud). Baudot is used by some press agencies and weather stations
- SITOR A and B are extremely popular teletype modes on shortwave. SITOR is used for communications between ships and coastal stations.
- FEC-A is a new press-diplomatic mode gaining wide acceptance primarily in Europe Extensive FEC-A traffic can be monitored in North America during the day
- ASCII at 75, 110 and 150 haud. SWED-ARQ This Swedish diplomatic mode can be copied in the U.S.A. during the day
- FAX That's right; with a graphics compatible parallel printer attached, you can copy FAX from shortwave. You can print weather maps and charts from around the world The printer is optional. (FAX decoding is at 120 LPM, 576 IOC).
- VHF-UHF MODES will be enjoyed by the scanner enthusiast.
 - ACARS Stands for Aircraft Communications Addressing and Reporting System. This new aviation teletype mode is in wide use at most major airports. Extensive traffic can be copied from both nearby commercial airports and aircraft. The M-400 is the first unit to offer this capability. · GOLAY digital pager mode
 - · POCSAG digital pager mode
 - . DTMF decoding of all 16 DTMF digits
 - CTCSS (PL) frequency decoding is also available. Read all 41 standard tones.
 - DCS (Digital Coded Squelch, also referred to as Digital Private Line) all 104 standard codes.

The M-400 has several functions that you can program. With the use of an optional speaker, the M-400 can be programmed to pass only the audio you want to hear! You can set the M-400 to only activate the speaker when it receives a CTCSS, DCS or DTMF code of your choosing. The M-400 comes with an Instructive Owner's Manual and 12 VDC wall adapter. Note: For accurate DCS ,PL and pager reception, direct connection to the receiver's discriminator may be required. One year ilmited warranty. Made in America by Digital Electronic Systems. The M-400 is the affordable accessory for every shortwave or scanner enthusiast

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RECEPTION MODES

RTTY Baudot

45, 50, 57, 75 and 100 baud.

SITOR A AROTOR, Amtor A

M SITOR B

FECTOR, Amtor B. NAVTEX M ASCII

75, 110 and 150 baud

SWED-ARQ

3. 9 or 22 character groups

EC-A

96 and 144 haud Facsimile (FAX)

120 LPM 576 IOC

■ POCSAG Digital pager mode.

■ GOLAY

Digital pager mode.

ACARS

VHF Aviation teletype mode

■ DTME

16 digits

Printer Output

CTCSS (PL)

41 standard frequencies

DCS (DPL) 104 standard codes

SPECIFICATIONS				
Dimensions	8.75°W x 2.5°H x 8°D			
Weight	2 Lbs. (5 Lbs. ship with PS)			
Display	LCD two line 40 char total			
Fitter Tones	Low tone (mark = 1275 Hz)			
	Fixed: 170, 425 and 850 Hz			
	Variable. 100 - 1000 Hz			
Power	11-16 VDC @ 200 ma			
	AC wall adapter included			
Speaker Input	4-16 Ohms 100 MW max			
	Mono mini jack (1/8*),			
Discriminator Input.	10K Ohms .25V max			
	Mono mini jack (1/8*)			
Speaker Output	Mono mini jack (1/8')			

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NASWA Notes

Bob Brown KW3F 238 Cricklewood Circle Lansdale, PA 19446 CompuServe 74756,1557 GEnie R.BROWN106 Packet KW3F @ WB3JOE



Wow!!! Ask for volunteers and you get swamped around here. Many, many thanks to the six club members that stepped forward to volunteer to host the club segment on the DX Purtyline. Rich D'Angelo, Kris Field, Bill Oliver and I have been reviewing the situation and we hope to have an announcement in next month's JOURNAL. Certainly the club's motto of "Unity and Friendship" was never more evident. Again, thanks to our volunteers. Without you there would be no club.

Speaking of volunteers, I want to report an error that was made last month. You may recall the article titled - *User Evaluation:* NRD535D. The author of that article was Rick Krzemien, not Krzemienark as was reported. Sorry Rick! In a recent correspondence from Rick he told me that he is interested in starting a Bay Area chapter of NASWA for members living in the San Francisco/Oakland area of Northern California. If you are interested in this, please contact:

Rick Krzemien 5398 Concerto Circle Concord, CA 94521-3250 (510)687-2719 after 4pm MST

Congratulations to Mark Meece and Harold Cones for being the first two members elected to ANARC's Executive Board that were not Club Representatives. Bill Oliver was also reelected. The three will serve two year terms that began on January 1st. They join Kirk Baxter, Dave Marshall, Paul Swearingen and Rich D'Angelo (Chairman) as the seven person governing body of ANARC.

The dates for the North American DX Championships ("NADXC"), which is sponsored by ANARC, will be March 4 through March 6, 1994. Further information can be found in the official notice which appears in this month's JOURNAL. NASWA members have always placed well in this shortwave listening event so I look forward to many of our

Welcome to the following new NASWA members -

Michael Bates, St. Paul, MN
David M. Berish, Hazelton, PA
Paul M. Casale, Long Island City, NY
Ed Catrow, Mobile, AL
Arthur A. Chartier, St. Petersburg, FL
James Cherry, Winchester, VA
Rick Doehner, Houston, TX
Larry Ellis, Dearborn Hts., MI
Bob Fore, Cold Spring, MN
James E. Gruhn, Omaha, NE
Lester Hill, Arcade, NY
Steve Imlay, St. Joseph, MO
Rene A. Lamoureux, Woonsocket, RI
Jay S. Mancus, Great Neck, NY

John Miller, Merrick, NY
Ed Millis, Dallas, TX
John Mongle, Abingdon, VA
Charles Montgomery, Okanogan, WA
Michael Papadakis, New York, NY
Richard Rothar, Iselin, NJ
Pete Schmidt, Venice, FL
Mr. Yasuhiro Shiozaki, JAPAN
Bill Stoner, Stockton, CA
Kristen Tarp, Sacramento, CA
William P. Tully, Syracuse, NY
Joel H. Wickens, Shrewsbury, PA
John Woerz, San Gabriel, CA
John A. Wolkowicz, Burbank, CA

Our Motto is - "Unity and Friendship"

members participating in this challenging contest. Thanks to NADXC Administrative Committee - Chairman Harold Cones, John Fisher and Kris Field - for organizing the DX championship.

Clandestine DXpert Mathlas Kropf from Germany sends along results from his eighth annual survey of clandestine radio activity. During the past 12 months the activity of clandestine stations on shortwave has dropped by around 11% to a new total of just 1883 hours per week. The sharpest drop was to Africa with a 30.7% decrease in broadcasts primarily due to clandestine broadcasts to Ethiopia dropping from 149 hours per week to zero. Broadcasts to Asia dropped 9.2% while activity in the Americas increased by

Calendar Of Events

- Jan 19 Meeting, N.E. Ohio SWLs. Cuyahoga County Library, 9089 Brecksville Rd., Brecksville, OH (Rt. 21, just South of Rt. 82). 7:00 PM. For info send SASE to: NE Ohio SWLs, c/o Donald J. Weber, P.O. Box 652, Westlake, OH 44145-0652
- Jan 21 Meeting, Philadelphia Area NASWA Chapter. Kulpsville Holiday Inn, Kulpsville, PA. 7:30 PM Contact Dan Cashin (215)446-7831
- Jan 21 Meeting, The Boston Area NASWA Chapter. Bull Cafeteria, Billerica, Mass. 7:30 PM Foradditional information please contact Paul Graveline (508) 470-1971, or via modem on Tom's BBS, (617) 698-8649 (300/1200/2400 baud), (617) 698-8734 (9600).
- Jan 15 The Miami Valley DX Club (All band orientation) meets on the third Saturday of each month at 1 PM. Locations vary but are announced in advance. For info, call the MVDXC (614) 471-9973 Or, send a SASE to MVDXC, Box 292132, Columbus, OH 43229-8132
- Jan 29 2nd Annual Eastern Nebraska DXpedition, Fremont NE (near Omaha), at a lodge overlooking the Platte River allowing for beverage antennas and overnight DXing. Two meals and lodging for just \$30. Contact: Carl Mann, (402)895-8100 for info, reservation, and maps.
- Feb 6 The Tidewater SWLs meet on the first Sunday of each month at 6:30 PM. For info, call Joe Buch, (804) 721-2782.
- Mar 4-6 The North American DX Championships (NADXC), for more info contact: Dr. Harold Cones, 2 Whits Court, Newport News, VA 23606
- Mar 11-12 The 7th Annual Winter SWL Festival, Kulpsville Holiday Inn, Kulpsville, PA. Registration form in last Journal or SASE to Winter SWL Fest, PO Box 591, Colmar, PA 18915
- Apr 15-18 Convention 1994 to be held at Camp Iona in North Otago, New Zealand. For more info contact: Convention'94, c/o Basil Jamieson, P. O. Box 179, Oamaru, New Zealand
- Aug 10-14 Radio Comm '94, Holiday Inn, Costa Mesa, CA. For more info send a #10 SASE to: SCADS, 6398 Pheasant Dr., Buena Park, CA 90620

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

just 0.7%. Although target areas decrease by one to 24, three new areas made the survey Turkey, Tajikistan, Somalia and Egypt. For the second year in a row Cuba, Iraq and Iran, respectively, were the three most active target areas. Our thanks to Mathias Kropf for sharing the results of his survey with us. There is no better place to follow the monthly activity in clandestine broadcasting through the pages of Hans Johnson's Listeners' Notebook column.

Paul Ormandy of the New Zealand Radio DX League writes in to tell us about Convention 1994 to be held at Camp Iona in North Otago, New Zealand from Friday April 15th to Monday April 18th 1994. This is an excellent chance to gather with international DXers in truly a special DX setting. The cost is NZ\$60.00 per person which covers accommodations and meals for the duration of the convention. Further information can be obtained by writing to:

Convention'94 c/o Basil Jamieson P. O. Box 179 Oamaru, New Zealand

Tell them you read about it in The JOURNAL.

I understand as a special request of long time NASWA member Gerry Dexter, WWCR began direct shortwave broadcasts to Europe on November 15, 1993 with a country music format. According to the station's press release, this is a first time ever format for international shortwave broadcasting. Thanks to Adam Locke of WWCR for providing that information.

Here's some late breaking news from long time member Bill Matthews in Columbus, Ohio. In honor of Bill's 100th DX Report over Radio Korea's Shortwave Feedback

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. Contributers 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 Brov'n KW3F, Dave Kirby N8JQX, and Hausie WB4JSP, host an always lively gang of DX monitors. (Best heard in the eastern half of NAm)

program, the Samoa Broadcasting Service ("SBS") will be taping a special 10 minute segment which will be a part of Radio Korea's English language programming on February 20, 1994. This special feature program will be broadcast at the regular times on the usual frequencies of Radio Korea's transmissions. Although Western Samoa is not on shortwave, the SBS has agreed to issue special QSL cards if return postage in the form of two IRC's are included with listener reception reports. Use the address in the WRTH for sending reports to Western Samoa. Remember, Radio Bahrain began as a relay over Radio Kuwait so an impressive response could be instrumental in getting shortwave broadcasts from Western Samoa on the air. Congratulations in advance to Bill Matthews for achieving this plateau and to the Samoa Broadcasting Service and Radio Korea for this joint cooperative effort.

Finally, Kris Field provides an important update to the prize information contained in last month's *JOURNAL* about the *Winter SWL Festival*. John Wilson of Lowe will present an HF-150 Communications Receiver on Saturday evening. Check page 64 of last month's *JOURNAL* for complete registration information or the *Calendar of Events*.

FOR SALE: Grundig Satellit. Totaly digital with two timers for tape recording. Enter frequencies for LW, MW, FM (stereo or Mono), and SW up to 30 MHz by key pad, tuning knob, or 42 programable memories. This mid-sized portable operates on 4 D batteries or universal power supply. Like new. Price \$300.00 in U.S. funds only. Donna Ring, 269 Terhune Avenue, Passaic, NJ 07055-3326. Phone (201) 471-4211 evenings or weekends.

Musings

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

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

The DX season is rolling along and so are the DX peditions. December saw our second DX pedition of the season to the legendary Gifford Pinchot State Park in central PA. While conditions were far from outstanding, the East-West Pennsylvania and Central Maryland NASWA Chapter managed another successful affair thanks to our ability to adapt.

In many respects this DXpedition was a *little* different. For starters, Dave Valko and Hans Johnson decided to visit international broadcast giant WINB in nearby Red Lion, PA. This seemed to be the highlight of the weekend for Dave and Hans; I told you conditions weren't that good! Also, the antenna set up is getting too complicated for me. I left pieces of rain soaked clothing in numerous thorn bushes helping to string a 1000 foot beverage. At one point I turned to Fred Kohlbrenner to say something to him only to notice Fred sneaking back to our dry, warm cabin. Splitter boxes, coal cables, PL-259 plugs, ground rods, etc. all seem to make this more difficult than necessary. It seems the more complex the antenna arrangements the worst propagation conditions appear. Can any one explain this phenomena? If Jerry Berg can DX off a portable wipe antenna, why can't the rest of us do the same?

While reception conditions were uneven, the food was spectacular. Dave's Mom came through with a Boston Creme pie that added pounds to the waist lines of our little group. Even Mr. Oreo Cookie couldn't resist. Once again, the Kohlbrenner was the sandwich of choice of the discriminating connoisseur. Chef Johnson surprised the gang with piping hot biscuits during the early morning hours and Sunday morning saw steaming hot pancakes and bacon. As a result of all this cooking activity, we find ourselves in need of a portable, RF shielded microwave oven suitable for DXpeditions. Once we get the microwave, we can consider leaving the receivers and antennas at home where they belong, hi!

73 - RAD

FRENDX: Twenty Five Years Ago (Jan. 1969)... In the OPEN MIKE column, members Gerry Dexter and Ed Shaw joined the discussion of what makes for a good QSL... Charlie Loudenboomer presented the second annual International Worldwide Continental DX Association Golden Knob Awards... SHORTWAVE CENTER editor Richard Wood interviewed Glenn Hauser about harmonic DX... in Gregg Calkin's QSL REPORT column member Jerry Stuart reports that Chinese Postal Authorities will confiscate all mainland mail if not addressed to "People's Republic of China." Fifty-five reporters started off the New Year by reporting to editor Dan Ferguson's LOG REPORT column. Among the faithful were Gerry Dexter, Marlin Field, Glenn Hauser, Del Hirst, Chris Lobdell, Henry Michalenka, Al Niblack, Cesar Objio, Bob Padula, Ed Shaw, Al Sizer, Bill Sparks, John Tuchscherer, Tom Williamson and Richard Wood...

Easy Listening

Richard D. Cuff 213 Parkview Avenue Allentown, PA 181G4-5323 GENie R.CUFF MCI Mail 375-4854 Prodigy NCHT70A

Christmas Presents

Santa Claus brought me a couple presents that I'll share with you here. First, I have now arranged things with the BBC to receive my copy of BBC Worldwide each mouth well in time for Journal deadlines. NASWAn Eric Walton of Vancouver, BC sent a "CARE package" of several program schedules. Unfortunately, the Drake R-8 didn't arrive under the Christmas tree. Guess I'll have to wait until next year.

BBC World Service Highlights

News and Features

Sunday, January 9th, 0230: The Untouchables is a single 30-minute feature on India's Fifth Caste, also known as Pariahs, or Dalits. They constitute more than one-fifth of India's population. They're assumed to be Hindus in the Indian constitution, but, at a cultural level, they're the oldest Dravidian people with a religion and music of their own. Repeated the same day 1630 and the following Monday 0730.

Sunday, January 23rd, 1401: What Makes Them Run? is a single-part 30-minute program examining the influences that compel politicians to run from office. The program looks at motivations of male and female politicians, the temperament required for politics, and differences between today's and yesterday's politicians. Repeated Monday the 24th 0630 and 1001.

Mondays 0415: Unconsidered Trifles is an 8-part 15-minute series profiling passionate collectors. Collectors of 20th century household ephemera - from cereal boxes to cans of cleaning fluid - comics, children's newspapers, material on slavery, and the works of Lewis Carroll are profiled. Repeated Mondays 0915 and Wednesdays 1515.

Wednesdays 0030: Omnibus is a weekly 30-minute program befitting its name. You never know exactly what will be featured. One of the January features looks at early Western contact with China: The 1792-1794 diplomatic mission of King George III's ambassador Lord Macartney. At that point in history China was largely unknown to the Western World, and the cultural misunderstandings between East and West which led to the failure of Lord Macartmey's meeting with the Chinese emperor have echoes to the present day. Repeated Wednesdays 1001 and 1930.

Fridays 1215: You Know It Makes Sense is a 6-part 30-minute series on the senses concluding this month. The January 7th program explores taste; the January 14th program looks at the manipulation of sound. The January 21st program looks at perfumery and aromatherapy and matters olfactory; the January 28th program looks at the specialized skills involving touch required for a lute player and a potter. First airing 0730; also repeated 1930.

Sports

Sundays, beginning January 30th, 0101: This Is Your Sport is a new 30-minute program hosted by Paddy Feeny on the history of various sports activities. The series begins with a look at the history of horse racing from its roots in North Africa and South Arabia. February editions look at the development of cycling, boxing, motor sports, track and field, and cue games (e.g. pool). Repeated Mondays 0630 and 1001.

Science and Technology

Wednesdays 0130: Science Or Fiction? is a 15-minute series concluding on January 26th looking at the narrowing gap between technological possibility and futuristic fantasy. The January 5th program looks at

the speed of light and how this serves as an upper limit to the speed of travel - or does it? The January 12th program looks at suspended animation; on January 19th, robots with minds of their own; the January 26th program searches for extraterrestrial aliens. Repeated Wednesdays 0930 and 1715.

Saturday, February 5th, 0130: Seeing Stars is a monthly 15-minute program on astronomy and the highlights of star-gazing for the month to come. The winter is normally considered the premier star-gazing season, so take advantage of the winter darkness and see what you can see. Seeing Starts first airs on the first Saturday of the month at 0130, with repeats the following Sunday (February 6th, for example) at 0430, 0915, and 2215.

Arts, Light Entertainment

Tuesdays, 0030, beginning January 18th: Maestro is a returning 30-minute quiz show on music running the gamut of popular classics to classic pop. Quiz team members also perform some of the tunes, both vocally and on instruments like the stylophone and the kazoo. First airing Mondays 1715; also repeated Wednesdays 0830.

Wednesday 1130 on January 25th is a special edition of the regular 30-minute arts program Meridian interviewing director Martin Scorsese. BBC Worldwide says this interview is "...frank and revealing, edged with humor and the sheer enthusiasm Scorsese has for his craft. The interview will also air Tuesday January 24th 2030 and Wednesday January 25th 0630. Meridian also airs Fridays and Saturdays at 1130; other airings are Wednesday, Fridays, and Saturdays 0630, along with Tuesdays, Thursdays, and Saturdays 2030.

Sundays, 0101: Play Of The Week highlights include: Stages, a two-part linked play by David Storey on January 9th and 16th. Figure Dancing on the 9th looks at an aging man with a vivid memory of the passions of his past and the impotence of his present. His persistent and insistent memory reminds him of his ex-wife's mother, with whom he had a clandestine but consuming affair. Caring on the 16th looks at two crumbling thespians reminiscing over the past personal and

professional philanderings. Caring slips from the poetry of old relationships to the fragmented language of confusion and despair. Laura Singer on January 23rd looks at a woman married to a peasant farmer much older than herself and tied to his landcentered life. Achance find of Roman pottery gives her an opportunity to visit a museum in the city and get a taste of another kind of life. Laura is a universal parable for human beings caught in the inexorability of their fate. After The Lions on January 30th is a play about the last years in the life of actress Sarah Bernhardt. The play focuses on the time when a fall during a performance of Tosca so injured Bernhardt's nee that gangrene set in. Facing amputation or death, Sarah fights with driving passion to keep performing before her adoring public. Play Of The Week also airs Sundays at 1201 and 1901.

Fridays, 0230: Thirty Minute Drama highlights include Writing To Rose on January 20th, and Cat's Whiskers on the 27th. Writing To Rose looks at a couple having a 30-year annual summer romance kept clandestine due to family misgivings. With the death of Rose's mother - who had forbidden the romance -the couple can now unite without fear of family disinheritance. Cat's Whiskers looks at a modern marriage where a long-suffering wife seeks to get even with her demanding husband. The woman's cat seems to understand her better than her husband does. One day, as the woman is preparing sandwiches for her husband to take on a pheasant shoot, she fills his sandwiches with cat food and feeds the cat paté. When the phone rings, she fears she's given her husband food poisoning, but the day has a much more dramatic conclusion. Other airings of Thirty Minute Drama are the previous Thursdays 1130 and 1715.

Music

Mondays, beginning January 3rd, 2215: The Music Works is a new four-part, 30-minute series examining how different musical styles have developed by inviting performers to discuss and demonstrate the music they play. Performers include pianist Jools Holland, producer and keyboardist Brian Eno, Thunder's guitarist Luke Morely, and Queen's drummer Roger Taylor. The artists

don't demonstrate just the styles they currently play, but show how their style reflects the influences of up to two generations before them. Repeated Tuesdays 0630, Wednesdays 1615, and Fridays 1030.

Sundays, 0445: The Multitrack Sessions is an eight-part 15-minute series continuing this month that showcases the playing and singing talents of leading performers. Hosted by Tom Robinson, each "session" is recorded "live" in BBC studios without overdubs or technical manipulation. The talent lineup includes Thunder, Everything But The Girl, The Oyster Band, Heidi Berry, Chuck Prophet, and Sara Davis. Repeated Mondays 1445, Wednesdays 0815.

BBC World Service For Africa

If you'd like a daily half-hour of news and current affairs about Africa in the BBC tradition, tune in to Focus On Africa weekdays. I've found the 1830 UTC airing on 15400 kHz to be reasonably reliable here. Everything from violence in Algeria to elections in Guinea to the new constitution in South Africa is covered. A segment of the Friday program is reserved for listener letters - letters not so much about program feedback. but letters ground-level African politics and economics from those coping with everyday life. Another interesting feature on Tuesdays (I think) is a press review. Focus On Africa adds some spice to this segment by dramatizing verbatim quotes from various African newspapers. The Saturday program slot is taken up by Spice Taxl, an entertainment program currently airing a "mini" soap opera entitled The American Bar. The Sunday slot is taken up with African Perspective, a long-form current affairs program featuring native African presenters.

Deutsche Welle

The January 19th 0300 program to North America will look at the year's upcoming German elections in the long-form current affairs feature Insight. Many Germans will have up to four opportunities to go to the polls in 1994.

A new monthly segment called Headcrash joins the Science And Technology program segment. Headcrash looks at personal computers and computing from the MS-DOS, Apple, and Amiga perspectives. The 0300 Friday release to North America includes this program following European Journal, but the Deutsche Welle's program guide doesn't specifically state the 0300 release of Science and Technology incorporates Headcrash.

A new English European Service premieres on January 1st at 2000 UTC on 5960 and 7285. Some of the program segments air in the North American releases, but the daily current affairs program, Germany Today, has solely a German focus in comparison to the pan-European focus of European Journal.

HCJB Highlights

Cuban cuisine is featured in the January installments of What's Cooking In The Andes?, Fridays to the Americas at 0100, 0330, and 0530 UTC. Introspect looks at the ongoing instability in Haiti, UTC Tuesdays at the same times. Traditional jazz lovers should check out Blues, Rags, and All That Jazz! Sundays at 2130 to Europe, and Saturdays (I think) 0630 to the Americas.

Finally...

Thanks again to Eric Walton for his muchappreciated program schedules. I look forward to seeing many of you once again at the Winter SWL Festival. Just think...only two months to go!

Until next month,

73 DE Richard

SOME THOUGHTS ON THE IMPLICATIONS OF SATELLITES FOR INTERNATIONAL BROADCASTING

by Don Moore'

(PREFACE: This article was inspired by several recent features touching on satellites in international broadcasting on Radio Netherlands' MEDIA NETWORK program. I do not claim to be an expert on the subject and this article has not been specifically researched. It is based simply on impressions and ideas I have gotten from countless articles and radio programs over the past several years. I have never owned or used a satellite system. Those who truly know better than I do are invited to point out mistakes and misconceptions where they exist. My hope is that this article will help raise some questions that need to be answered from the perspective of the listener on the problems and potentials of international satellite broadcasting. This article is written from an American point of view, with an eye towards the broadcasting industry in the United States.)

When I first got into the shortwave listening hobby in the early 1970s, I remember there was a lot of talk and speculation about satellite communications. I recall some individuals even predicting that shortwave would be dead by the end of the century, and perhaps several years sooner. As we move into the mid-1990s, we see that that is not going to be true, and that shortwave will remain a major player in international communications for at least another decade, probably two or more, unless there are dramatic technological developments.

Yet, increasing use of satellites for international broadcasting is the wave of the future. And it should be-satellite technology is clearly superior in the ability to deliver a quality signal. The potential drawbacks to international broadcasting via satellite are not technical, but rather political, commercial, and sociological. From that perspective, I've been wondering how

* 11434 140th St. Davenport, IA 52804-9538 international satellite broadcasting might be accomplished and what it may mean to us, the listeners.

SATELLITES AS A TOOL FOR LOCAL REBROADCAST

One use of satellites is that being pursued by Trans World Radio - send the signal via satellite to local radio stations for rebroadcast. The key here is whether or not there are sufficient local media outlets to relay your broadcast. A few public radio stations in the US relay some programs from a few international broadcasters such as the BBC and Deutsche Welle. But considering the vast number of international broadcasters and program hours produced by them and the small number of public broadcasting stations in any given area, this is never going to be a viable replacement for shortwave.

The next option would be to have your broadcasts relayed as an FM feed via cable operators. Currently, C-Span relays the BBC World Service 24 hours a day on one channel and selected English language broadcasts from a variety of broadcasters on another channel throughout the day. Some cable operators pick this up for relay to their subscribers. But the FM dial is only so big, and much of that space is given to carrying local and regional commercial radio stations. In reality, there is very limited room for international broadcasting on cable FM feeds.

With television, channel availability again becomes the issue. Will cable services want to carry international broadcasters' TV offerings in the limited channel space that they have? In the near future in the US we will have 500 channel cable television. What are they going to put on the added channels? More variety? Relay English language TV networks from other countries - Australia, Britain, New Zealand, Nigeria, India ... or, for more variety, from non-English speaking places such as Brazil, Norway,

Thailand ... No, we are going to get more of the same reruns and movies. The same movie (which we can also rent for a couple bucks at the corner video store) will be shown on ten channels starting at fifteen minute intervals for increased flexibility in viewing. How soon will it be until we have an all StarTrek channel, an all Waltons channel, or an all MASH channel, repeating the same series over and over? If there is money to be made, the commercial media conglomerates will do it, and even with 5000 channels, there isn't going to be much room for non-profit international broadcasting via cable.

DIRECT SATELLITE BROADCASTING

The other option for international broadcasting is direct broadcasting via satellites; each listener/viewer has their own receiver and antenna. There has been talk in North America of creating a "DBS" band for direct satellite radio broadcasting. While satellite and digital technology do allow a greater number of broadcasters to utilize a specific bandwidth, one again has to ask if there will be room at the inn for international broadcasting. Or, will the band be filled with countless similar but competing rock and country music stations?

The more likely scenario for direct satellite broadcasting is similar to the state of the satellite TV industry today: only interested dedicated individuals and those without other options will buy the necessary equipment to tune in. It won't be a mass medium. In fact, that description is probably not much different from shortwave listening in NorthAmerica today. In this scenario, international broadcasting via satellite cannot effectively compete with terrestrial-based cable for large numbers of viewers/listeners. It will remain an also-ran, as shortwave is today relative to AM and FM.

Of course, as many shortwave broadcasters will tell you, the key is not so much how many you reach as who you reach, especially in the small North American shortwave audience. Studies have consistently shown that the North American shortwave audience is mainly highly-educated "opinion leaders". The question is, is there appropriate equipment for these people to buy, and will they opt to buy it?

Satellite dishes will clearly need to come down in size, and as satellites get more powerful they are indeed doing that. "Opinion leaders" tend to live in urban areas and may not have room for large dishes. Those who live in apartments may

need very small dishes, indeed. But how do you serve the increasing number of listeners who have shortwave receivers in their cars? A special antenna would be needed for that environment.

Flexibility is an important point of comparison between shortwave and satellite. Pointing a satellite dish at a specific satellite and then repositioning it for another is a lot less flexible than using a shortwave randomwire that doesn't need to be moved each time a new station is tuned in! Of course, multiple stations will probably be on the same satellite - but most listeners/viewers will want to receive several different satellites. "Bandscanners" will find this limiting.

Portable shortwave receivers are highly popular, and some sort of portable satellite receiver and antenna is needed for on-the-go viewing/listening on vacation or at the office. When I take my Sony ICF-2010 to work to listen to Radio Australia in the morning, it doesn't matter that my office window faces due south and that the great circle path for radio signals from Australia is to the northwest. I place the radio by the window and the signals bounce around enough or goes through walls or whatever that I can get Radio Australia anyway. But for satellite reception the dish must be pointed directly at the satellite without obstructions. If Radio Australia were via a satellite to the northwest of me, it would be impossible to point a dish, no matter how small or large, in that direction from my office window.

A MORE LIMITED SELECTION OF VIEWPOINTS?

Jumping back a bit, let's now assume there is some room for international broadcasting on domestic cable systems or via a DBS satellite band. Who is going to be on it? The most likely candidates are the major broadcasters such as the BBC, Deutsche Welle, and Radio Netherlands. With the possible exception of Radio Japan, we're looking at a limit to Western European perspectives. Will there be room for the likes of Argentina, Egypt, New Zealand, and Thailand, to name a few? Most shortwave listeners may do most of their listening to a few major broadcasters, but the perspectives of smaller broadcasters help round out and truly internationalize shortwave as a communications medium. I fear that the smaller shortwave voices will be lost when the shift to satellite comes, at least in respect to direct access to a large audience, which the "big boys" have a more realistic chance of getting.

Now, for the sake of discussion, let's assume that all international broadcasters who want it are given access to the U.S. audience via cable or DBS by either audio or video, as the case may be. In times of crisis, how long will that access last? If Baghdad had been available on cable. how long would it have remained so after the invasion of Kuwait? How long would Beijing have lasted after Teinamein square? How about Moscow during much of the Cold War? Here I am not thinking so much of censorship instigated by either the government or the cable operators, although that is always a distinct possibility, but rather of censorship pushed by a small number of closed-minded citizens. How many responsible librarians have been forced against their will to take books off the shelf after vocal complaints by a few narrow individuals? Access to diverse, even opposing, points of view is a central part of shortwave listening. If international broadcasting were done via cable or domestically-controlled DBS, a narrow minority could deny us that access just at the time it is needed most.

WHAT YOU GET IS WHAT YOU SEE (OR HEAR)

To this point, I've been assuming that the broadcaster wants to reach the particular audience in question, in this case, North America. But what if he isn't trying to be heard (seen) in North America?

One advantage of shortwave to the listener is the ability to hear broadcasts directed to other target areas. For example, All India Radio does not intentionally broadcast to North America, but their European service around 2000 hours can often be heard quite well here. Likewise, many North American SWLs enjoy listening to the Afropop music of Africa Number One, which is directed to Africa. For African news, many of us tune in the English language African services of

broadcasters such as Deutsche Welle and Radio France. On satellite, all this would be impossible; the footprint for a broadcast to Europe or Africa simply doesn't allow for reception in North America. As an American, I worry about another related side effect of satellite broadcasting: we will no longer be able to tune in VOA broadcasts to other target areas such as Africa or Asia to learn what our government is telling people in other countries.

Some stations we hear on shortwave are not international broadcasters at all, but domestic broadcasters using shortwave for a domestic or regional audience. These stations are usually classified as rare DX, but some are easier to hear than many bonafide international broadcasters. I've picked up 60 meter band stations from Venezuela, Colombia, Togo, Nigeria, the Russian Far East, and China (among other places) on simple \$40 "1960's technology" receivers without external antennas. On shortwave, a taste of domestic broadcasting in other countries is available to anyone who cares to go looking for it. On satellite, that will be lost.

CONCLUSION

Satellite broadcasting is coming, whether we like it or not. It obviously will be a vast improvement to what we have know, technologically speaking. The question is, will it be vastly inferior in terms of what we have access to? Myself, I'm pessimistic. Can anyone prove me wrong?

NOTE: Permission is granted to all to reprint, electronically repost, and otherwise distribute this article in its entirety. Comments should be directed to Don Moore; 11434 140th St; Davenport, Iowa, 52804-9538; USA or via email to Internet MOORE@TMU1.MCREST.EDU. Copies of this article are available via e-mail.

THE DEMISE OF THE QSL???

By Don Moore

Well, it seems there is nothing new under the sun. Recently while glancing through some old copies of "Radio News", an old-time hobby magazine, I came across an interesting notice in the March, 1936 issue. Station W8XK, the SW outlet of KDKA, Pittsburgh, announced that it would no longer issue verifications because "they have received so many letters daily saying that their transmissions are considered as local by listeners all over the world...' The April, 1936 issue had a picture of the QSL secretary's desk piled high with several hundred reports - one day's mail!!

I had to smile when I read that notice from 57 years ago. For over 20 years I've been involved in the SW hobby, and for just as long I've been hearing about the soon-to-happen demise of the QSL card. Every so often an international broadcaster announces a restrictive or no-QSL policy and out come the doomsayers. I've seen FEBA Seychelles go to a "no QSLs outside our target areas" policy - then dump it and begin issuing QSLs freely again. I remember when Radio Sweden went to do-it-yourself cards, then back to issuing regular QSL cards. I was around in 1980 when Radio Australia announced a policy of QSLing only one pre-announced month a year. I believe that lasted two years, before they went back to year-around veries.

I don't want to imply that broadcasters "owe" us QSLs or "must" verify reports. QSLs are and will continue to be a service stations provide listeners. Stations certainly have every right not to verify if they should so choose. However, it is interesting that when stations do stop verifying, or come up with restrictive policies, it is for one of two reasons. Either their budget can not handle QSLing any more because of too many reports or too little income, or they don't see enough evidence that hobby ists really appreciate QSLs. Yet, QSLing seems to be an integral part of our hobby, probably because it is one of the few forms of two-way communication the SW broadcast hobby has. I don't know how our hobby will change in the next 55 years, but I wouldn't be surprised if someday someone opens up a 57 year old copy of a 1990s "Journal" and smiles when they read that Radio XYZ has stopped QSLing.

But, if stations issue QSLs because listeners want them and it's a form of two-way communication, why do we want QSLs? I don't think proving we've heard stations has anything to do with it. If it takes a QSL card to prove to you that I've heard Radio Australia or the Voice of Turkey, you're perhaps being a bit overly nit-picky. As to the smaller stations around the world that aren't so easy to hear, such as those in the Peruvian Andes, well, I've visited a lot of those. I can tell you that many reports that get verified don't really contain any verifiable details that could distinguish the station from many other stations ten or twenty kilohertz up or down the band. The stations generally don't care though. They assume you must have heard them: otherwise, why would you have bothered to write? As Michigan DXer Harold Frodge once put it, QSLs are "irrefutable proof that letters were mailed."

I am not trying to shoot down a major part of the hobby here. I've collected QSLs since two months after I began listening to shortwave. I continue to collect them, although not as actively as I once did due to time constraints, and I know I will collect QSLs for years to come. Why? I enjoy getting mail - or at least something besides bills and advertisements. I take pride in trying to make my reports and the enclosures that go with them as interesting to stations as possible, so it is always special when I get back a great reply that shows a station appreciated my efforts. My QSL albums are great for showing off to others - either other hobbyists, people curious about the hobby, or my international students. (I once had a student from the Dominican Republic whose father turned out to be close friends with the veri- signer on my La Voz de la Fuerzas Armadas QSL.) Finally, I collect QSLs as a sort of personal diary - they represent something that has been a part of my life for over two decades. I frequently enjoy pulling out the albums and reminiscing over the old ones and remembering when I first heard the station and where I was and what else I was doing at that time in my life. My QSL collection is my most prized possession.

 $\overline{\text{FOR SALE}}\colon$ Customized Beam Headings (from/to) and Distances (MI/KM) to over 482 WRTH-93 transmitter sites including new Russian Republics. ITU Country Codes included. Send your location or coordinates, \$6.95. NASWA Journals '91 and '92 complete, \$10.50 a year or \$20.00 for both. WRTH-91, \$8.95. "Passport to World Band Radio" '92 and '93, \$7.95 each or \$15.00 for both. All items include shipping. Cashiers check or MO, please. Al Drehmann, Route 2, Box 3-B, Tryon, NC 28782. Phone (704) 894-3398. No collect calls, please.

Listener's Library

T. J. "Skip" Arey WB2GHA P.O. Box 644 Waterford Works, NJ 08089 GEnie T. AREY 1

If you're looking for a New Year's resolution that would actually be fun to keep. Why not promise yourself that you will warm up the soldering iron a few times during these long winter nights. The object of this effort could be maintenance, troubleshooting, repair, modification or maybe even some good old fashioned kit building. If you haven't noticed, quite a few companies are vying for the role that was once filled by Heathkit. My personal vote for taking over the Heathkit helm has got to be Ten Tec. It is my understanding that they will be releasing some very exciting kits over the next few months including many that will be of interest to the shortwave listener.

Anyway, to get your minds pointed in the direction of some good old fashioned "home-brewing", I would like to present several books that might just get you out of your chair and over to the workbench. Fair warning, folks! I am going to lean a bit on the theoretical stuff. I only do this because knowledge is ALWAYS power.

LENK'S RF HANDBOOK OPERATION AND TROUBLESHOOTING

by John D. Lenk 320 Pages \$22.95 Tab Books Blue Ridge Summit, PA ISBN: 0-8306-4560-8

Back when you could find great little projects in the pages of magazines such as Popular Science and Electronics Illustrated, each article was usually accompanied by a paragraph or two about the theory behind the design. These little "How it works" column inches gave many folks their grounding in radio theory. Learning theory by really digging into a circuit is a great learning tool. One picture may be worth a thousand words but a fully populated printed circuit board in front of you is worth at least a million. Allowing you to follow along a circuit's pathway is at the very heart of John Lenk's book.

In his preface, the author refers to this book as having "something for everyone". Lenk is right! If you plan to play with radio, this is a great book

to get you started. It will also serve you well as you advance in your knowledge and courage. Lenk has written over seventy electronics books, selling over a million total copies including translations into eight languages. To put it simply, he knows his stuff.

Lenk takes his reader through a very thorough study of the basics of radio frequency circuits and theory, using 150 illustrations to get his various points across. The reader gets a practical knowledge of RF amplifiers, multipliers, mixers and converters. All those little do-hickeys that make up the insides of a modern shortwave receiver. Each block diagram and schematic is explained in exhaustive detail, guiding the reader through the circuit and its workings.

All the math and science is laid out for the reader's use. This can be a bit frightening to most beginners. My advice is to hang tough. Learning this stuff can actually be fun if you are thinking in terms of how it all comes together to make those sounds from far off places appear in your speaker.

The second section of the book is where we get down and dirty. Lenk's section on RF testing explains how to go about taking all the various measurements that go along with keeping a receiver up and running. Texts that give the nonengineer a clear understanding of modern electronic testing and measurement techniques are few and far between. Lenk shows you how to bring your test bench into the twenty-first century. There is even a section on using WWV signals for calibration purposes. Yes, those stations exist for reasons other then keeping your Seiko set.

The third section is devoted to troubleshooting. The step by step procedures outlined allow you to make full practical use of the information in those first two sections. You will learn how to trace most of the problems you are likely to find with any of your receivers.

On the whole I am pleased with Lenk's production. This book could even serve as the basis for a good self study program that could point the reader in the direction of more complex receiver repair and modification. I have always found radio hobbyists to be intensely curious

folks. This book will lead you down new and more curious pathways armed with some essential tools for the trip.

POWER SUPPLIES, SWITCHING REGULATORS, INVERTERS AND CONVERTERS

by Irving M. Gottlieb 480 Pages \$21,95 Tab Books Blue Ridge Summit, PA ISBN: 0-8306-4404-0

I have dabbled in just about every aspect of hobby electronics. I have even taken a turn or two in the world of commercial and industrial electronics. No matter where I have hung my hat, people seem to be very interested in their power supplies. After all, the power supply is the closest thing to a heart that a piece of electronics can have. Also, if you have done any repair work, the power supply can be the most vulnerable portion of a system. Heck, if it fails, it can even wreak havoc throughout the rest to the equipment's innards. For this reason, a bit of time spent studying the lowly power supply can pay big dividends down the road.

The thrust of Gottlieb's study is to show the reader how to take juice from the mains and turn it into whatever your electronic item needs. Face it folks, modern equipment usually requires something more then a transformer and a couple of diodes to get the job done. This book goes into detail in its explanation of transistor and thyristor inverter and converter applications. You will get a firm grounding (pun intended) in the realm of modern switching power supplies. In depth investigation is given to the latest use of solid state devices in modern power supply design. The reader will even develop enough expertise to design his or her own high-performance regulated power supplies. I have long thought about coming up with a single power supply that would allow me to eliminate all those little AC adapters I have plugged into so many wall sockets that my firefighter friends break out in sweats. Gottlieb has got me thinking about the project in practical terms.

It is rare to find a book on this subject that is both approachable by the hobbyist, but still of use to the technician. Gottlieb's liberal use of illustrations and diagrams (over 300) make this subject understandable to anyone willing to take the time to read this book. I checked the course catalogue of my local community college. They offer a course in power supplies for about \$150.

Gottlieb's book is cheaper and gives me just about everything I need to enjoy building projects and repairing my rigs.

MAKING PRINTED CIRCUIT BOARDS

by Jan Axelson 328 Pages \$19.95 Tab Books Blue Ridge Summit. PA 1SBN: 0-8306-3951-9

One of the jobs I took while working my way through one of the colleges I went to was with a little outfit called Methode Electronics. This firm was in the business of making printed circuit boards. It was an exciting time because multi-layered PC board construction was just coming on line. I spent many a second shift playing with all the latest in commercial PC board equipment. Still, when I got home and wanted to relax, I could be found tracing designs on scraps of PC board with a resistive pen, etching the boards in one of my mom's old glass cake pans. Doing it yourself is always more fun.

Etching your own printed circuit boards is really not that difficult a task. All it takes is a few supplies and a little bit of book learning. Jan Axelson's book is a great way to get started. This book will take you from beginner to expert in very short order. Along the way you will have the opportunity to try your hand at any of twenty-five projects. Plenty of fun and games for those long winter nights.

Axelson's work has at its heart a desire to show folks how to make their own PC boards simply and, more importantly, cheaply. You will even discover how to go beyond my crude resistive pen technique into photo-resistive methods. If you are a home computer user, you will also discover low cost techniques for designing PC boards on your "PC". In all aspects, this is a "learn by doing" book.

In addition to showing the reader how to construct a PC board, Axelson gives a few good lessons on how to stuff the board. The chapters covering circuit assembly are well written. The book includes many resources for supplies and additional information. The book even includes the best environmentally safe ways of disposing your used etching chemicals.

Well, what are you waiting for? Isn't it time you got your hands dirty in this hobby? Take a cruise through the above mentioned books and start soldering something today!

Equipment Review

Alan Johnson N4LUS 6001 Goldsboro Road Bethesda, MD 20817 CompuServe 76665,1756 GEnie A.JOHNSON64

THE LOWE PR-150 PRESELECTOR

Once upon a time, all quality communications receivers had preselectors. This may have been a separate control labeled as such, or a stage of RF amplification whose tuning was ganged to the main tuning control. In fact, back in the days when radios glowed, one mark of the quality of a set was the number of tuned stages in the "frontend"-that portion of the receiver between the antenna and the first mixer stage. One inherent characteristic of a tuned circuit is selectivity, i.e. that it is more responsive to one range of frequencies while rejecting frequencies outside that range. This front end selectivity was required in the older superheterodyne receivers to achieve good image rejection, i.e. rejection of signals whose frequencies are separated from the desired signal by twice the receiver's intermediate frequency (IF). With the advent of modern synthesized tuning radios there was a concurrent ability to use higher first IF's which made image rejection much less of a problem. Manufacturers therefore dropped the costly preselector stage and replaced it with broad-tuned bandpass filters or in some cases a single low-pass filter with a cut-off below the IF. (Japan Radio Co. receivers have bandpass filters which are tuned by varactor diodes).

SO WHAT'S THE PROBLEM?

The problem is that tubes and transistors are non-linear devices which means that if two signals go into the device, more than two signals come out. This is precisely what a mixer stage is designed to do, but a problem arises when signal levels overload the mixer - spurious mixing products appear in the mixer output. Overloading can occur when there are strong signals applied to the antenna input, such as using a large outdoor antenna with a portable receiver, using a high gain untuned pre-amplifier, strong signals (either local MW broadcasters or high powered SW stations) or from poor mixer design. It's interesting to note that front-end attenuator controls did not appear on receivers until the advent of solid-state,

general coverage receivers. These controls are an inexpensive way to deal with front-end overloading. Front-end overload manifests itself as signals appearing at unexpected points on the (intermodulation) and local broadcast signals appearing on the same frequency as SW stations (cross-modulation). A receiver's immunity to such unwanted signals is generically referred to as "dynamic range" and is measured in terms of blocking, intercept point and reciprocal mixing. In today's HF environment, a receiver's ability to deal with strong signals (both on the frequency to which the receiver is tuned or far removed from it) has become more important than its sensitivity to weak signals.

There appears to be a very common misconception among SWL's and hams that the higher the S-meter reading a signal has, the better it is. What is most important in determining the readability of a signal is its signal to noise ratio. Remember that the S-meter responds not only to the desired signal, but to the noise and spurious mixing products that accompany the signal as well. As an experiment, try switching in the attenuator or turning down the RF gain and see what happens to the signal. You may have to turn up the volume a bit, but the signal should be more "listenable".

BUT I'M USING AN ANTENNA TUNER!

Antenna tuners certainly have their place, but they are not the same thing as a pre-selector. An antenna tuner is designed to match the impedance of an antenna to the input impedance of the receiver. A random wire antenna can have a widely varying impedance as the wavelength of the tuned signal varies relative to the electrical length of the antenna. An antenna tuner acts as a transformer to couple the antenna to the receiver. This transformation is most important with transmitters, where maximum power

transfer to the antenna is desired. An antenna tuner offers very variable degrees of selectivity, usually acting at best as a low-pass filter. A preselector, on the other hand, does offer selectivity, acting as a "slot" which can be moved across the radio spectrum, letting desired frequencies pass through and rejecting all others (within limits). A preselector does not match the impedance of the antenna to the receiver.

SO WHERE'S THE REVIEW?

I apologize for all the theory, but I felt that some background information was necessary. Those readers with no technical background are probably overwhelmed while the technical types are complaining about all the things I oversimplified. Oh well...

The Lowe HF-150 is a great example of what modern solid-state electronics can achieve in a receiver - wide band coverage, accurate and stable tuning and ... front-end overload when used near high-powered MW transmitters, even when tuned to SW frequencies. Although the HF-150 uses a modern integrated circuit in a well-designed mixer circuit, there is no filtering in the front-end other than a low-pass filter with a cut-off frequency of 30 mHz. This means that strong signals can overload the front-end.

To help relieve this problem, Lowe has introduced the PR-150 preselector. This appears to be a different design from that which was negatively reviewed in the WRTH Equipment Buyer's Guide 1993, as the current production model has seven bands and is tuned by a dualsection air variable capacitor vs. the nine bands and varactor tuning of the WRTH review unit. The PR-150 matches the HF-150 in size and external appearance, but can be used with any receiver (although it will work best with receivers with a 50 ohm coaxial antenna input, as this is the design output impedance of the preselector). It allows for selection of two antennas, either a 50 ohm coaxial feed or a high impedance (600 ohm) random wire or dipole fed by ladder line. Either antenna can be selected by a front-panel switch. Front-panel switches are also provided to select a -16 dB attenuator pad or a +10 dB bipolar transistor pre-amplifier. There are also Up/Down pushbuttons for band selection and a switch for "Wideband" (bypass) mode, plus the rotary tuning knob. There is a column of LED's on the front panel to indicate the selected band or Wideband position. The control circuitry "remembers" the last band selected, so instant comparison between the preselector and the wideband position is possible by pushing the "Wideband" switch.

The PR-150 covers the range of 100 kHz to 30 mHz in seven bands: 100-220 kHz, 220-500 kHz. 500-1200 kHz, 1.2-2.6 Mhz, 2.6-5.9 mHz, 5.9-13 mHz and 13-30 mHz. There is approximately 5% of overlap between bands. The filters for each band consist of dual parallel resonant LC circuits, tuned by a dual section air variable capacitor. Unlike an antenna tuner, each filter is a band-pass filter, rejecting frequencies above and below the frequency. Selection of the appropriate filter for each band is by PIN diedes and relays, minimizing the number of non-linear devices in the signal path, thereby enhancing dynamic range. Although the PR-150 is a passive device in terms of signal handling (unless the pre-amp is switched in), the control and logic circuitry does require power - nominally 12 volts DC at a minuscule 50 mA. No signal is passed through the preselector with no power applied. Two 2.1 mm coaxial power sockets are provided on the back of the unit along with a short jumper cable, so the HF-150 and PR-150 can both be powered by the same AC adapter. There is no provision for internal battery powering of the PR-150 nor can it be powered by the batteries in the HF-150. A coaxial cable jumper with PL-259 connectors is supplied to hook the PR-150 to your radio. Also included is a comprehensive instruction manual with schematic and a brochure comparing antenna tuners to preselectors.

The PR-150 definitely provides selectivity, but selectivity is a relative thing. Don't expect the unit to help reject adjacent channel signals that are only 5 kHz away. The specified selectivity is +/- 5% of the tuned frequency at -6 dB and +/ - 25% at -30 dB. This works out to +/- 250 kHz and +/- 1250 kHz for a tuned frequency of 5 mHz - fairly broad, but enough to help reduce the effects of local broadcasters. The other potential surprise about the PR-150 is that it actually reduces the signal level, since it is passive. It introduces an insertion loss of anywhere from 5 to 10 dB (1 to 2 S-units). Very rarely is this a problem however, as the actual signal to noise ratio is improved by attenuation of the receiver's front-end overload "crud". For extremely weak signals the pre-amp can be switched in.

IN THE SHACK

The PR-150 is a breeze to connect and use, although I found it somewhat ironic that the accessory has more controls than the radio it is designed to be used with! I used the preselector with a 70' random wire feeding 50 ohm coax through a balun. Tuning with the PR-150 is

quite sharp, although minimal retuning is needed within each shortwave band. Proper tuning can be accomplished by watching the S-meter, or in the case of the HF-150, tuning for minimal noise on the signal.

I found the PR-150 to be effective, especially on the long and medium waves. When listening to local non-directional beacons, there was a hodge-podge of various local broadcasters that were cross-modulating the beacon. With the PR-150 switched in and tuned, the background mixing products were reduced almost to the point of inaudibility. I found the same results when listening to weak medium wave stations. as well. I used the preselector for a while with an old Radio Shack DX-302 receiver, a set that is noted for poor dynamic range. On the DX-302 I was using there was a particular problem with 80 meter amateur signals appearing 1 mHz higher, smack in the middle of the 60 meter tropical band. The PR-150 took care of the problem, without reducing the strength of the 60 meter signals below audibility. So, the PR-150 does work and is useful, although its effects are not dramatic to the point of knocking your socks off.

WHAT'S WRONG WITH IT?

The first and foremost problem with the PR-150 is its price: \$300 list in the U.S.-that's fully half the price of the Lowe HF-150. Now, in terms of quality of construction and engineering design of the unit, that's a fair price, but still quite a chunk of change. There are three minor

complaints that I had. The PR-150 is not an exact cosmetic match to my HF-150: the front panel is lighter on the PR-150 and the model number on the HF-150 isorange and on the PR-150 it is red. This may be because I have an early HF-150. In addition, since the cabinet top of the units are not flat, they cannot be stacked, but must be used side-by-side. The tuning is sharp enough that a reduction drive to slow down the tuning rate would be a welcome addition.

Remembering that the PR-150 can be used with any receiver, not just the HF-150, will it help in your situation? If live out in the country with no strong local MW broadcasters you probably don't need one. If you're using an active antenna, its built-in amplifier is probably the culprit if you have intermodulation products, and the PR-150 won't help, since it goes between the antenna and the receiver. If you live in an urban or suburban area and have outdoor wire antennas, you should consider a PR-150. Tune around unused portions of the spectrum at various times of the day and see if signals show up that shouldn't be there. They may not be recognizable but may be a garble of various stations. Then try switching in your set's antenna attenuator, if it has one. If this improves the situation, you're affected by front-end overload. In such cases, you may have further improvement by using a PR-150, which will help reduce the overload but not greatly reduce the radio's sensitivity. The PR-150 is available from Lowe's U.S. suppliers, Electronic Equipment Bank and Universal Radio.

Hardware Bits

by Alan Johnson

COMMUNICATIONS HEADPHONES - Fair Radio Sales advertises a set of Roanwell aviation-quality headphones in their Fall '93 catalog supplement. They are 600 ohm units and are priced at \$19.95, plus shipping. These are new in the original sealed packages and have 1980 manufacturer's date codes. They have a five foot cord with a standard 1/4" plug. They are tight-fitting and provide excellent isolation from outside noise (I can't hear my wife when I'm wearing them!). They should work with all radios with a low impedance headphone output although some radios may require a 600:8 ohm transformer. Contact Fair Radio at 1016 Eureka St., Lima, OH 45802; 419-227-6573 or 419-223-2196.

RADIO SHACK INVERTED VEE DIPOLE - The shortwave dipole, catalog number 20-181, listed in the 1994 RS catalog is now available in stores. The price is \$39.95 and the antenna is stated to cover the 60, 49, 41, 31, 25, 21, 19, 16, 13 and 11 meter international broadcasting bands. The overall length is 65 feet, which seems a bit short for 60 meter coverage, even when accounting for an inverted vee installation. On inspection, the antenna is a parallel dipole design, using five conductor rotor cable for each dipole leg, with each leg connected to a UHF coaxial "Tee" connector. No lead-in coax is supplied. My recommendation is to buy a roll of rotor cable (\$13.39 for 100 feet) and 3 insulators (\$2.29 each) and build your own, using the 486/frequency (in mHz) formula to determine the length of each element.

SONY CRF-V21 DISCONTINUED - Amateur Electronic Supply has discounted the Sony CRF-V21 FAX/RTTY shortwave receiver. Current pricing is \$1299, with an original price of \$3999. Be the first on your block to have one! AES, 5710 W. Good Hope Road, Milwaukee, WI 53223; 414-358-0333 or 800-558-0411.

Technical Topics

Joe Buch N2JB 2008 Mozart Circle Virginia Beach, VA 23454

Receiver Overload

Mail continues to come in from listeners who are having trouble interfacing large dipole antennas to modern solid state receivers. This month we will present some ideas on this subject.

The first question you should ask yourself is, "Why do you want to use a full size antenna?" One reason might be that you live in a building that uses a lot of metal in its structure. The metal absorbs RF waves reducing the effective sensitivity of the built-in whip antennas. A second reason is to get away from man-made interference near your radio. Computers, TV sets, flourescent lamps, touch control lamps, microwave ovens, electric shavers, elevator control relays, printers and computer monitors have all caused reception interference problems. Placing the antenna as far as possible from such sources goes a long way toward reducing their effect on shortwave reception.

If you live in a wooden single family home and have control over which appliances are operating when you want to listen, you probably don't need an outside antenna. If you can hear atmospheric noise on your receiver's built-in antenna when the receiver is tuned to an unoccupied frequency, then your receiver and its whip antenna have all the sensitivity you can use. A large outside antenna like a dipole will improve the signal and noise equally and nothing will be gained. Most modern solid state portables have sufficient sensitivity and gain to easily detect atmospheric noise. That noise sets a sensitivity threshold which larger nondirectional antennas will do little to improve. A directional beam antenna can improve the signal-to-noise (S/N) ratio by reducing noise pickup from unwanted directions while enhancing the signal received from the favored direction. So there could be some S/ N improvement from such an antenna.

A large outdoor dipole can cause the high gain amplifiers on modern portable radios to be driven into non-linear operation due to the strong signals reaching the receiver. The frequency of the signals causing the non-linear operation can be in the AM broadcast band all the way up to VHF or UHF TV and FM radio transmission frequencies. Once the amplifier has been driven into non-linear operation by a strong signal, intermodulation

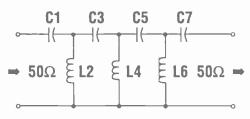


Figure 1 - Low pass filters can be built using readily available components.

products are generated between all of the stations received, even relatively weak DX stations.

Because the signal is causing the overload may be outside the receiver tuning range, a cut and try approach to a cure should be adopted. If you suspect that AM broadcast signals are causing the overload, a high pass filter like that shown in Figure 1 should be tried. The filter has a theoretical attenuation of more than 50dB for frequencies below 1600KHz and less than 3dB attenuation for frequencies above 3MHz.

Unfortunately, use of standard value parts for the filter circuits compromises the performance slightly. Radio Shack does not stock small coils. Parts numbers shown are from the Mouser Electronics Catalog (1-800-346-6873). They have a "no minimum" order policy but they do add a \$5 handling fee to orders under \$25. The phone number works in all 50 states, Canada and Puerto Rico but it is only toll free in the contiguous 48 states.

When building the filter, keep the leads short and be sure to physically separate the input and output connectors to prevent stray coupling which can reduce the ultimate attenuation.

If you have strong TV or FM stations near your listening location, a low pass filter of the type used by radio amateurs should help. This filter can simultaneously be connected in series with the high pass filter described in Figure 1. Radio Shack is no help here either. The MFJ-704 cuts off above 30MHz and sells for \$40 (1-800-647-1800).

If intermods persist after adding low and high pass filters to the feedline, the likely cause is one or more strong signals in the 3-30 MHz range. Two approaches can be tried. MFJ sells a passove tuner which assists rejection of out-of-band signals. The dial is simply peaked at each frequency you wish to listen to. It is theur P/N MFJ-956 and sells for \$40. The other approach consists of adding a broadband attenuator. The attenuator reduces the desired signal and the atmospheric noise equally so it does not affect sensitivity as long as the atmospheric noise level at the attenuator output is 10dB or more above the inherent receiver noise. The attenuator does reduce the level of all signals reaching the receiver. Use only enough attenuation to eliminate the intermod problem. A schenatic of such an attenuator with a parts list is shown in the ARRL Handbook.

Palomar Engineers sells a combination amplifier (which should be left OFF when used with a sensitive receiver), 20dB attenuator, high pass filter with a 3 MHz rolloff, and low-pass filter with a 30 MHz upper pass frequency. This device has all these capabilities in one compact box. Switches allow selection of any or all features as desired. Palomar calls it the "Amplifilter." and sells it as PA-360 for \$80 (1-800-747-3343).

Which approach is best for you? The answer depends upon what is causing your problem. I suggest you find someone in your area who has one or more of these devices. Borrow what you can and try it out before you buy. Check with manufacturers and dealers to see if they will allow you to return items that don't work in your situation. Remember that

Schematic Designator	Value	Mouser Part Number	Unit Price
L2 and L6	1.8 microHenry	43LQ186	\$.38 each
LA	1.5 microHenry	43LQ156	\$.38
C1 and C7	1200 picoFarad	23PS212	\$.19 each
C3 and C5	560 picoFarad	23PS156	\$.19 each

high and low pass filters need no adjustment or tuning as the receiver is tuned. On the other hand the passive preselector must be adjusted each time you change bands and at the lower frequencies will need to be peaked within a band. The tuner hass the advantage of attenuating strong shortwave signals. The greater the separation between the frequency of the receiver and that of the interfering signal, the better the passive tuner will work.

Neither the author nor NASWA in any way endorses the products or companies mentioned in this article.

Errata

And now for something completely different as my favorite group of silly Brits would say.

Tony Orr has written in to point out that there is an error in the diagram shown in the October 1992 NASWA Journal Technical Topics article. In the top schematic of Figure 1, the 75/300 ohm balun shown as Radio Shack P/N 15-1143 should be P/N 15-1253. Thanks for the feedback, Tony. I regret any inconvenience this error may have caused Tony or anyone else attempting to eliminate an ITV problem. For my penanee I promise to listen to WEWN for an hour.

I would be interested in how these ideas work for you. Share your results and I will pass on your experience to the NASWA membership in a later column. Best wishes and good DXing in 1994 to you all. Stay tuned.

Net Notes

Ottawa - The Canadian Broadcasting Corporation's Radio services in collaboration with Industry Canada have taken the first step in making CBC Radio programming available over the Internet global communications network.

Internet is an international link for various domestic computer networks. Until recently, account holders could only access and exchange data and text. However, it is now possible to access audio material.

An experimental database containing sound and text files from such CBC Radio programs as Quirks and Quarks, Basic Black and Sunday Morning has been established at the Communications Research Centre (CRC), Industry Canada's major research facility located at Shirley's Bay in Ottawa. It is currently transmitting this programming over the Internet to more than 20,000 networks in 152 countries.

"I am delighted that the CBC is participating in this project. Internet will bring Canadian public radio programming to a huge new potential audience in this country and around the world", said Harold Redekopp, CBC's Vice-President of English Radio. "This is another example of our commitment to using new technologies to distribute our services

as widely as possible, thereby achieving further use and exposure of our work."

The CBC Radio trial represents the first ever presence on the Internet by a national broadcaster. Earlier attempts at "radio" on the Internet have been largely directed towards a technical audience. The CBC trial provides a rich variety of general interest programming that gives listeners the ability to select program segments of their choice. These are available "on demand" rather than being tied to a fixed broadcasting schedule.

"Future phases of the trial will build on the existing content, with additional programming including SRC French language programming, foreign language programming from Radio Canada International and eventually archival information," said Michael McEwen, CBC's Senior Vice-President of Radio Services. "The trial will provide Internet users from around the globe with world-class Canadian content."

(More information from Andrew Patrick, Ph.D.andrew@calvin.dgbt.doc.CA

Listen to CBC Radio on the Internet: WWW (Mosaic)/Gopher/FTP: debra.dgbt.doc.ca

NASWA Portraits

Jerry Klinck 43 Lein Road West Seneca, NY 14224



Welcome to another Portraits column - one which is special to me. My closing comments in the September column referred to a lovely young lady of 15 who I "card swapped" with back in 1961. She was very nice and the only female DXer I know, but is still a very nice person. With pleasure, I introduce you all to "my DXer friend of the early sixties", Mrs Connie Hill Franciosi...

"Imagine my surprise recently, when my September Journal arrived, I read your fine Portraits column, and found my name at the end of it. How many Connie Hill's of Arlington can there be that listened to shortwave radio back in the sixties? Yes, it is definitely me and I wanted to let you know I am still alive and well and listening to shortwave radio some thirty year later."

My initial interest in radio was sparked as a young teenager. On my way to the school bus stop each morning, I used to stop at the home of two friends. While waiting for the twins to get ready, I would play with an old antique radio belonging to their parents. This radio wouldn't pick up much other than CHU but hearing a signal from Canada got me hooked. Several years later, at Christmastime, 1960 I believe, I convinced my parents to buy me a shortwave radio, and my "career" was launched. I spent many happy hours, day and night, listening to my Hallicrafters radio, and I built up a nice collection of QSL's which I still enjoy perusing. College and graduate school in Ohio put shortwave on the backburner for a while. However, after relocating in Mass. in the mid 1970's, I became a ham. . WB1DHT. My work as a school psychologist and later a special education administrator, as well as another return to school for doctoral work, has cut down on my time for radio in recent years, but radio, in it ham and SWLing forms has been a stimulating and satisfying hobby for me. During the last couple of years I have leaned more toward SWLing and within the last month I am now using a Sony SW-77 and enjoying all its' advanced features."

"I have given some thought to why more women aren't involved in radio but have yet to come up with any definitive answers. Like Nina, who was featured in the September column. I have little interest in technology or how it all works. I just marvel that it does! I get as much thrill hearing a signal from R. Australia or having a contact with a ham in Arizona, both fairly common radio occurrences, as I did when first starting out. I love to get the Atlas out when I have a new contact with a ham and see where he/she is located. I credit my knowledge of world geography, especially is some of the third world countries, to shortwave listening. A good friend will soon be leaving for six months in Dakar, Senegal, so lately I have been exploring the tropical bands, looking for African stations. Whether ones' interests are world affairs, music. culture, or just plain adventure, shortwave radio presents a playground of the world which can satisfy them all. (Amen to that - ed.) My hope is that more individuals, especially young ones both male and female, will discover the joy and endless fascination to which all of us are already privy.

"That's my story. I want you to know that I enjoy reading the Portraits column each month, and my membership in NASWA over the last several years has certainly enhanced my overall enjoyment of this hobby which we both (all) love."

Thanks for the nice visit and kind words, Connie. So great to hear from you again after all this time. Hope you enjoyed many more years of shortwave pleasure!

Next month we visit a friend of our distributing editor, Vern Hyson. Meanwhile, my visit with friends at the local firehall last week netted me a \$5.00 victory in a little geography bet. Somehow the topic of the capital of Australia came up and all the "experts" pronounced either Sydney or Melbourne as the capital. The wager ensued and, after a quick trip home to get the Atlas, I was happy to relieve the gentleman of his \$5.00. Love geography!

Listener's Notebook

Hans Johnson 7529 Red Cravat Court Columbia, MD 21046 CompuServe 73042.3644

COPYRIGHT NOTICE—Items credited to Summary of World Broadcasts are copyright by the BBC Monitoring Service and may not be reproduced without BBCMS permission.

EDITOR'S NOTES—All frequencies are in kilohertz and all times are in UTC/GMT. Your contributions and feedback are welcome at any time. Thanks to Mitch Sams, Paul Ormandy and Rich D'Angelo, LN will now receive the New Zealand Dx Times. I have also made arrangements to receive the Radio News Bulletin by Dr. Adrian Peterson. Not only does Adrian cover Adventist World Radio stations, he also has news from stations the entire world over through his extensive travels. A big thanks to Tony Orr and Giovanni Serra for sharing information from Atividade Dx (Brazil) and Radiorama (Italy) respectively this month. Much thanks to Ralph Brandi who continues to do a bang up job with the column's presentation as well as behind the scenes. The "Fab Four" got together for a Dxpedition at Gifford Pinchot State Park in early November. Those logs are marked GP.

PLEASE send along your ENGLISH language schedule information to Tom Sundstrom. Tom's column presents that information in a much more useful format than *LN*.

DEADLINE for next month's column is Friday, January 28th.

ANDAMAN ISLANDS—AIR-Port Blair 4760 continues to be heard here. Try right before 1130 and listen for the id: Port Blair All India Radio. This station is a good verifier. The station is scheduled to move to 4950 where they will be much harder to hear so get them while you can. This is the only station in this NASWA country. (HJ December 5th)

see also INDIA

ARGENTINA—Radio Malargue 6160.6v They are using a 1 kW homemade transmitter manufactured by a father and son technical team. Verification signers are Eduardo Vicente Lucero, Jefe Tecnico and Nolasco II. Barrera, Interventor. (Korinek Numero Uno No. 1247 November 26th)

ANTARCTICA—Radio Arcangel San Gabriel 15476v has reactivated and was heard with an English id announcing 6030 and 15476 but Spanish programming at 2330. (Jones Radio Nuevo Mundo No. 187)

AUSTRALIA—AAFR 10848.5U In spite of reports that this service is about to end it was still being heard on December 10th at

1600 transmitting to Somalia via the Exmouth site in Western Australia. Note that this service is on only on Fridays. (GP)

While the *ABC* service in Brisbane shutdown as scheduled on December 18th, *ABC* via Perth was still going strong on the 21st as heard here on both 6140 and 9610 in the local mornings. (HJ)

BELIZE-Referring to the ship Fury V, which is now flying the Belize flag, Brother Stair said on WRNO on December 10th that the ship will be anchored offshore near a land site where satellite dishes and microwave relays will be set up. Satellite receiving dishes won't work on the ship. The land still has to be leased. No mention of the locale, no mention of frequencies. (Mike Fern December 17th) Given the nature of Belize's infrastructure and off shore waters they would be rather limited in choosing sites. Alternatively they could anchor off of one of Belize's numerous cayes. I bet this is going to take a lot longer to set up and cost a lot more than they think. Wouldn't it be easier to buy/lease the VOA site at Punta Gorda in the south of Belize and set up the transmitters there?

BOLIVIA—Takayuki Inoue Nozaki provides us with another one of his fine reports of Bolivian stations this month:

Radio Machupo 4625.7 is operating without an license and is named after the River Machupo. This station is tough to verify.

Radio Santa Ana 4649.1 uses its 1.5 kW transmitter at half power to prolong the life of the tubes. It is fed into a quarter wave dipole 10 meters high. The studio and transmitter site are linked by a telephone line. Their license expired over 10 years ago. While the Bolivian equivalent of the FCC cracks down on unlicensed stations in the big cities its powers are much weaker out in the provinces so it only sends notices telling the stations to pay their license fees. Although the offical sign on is at 1030 the station often does not get on the air until 1100 as the morning announcer is a late riser (hi). The station is not interested in reception reports and probably has not verified one in years. The following types of canned ids can be heard at the top of the hour: 1-En el Beni, primera en noticias, deportes, sintonia, potencia y fidelidad, Santa Ana, la Radio. 2-De noche y de dia, amiga y companera, Santa Ana, la radio, una amistad no se olivida.

Radio Paititi identifies itself as this but their offical name is Paititi Radiodifusion. The station alternates between 2 transmitters in order to prolong their life. A 1 kW Thordarson operated at 700 watts into a half wave dipole 15 meters high on 4681.4v and a Hucarr brand 200 watt transmitter on 4682.5. They play a variety of canned ids at the top of the hour. The station owner, Ancir Vaca Cuellar, is friendly and he welcomes reception reports. He sends his letters for overseas listeners usually from the a post office on the Brazilian side of the river on the border because the Bolivian postal service is so poor. I recommend you send him 2 or 3 dollars for covering postal costs and round trip motorboat fee to the Brazilian side to mail the letter. Send your letter to P.O. Box 172.

Radio Riberalta closed down a few years ago as competition from and other radio stations resulted in the station losing money month after month.

Radio Abaroa is named after Coronel Eduard Abaroa, a national hero of the War of the Pacific. Although the station operates on 4712.4 they announce 4760 as that is their assigned frequency. Their *Alcam* Brazilian made 500 watt transmitter is operated at about 300 watts. The station's antenna is a half-wave dipole 10 meters high. The owner is not interested in receiving reception reports but you might want to write in care of one of the announcers. The station closed down their P O Box so letters should be sent to: Radio Abaroa, Correo Central, Riberalta, Bolivia.

Radio Mamore is off the air but you can send your follow up reports to: Ramiro Enebore Cuellar, Correo Central, Guayaramerin, Bolivia.

Radio Difusora Libertad 4808.9 is an inactive miners' station. The local mine is virtually shut down and the station personnel, themselves miners, have left. While active the station was unable to respond to reception reports for financial reasons.

Radio Emisora 16 de Marzo 4864.4 Their signal is weak even in Bolivia so they are probably operating their 1 kW transmitter at reduced power.

Radio Emisora San Ignacio 4901 is operating their 500 watt Hucarr transmitter at half power. They have been heard signing on at 1045.

We also have other Bolivian news:

Radio San Joaquin 4506.7 logged on November 15th. (Atividade Dx December via Tony Orr) A new station? No further details available. (HJ)

Radio El Mundo 6015.1 heard at 1002 sign on down slightly from listed 6015.7 for the first time in quite a while. (HJ December 17th)

Radio Intergracion 6122.2 Their canned id is: Desde El Alto La Paz, ustedes sintonizan a CP263 Radio Intergracion 650 (sic) kilociclos, una emisora al servicio del pueblo. The verfication signer is Senor Andres A. Quiroga V., Gerente General. (Camporini Dx'ers Calling No. 136 November via Fred Kohlbrenner) Another fella signing cards at this station is Benjamin Juan Carlos Blanco O., Director Ejecutivo. (Sandberg Shortwave Bulletin No. 1238 November 23rd)

Radio Metropolitana 6196.1 has been heard on this new frequency up slightly from their former 6194.5. (HJ December 5th)

BRAZIL—Radio Nacional Sao Gabriel 3375 Luiz dos Santos Franca, Gerente is a verification signer here. (Skoglund Shortwave Bulletin No. 1239 December 7th)

Radio Meteorologia Paulista 4845 is still active. (Atividade Dx December via Tony Orr)

Radio Guarani 6050 has been inactive since early September. During a visit to the station November 9th and 10th, their engineer told us they were waiting for a replacement tube. (Moferini Play Dx No. 766 November 29th)

Radio Universo 9565 reports to the address listed in the 1993 WRTH have been returned as undeliverable. (van Arnhem Shortwave News December)

Radio Bandeirantes 9645 verification signer is Salomao Esper. (Paszkiewicz Fine Tuning No. 717 December 12th)

Radio Gazeta 9685 has reactivated after being off for more than a year. (Jones Radio Nuevo Mundo No. 187 December 4th)

Radio Clube Ribeirao Preto 15415 has probably reactivated here but the signal is always weak. (ibid)

Dario Monferini presents observations of his recent trip to Brazil in the December issue of Shortwave News:

Radio Alvorada 4865 reactivated.

Radio Caraja 4885 reactivated.

Radio Gaucha 6020 has bought out cochannel Radio Educadora Bahia.

Radio Record 15325 plans an international service here with a 10 kW transmitter.

BULGARIA—Horizont (Home Service) 9850 has replaced 9905 at 0500–0800 0800–1000 (Sundays) 1000–1745. Also, the Stolnik transmitter site on 7670 is still in use. (van Hullebusch Shortwave News via Foster OZDX December)

CANADA—Canadian Forces Network 6000 is heard from 0300-0330 in English and appears to be a Monday through Friday operation. (Brian Alexander Fine Tuning No. 716 December 8th) Best reception here on 9725. (HJ)

CLANDESTINES—During the past 12 months the activity of clandestine stations on shortwave has dropped by 11.1 per cent to a new total of 1883 Weekly Broadcasting Hours

(WBHs). This is the result of the latest Clandestine Activity Survey which has been compiled annually since 1986. Clandestine activity to Africa dropped by 30.7 per cent and to Asia by 9.2 per cent while the activity to the American continent increased slightly by 0.7 per cent. The number of active target areas (countries) decreased by one to 24. New target areas which were not active one year ago are Turkey, Tajikistan, Somalia and Egypt. The biggest change from last year took place in Africa where clandestine broadcasts to Ethiopia dropped all the way from 149 WBHs to zero. The three most active target areas are Cuba, Iraq and Iran with 388, 288 and 244 WBHs respectively. This is exactly the same order as 12 months ago. (Mathias Kropf December 9th)

CLANDESTINES—ASIA—Voice of Abkhazia This radio station broadcasts in support of Abkhazian separatists, hostile to the Georgian government. According to a report on Ostankino TV, Voice of Abkhazia began broadcasting on 4th April 1992. Their schedule is 1830–1900 on 5905 with programs in Abkhaz with news in Turkish from 1850–1850. They use 7305 in summer when broadcasts will be one hour earlier. (BBCMS Summary of World Broadcasts No. 48)

CLANDESTINES—AFRICA—Voice of Free Sahara is carried by Algiers. Try from 2200–2300 on 15215 and 9640. Programs are in Arabic and are presented by the Polisario Front, a group opposed to the Moroccan control of the former Spanish colony of Western Sahara. (BBCMS Summary of World Broadcasts No. 47 November 19th)

VORGAN 4960 This UNITA station is heard with programs in Portuguese, English and French. Sign off time varies between 2100 and 2200. (Korinek Numero Uno No. 1247 November 26th) 7290 is scheduled to sign off at 2200 but for the past month I have noted them consistently signing off around 2019–2045. They sometimes have ENGLISH between 2015–2040. (Brian Alexander December 11th)

Free Radio Voice of Ethiopian Unity Yenetsa Radio Yeethiopia Andinet Dimts New (Amharic) This station was first heard on 17th November and can be heard on Wednesdays and Sundays from 1600–1700 on 11666 11695

and 15205 giving their address as: PO Box 91701, Washington DC, 20090 USA. The radio is hostile to the Ethiopian and Eritrean governments and the announcer reading the station's opening and closing announcement does not appear to be native Amharic speaker but speaks with an accent, probably Russian. The above frequency is used by Radio Moscow's Amharic service from 1500-1600. The operation of this radio is practically identical to one which operated in 1992 when a station calling itself the Voice of Ethiopian Patriotism broadcast from transmitters in Russia on frequencies used by Radio Moscow's Amharic service. It also broadcast on Sundays and Wednesdays only and gave an address in Washington DC. Summary of World Broadcasts No. 48 November 27th and No. 51 December 17th)

A Voz da Renamo 6155 tentatively heard at 0356 with same interval signal used by former Swazi Radio and Radio Paralelo 27. I received a response to my fax report from Dario Bettencourt, Director of Programmes, from Radio Cidade, Swaziland Commercial Radio PTY Ltd., P.O. Box 15535, Doorfontein 2028, South Africa, Fax +2711-434-3682. He said: What you heard was a test transmission of A Voz da Renamo via Radio Cidade. This was not a political program and Renamo would like to run this program but we are encountering problems in getting approval from the previous owners in terms of the selling contract as they would consider it controversial and the Swaziland Government itself feels that they still have an old friendship link with Frelimo. Democracy is still a long way from reality in Africa. The ruling party in Mozambique is Frelimo (Portuguese acronym Mozambique Liberation Front or the Front for the Liberation of Mozambique) and their opposition is the Mozambique National Resistance, known by its Portuguese acronym, Renamo. (Howard Numero Uno No. 1248 December 3rd and Howard Numero Uno No. 1250 December 17th) A cease fire has been declared in Mozambique. See the August and November 1993 LN for more information. (11J)

CLANDESTINES—EUROPE—Radio Dnestr International, the external radio service of the Russian separatists of the Pridnestrovye region of Moldova, can be heard with a broadcast in English from 0330—

0400 on 7105 and the same program is repeated the following day. The transmission is every day except Fridays and is directed to the United States. On Fridays they have a Ukrainian Program instead. Their address is: Radio Dnestr International, 25th October street, 45 Tiraspol, Pridnestrovye via C.I.S.. (BBCMS Summary of World Broadcasting No. 50 December 10th and No. 51 December 17th) They have a good signal here in Maryland. As mentioned in the July and October LNs, the shortwave site of 5 transmitters is at Mayak and all are reported as 1000 kW. The site is also referred to as Grigoriopol, a large town close south of Mayak or as Kishinev, which is the site listed by Radio Moscow. In spite of the unrest here, they continue to use the site. Dave Valko has noted RM programming at 0400 with no visible break and apparently from the same site. (HJ)

CLANDESTINES — MIDDLE EAST—Voice of Palestine is carried on Radio Algiers International Service from 1702–1800 in Arabic on the following frequencies: 15215–15205–11715–6160. This program is presented by the PLO. (BBCMS Summary of World Broadcasts No. 47 November 19th)

Voice of the Islamic Revolution in Iraq Sowt At-Thawrah Al-Islamiyah fi Al-Iraq (Arabic) was noted slightly off its nominal frequency on 9670.3 with an id at 1452 in Arabic. (HJ November 29th)

Voice of Human Rights and Freedom in Iran Seda-ye Hoquq-e Bashar va Azadiha-ye Iran (Persian) was known as Iran's Flag of Freedom Radio Derafsh-e Kaviyani Radyo between 14 February 1987 and January 1993. Prior to February 1987 the radio identified itself as Voice of the Liberation of Iran Sedaye Jebhe-ye Nejat-e Iran —this was first monitored on 23rd June 1983, although it may have been on the air since at least March 1983. This station, a radio hostile to the government of Iran, was confirmed in early December to be broadcasting from a mediumwave transmitter which at other times during the day carries Egyptian Radio's Voice of the Arabs, Nile Valley Radio and Palestine services. So far the shortwave broadcasts, believed also to be from transmitters in Egypt, have only been observed as follows: to Iran: 0230-0425 11470 to

Europe: 0600-0645 11470, 9350 and 1545-1630 11650, 9350 and again to Iran at: 1630-1825 15620. Other frequencies announced by the station have not been heard. The station is asking for reception reports to the following fax and phone number and addresses: France-Paris (phone and fax): 0033 1 48258178 Germany—Hamburg (phone): 0049 4 8453562 Germany—Hamburg (fax): 0049 4 0417691 Germany—Frankfurt (phone): 0049 6 9882838 Germany (phone and fax): 0049 6 9811322 USA R. Farhadi, PO Box 19740-187, Irvine, CA 92740, USA France Box holder, 18 bis Rue de Violet, 75015 Paris, France Germany P.L.K. 00559 B, 22391 Hamburg, Germany or Postfach 102824, 44028 Dortmund, Germany. (BBCMS Summary of World Broadcasts No. 50 December 10th and No. 51 December 17th) Also heard on 9350 at 0230. (Brian Alexander December 19th) Great, BBCMS should hire you as they did not catch this one. (HJ)

CLANDESTINES — WESTERN HEMISPHERE—Voz Popular 7000 Julia Batres Lemus, verification signer and guerilla, recently toured my town of London, Canada, on a tour to promote the station. The station's power is 2 kW to a dipole antenna and the transmitter is in a fixed position in the jungles of the Sierra Madres near the Tajulnulco volcano. They are on Tuesdays and Fridays from 2300–0045 and on 3500 from 0200–0300. Their address is Fernando Garcia, Centro de Promocion Popular, Apartado 20-668, Mexico City, DF, Mexico (Ross Numero Uno No. 1247 November 26th)

Radio Patria Libre 15050 has been heard here operating in SSB. This is the first time this station has been noted operating in sideband. (George Zeller December 1st)

COLOMBIA—Ecos Celestiales 5535 has been off about a year, having moved their studios and antennas. (Gaviria Play Dx No. 768 December 13th)

COMOROS—Although I was on vacation here, I did not manage to visit *Radio Comoros* as, according to my guide, it would take undue effort for "security reasons." For the same reasons, I didn't risk my life trying to take pictures, but I can say the facilities seem to be basic to the extreme. It is surprising that they manage to produce pretty professional programs. (Korinek Numero Uno No. 1247 November 26th)

COSTA RICA—RFPI According to their mailbox show of November 26th, the new 30 kW transmitter was still operating at half power, awaiting a new power transmission line to the site. (30 kW output on AM requires about 75 kW demand on the a.c. line—Mike Fern) Antenna erection had to be put off in November because of alternating rain and wind. (Mike Fern November 29th) 9375 is the station's new 31 meter band frequency. A rotary log-periodic antenna covering 9 to 26 mlz has been tuned and erected as of December 7th. (ibid December 10th)

Radio Universidad de Costa Rica 6105 Although irregular, they have also been heard in the evenings. Try shortly before 0358 sign off. (Paskiewicz Numero Uno No. 1249 December 10th)

CROATIA—Croatian Radio can been heard with English news on 5920 9830 and 13830 at 0705 0905 1305 and 2205. Until January 31st reception reports can be sent to: ADXB-QE QSL-Bureau, Harald Suss, Albert-Severstr.2-28/12, A-2231 Strasshof-Silberwald, Austria and should contain one IRC. QSLs will not arrive before February but they will be sent directly from the station's headquarters in Zagreb. (Suss Play Dx No. 766 November 29th) The station has also been noted on 3910 at 0100. (Groppazzi Radiorama November via Giovanni Serra)

CUBA—Radio Rebelde 5025 returned to the air in mid-December. Like other Cuban shortwave transmitters it is off the air now and then for reasons that would be ridiculous this side of the border. (Mike Fern December 17th) Power cuts due to nonpayment? (HJ)

Radio Habana 9510 noted from 0200 to 0430 sign off in English with transmitter problems, a weak signal and transmitter breaking up. Also just an open carrier when they were suppose to have been on at 0640. (Brian Alexander December 5th)

CZECH REPUBLIC—Radiozurnal 5930 The relays of the first channel of the Czech domestic service ended on January 1st. The end of shortwave broadcasting here also meant an end to Czech Radio broadcasts in Slovak beamed from Prague. A CTK news agency report on 8th December quoted the former director of the Czechoslovakia federal radio station, Vaclav Vrabec, as saying that the broadcasts had been discontinued for financial

reasons. However, Radiozurnal reported on 9th December that the ending of the broadcasts to Slovakia had been a decision of the Czech Government Office not of Czech Radio. (BBCMS Summary of World Broadcasts No. 50 December 10th and No. 51 December 17th)

Radio Prague According to the station, massive schedule will take place soon. Their Dx show Dx Special will soon end but it might be replaced with a similar type show. (ibid)

Following talks held so far between Czech Government officials, representatives of the US Administration, members of the US Congress, and the Radio Free Europe [RFE] and Radio Liberty management, the Munich headquarters of the two radio stations is likely to be relocated to Prague. If the committee issues the authorization, an agreement on RFE's and Radio Liberty's relocation to Prague could be reached by the end of January, according to Pechacek. The final decision on relocating the radio stations' headquarters will require an approval from the Congress, the US State Department, and the National Security Council. (ibid)

DOMINICAN REPUBLIC—Onda Musical 4780 has verified. The station's verification signer is Mario Baez Asincion, Director-Administrator. They are running with 1 kW of power the same power level they were using in the early 1980s. (D'Angelo Numero Uno No. 1247 November 26th) The station's slogan seems to be La Inconfundible. (TIN December 9th listening to HJ tape)

Radio La N 103 4800 In a verification letter the station said they are not on the air due to transmitter problems. (Schnitzer Shortwave News December)

ECUADOR—Radio El Saber del Hombre 2967.7 is the correct name of the station that was heard here last winter. Their canned id is: Radio El Saber del Hombre es la voz de la . . . Runacunapac Yuchana desde Simiatug, norte de la Provincia Bolivar. Transmitimos en 1510kc onda media, primera banda. Runacunapac Yuchana is Quichua for human knowledge. Harmonic of 2 x 1510 roughly. (TIN December 9th listening to HJ tape)

HJCB 6205 two transmissions are heard on this frequency, ex 11735. They are Tajik and Uzbek from 0115–0145 and Russian from 0150 until 0430. Both are parallel 9600. 6205

was also testing a tape loop in Japanese at 1152. (Mike Fern November 15th)

TWR via HCJB in Portuguese is now heard on 6125 and 9515 from 0730–0930 only. You might try sending a reception report to Rich McVicar if you want to QSL this one. (Mike Fern December 17th)

FRANCE—Radio France Internationale put a rotatable antenna into operation on 26th November. As a result, RFI is expecting a marked improvement in its shortwave broadcasts beamed at Africa, Europe, the Middle East and the North American east coast. This antenna, named Alliss, should give shortwave reception a quality close to that of mediumwave. It will also allow French external radio to have a greater flexibility in the management of its frequency changes since the Alliss antenna can face any direction by rotating on itself by 360 degrees.

In all 15 such antennas are to come into operation for RFI by 1997, one of them in Guyana in 1994. The overall cost of these antennas is around 800 million francs. If, according to RFI managing director and chairman of the board, Andre Larquie, this inauguration [of the antennas] represents "a dream" for RFI, he stressed again that his station "will only acquire world coverage of good quality on shortwave when other transmitting sites are set up in Jibuti and in Thailand", a project for which he has been requesting more funds from the government. RFI's budget is to grow by 8.8 per cent in 1994, mostly to enable RFI to pay the rental of these Alliss antennas (43 million francs next year), the duration of the rental agreement is 20 years. (BBCMS Summary of World Broadcasts No. 48 December)

GABON—AWR Broadcasts via Africa No. 1 were intended to be phased out a couple of months ago, but they were given a temporary reprieve when difficulties were encountered regarding the replacement broadcasts from station located in Russia. The current schedule is: English on weekends from 1200–1400 on 11780 and French on the weekdays from 0500–0800 on 9625. Their address is: AWR-Africa, 08 BP 1751, Abidjan 08, Cote d'Ivoire, West Africa. Fax number is (225) 41-31-23 (Radio News Bulletin No. 12 November 1st and No. 13 December 13th)

GOA—see INDIA

GUATEMALA—Radio Maya TGBA According to the station's manager, Pastor Jose Castanena, they receive about 40 letters a day. Having started broadcasting on May 2, 1962 they now transmit in Spanish and five Indian languages using a staff of 3. They plan to add another person shortly. In 1992, the station's budget was \$17,400. (Marlin A. Field November 26th)

Radio Mam 4825 Noted on November 25th for the first time in quite a while. Heard around 1230 with programming in Spanish and Mam. (Valko Numero Uno No. 1247 November 26th) Sign on is now earlier than old 1300 so this should make the station easier to hear in eastern North America. (Don Moore Radio News Electronic Edition No. 14 December 14th)

Radio Tezulutan 4835 While the station uses some Spanish, most of the programming is in the K'ekchi language, one of a number of Mayan languages used in Guatemala. The K'ekchi are the fourth largest indigenous group in Guatemala. They live more or less in the area north and east of Coban (where the station is located). Although K'ekchi (and all the Mayan langs) are phonetically very different from Spanish, it is possible to confuse it for Spanish because a large number of Spanish words have been borrowed. The word "tezulutlan" means "land of war" in the K'ekchi tongue. When the Spanish came into Guatemala in the 1520s, they quickly subdued the Mayan tribes farther south, but could not defeat the warlike K'ekchis, who maintained their independence for a time. The region was given the name Tezulutlan by the Spanish. There is one other station that uses K'ekchi. Radio K'ekchi on 4845 located in the small town of Fray Bartolome de las Casas, near Coban. While the town is named after the man who converted the K'ekchi to Catholicism, the station is run by K'ekchi Evangelist Protestants who are trying to convert their fellow tribesmen away from Catholicism, A bit ironic. Radio Tezulutlan, by the way, is run by the Roman Catholic church, so the two stations are involved in a friendly battle for souls. The most common kind of music on Guatemalan stations is marimba music. The marimba is similar to a xylophone, except the keys are made of wood rather than metal. The instrument made its way to Guatemala from Africa in colonial days and

the Indians adopted it and changed it to their liking. The music is quite beautiful and very upbeat. They are also very large. At minimum, a marimba is played by three people. Longer ones require as many as eight or nine. (Don Moore Radio News Electronic Edition No. 13 December 14th)

HAWAII—KWHR 9930 Heard with very nice signal on first day of transmission on December 19th at 1119–1155 sign off, back at 1215 tune by. Playing "Onward Christian Soldiers" and a series of three ID's, one with their schedule, another with equipment rundown, the third welcoming first-day reports. Giving the South Bend address, also their FAX number (219-291-9043). Schedule announced as:

0000-0200 17555 (225 degrees) 0200-0600 17510 (310°) 0600-1400 9930 (300°) 1400-1600 9930 (285°) 1600-1800 7425 (225°) 1800-2000 13625 (225°) 2000-2200 13720 (300°) 2200-0000 17510 (300°) (Jerry Berg December 19th)

HONDURAS-Radio Paz 4325v is another new Honduran station. It was heard with Folk music and talk in Indian language. At 1130 there was a canned id as: Estan en la sintonia de Radio Paz, una emisora para todos los pueblos que aman la paz. The id also mentioned that the station was testing: y ahora Radio Paz llegara a todos los pueblos del mundo, estamos probando nuestros nuevos equipos en onda corta, estamos transmitiendo en la frecuencia de 4325, onda tropical de 60 metros, en el ano internacional de los pueblos indigenas a todos le deseamos Paz. (Manual Rodriguez Lanza Radio News Electronic Edition No. 12 December 1st) The station signed on at 1102 on December 9th with the id as: Esta es Radio Paz, 990 kiloHertz onda media, 4325 kiloHertz onda tropical de 60 metros, desde Choluteca, Republica de Honduras, Centroamerica. The station had news at 1130. (ibid No. 14 December 14th)

Radio Litoral 4830 The station uses the slogan La Voz de la Esperanza. Sign on seems to be at 1230. (Parks DX South Florida No. 314 November 19th)

INDIA-AIR-Shillong 4790.5 Here is a station profile direct: The North Eastern Service of AIR broadcasting from Shillong, the capital city of the state of Meghalaya in north east India, was commissioned of January 3, 1990. It used to broadcast on 3255 with a 50 kW transmitter located at Mawjrong, 28 kilometers east of Shillong. The station recently moved to 4790 (nominal) for a wider audience coverage. The studios of the service are located at a central place in Shillong near Raj Bhavan, the offical residence of the Governor. The state of Meghalaya is known as the 'Adobe of the Clouds' and is also sometimes referred to as the 'Scotland of the East' in view of its beautiful landscape. NES broadcasts programs in Hindi, the offical language of India and in English to seven states in north east India from 1100 to 1630. NES broadcasts folk music of the different tribes and communities of north east India, besides other Indian music and a good number of western music. NES welcomes reception reports to the following address: Lalrosanga, Director, North Eastern Service. AIR, Shillong-793001, Meghalaya. (Station letter via Stephen J. Price November 26th)

Dave Clark's World Radio Report in the January 1994 DX Ontario has an overview of changes in the Indian broadcast scene via Manosij Guha's Dx Grapevine from November 1993:

AIR-Delhi is using 3365 at 0025-0229 replacing 4960; 3365 is also used at 1230–1840

AIR-Hyderabad is using two HF transmitters simultaneously at 0230+ on 4860 and 6120. The complete Hyderabad schedule is: 0025-0400 on 4800 (50 kW), 0228-0411v on 6120 (10 kW), 0530-0910v on 7140 (50 kW) and 1200-1741 on 4800 (50 kW)

AIR-Thiruananthapuram has been commissioned as is running a full schedule with 50 kW as follows: 0025–0215 on 5010, 0230–0400 & 0700–0940 on 7290, 1200–1740 on 5010. The antenna now is use provides regional coverage to Kerala. A second antenna is to be used to carry the external service in Malayalam to the Middle East.

AIR-Guwahati A is now using 4940 (ex 3375) at 1200-1701/1730; also on 4940 at 0025-0145 & 0200-0400. AIR-Guwahati B is in the course of being upgraded from 20 to 50 kW.

AIR-Gangtok (SIKKIM) has the new 10 kW Harris transmitter ready for operation; look for tests on 4775 and 3390.

see also SIKKIM

AIR-Itangar will not have a sufficient power supply to operate on MW (100 kW) and IIF (50 kW) simultaneously until sometime in 1994, so until then, the new shortwave outlet will only be on the air for short spells. Thus, recent loggings on 4760 thought to have been from Itangar have probably been Port Blair.

see also below (HJ)

see also ANDAMAN ISLANDS

AIR-Calcutta has a new 50 kW transmitter installed and tested but is still not back on assigned 4820, 6010 & 7210.

Numerous other planned frequency swaps between regional sites on 90 and 60 meters have not occurred as yet. As for the GOA situation, the two 250 kW transmitters installed near Panaji have been tested and are ready for use. However, a regular external service schedule, which will include a Commercial Service to the Middle East, as well as a Malayalam Service to The Gulf, is still waiting for completion of special studios near Bombay.

Other news:

AIR-Leh 4760 is heard here in addition to Port Blair. Both take the 1530 Delhi English news, but at 1545 Leh has local vernacular programming up to 1630 off. Port Blair continues to take Delhi English relay and signs off at 1630 with local English id. (Contact December via Richard D'Angelo)

INDONESIA—RRI Banjarmasin 3250 is used from 0900–1530 and 1900–0100 and 5970 from 0100–0900. 2430 is inactive. 3250 is a 20 kW Gates transmitter made in 1958, 5970 uses a 10 kW Gates unit and 2430 uses a 200 watt RRI model. The verification signer is Drs. Harmyn Husein, Kepala Stasium. (Juichi Yamada December 2nd)

RRI Gorontalo 3264.6 drifted here from 3266.4 in November. Sign off is 1315. (ibid)

RRI Palembang 4855.9 has been noted with improved reception since November 21st. Perhaps the transmitter power has returned to 10 kW after being on 2 kW for a while. (ibid December 17th)

RRI Wamena 4871.1 is used instead of 4866.4 from 1200-1600. The station uses the

latter after 1600. (ibid) Update and correction to December LN. (HJ)

RRI Sorong 4874.6 has reactivated. Heard for the first time since on November 24th at 1000. (TIN Numero Uno No. 1248 December 3rd) They used 9742 during the time they were not on 4874.6. (Kito Tropical Band Dx Review No. 35 December 1st via Numero Uno No. 1250 December 17th)

Radio Suara Kasih Agung 4881.6 Heard on December 12th at 1120 with a signal strength that suggests that they increased their power. (Martin OZDX December)

RRI Pekanbaru 5040 according to the station, they are on with 10 kW from 2230–0315 and 0930–1515. They have local news (Berita Daerah) at 2330 0100 0300 0630 0930 and 1330. The verification signer is Drs. Mukidi, Kepala Stasium. (Juichi Yamada December 17th)

RRI Sibolga 5256.4 has reactivated after being off for 5 months. Sign off is now 1600. (ibid)

RRI Jakarta 15154.3v may have made some transmitter adjustments as it is being heard with an improved signal as of late around 2230. (Stephen J. Price November 29th)

ITALY—IRRS 7125 The station's current schedule is Mondays to Fridays 0600—0915 1200—2115 and Saturdays and Sundays 0600—2230. (Contronco, Station President via Yamron Fine Tuning No. 715 November 24th)

RAI is on new 9725 and 11880 in Italian at 0000. (KBJ Shortwave News December)

JAPAN—NHK operates a network of low-powered shortwave transmitters for domestic broadcasting. While these are primarily emergencies transmitters in the event telephone and microwave links fail, the stations are on irregularly within the following scheduled times. Below are the stations that can be heard in Tokyo. Note that NHK-Osaka has changed its frequencies and now transmits in USB instead of DSB:

Freq	Mode	Station	Schedule	Power (watts)
3259	USB	Fukuoka 1	0800-1300	600
3373.5	USB	Osaka 2	0800-1300	300
		(ex 3377.5)		
3607.5	USB	Tokyo 1	0800-1300	900

2270				40.000
			0400-1300	
3970	AM	Sapporo 1	1300-1500	600
5428	USB	Osaka 2	2000-0300	300
		ex 6190	0500-0730	
6005	AM	Sapporo 1	2030-0030	600
			0400-1230	
6130	USB	Nagoya I	0100-0330	600
6170	USB	Tokyo 1	2030-0030	900
9181	USB	Osaka 2	0330-0430	300
		ex 9538.75		
9535	USB	Sapporo 1	0100-0330	600
9535	USB	Fukuoka 1	0430-0730	600
9550	USB	Tokyo 1	0100-0730	900
The s	tations	in Hirosh	ima, Matsu	ıyama.
		endai closed		
1980s.	The sh	ortwave tran	smitters have	e beer

USB Nagova 1

2000-0030 300

3970

6th-19th)

Fukuoka I 3259 has been inactive since the end of November. (Juichi Yamada December 17th)

taken away so there is no chance of them

returning to the air. (Takayuki Inoue Nozaki

Relampago Logging Dx No. 27 November

JORDAN—Radio Jordan 9560 Heard relaying 96.3 mhz FM with a DJ program of pop music and English and Arabic talk at 1515. (Ross Numero Uno No. 1247 November 26th)

LIBERIA—*ELWA* 4760 A schedule received direct is as follows: Weekdays 0600–0830, 1630–2200; Saturdays 0600–1200, 1600–2130; Sundays 0600–1000, 1700–2100. (Jerry Berg December 19th)

LITHUANIA—Radio Vilnius Although relays via Russia ended on the 1st, the station will continue to use the Radio Centras transmitter on 9400. According to the station, there is also talk about setting up their own transmitter in cooperation with Latvia. (BBCMS Summary of World Broadcasts No. 51 December 17th)

MOLDOVA—Radio Moldava 13640 has verified. This site was located in Moldava but has been destroyed in the unrest there. (Schmid Shortwave News December)

see also CLANDESTINES—EUROPE

MONGOLIA—Home Service is scheduled as follows: 4080 mornings until 1500 sign off. This channel reactivated in mid-November. 4850 same schedule. 4870 is irregular. 4897 same schedule and 4995 has been inactive since early November. They have ENGLISH news at 1440 every Wednesday. (Kito Tropical Band Dx Review No. 35 December 1st via Numero Uno No. 1250 December 17th)

NAMIBIA-The schedule of Namibian Broadcasting Corporation is as follows: Transmitter 1 3290 (100 kW) at 2200-0600 and 1600-2200 and on 4965 (100 kW) from 0600-1600. Their German service is at 1000 and 1600 on weekdays, 1100 Saturdays and 0800 and 1600 on Sundays. Afrikaans service is at 0800 and 1100 on weekdays, 0800 on Saturdays and 0900 on Sundays. Transmitter 2 on 4930 (100 kW) from 0800-1600 and on 3270 (100 kW) at 1600-2000. The Damara/ Nama Service is at 1130 and 1730 on weekdays, and 0530 and 1300 on Saturdays and Sundays. Otjiherero service is at 0800 and 1600 on weekdays and 0400, 1000, and 1600 on weekends. At other times the National Service is relayed. (Juichi Yamada December

NEPAL—Radio Nepal 3230 has reactivated parallel 5005 but sign on time is variable. (Juichi Yamada December 17th) The station invited a delegation from China Radio International to visit. The delegation offered to help Radio Nepal with its shortwave transmissions. (BBCMS Summary of World Broadcasts No. 50)

NIGERIA-Voice of Nigeria Information and Culture Minister Professor Jerry Gana has visited the Federal Radio Corporation of Nigeria and the Voice of Nigeria studios in Lagos. As was the case when he visited the Nigerian Television Authority, the minister was dismayed at the obsolete equipment being used by the broadcasting stations. He, however, expressed satisfaction with their efforts towards informing and enlightening the people and commended them for being able to perform under such demanding conditions. (BBCMS Summary of World Broadcasts No. 51 December 17th) The station says they get 750,000 letters a year. (Radio News Bulletin No. 13 December 13th)

PAKISTAN—Radio Pakistan-Islamabad 4895 has English news at 1600.

(Southwell Contact November via Richard D'Angelo)

Radio Pakistan Home Service Schedule until March 5th is:

Transmitter 1—4915 0045-0215 9515 0800-1030 1034-1103 1113-1245 6070 1300-1600.

Transmitter 2—4815 0045-0310 7290 0330-0430 9645 0345-0445 7290 1130-1337 4895 1400-1805

Transmitter 3--9495 0630-0634 7325 1103-1113

Transmitter 4—9645 ()60()-1145 Transmitter 5—9515 ()33()-()337.

PAPUA NEW GUINEA—Radio Enga 2410 is back and is now more or less regular again. (Clark Numero Uno No. 1248 December 3rd)

Some light was shed upon the recent changes at NBC when Steve Canney received this transcription (unfortunately undated/ uncredited) of a press report from Robert Pounds: A new 100 kilowatt transmitter (on 9675) will replace the 30-year-old 10kW transmitter (ex 4890) at Port Moresby's Waigani transmitter station. It would broadcast Radio Karai (English service) and be powerful enough to cover most of the region, including parts of northern Australia. This would make redundant repeater stations currently located in Lae, Rabaul, Madang, Wewak, Goroka and Port Moresby, most of which have been subject to breakdowns for lack of spare parts or vandalism in recent year. [Oops, I don't like the sound of this ...will we lose some or all of the 90mb outlets? /DMC] The new transmitter and aerial system, manufactured by U.S. Continental Electronics Continental supplied a technician and three riggers to assist PNG engineers with installation. Radio is an affordable source of information to many villagers and remains the primary mass medium in Papua New Guinea. The more powerful transmission should prove a boon to many villagers who cannot presently receive a clear signal, largely because of the country's mountainous nature. [Apparently 4890 is now just a standby frequency but there has been no further word to suggest that any of the 90 meter Provincial outlets would be going out of service./DMC] (Dave Clark's World Radio Report Dx Ontario January)

PERU—Radio Internacional del Peru 3397.4 while claiming at times to be broadcasting from Lima, this one gave its address during a canned id as: Av. Bolognesi 5-32, San Pablo, Region Nororiental del Maranon, Cajamarca, Peru. Apart from this id, San Pablo is being mentioned a "branch office" of the station in many of its programs. (Klemetz Numero Uno No. 1250 December 17th)

Radio La Hora 4858.3 has moved here, ex 4899.8 (ibid)

Radio Lider 4860 has been off the air since the end of November. (ibid)

Radio Nuevo Mundo 4881.6 has been noted quite regularly as of late since the end of November during both the local mornings and evenings. This is the first time the station has been noted here in almost a year. (HJ)

Radio Horizonte 5019.8 a new one, noted at 0240. (Latinoamerica Dx No. 161 October via Radio Nuevo Mundo No. 187 December 4th)

Radio Ritmo 5602.7 According to an item in the Argentine Dx magazine Conexion, A report on Lima television said that the authorities had ordered the shutdown of Radio Ritmo, which was presumed to be located in Puerto Maldonado. The station was heard until about May of 1993. In the morning and evenings, this station used to relay the Lima signals from Radio Programs del Peru (730) and Once Sesenta (1160) cutting in plenty of local ads and messages for Puerto Maldonado, but carefully avoiding to identify itself, not even at 0900 sign on. The few ids that were heard just casual ones in the middle of programming. (Klemetz Numero Uno No. 1250 December 17th)

Radio Frecuencia San Ignacio 5700 heard mentioning a new address, but too difficult to copy due to QRM. (Klemetz Numero Uno No. 1250 December 17th)

La Voz de Huamanga 6070.1 is their assigned frequency so perhaps they were ordered to operate on it rather on their old frequency of 6200. (TIN Numero Uno No. 1249 December 10th)

Radio Nacional del Peru 6095.1 signs on at 1100 weekdays and 1129 on Sundays. (Klemetz Numero Uno No. 1250 December 17th) The station is definately in Lima and a QSL signed by Rafael Mego Carrascas,

Jefatura de la Administracion was received from the following address: Avenida Petit Thouras # 447, Lima. Their *Philips* transmitter is operating at a full 10 kW. (Kuhl Shortwave News December) Heard iding as *Radio Nacional Tacna* at 0005. (Monferini Play Dx No. 768 December 13th)

Radio Universo 6815 also heard on UTC Sunday in addition to UTC Monday. (Klemetz Numero Uno No. 1250) December 17th)

PHILIPPINES—DZBS2 (FEBC) 3330v located in Mindoro has been signing off at 1155 since the middle of December. (Juichi Yamada December 17th)

PIRATES—EUROPE—Radio Pamela has been heard operating on Tuesday afternoons and evenings. Try 6295 6300 or 6305 (Free Dx/Contact November via Rich D'Angelo)

QATAR—Radio Qatar is having a transmitter problem. They were heard on 6999.3 7060 7093.3 and 7126.5 signing off in Arabic shortly after 2100. (Al Quaglieri December 5th) Nominal frequency seems to be new 7170. (GP December 9th)

ROMANIA—Radio Romania International 6141.1v is a sick transmitter that is probably nominal 6155. Heard in the local North American evenings. (GP December 10th)

RUSSIA—In addition to its own programs, the *Mayak* network also carries programs from other stations. They include: *Radio Slavyanka* Mondays to Fridays from 0200–0205 and weekends from 0200–0230 on 7360 6195 6155 5925 4930 and 1930–1935 weekdays and 1930–2000 weekends on 13820 LSB 10855 USB 7305 6190 6155 6015 5925 4930. *Radio Baltika* weekends from 0620–0625 on 13820 LSB 12060 10855 USB 9470 3384. (BBCMS Summary of World Broadcasts No. 47 November 19th)

The Russia's Radio or Radio Rossii has other stations' programs too: Radio Slavyanka daily except Thurdays and Fridays from 0440–0500 on 9730 8040 USB 7970 USB 7265 7165 5995 5910 4820 4485.

The *Voice of Islam* Fridays from 0625–0700 on 18870 15660 both USB 15365 11990 11905 11780 11720 9720 9595 8005 USB 7265.

Voice of Hope from AWR studio in Tula Wednesdays from 1710–1725 on 12175 11575 8040 all USB 7345 6040 5980 5910 5905 4895 4820 4485. (ibid) The first radio programs were sent over the newly established landline running from Tula to Moscow on November 19th. This to increase the efficientcency of its broadcasts over the four transmitter sites located at Moscow, Ekatarinburg, Samara and Novoisibirsk. Their fax number is (7) 0872-331218. (Radio News Bulletin No. 13 December 13th) Their schedule via Novsibirsk is as follows: Mandarin 1200 1300 (weekends only) 1400 (ditto) 1500 9835 1600 1700 (weekends) 1800 (ditto) 1900 (double ditto) 6150 Korean 1300 (weekdays) 9835 Japanese 1400 (weekdays) 9835 Hindi 1600 (weekdays) 6150 ENGLISH 1700 (weekdays) 6150 Russian 1900 (weekdays) 6150. (ibid)

Evenkiyskiy Radio 4040 Heard signing on at 0030. Verification signer is V. Ya. Katyshev. (Alm Shortwave Bulletin No. 1238 November 23rd) Power is 1.5 kW according to the 1993 WRTH. Beware of co-channel Armenia here. (HJ)

Radio Risalah (Arabic) Poslaniye . (Russian) Radio Message This station was first heard broadcasting in Russian at 0847 on November 22nd with a program of Arabic poetry. They are on from 0800-0900 on 15550 17635 and 17710 on Mondays and Thursdays with programmes of foreign press and agencies material, and also material from ITAR-TASS, the Islamic Herald and Radio Moscow International. Their fax number is 233 1342. Listeners can also write to the station at: Russia, Moscow, 25 Pyatnitskaya Street, "Al-Risalah —The Message" (BBCMS Summary of World Broadcasts No. 48 December

Radio Alef (or Radiostantisiya Alef — Alef being the Hebrew letter "A") was first heard on 21st April 1992. It describes itself as a programme prepared by Radio Moscow and the Jewish Children's Association, Banim Banot. The service is announced as being for Moscow, the Moscow oblast and Israel. The radio carries advertising and occasional announcements in Herbrew. On days when Radio Alef is not broadcasting, the shortwave frequencies may carry Radio Moscow's Arabic service. Their address is PO Box 72, Moscow 123154. They are on from 1700-1735 on Sundays and Tuesdays and Thursdays on 12075 and 5905. Transmissions will be one hour earlier in summer. (BBMCS Summary of World Broadcasts No. 50 December 10th)

Radio Moscow says they get a 100 million letters a year. (Radio News Bulletin No. 13 December 13th)

Radio Nadezhda current schedule is: 0700–1100 5920 7355 15460 1100–1500 9525 11665 11705

1500–1900 7235 7255 7260 9450 11855 17675

2000-0000 5905 7260 11855 12015.

(Nikolai Rudnev November 28th)

Radio Shark has not been heard in several weeks. (ibid)

SIKKIM—AIR Gangtok 4775 The only station in this NASWA country continues to be heard irregularly. Try shortly before 1200 and listen for sub-continental music. (Ed Rausch December 10th)

see also INDIA

SLOVAKIA—As of this writing, AWR is to conduct test transmissions consisting mostly of music starting on January 1st. Programs will begin on January 8th but they will also be considered tests until the beginning of a new schedule period on March 27th. Two 250 kW transmitters are to be used. Here is a preliminary schedule: English 0400-0500 9455 0600-0700 13715 0700-0800 7180 1400-1500 13790. English and Hindi 0100-0300 7270 English and West Asian languages 0300-0500 9465 English and Subcontinent languages 1500-1800 9455. English and French 1600-1800 11610 1800-2000 9455 French 0300-0400 7115 0500-0600 9465 German 1500-1600 5945 German and Czech 0700-0900 5940 Czech 1300-1400 5940 Arabic 0500-0700 11610 1800-2000 7315. (Radio News Bulletin No. 13 December 13th)

SOMALIA—Radio Manta This station was first heard on short wave in January 1993, although a medium service is believed to have started in December 1992. The radio was originally run by the US military and identified itself as Radio Rajo Radio Hope, the voice of the Unified Task Force. The name was changed to Radio Manta Radio Today with the handover of command from the US-led Operation Restore Hope to UNOSOM-2 (UN Operation in Somalia Phase Two) on 4th May 1993. The shortwave transmitter on 9540/6170 operates in USB mode plus carrier. According to information from UNOSOM, the

transmitter has a power of 600 Watts. The radio sometimes suffers from intermittent cochannel interference from one or more transmitters which broadcast anti-UNOSOM material. The 1100 and 1700 gmt broadcasts are relayed on 89.7 MHZ by *Radio Ibis*, a station set up by the Italian forces in Somalia. The schedule of Radio Manta is: 1000–1045 1100–1145 1300–1345 on 9540 and 1600– 1645 1700–1745 1900–1945 on 6170. All transmissions are in the Somali language. (BBCMS World Broadcasts Schedules No. 50 December 10th)

SOUTH AFRICA—Capital Radio 7149.5 Irregular operation but their schedule is 0230–2300. (Korinek Numero Uno No. 1247 November 26th)

SUDAN—Radio Sudan 5000 has been heard on this new frequency around 2130 apparently ex 4994. At times it is parallel 9165 and 7200. At other times it has been carrying another as of yet unidentified program in Arabic. (GP December 8th) The station has an Arabic program at 1500 rather than the scheduled National Unity Radio in English. (Juichi Yamada December 17th)

SWAZILAND—see CLANDES-TINES—AFRICA

TANZANIA-Radio Tanzania Because of nonpayment of debt, the national electric company cut off power on December 8th to the mediumwave transmitter (603) located in Dodoma. If the debt was not repaid by the 15th, the electric company said it would cut the supply at the studios and facilities in Dar es Salaam, a move that would cripple the station's domestic and external broadcasting. The transmitter at Dodoma was forced to rely on a local generator which reduced their power from 100 to 10 kW. On December 9th. Radio Tanzania's chief technician asked listeners in regions which are experiencing problems with reception of Radio Tanzania to use the short wave on 6105 especially during the night. The director of broadcasting said the government is aware of the problem over power debt and that it was working on it. He said, however, that the debt had increased substantially as a result of an increase in power charges by more than 70 per cent. (BBCMS Summary of World Broadcasts No. 51 December 17th)

see also ZANZIBAR

THAILAND—BBC Detailed engineering surveys have been started in Thailand on the site that has been earmarked for the BBC's next major relay station with the surveys taking place at the site at Nakhon Sawan, 250 kilometers north of Bangkok. The Foreign Office has given its full backing to the building of the transmitting station and the BBC is now waiting for the Treasury to allocate the funds for its construction. It hopes to start work in the second quarter of 1994. Originally the relay was to be a joint venture between the BBC and Radio Netherlands, but lack of money forced the Dutch to pull out. The station will take between two and a half and three years to build and its four transmitters will cover the majority of China, India, Nepal, Bangladesh and parts of Pakistan. (Ariel via Fitzsimmons Contact November via Rich D'Angelo)

UNITED STATES—WRMI 9955 The station hopes to begin regular programming by the end of January at the latest. Jeff White can be reached at Compuserve 71163,1735. (Jim Ducharme Decmeber 7th)

WINB The following information is from a visit Dave Valko and HJ made to the station on December 11th and a phone call by HJ on the 13th. The station resumed broadcasts to Mexico on a beam of 242 degrees on the 13th on 15145 at 2345. The broadcasts to South America stopped last summer when a worker cutting the grass around the rhombic antenna to South America clipped one of its guy wire which sent it tumbling to the ground. An additional feed point has been put on the rhombic antenna to Europe yielding the 242 degree heading as well as the 62 degree one. (62+180=242) For some time, the operators of the station have poured money in satellite television, AM and FM rather than shortwave i.e. the rhombic antenna to South America was not rebuilt. A General Electric 4BT50A1 AM transmitter purchased from WGY several years ago has never been converted to shortwave use below). The Continental transmitter, rated at 50 kW, was only putting out 16.5 kW when we visited and doesn't put out more than 20 kW these days. It has also lost its frequency agility, forcing the station to continue to transmit in the 19 meter band during a period of declining sunspot activity. The control booth is rather sparse, consisting of 3 cassette decks, a cart machine and a

turntable. Heat from the transmitter was being used to heat the 3 story white block building that houses WINB.

The future is bright for WINB, however. While there are no plans for the GE transmitter, the Continental is scheduled for a complete rebuilt early in 1994. Parts such as a tube have already been ordered. The station has contracted with George Jacobs for frequency recommendations and plans to move to a lower one.

Finally, the station receives about 15 letters a week, mostly QSL requests. Their correct phone number is (717) 244-5360. (HJ)

The main problem WINB would have in "QSYing" that old GE to shortwave is instability within the transmitter itself. Stray capacitances between components that would be negligible at MW frequencies could prove disasterous at HF! The transmitter would need to be adjusted very carefully to avoid feedback and other problems. The transmitter might work for years if you left it on one frequency as it would be very difficult to retune. Plus, the FCC might take a rather dim view of a non-type accepted transmitter cranking out several kilowatts just a few miles from Gettysburg! (Elton Byington December 13th)

WMLK 9465 uses a homebrewed 50 kW transmitter. Plans to replace it with a 100 kW are not a high priority as the station believes it is getting out just fine with 50 kW. The schedule is the same as that listed in the 1993 WRTH with no broadcasts on Saturdays, which is their Sabbath. (HJ December 13th)

WCSN Prophecy Countdown, the group that purchased this station, plans to begin airing up to 30 hours of programming weekly from this station starting on January 17th. (Dexter Numero Uno No. 1248 December 3rd) The estimated cost of operating the station is between 1 million and 1.5 million and the costs of program production will be an additional 500,000 a year. (Radio News Bulletin No. 13 December 13th)

KVOH narrowly escaped destruction during the recent fires in California. (Radio News Bulletin No. 13 December 13th) I spoke with their Vice President, John Tayloe, on December 17th. He said that things got so bad at one point that they evacuated the station. (HJ)

WWCR 5902.6 a spur here from 5810 at 0035. (Brian Alexander December 19th)

URUGUAY—Radio Integracion 6045 Their current schedule is 0100-0200 and 1300-1400 only. (Margenet Play Dx No. 768 December 13th)

VIETNAM—Home Service 4894.7v has been inactive since late October. (Kito Tropical Band Dx Review No. 34 November 13th via Numero Uno No. 1250 December 17th)

Radio TV Son La 4965v is heard on this new frequency signing on at 1155 and signing off at 1400. It is parallel to 6329.5. (Juichi Yamada December 17th)

Voice of Vietnam Hmong Service 6166 signs on at 2200 in parallel with 5031.8. In the local evenings it signs on at 1100 with Vietnamese service, then Hmong service at 1200 with sign off at 1330. (jbid)

ZANZIBAR—On December 2nd, the management of the Voice of Tanzania-Zanzibar, informed its listeners: Because of breakdown of our mediumwave transmitter (585), some of our broadcasts from this transmitter have not been received clearly. Our broadcasts are however being clearly received on the shortwave 41 metre band. (BBCMS Summary of World Broadcasts No. 50 December 10th) While Zanzibar uses the 49 and 25 meter bands I am not aware of them using 41 meters. BBCMS has not replied vet to my query as to whether the 41 band reference is a typo. The GP # 9 Dxpedition logged the station at 1900 hours on 6014v in early November. It's also interesting to note that the station did not mention the 25 meter band frequency (11734v) in its announcement so perhaps this transmitter is off the air. (HJ)

see also TANZANIA

QSL Reports

Sam Barto 47 Prospect Place Bristol, CT 06010



Hope everyone is having a very joyous holiday season and your mailbox is filled with all kinds of goodles from around the world. Best of QSLing...Sam

ALBANIA: Radio Tirana 11825 f/d cd. w/ sticker and "Flag" cd. in 3 mo. for \$1.00 and 1 IRC. (Pankake-MN).

ANTIGUA: BBC Caribbean Relay 5975 f/d ltr. in 34 ds. for \$1.00. (Sweitzer-FL). Deutsche Welle 15410 and 17715 f/d "40th Anniversary" cd. in 1 mo. (Humenyk-ONT). 9700 n/d "Map" cd. w/ sticker in 15 ds. v/s Peter S1uge. (McClure-CA).

ARGENTINA: Radiodiffusion Argen-

Radio Moscow's Seasons Greetings Card tina Al Exterior 11710 f/d cd. w/ schedule in 142 ds. (Dukes-SC). ARMENIA: Radio Yereyan 11790 postcard w/ personal ltr. in 174 ds. for 1 IRC. v/s Levon Ananikan. (Arey-NJ). Armenian National Radio 11795 f/d cd. w/ schedule in 4 mo.(Field-MI). Radio Yerevan - Arax Radio Agency

VERIFICATION SIGNERS: Radio Tacna 9505 Sra. Yolanda de Caceres, Directora. Radio Cusco 6203 Raul Siu Almonte, Gerente General. Radio Irag International 15180 Jamal Al-Samarae, Head of the International Dept. Radio Moldava International 15220 Constantin Marin, Editor in Chief of the International Service. Radio Vision 2000 5131 Marino Tello Cruzado, Gerente.....via PLAY/DX....Sam.

17660, 12050, 11920 and 9450 p/d cd. w/ personal ltr. in 6 mo.(Barto).

ASIATIC RUSSIA: Radio Nederlands 12065 via Petropavlovsk Kamchatski f/d cd. in 22 ds. for used Canadian stamps.(Carleton-ONT). Adventist World Radio 11855 via Novosibirsk f/d cd. in 50 ds. w/ schedule and report form. (Helm-KS). Deutsche Welle 9875 via Novosibirsk f/d "40th Anniversary" cd. in 163 ds. v/s Peter Sluge. (Humenyk-ONT).

AUSTRALIA: VLW6 6140 via Wanneroo f/d "Map" cd. in 74 ds. w/ stickers for 3 IRCs.(McClure-CA). Australian Armed Forces Radio 12070.5 via Belconnen f/d ltr. in 68 ds. for \$1.00(returned). v/s Hugh McKenzie, Manager -Presenter. (Buer-FL).

AZERBAIJAN: Radio Baku 15240 n/d cd. in 108 ds. v/s A. C. Xerm. (Helm-KS). BELGIUM: RVI 13655 f/d "Sailing Vessel" cd. in 83 ds. w/ schedule.(Levison)



11930 rcvd. special last broadcast cd. for July 1, 1993 in 33 ds. w/ station info. and sticker.(Helm-KS) BOTSWANA: VOA 7415 via Moepeng Hill f/d "Map" cd. in 17% mo. after a f/up rpt. v/s John Vodenik. (Wilkins-MS). BRASIL: RadioBras 15445 f/d cd. w/ schedule and sticker in 53 ds. for \$1.00. v/s Gaby Hertha Einstass, Correspondence Service. (McClure-CA). Radio Inconfidencia 6010 f/d cd. in 42 ds. for a PT rpt. (Helm-KS).

BONAIRE: Trans Forld Radio

RADIO FOR PEACE INTERNATIONAL



Global Community Radio Dedicated To Peace





BRASIL: Radio Bare 4895 n/d cd. w/ 2 page personel ltr. in 26 ds. for a PT rpt. and \$1.00. v/s Fernando A. B. Andrade, Director. The v/s is looking for radio catalogs (D'Angelo-PA). Deutsche Welle 11810 via <u>Bra-</u> silia f/d "40 Anniversary"

cd. in 164 ds. w/ schedule. (Humenyk-ONT).

<u>BULGARIA: Radio Sofia</u> 9850 and 13670 f/d cd. in 48 ds. w/ schedule.(Helm-KS). 15330 f/d cd. in 227 ds.(Levison-PA). 6235 via <u>Stolnik</u>, 7225 and 9700 via Koslinbrad and 11870 via Plovdiv f/d cd. in 8 mo. on my second try. Schedule and report forms were rcvd. (Field-MI).

CAMEROON: CRTV 3970 via Buea f/d cd. in 5 wks.(Field-MI).

CANADA: CPVP 6030 f/d ltr. in 13 ds. for \$1.00. v/s Ken Pasolli.(Pankake).

NOTES: Jerry Klinck says that early indications look good for this DX season. The Peruvians and Africans have been especially good at his location. Same thing here...Sam. Mike Hardester has been looking for increased pirate activity on the bands. Just one station so far but conditions look good. Barry Schwartz has been putting a lot of time in lately in upgrading his ham license. He is also trying to devote more time to the wife and family not to mention work. Good idea Barry but I thought DXing was the number one priority in all our lives...Sam.

Radio Canada International 5960 f/d cd. w/ schedule, pennant and decal in 17 ds. (Dukes-SC). Deutsche Welle 6085 via Sackville f/d "40th Anniversary" cd. in 163 ds.(Humenyk-ONT). CFRX 6070 f/d "Map" cd. in 9 ds. w/ schedule. v/s S ephan Canney. (McClure-CA).

CHAD: Radiodiffusion Nationale Tchadienne 4904.5 f/d cd. w/ station stamp in 265 ds. for a FR rpt. and 2 IRCs. Sticker was also rcvd. (Helm-KS).

CHINA, PEOPLES REP. OF: China Radio In-



ternational 11855 f/d cd. in 16 ds. for 2 IRCs.(Pankake-MN). 11715 f/d cd. w/ paper cuts in 36 ds. In a separate mailing I rovd. a T-shirt and a note from Chen Lifang. (Levison-PA).

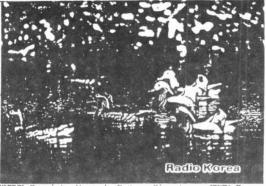
CLANDESTINE: Voice of Human Rights and Freedom for Iran 9350 short, almost a personal ltr. acknowledging my rpt. in 94 ds. for \$1.00.(D'Angelo-PA). Radio Miscut YNPMK 6863 p/d 2 page personal ltr. for a 1983 rpt. in 3 mo. for a SP rpt. v/s Evaristo Mercado Perez, Director. (Barto-CT).

COLOMBIA: Radio Super de Medellin 4875 n/d 1tr. in 42 ds. for a SP rpt. and \$1.00. v/s Henry Pava Camelo. Reply came from the Calle 39A address in Bogota.(D'Angelo-PA).

COSTA RICA: Vietnam Veterans Radio Network 15029.9, 7375, 21465 and 7385 via Radio For Peace International f/d cd. in 2 mo.(Barto-CT). CUBA: Radio Habana Cuba 6010 f/d "Picadura Valley Cattle Breading Pro-

ject" cd. w/ personal ltr. in 128 ds.(Humenyk-ONT).

DJIBOUTI: Radio Television Djibouti 4780 f/d cd. in 92 ds. for a FR rpt.(Helm) ECUADOR: HCJB 15155 f/d "San Rafael Falls" cd. in 2 mo. (Pappas-SD). 17790 same f/d cd. in 141 ds. w/ sked and other goodies. v/s Glen Volkhardt. (Humenyk). *Radio Baha'i del Ecuador 4950 f/d cd. w/ personal 1tr. in 29 ds. for a SP rpt. and \$1.00. v/s Segundo Mozales F. and Guillermo Campos. (D'Angelo-PA).



VERIFICATION SIGNERS: Radio Miskut YNPMK Evaristo Mercado Perez, Director. 6025 Chief Engineer L. Nnamuchi. Radio Eastern Highlands 3395 Ignas Yanam, Technical Officer. Radio Baqua 3310 Julio Carzado Ganoza, Titular Gerente. Addr: Avenida Principal 794-796, Bagua, Depto. de Amazonas. Ondas del Sur Oriente 5069 Roberto Challco C., Radio Ancash 4990 Dante Moreno Neglia, Gerente de Programacion. Radio La Voz de San Antonio 6628 Wilmer Vasquez C., Encargado Administraccion. & Valentin Mejia Vasquez, Director Gerente....via PLAY DX...Sam.

ENGLAND: Radio Canada International 11935 via Skelton f/d cd. w/ sticker and schedule in 15 ds. w/ CIDX info. (Carleton). 3975 f/d cd. in 12 ds. for reception of a special election coverage transmission. (Sweitzer-FL).

EUROPEAN RUSSIA: Radio Moscow 12070 via Moscow "Cosmos Hotel" cd. in 55 ds. for \$1.00. Also rcvd. sticker and schedule.(Davis-NM). Radio Aum Shinrikyo 11760 p/d cd. w/ newsltr. in 42 ds.(Carleton).

GABON: Radio France International 12015 n/d form ltr. in 44 ds. for EG rpt. Also rcvd. sticker, schedule and other info. v/s Jimson R. Najovits, Head of the English Language Service.

GEORGIA: Radio Tbilisi 11760 (McClure-CA).
"Tower" cd. in 2 yrs. via registered mail.
v/s Helena Apkhadze, Editor. He said that for objective reasons, the response was delayed.

GERMANY: Deutsche Welle 15275 f/d cd. (Johnson-MD) in 163 ds. (Humenyk-ONT).

GHANA: GBC Radio Two 3366 f/d cd. in 3 mo.(Barto-CT).
same in 60 ds. w/ schedule.(Rodriguez-MI)....This is my first African

QSL!!!...Jodi Rodriguez. <u>GBC Radio One</u> 4915 f/d cd. in 2 mo. for ms. <u>GREECE: Voice of Greece</u> 15630 f/d "White Tower" cd. w/ (Rausch). schedule in 6 mo. for ms. (Pappas). GUATEMALA: Radio K'ekchi 4844.3



7354 khz 1 metres Short wave.

TO NEVER Tromunel

DATE 13th October 85

f/d prepared cd. in 1 mo. for a SP rpt. and ms. Also rcvd. personal 1tr. and paper pennants. v/s Ancelmo Cuc Chub, Secretario y Director de Programaciones. I made a \$5. dollar donation to the local church. It may of helped. (Rausch) HONG KONG: BBC 11820 f/d cd. in 2 mo.(Field-MI) same in 11 ds. for 2 IRCs. v/s Phil Sandell (Carleton).

15 DE JUNIO

idental

DE LA

SINTONIA TOTAL

LA EMISORA

72



HUNGARY: Radio Budapest 9835 f/d cd. in 68 ds. w/ schedule.(Levison-PA).

INDIA: All India Radio 4820 via Calcutta f/d cd. in 93 ds. for 2 IRCs.(Helm-KS).

IRELAND: DLR-106 6226 f/d "Logo" cd. in 41 ds. for \$1.00.(D'Angelo-PA).

JAPAN: Radio Japan cd. w/ schedule (Humenyk-ONT) Radio Canada International 11705 via Yamata f/d cd. in 18 ds. w/ sticker.(Sweitzer-FL).

JAVA: RRI Nasional Jakarta 4775 f/d cd. in 114 ds. for an IN rpt., 2 IRCs and address label (not used).(Helm-KS).

KAZAKHSTAN: Radio Nederlands 12025 via Alma Ata f/d "Happy Station Team" cd. w/ sticker and schedule in 25 ds.(Carleton). 7305 f/d cd. in 24 ds. (Jordan-TN).

KOREA, REP. OF: Radio Korea 15575 via Kimje f/d "Paek-bo Bird" cd. in 134 ds. w/ schedule. (Humenyk). 5975 f/d "Map" cd. in 36 ds. w/ sticker and station pennant for 2 IRCs. (Mc-Clure-CA).

NOTES: Bill Wilkins says that after much frustration with the VOA he finally received two QSLs on the same day. Thanks to John Vodenik the QSL signer. Bill wishes everyone a fine holiday season. Marie Lamb says that the replies have been slow but she hopes the reply rate picks up over the holiday season. Betsy Kay Robinson sent along her WDX card. Very nice looking...Sam. Thank you. Neil Carleton of P.O. Box 1644, Almonte, ONT., KOA 1AO , Canada needs the most recent address for the HBC Eastern Relay

Station in Oman. He used the P.O. Box 3716, Ruwi P.O., Muscat but it was returned "box closed". Can anyone help?

Radio Macarena

VILLAVICENCIO

CERTIFICADO DE SINTONIA

Nombre: ... ANTHONY -SCOTT - HELM ... Cludad ... EANSAS, CITY ... U.S.A.... LIBERIA: ELWA 4760 f/d cd. w/ schedule Fecha y hora de recepción: Tiob/Jiji utc.

In 2 mo. for 2 IRCs.(Rausch-NJ).

MALAGASY REP: Padio Nodovisora de la companya de la com Homos comprohado aus detallos de regulator y de la emisora sintonizada es nuestra.

KUWAIT: Radio Kuwait 13620 f/d folder cd. w/ decal and schedule in 9 mo. (Wallace-CT). 11990 same in 43 ds.

MALAGASY REP: Radio Nederlands 11655 f/d cd. in 1 mo. (Gaharan-LA).

MALAYSIA: Voice of Malaysia 6100 f/d "Dancer" cd. in 2 mo. for \$1.00. Schedule was rcvd.(Millard-TX).

MALI: China Radio International 9780

via Bamako f/d cd. w/ site in 1 mo. (Trummel).

MALTA: Deutsche Welle 15270 f/d "40th Anniversary" cd. in 59 ds.(Humenyk). MEXICO: Radio Educacion 6185 f/d "Certificado de Sintonia" in 37 ds. for a SP rpt. and \$1.00. v/s Luis Ernesto P. Orozco, Director General. (Mc-

* Clure-CA). Radio Mil XEOI 6010 p/d ltr. w/ sticker in 2 mo. for \$1.00. v/s Srita Zoila Quintanar Flores.(Trummel).

MOLDOVA: Radio Moscow 11790 via Kishinev f/d "Peoples Friendship House" cd. in 65 ds. for \$1.00.

CONGRATULATIONS!

By your unwavering perseverance, solid determination, and dumb luck, you have succeeded in receiving an official transmission of

The Voice of LARYNGITIS!

On the 12th day of September of the year of our 1993 from 2303 to 2333 Mean Green Witch time, on the frequency of 7416 killer lurts.

The listener known as Mr. Chris Lobdell is hereby awarded QSL number ____311_

Signed: (a Reliable Witness) 14

Schedule was rcvd. (Davis-MOROCCO: VOA 15410 NM).

f/d cd. in 72 ds. v/s John Vodenik. Site is near Bre- $\frac{ich}{68}$ (Wilkins-MS). same in 68 ds. for 2 ms. This site is actually in French Morocco.(Buer-FL). 17785 f/d cd. in 36 ds. for ms. (Davis-NM).

NEW GUINEA: Radio Morobe 3220 f/d 1tr. in 3 mo. for \$1.00 v/s Peter W. Manao, Provincial Programme Manager. (Trummel).

Dear Sir.

We read your letter of November I5, I992 with greatest pleasure, and were glad to learn that about 30 years you have been DX-ing and now are a radio fan to our station as well.

Your name has been put down to the honour book of our listeners and we thank you for your warmest attitude. It is our pleasure to send you our spring and summer programme schedule and a QSL card.

Unfortunately your letter was delayed for 5 months because of the communications blockade imposed by our neighbour.

Give our test regards to your family.

Yours faithfully,

田田田,

Manage 1

adioKo

Levon Ananikian,

General Manager of ARAX RADIO AGENCY

rpt. for ms. v/s Peter W. Manao. Thanks for the ltr. and info. regarding the mix-up w/ your rpt. to this station. (Sgrulletta-NY).

NICER: La Voix du Sahel
5020 n/d ltr. in 2½ mo.

NEW GUINEA: Radio Morobe

3220 ltr. w/ wrong info.

in 10 mo. after a f/up

NIGER: La Voix du Sahel
5020 n/d ltr. in 2½ mo.
for an EG rpt. for \$1.00
v/s Adamou Oumarou.(Trummel). S/V #200:

NIGERIA: Voice of Nigeria rcvd. program guide in 6 mo. but no OSL.(Pankake-MN)...Have a happy holiday season...Sam. OMAN: BBC 15310 f/d cd. in

l mo. for \$1.00. v/s Tim Mullins.(Trummel).

PAKISTAN: Radio Pakistan 15550 p/d ltr. w/ newsltr. in 34 ds.(Sweitzer-FL). 11570.1 and 15555.1 p/d ltr. in 3 mo. v/s Syed Abrar Hussain.

PALAU: KHBN 9830 f/d "Map" cd. in 31 ds. w/ schedule for (Barto-CT).

ms. and used Canadian stamps.(Carleton).

PARAGUAY: Radio Nacional del Paraquay 9735 f/d ltr. in 227 ds. for a SP rpt. via registered mail. Schedule was rcvd.(Helm-KS).

PERU: Radio La Voz del Alto Mayo 6137.4 f/d ltr.

* w/ schedule in 2 mo. for a SP rpt. v/s Victor
Bustamente Sanchez, Gerente and Pepeto Vasquez Paiseg, Jefe Relaciones Pub'icas.(FieldMI). Radio Ancash 4990.6 f/d "Certificado de
Sintonia" w/ form ltr. in 143 ds. for a SP
rpt., FM sticker and \$1.00. v/s Ing. Armando
Moreno Romero, Gerente.(Jordan-TN). f/d cd.
in 261 ds. for a SP rpt. and \$1.00. Also rcvd.

* a personal ltr.(Helm-KS). Radio Vision 2000 personal ltr. in 60 ds. v/s V. Marino Tello Cruzado, Gerente-Propietario. Also rcvd. a C-60 cassette w/

local mx. Addr: Jr. Francisco Bolognesi 738, Bambamarca, Cajamarca.

(Barrera-ARG)...Nice hearing from you again Gabriel...Sam.

PHILIPPINES: Radio Veritas Asia 9520
 f/d "Palauig" transmitter cd. in
1 mo. for 2 IRCs. v/s Ms. Cleofe
R. Labindao.(Pappas-SD).

PORTUGAL: Deutsche Welle 13750 and 15470 via Sines f/d "40th Anniversary" cd. in 50 ds.(Humenyk). 9765 f/d cd. in 78 ds.(Helm-KS).

RIO MUNI: Radio Africa 7200 f/d cd. in 49 ds. via the CA addr.(Helm).

<u>ROMANIA</u>: <u>Radio Romania</u> 9690 f/d "Iasi Palace" cd. in 52 ds. w/ sticker, schedule and a personal ltr.(Humenyk-ONT).

RWANDA: Deutsche Welle 17860 and 21560
via Kigali f/d cd. in 50 ds.(Humenyk)
SAIPAN: KHBI 9425 f/d "Antenna" cd. in

1 mo. for ms.(Pappas-SD). 13625 f/d cd. in 2 mo.(Trumme1). STERRA LEONE: SLBS 3316 f/d blue "Logo

SIERRA LEONE: SLBS 3316 f/d blue "Logo" cd. in 2½ mo. for \$1.00.(Millard).

SINGAPORE: BBC 6195 f/d cd. in 1 mo.

for \$1.00.(Trummel). 9740 f/d "Antenna" cd. in 24 ds. for 2 IRCs.(Carleton)

Radio «a. sezu;7 5 Gumby International

This confirms that horizontall heard another boring and mathetic broadcast from Eadio Gumby Intermetional on Salah 1993 from from OTC on a frequency of Total that in the figure band.

Zomments:

Through for the deterted april (had Bu the every that were an intention to you, by of yourself that you work in jobs letted



SLOVAK REP: Slovak Radio 5930, 7310 and 9810 f/d cd. in 3 mo.(Trummel). 9810 via Velke Kostolany f/d cd. in 67 ds. for \$1.00. (Davis-NM). 5930 f/d cd. in 87 ds. for \$1.00.(Millard-TX).

SOLOMON ISLANDS: SIBC 9545 f/d cd. w/ a nice personal note in 3 mo. for \$1.00. v/s Cornelius Rathammo. (Trummel). f/d "Logo" cd. in 1 mo. for \$1.00.(Millard-TX).

SPAIN: China Radio International 9690 f/d cd. w/ site in 1 mo.(Trummel).

SRI LANKA: VOA 11705 via Colombo f/d cd. in 8 ds. (Sweitzer-FL). Deutsche Welle 11965 via Trincomalee f/d "40th Anniversary" cd. in 163 ds. (Humenyk-ONT).

TAHITI: RFO Tahiti 15170 f/d cd. in 127 ds.

for \$1.00.(Comeau-MA)

TAIWAN: Voice of Asia 7445 f/d cd. in 1 mo. (Trummel). BSF 15000 f/d "Chiang Kai-shek Memorial Hall" cd. in 15 ds. (D'Angelo-PA).

TANGIER: RTVM 17815 f/d "World Map" cd. in 25 ds. for \$1.00. v/s Tanane M'hammed Jamal Eddine (Ondrechen-DEN).

THAILAND: Voice of America 11705 via Udorn f/d cd. in 13 ds. for ms. v/s John Vodenik.(Jordan-TN). 11785 f/d cd. in 31 ds.(Helm-KS). 11820 f/d cd. w/ sticker in 35 ds. v/s Dan Ferguson.(Carleton).

TOGO: Radiodiffusion Togolaise 5047 and 7265 f/d cd. in 65 ds. after a f/up rpt. in FR w/ \$1.00.(Helm-KS). 5047 f/d cd. in 11 mo. after a f/up rpt. in EG for ms.(Gaharan-LA).



USA: KCBI 15375 f/d "Two-if-by-Sea" cd. in 9 mo. for ms.(Pappas-SD). same in 1 wk. on my 2nd try. (Field-MI). KJES 11715 f/d cd. in 18 ds. for ms. v/s M. Reuter. (Carleton). f/d "USPS" cd. in 22 ds. for 2 ms. (Wilkins-MS). KGEI 15280 f/d "San Francisco" cd. in 9 ds. for 2 IRCs. v/s Edgar F. Peebles. (McClure-CA). 15280 and 9615 f/d cd. in 10 ds. after a f/up rpt. (Trummel). WCSN 13770 f/d "Dipole Array" cd. in 55 ds. v/s Frank Hoskins Jr., Humenyk-ONT).

WJCR 7490 f/d cd. in 35 wks. for \$1.00. v/s Gerri Powell.(Pankake-MN). Radio Miami Inter-national WRMI 9955 f/d cd. in 14 ds. for ms. QSL stated that this was a "test transmission 400 watts". All rcvd. in 7 ds. v/s Jeff White.(Jordan-TN). f/d "Palm

Tree" cd. in 21 ds. for ms. Sticker and brochure were rcvd. (Pogue-TN). WEWN 7425 f/d "Angel w/ Trumpet" cd. w/ personal 1tr. and other brochures in 33 ds. for ms. v/s Wm. Steltemeier.(Carleton). f/d cd. in 3

QSL Vérification de Réception
la Station Office de Radiodiffusion et TV du Benin At Benjamin Krepp

Nous avons le plaisir de confirmer votre rapport d'ecoute du 01.X 1990 de 2300-2400 heures (VFE) (Locale) 4870 kHz.



wks. for \$1.00.(Pankake-MN). 13615 f/d cd. in 41 ds. for ms. (Sweitzer-FL). Voice of America 15120 via Delano f/d cd. in 45 ds.(Sweitzer-FL).

Thank you for your reception report of

RADIO ULAANBAATAR's broadcast, which

we've checked and found correct as follows:

Date of reception . August 188 1991. .

Time1445-0514 GMT

Frequency . . 13782 kHz

We 're happy to send you this QSL Card with

greetings and good wishes from all of us at

Mr . Brien Boulden .

RADIO ULAANBAATAR.

PADIO ULAANBAATAR

ULAANBAATAR, MONGOLIA -

C. P. O. Box 365

<u>USA (Pirates)</u>: <u>Altered States Ra-dio</u> 7415 f/d "Dead Rock Star -Jim Morrison" cd. in 42 ds. for \$1.00. via the Merlin addr. (Comeau-MA). Voice of Laryngitis 7416 f/d photo cd. of "Women on Kitchen Counter" in 2 mo. for 3 ms.(Lobdell-MA).

LAO NATICNAL RADIO	USA (Pirates): Radio Gumby Inter-
P.O. Box 310	national 7465 f/d sheet in 2 mo.
VIENTIANE, LAO PDR	for 3 ms. from the Merlin addr.
	(Lobdell-MA). same in 56 ds. for
QSL - VERIFICATION	\$1.00.(Comeau-MA). Witch City
Thank you for your : report on the recep-	Radio 7470 f/d sheet w/ "Witch
tion of our transm	Stamp" in 22 ds. for 3 ms. Use
mission PR Gordon DARLING	Wellsville addr. (Comeau). NAPRS
Doto : EAPA SI DE	7464 f/d "Antenna/Map" cd. in 35
Time : II. a U.C.	ds. for 3 ms. Use Wellsville
Frequency Station:	
UIENTIAN dE () 2	addr.(Comeau). Omega Radio 7466
X STATE OF THE STA	7466 f/d cd. in 32 ds. for 3 ms.
Company of the same of the sam	<pre>v/s Dick Tator(cute:)(Comeau-MA)</pre>
07	Radio Pluffernut 7465 f/d ltr. in
	67 ds. for ms. (Comeau). Union
City Padio 15050 f/d od in 1 mo	. after a f/up rpt. for 3 ms. v/s Mark
	e 7460 f/d "FCC Fighter" cd. in 21 ds.
	f/d sheets rcvd. for logs in PiPA.
(Lobdell). RKNA 7410 f/d "Clinto	n Wanted Poster" sheet in 1 mo. from
the Wellsville addr for 3 ms.(Lo	bdell-MA). Hope Radio International
	d-MI). Solid Rock Radio 7416 f/d cd.
	65 f/d "Glad you caught our signal and
not us ca. in 51 ds. for 3 ms. (Arey-NJ). <u>He-Man Radio</u> 7415 f/d "Green

Halloween" cd. in 28 ds. for 3 ms.(Arey-MJ). Radio Halloween 7412 f/d "Jack-O-Lantern" cd. w/ltr. in 29 ds. for 3 IRCs.(Arey). WRAR 7415 f/d sheet in 47 ds. for 3 ms. Rodio Republi ludiarisma Resters. Kepada Yth. Tuan MIKE HARBESTER. Ini membenarkan laporan tuan dari Radio siaran pada gelombang 17 meter atau frekwensi kHz.
pada 1976/67 1991 dariped 55 sampai 27.00 U.6 waktu Indonesia Bagian Pemancar kuasa studio kami 17-7.kw. dengar 1-35 antena.

Banyak terima kasih untuk laporan tuan. Name Pergas bushineachine Rton Winom Carl ands Serts enteninger has pravon aller Sicretands hay fight to 19 met 91 Sing my NA Noticetion Proposed were Repole Studie

Use Huntsville addr. (Comeau). f/d cd. in 2 mo.(Lobdell). Happy Hanukkah Radio 7410 f/d "Menorah/Dradle" form ltr. in 2 mo. Merlin addr. (Lobdell). Radio Doomsday 7414.5 and 7464 f/d "Earthskull" cd. in 2 wks. Wellsville addr.(Lobdell). Radio Marabu 7460 f/d cd. in 3½ mo. for \$1.00. Addr: Box 220342, D-42373 Wuppertal, Germany. (Lobdel1).

VATICAN CITY: Radio Vatican 9605 via <u>Santa Maria di Galeria</u> f/d "Transmission Tower" cd. in 69 ds.(Humenyk-ONT).

WEST BERLIN: Radio In American Sector 6005 f/d cd. in 2 wks. for \$1.00.

ZANZIBAR: Radio Television Zanzibar 11734 n/d veri ltr. (Ondrechen-DEN)

* W/ "Thank you for reporting our SW station...we are happy you heard it" for a f/up rpt. w/ \$1.00. to Dar-es-Salaam. Reply was mailed from Zanzibar. v/s Yusuf Omar Chunda who needs the following tubes for the transmitter: (2 each) 4C15,000A and 3CX15,000H3. (Flynn-OR).

Dear Mr. Krepp, Thank you for your report dated 2nd Jan., 1990 re our transmission on 17018kHz on 23.12.89 at 1655-1700z. We confirm your febort as being correct. Thank you for your interest you have taken in this station. 73's

W 10.4 320

Hope everyone has had a very merry holiday season. Now to get out the shovels and back to work ... Sam.

J.G. Nothnagel. Control Coastal Radio Officer. Cape Town Radio. 30th August, 1990.____

Contributors' Page

Vernon Hyson 5410 Camp Stewart Road Charlotte, NC 28215 CompuServe 76516,1531



LOGGINGS CONTRIBUTORS - January 1994 - DEADLINE 10th of MONTH

The following members contributed loggings:

Brian ALEXANDER, Mechanicsburg, PA NRD525 Vs Longwires Jerry BERG, Lexington, MA Julianna BICKUS, Herndon, VA Jim CLAR, Rochester, NY David M. CLARK, Newmarket, ONT Russell CLEVELEY, Wilson, NY Richard D'ANGELO, Wyomissing, PA Jim DUCHARME, Hadley, MA Marlin FIELD, Hillsdale, MI William FLYNN, Cave Junction, OR Harold FRODGE, Midland, MI Peter GRENIER, Sparks, NV Michael HARDESTER, Jacksonville, NC Hans JOHNSON, Columbia, MD Jerry JOHNSTON, Lexington, KY Rufus JORDAN, Pittsburgh, PA Jerry KLINCK, West Seneca, NY Ben KREPP, Watertown, MA Marie LAMB, Brewerton, NY Jim LANE, Toronto, ONT William McGUIRE, Cheverly, MD Ed NEWBURY, Bridgeport, NE Marina PAPPAS, Huron, SD Sheryl PASZKIEWICZ, Manitowoc, WI Ed RAUSCH, Cedar Grove, NJ Chuck RIPPEL, Virginia Beach, VA Doug ROBERTSON, Oxnard, CA Betsy K. ROBINSON, Clinton, TN Errol URBELIS, Kings Park, NY Dave VALKO, Dunlo, PA Yuichi YAMADA, Nara, JAPAN

R8 R390A HO180A 150' LW R8 ATS803A Transoceanic Eavesdropper R8 FRG8800 Eavesdropper, 110' LW 2-R8 2-R7 HQ180A Mucho Antena Icom 725 R1000 R8 FL3 AD Sloper Farley Loop SX100 SX110 S76 65' Trap Dipole NRD535D SPR4 Eavesdropper R8 R2000 Sony 2010 R7A TUN3 90' Random R71A DX302 Sony 2002 AP4 MFJ 956 Trap Dipole RW FRG7 ATS803A MFJ1020A Realistic Amp Antenna R70 Sony 2010 RWest Loop 200' Random R8 FL3 AD370 AD Sloper 50' LW NRD525 SP600 Eavesdropper LW DX302 Transoceanic 33' LW R8 HQ180A Sony 2010 2-60m Dipoles 80' LW NRD525 750' Beverage 500' Beverage R600 ATS803A MFJ16010 16m Dipole 60m LW R5000 20m Dipole DX380 R8 R5000 70' Windom 66' Dipole 45' Segmented DX400 Indoor Random NRD515 NRD525 Eavesdropper 150' LW R5000 Sony 2010 MFJ959 Eavesdropper 150' LW R8 R390A SP600 HQ180AC HQ145A JX1 Inv V DX Sloper DX302 FRG8800 FRA7700 ATS808 LW TS440S HQ180 Sony 2010 FRG7 125' LW Antron 99 NRD525 NRD525 10m Dipole 60m LW

****HEADING CORRECTION FROM LAST MONTH - The contributors were for the months of November and December****

The logs from Jerry Berg were from a DXpedition to Green Mountain, Barnard, VT using a R8 and an 1100' Longwire. Ben Krepp was on the same trek to the wilds using a NRD525 & a 750' Beverage oriented N-NW.

I hope all had a good Holiday and got some time in for listening. Maybe some of you were lucky enuf to get some more radio loot, to boot? (An old radio/computer saying). Hoping to see alot of you at the Winterfest this year. I will be doing my anti-snow dance as usual.

This month's contributors to the Tropical Bands Section will be listed next month - the U. S. Mail Christmas flow prevented Sheryl's summary from reaching here on time. Thanks for your understanding.

Enjoyable listening & good DX -

Tropical Band Loggings

Sheryl Paszkiewicz 1015 Green Street Manitowoc, WI 54220



Lots of material this time. WILLIAM BROWN writes fire destroyed his vehicle and he lost entire sticker/pennant collection. If you have any spares you could part with, William would sure appreciate it. His addr PO Box 520611, Independence MO 64052.

2325	AUSTRALIA VL8T 12/6 1047 //2485 comedy, ID, world nx,
2410	CAAMA pgm (Robertson-CA) NEW GUINEA Enga 11/27 1200 PD tlk, instl theme (Valko-PA)
	11/28 1246 EG chatter, ID fanfare, poss Karai svc (Clark-ON)
2485	AUSTRALIA VL8K 12/2 1015 variety pgm, ID (Robertson-CA) 11/26 1154 Western mx, TCs, IDs (Klinck-NY)
2800h	USA WZAZ 1400x2 11/26 0345 ment Florida (Hardester-NC)
2840h	UNID 710x4 ment Cuba, Streisand mx, ment R Nac. (Hardester)
2920h 3210	USA WBPA 1460x2 11/25 0415 (Hardester-NC)
	MOZAMBIQUE RM 11/15 0253 PT IS, ID, anthem, nx (Lamb-NY) 12/1 0253 IS, IDs in sev lang, mx (Klinck-NY)
3220 3220	CHINA CPBS1 10/17 1601 ID, trad mx (Yamada-JAPAN)
3220	ECUADOR HCJB 11/24 0045 Andean mx, etc (Hardester-NC) NEW GUINEA Morobe 11/27 1301* Hank Williams, ID, etc (Valko)
3222	TOGO Kara 11/6 0602 nx, hilife, poor (Urbelis-NY)
3224.8	SUMATRA Tanjung Pinang 10/28 1132 mx, SCI, nx (Yamada)
3230.2	PERU El Sol de los Andes 12/2 0958 ad, ID, TC (Johnson-MD)
3235	NEW BRITAIN RWNB 11/28 1220 PD gospel mx pgm (Lawrence-NY)
	11/12 1258 vcls, TC, ID, good nite (Clark-ON)
3245	INDIA Lucknow 12/3 0033 nx //3315 (Johnson-MD)
3250	HONDURAS Luz y Vida 11/25 2352 mx, ment San Luiz (Pappas-SD) 11/28 0310 Childrens Bible Hr (Clar-NY)
3255	LESOTHO BBC 11/29 0300 nx, sports, fair (Urbelis-NY) 11/5 0320 EG nx, sports, ID (Newbury-NE) 12/2 0324 (Klinck-NY)
3260	NEW GUINEA R Madang 11/27 1140 island mx, TC, ID, 70s pops
	(Rausch-NJ)
3264.7	011 NIDGE G
3204.7	SULAWESI Gorontalo 11/14 1225 EZL, IN anmts, believe Bengkulu on 3264.9, can someone confirm? (Clark-ON)
3264.8	Bengkulu on 3264.9, can someone confirm? (Clark-ON)
3264.8 3266.4	Bengkulu on 3264.9, can someone confirm? (Clark-ON) <u>SUMATRA</u> Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) <u>SULAWESI</u> Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada)
3264.8	Bengkulu on 3264.9, can someone confirm? (Clark-ON) <u>SUMATRA</u> Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) <u>SULAWESI</u> Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) <u>ECUADOR</u> Ecos del Oriente 11/13 1015 buenos dias Ecuador
3264.8 3266.4 3270	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY)
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3264.8 3266.4 3270	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago mgrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY)
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3264.8 3266.4 3270 3270 3277 3280 3289.9	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC
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3264.8 3266.4 3270 3270 3277 3280 3289.9	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311 drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY)
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3264.8 3266.4 3270 3270 3277 3280 3289.9 3315	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) INDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3315	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago mgrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) INDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA)
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3315 3316	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago mgrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) INDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA) KALIMANTAN Palangkaraya 10/28 1623* nx, pops, ID (Yamada)
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3316 3324.9 3325	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) INDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA) KALIMANTAN Palangkaraya 10/28 1623* nx, pops, ID (Yamada) GUATEMALA R Maya 11/21 1130 IDs, band mx, rel (Robinson-TN) 11/27 1130 TC, ID, hymns (Rausch-NJ)
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3316 3324.9 3325 3330.3p	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) 1NDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA) KALIMANTAN Palangkaraya 10/28 1623* nx, pops, ID (Yamada) GUATEMALA R Maya 11/21 1130 IDs, band mx, rel (Robinson-TN) 11/27 1130 TC, ID, hymns (Rausch-NJ) PHILIPPINES FEBC 10/22 1156* lang mx, bird, NA (Yamada)
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3316 3324.9 3325 3330.3p 3345	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago mgrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) INDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA) KALIMANTAN Palangkaraya 10/28 1623* nx, pops, ID (Yamada) GUATEMALA R Maya 11/21 1130 IDs, band mx, rel (Robinson-TN) 11/27 1130 TC, ID, hymns (Rausch-NJ) PHILIPPINES FEBC 10/22 1156* lang mx, bird, NA (Yamada) MOLUCCAS Ternate 10/11 1108 ID, pops, SCI, nx (Yamada)
3264.8 3266.4 3270 3270 3277 3280 3289.9 3315 3316 3324.9 3325 3330.3p	Bengkulu on 3264.9, can someone confirm? (Clark-ON) SUMATRA Bengkulu 10/29 2103 nx, ID, Koran (Yamada-JAPAN) SULAWESI Gorontalo 10/30 1311* drama, ID, SCI, nx (Yamada) ECUADOR Ecos del Oriente 11/13 1015 buenos dias Ecuador morn pgm, IDs, TC, ment Lago Agrio (Clar-NY) NAMIBIA NBC 12/4 0200 Xmas mx, nx (Frodge-MI2) 11/18 0402 EG //3290 Afr nx, TC (Klinck-NY) KASHMIR Srinigar 12/3 0119 IS coming thru (Johnson-MD) ECUADOR LV del Napo 12/4 1103 Andean mx, IDs (Frodge-MI2) ECUADOR R Centro 11/26 0630 pops, ads, ID (Lawrence-NY) 11/13 0900 ID, professor tlk, TCs (Berg-VT) 11/5 1050 nx, TC poor (D'Angelo-PA) ADMIRALTY ISL R Manus 11/27 1200 PD nx, Amer pops, drums, best PNG opening this season (Lawrence-NY) 1NDIA Bhopal 12/3 0024 IS, ID, nx (Johnson-MD) 12/3 0026 SC mx, 3+1 TP, ID, EG nx, SC, tnx Hans (Valko-PA) SIERRA LEONE SLBS 11/24 0642 EG nx, pers anmts (Lawrence-NY) 11/15 2145 EG nx, TC, PSAs, IDs (Urbelis-NY) 11/7 0602 s/on TC, ID, nx (Klinck-NY) 11/6 2202 nx, full IDs (D'Angelo-PA) KALIMANTAN Palangkaraya 10/28 1623* nx, pops, ID (Yamada) GUATEMALA R Maya 11/21 1130 IDs, band mx, rel (Robinson-TN) 11/27 1130 TC, ID, hymns (Rausch-NJ) PHILIPPINES FEBC 10/22 1156* lang mx, bird, NA (Yamada)

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11/29 1140 mx, ID, slogans (Clar-NY)
                      mx (Rausch-NJ)
            PAPUA R Milne Bay 12/4 1230 ID, Michael Bolton (Rausch)
3365
            GHANA GBC 11/22 2145 EG nx, hilife (Urbelis-NY)
3366
            GUATEMALA R Tezulutlan 11/20 1105 tlks, ID //4835 (Lawrence)
3370
            12/4 0202 chit chat xylo bridges, IDs (Frodge-MI2)
            NEW GUINEA RWH 12/5 1230 EG ID hymns (Frodge-MI2)
3375
            SUMATRA Medan 10/27 1631 nx, Western pops (Yamada-JAPAN)
3375.7
            GUATEMALA R Chortis 11/26 1130 IDs, band mx, accordion solos (Robinson-TN) 11/14 1057 marimba, morn pgm (Krepp-VT)
3380
            BRAZIL R Educ Rural 11/11 0955 vcls, canned ID (Johnson-MD)
3384.9
            SUNDAS Kupang 11/28 1300 Jak nx, anthem, pops (Clark-ON)
3384.9
            10/23 1520* Jak nx, close anmt, poor (Yamada-JAPAN)
3385
            NEW BRITAIN RENB 12/5 1215 EG ID, choral mx (Frodge-MI2)
            ECUADOR Catolica Nac 12/1 0033 mx pgm, canned ID (Johnson-MD)
NEW GUINEA REH 11/27 1303* island mx, ID, NA (Valko-PA)
SUMATRA Tanjungkarang 11/6 2212 Jak nx, ID (D'Angelo-PA)
3394.8
3395
3395
            PERU R Internacional 11/6 1003 IDs, TCs, huayños (D'Angelo)
3397.4
            11/13 1012 OA vcls, ID 1026, TCs, (Berg-VT)
            UNID 12/4 1040 cumbias, promo ment Colombia (Frodge-MI2)
3502
            IRIAN JAYA Merauke 11/14 1207 Jak nx, anthem //9680 (Clark)
3905
            NEW IRELAND RNI 11/27 1140 Me & Bobby McGee, island mx
3905
            YL anncr, no nx 1200 (Lawrence-NY) 11/6 1140 C&W, ID (D'Ang.)
            SWITZERLAND SRI 11/29 0632 FR nx, sports, ID, rock mx (Lamb) JAPAN R Tanpa 11/4 1255 JP YL, TP, ID (Newbury-NE) VATICAN VR 12/10 0600 EG test IS, ID, mass //7250 (Lamb-NY) VATICAN VR 11/26 0600 EG pgm, IS, weak (Alexander-PA) CAMEROON CRTV Buea 11/5 2255* FR vcls, tlk (Hardester-NC)
3905
3945
3945
3950.1
3970t
            GERMANY RFE Biblis 12/10 2037 RM IDs, nx, disco (Lamb-NY)
3970
            GERMANY VOA Munich 11/29 0623 VOA Monday Morning (Lamb-NY)
3980
3987.1
            IRIAN JAYA Manokwari 11/12 1225 pops, ad (Clark-ON)
3995
             GERMANY DW Juelich 11/11 0115 IS, tlk (Flynn-OR)
             SUMATRA Padang 10/18 1616 pops IS, nx (Yamada-JAPAN)
4003.2
             TIBET Xizang PBS 10/22 1250 Tibetan, TP, good (Yamada)
4035
             CUBA Rebelde 11/12 1000 710x6, also 4200, 5680 (Johnson-MD)
4260h
             PERU Naylamp 11/13 0830 romantic mx, TCs (Berg-VT) 11/12
4299.8
             1046 mx, TC, ID (Klinck-NY)
             <u>CLAND</u> Vo Iranian Kurdistan 11/13 0315 mx, ID, tnx MRL (HJ)
<u>PERU</u> Horizonte 11/27 0944 Andean mx, ID, TC (Clar-NY)
4300
4505
             USA WLAC 11/15 1020 1510 x 3 and // w/rel (Johnson-MD) 11/28
4530h
             0710 gospel mx, ID, tnx Johnson (Alexander-PA)
BOLIVIA Rdf Tropico 11/5 2312 nx, econ, ID (D'Angelo-PA)
4552.5
 4600
             BOLIVIA Perla del Acre 11/12 1029 mx, ID, TC (Klinck-NY)
             GERMANY RFE 11/1 to 0700* in UK nx, folk mx, IDS, LSB.
 4565
                                                                                 Also
             RFE in USB same time in lang to 0700* ID, fairy tale (Serra)
             IRIAN JAYA Serui 10/28 0905 Koran, pops (Yamada-JAPAN)
 4606.3
 4635
             TAJIKISTAN Dushanbe 10/24 1515 pops, ID, nx (Yamada-JAPAN)
             11/1 0140 RS seems //4740 (Flynn-OR)
             VIETNAM Son La? 10/29 1210 VT tlk, mx to 1358* (Yamada)
 4683.5v
             JAVA RKIP Surabaya 10/14 1200 nx, lcl pops (Yamada-JAPAN)
 4697
             BOLIVIA Abaroa 12/2 0332 IDs, CP ballads (Klinck-NY) 11/6
 4712.6
             0936 ID, TC, romantic vcls (D'Angelo-PA)
 4725
             MYANMAR Vo Myanmar 11/28 1130 tlks/orch mx (Lawrence-NY)
             12/3 1130 CH tlks, mx, fair (Urbelis-NY) 11/17 1205 (Daven.) CHINA Xinjiang PBS 11/29 1055 Uighur orch, ID, nx (Lamb-NY)
 4735
             12/3 1130 CH tlks, mx, fair (Urbelis-NY) 11/29 1125 (Clar-NY)
             TAJIKISTAN R Yunost 10/30 1618 lang tlk, EZL (Serra-ITALY)
 4740t
             Slavyanka R 11/3 0200 IS, ID tnx Rudnev & BBCM (Johnson-MD)
             PERU Huanta 2000 11/14 1016 mx, IDs (Klinck-NY) 11/5 0954
 4747
             instls, rel, ads (D'Angelo-PA) 11/9 1022 ID, TC, mx (Clar)
             TIBET Xizang 10/16 1132 tlk, full ID, mx (Yamada-JAPAN)
 4750
             BRAZIL Rdf Maranhao 11/27 0010 ads, ID, phone tlk (Alex.) SULAWESI U-P 11/7 1105 tlks, sfx, flutes (Davenport-TN)
 4753.8
 4753.9
             10/14 1425 tlk, pops, nx, drama (Yamada-JAPAN) 1132 (Klinck) BRAZIL R Educ Rural 11/7 2340 tlk, pops, ID (Alexander)
 4755
             SULAWESI U-P 11/27 lcl mx (Rippel-VA)
 4756.3
             ANDAMAN Port Blair 12/4 1125 SC mx, ID, Hindi nx (HJ-MD)
 4760
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INDIA AIR site? 11/28 1140 SC mx, TP, nx (Lawrence-NY)
4760
           11/28 1140 Indian mx, no chance of ID (Berg-MA)
           LIBERIA ELWA 11/27 0648 EG resurrection msg (Lawrence-NY)
4760
           11/6 0602 EG Bible pgm, ID, fair (Urbelis-NY)
           SUMATRA Medan 10/24 1125 SP mx, IN ID, etc (Yamada-JAPAN)
4765.9
           ECUADOR Centinela del Sur 11/24 1125 promos, greetings,
4770
           mx bridges, xmtr probs (Davenport-TN)
4775
           PERU R Tarma 11/27 1050 mx, ads, clear ID (Lawrence-NY)
           11/16 *0958 ID, anmts, OA vcls (D'Angelo-PA)
4775
           SIKKIM AIR Gangtok 12/3 1155 SC mx, xmtr on & off (Rausch)
           12/3 1155 Hindi mx, TP, ment Gangtok, 1205 peak (Urbelis-NY)
           12/2 1240 tent w/SC mx, undermod (Valko-PA)
4779.8t
           ECUADOR R Oriental 11/29 0340 after Onda Musical off w/ID,
           LA mx, ads (Rausch-NJ) 11/11 0120 promos, bad aud (Davenport)

DOM REP Onda Musical 0120 martial mx, ID, ballads (Jordan-PA)
4780
           11/18 2330 merengues, IDs, good (Urbelis-NY) 11/5+ 0300* ads,
           jingles, IDs, NA (Alexander-PA) 11/7 2259 IDs etc (Klinck)
           11/13 0245 sports, phone #s, promos (Clar-NY) 11/9 0040 ad
           for oregano supermkt, greetings (Bickus-VA)
           NORTH KOREA RP 12/4 1215 KR vcls, tlks (Rausch-NJ)
4780
4783
           MALI RTV Malienne 11/24 0636 Afr mx, tlk //4835 (Lawrence-NY)
           11/14 2320 IDs, hilife, pops (Clar-NY)
CHINA Zhejiang 10/15 1230* nx, good (Yamada-JAPAN)
4785
4785
           COLOMBIA Ecos del Combeima 11/29 1115 nx, IDs, ment Super,
           Pablo Escobar (Lamb-NY) 11/13 1000 ID (Urbelis-NY) 11/8 1010
           tlks, morn pgm (Davenport-TN) 11/12 0956 IDs, etc (Clar-NY)
4789.6
           IRIAN JAYA Fak-Fak 10/15 1245 pops, SCI, nx (Yamada-JAPAN)
4790
           PERU R Atlantida 11/16 1042 campo mx, IDs, TC, sfx (Lamb-NY)
           11/14 1030 Andean mx, ads, TCs (Urbelis-NY) 11/8 1003 ID,
           TC, rooster (Davenport-TN)
4790.5p
            INDIA Shillong 11/7 1203 lcl mx, Hindi tlk, nx (D'Angelo)
4790.5
           PAKISTAN AKR 11/14 1410 tlk, SC vcl (Clark-ON)
4795
           UKRAINE RU 11/18 2220 EG ID, theme mx (Davenport-TN)
4800
           GUATEMALA R Buenas Nuevas 11/20 1129 ID, tlk, sfx (Lamb-NY)
           12/5 0125 Xmas, campo mx, ID spot (Frodge-M12) 11/2 0030 rel (Davenport-TN) 11/6 1112 poss Quechua w/rel, ID (Klinck-NY) INDIA Hyderabad 11/14 still fair 1430 (Clark-ON)
4800
4800t
           LESOTHO RL 11/22 0325 Amer/Afr mx, tlk lang (Lawrence-NY)
           11/13 0300 NA, kids choir, rel (Krepp-VT) 11/5 0412 EG ads
           one for bedroom suite (D'Angelo-PA)
4801
           PERU R Onda Azul 11/11 1200 TC, nx, ads (Davenport-TN)
            11/6 2243 live bx, tlk to performers, ads (D'Angelo-PA)
           11/9 1010 nx, folk mx, TC, canned ID (Clar-NY)
PERU Villa Rica 11/7 1013 OA vcls, IDs, etc (D'Angelo)
4804.6
           BRAZIL Rdf Amazonas 11/11 0020 echo anmts, pops (Daven.)
4805
           ARMENIA R Yerevan 10/30 1512 nm, chants //4990 (Serra-ITALY)
4809.9
4810
           SOUTH AFRICA Afrikaans Stereo 11/19 2041 AK EZL, ID (Lamb-NY)
           11/2 0220 R 2000 EZL, MASH theme, good (Newbury-NE) 11/19 0115 R2000 EZL, orch Beatles song (Bickus-VA)
4815
           BURKINA FASO RTV Burkina 11/24 0625 FR mx, ads, ID (Lawrence)
            11/15 2235 FR/lang hilife mx (Urbelis-NY)
4820
           HONDURAS HRVC 11/11 0145 rel, USA addr (Davenport-TN)
           11/2 0215 rel rock mx (Newbury-NE)
4820.9
           PERU R Atahualpa 11/11 1130 huayños, ads (Davenport-TN)
4824.3
           PERU LV de la Selva 12/4 1040 Niños Musical, ID, nx (Rausch)
           11/6 1045 great Andean mx, ID, fair (Newbury-NE)
           GUATEMALA R Mam 11/11 1200 Christian mx, tlk (Davenport-TN)
THAILAND RT 10/2 1532 Thai tlk, EG ID, //9655 (Yamada)
BOLIVIA R Grigota 11/6 1105 ID, LA pops (Newbury-NE)
4825
4829.9
4830
4830
           BOTSWANA RB 12/3 0405 EG nx cmtry (Rausch-NJ)
           VENEZUELA Tachira 11/8 0011 ID, FC, ads (Davenport-TN)
4830
4834.9
           PERU R Marañon 11/13 1001 NA, Chariots of Fire, FC, QTH,
           slogans, poss cmtry (Clar-NY)
4835
           GUATEMALA Tezulutlan 11/14 1100 marimbas, ID, PSA (Urbelis) 11/11 0131 rel pgm, promos (Davenport-TN) 11/2 0230 (Newbury)
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SARAWAK Kuching 11/27 1121 mx, ID, TP, tlk (Robertson-CA)

4835

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BRAZIL Bandeirantes 11/14 1016 morn pgm, ads (Davenport-TN)
4838.5
            VENEZUELA Valera 11/12 0130 ment Trujillo, ads (Davenport)
4840
            GUATEMALA Kekchi 11/11 0235 ID, folk mx (Davenport-TN)
4845
            MAURITANIA ORTM 11/18 2315 AR nx, mx (Urbelis-NY)
4845
            ECUADOR Luz y Vida 11/18 1201 tlks, HC mx (Davenport-TN)
4849.5
            11/13 1036 rel, canned IDs, Hallelujah chorus (Clar-NY)
            UZBEKISTAN R Tashkent 10/31 1730 ID chants, IS, nx? (Serra)
4850
            UNID UTC-5 hrd morns, La Hora? (Johnson-MD)
4858.2
            INDIA AIR Delhi 12/4 1220 EG nx, ID, into Hindi (Rausch-NJ)
4860
            PERU R Lider 11/6 0933 ID, flute mx (D'Angelo-PA)
4860
            RUSSIA RM 11/18 2159 EG TP, ID, nx (Davenport-TN)

WENEZUELA R Maracaibo 11/27 1558 tlk, full ID, nx (Robertson)

MOLUCCAS Ambon 10/18 1010 tlk, pops (Yamada-JAPAN)

COLOMBIA LV del Cinaruco 11/18 0230 ID, futbol (Robinson-TN)
4860
4860
4863.8
4865
            11/17 0115 sports tlk, IDs, TC (Davenport-TN)
            IRIAN JAYA Wamena 11/28 1245 pops, no freq switch at 1300
4866.5p
            (Clark-ON)
4870
            BENIN ORTH tent 11/26+ 2300* FR Afr pops, oldies (Ducharme)
            ECUADOR LV del Upano 12/7 1108 rosary, Christian mx, rel, tnx
4870
            Tony Jones & Rich McVicar (Lamb-NY) 11/24 1100 ballads, prayer
            (Davenport-TN)
            IRIAN JAYA Wamena 10/24 1440 pops, SCI, nx (Yamada-JAPAN)
IRIAN JAYA Sorong 11/7 1116 full ID, TC (Davenport-TN)
4871.1
4874.6
            BOLIVIA Cruz del Sur 11/11 1000 rel, ment del Sur (Daven.)
4875t
            CHINA Vo Jinling 12/2 1220 CH nx, tlks (Urbelis-NY) 11/17
4875
            1241 faint but steady (Davenport-TN) 1155 chimes, mx, TP, nx
            (Krepp-VT)
            ECUADOR RN Espejo 11/27 0230 IDs, drama (Clar-NY)
4879.6
            BANGLADESH RB 10/23 1040 Bengali mx, TP, ID, nx (Yamada)
4880
            11/5 1500 TC, drums, nx (Flynn-OR)
            IRIAN JAYA Suara Kasih Agung 10/28 1105 pops (Yamada-JAPAN)
4881.2
4881.6
            PERU Nuevo Mundo 11/26 0958 TC, IDs (Johnson-MD)
            BRAZIL RC do Para 12/8 0234 soul, pops, echo IDs (Lamb-NY)
4885
            COLOMBIA Ondas del Meta 11/8 0100 lively ads, echo (Daven.)
BANGLADESH RB 10/23 same as 4880, drifted (Yamada-JAPAN)
4885
4887.5
            PAPUA NBC 11/5 1115 lite rock, YL annor (Newbury-NE)
4890
            PAKISTAN RP 10/18 1545 Urdu ID, march, nx (Yamada-JAPAN)
4895.6
            MONGOLIA Ulaanbaatar 10/24 1035 MG mx //4850 (Yamada)
4897.2
            GUINEA RTV Guineenne 11/15 2145 lang hilite (Urbelis-NY)
4900
4905.1
            CHAD RNT 12/1 0458 FR hilife, ID, nx (Klinck-NY)
            CHINA CPBS2 11/16 2212 CH mx, Jingle Bells, ID, EG lesson
4905
             (Lamb-NY)
4909.8
            ZAMBIA ZNBC 11/22 0240 EG IS, drums, tlks, CW QRM (Lawrence) AUSTRALIA VL8T 12/3 1220 PSAs in EG (Urbelis-NY)
4910
            HONDURAS LV de la Mosquitia 11/14 0125 Miskito mx (Krepp-VT)
4910
            11/17 2358 1st sig since Aug, Miskito, EG 0203 (Johnson-MD)
            INDIA Jaipur 11/14 1305 best Indian on band (Clark-ON)
4910
            10/21 1459 Hindi mx, tlk, 1530 EG ID, nx (Yamada-JAPAN)
4914.5
            PERU R Cora 11/10 1003 folk mx, nx (Davenport-TN)
            GHANA GBC 11/7 2238 tlk, acapella sing, TC, ID (Newbury)
AUSTRALIA VLM4 11/27 1231 C&W, ABC natl nx, NA (Lamb,
4915
4920
             (Frodge, Davenport)
            ECUADOR R Quito 12/8 0258 mx, ID, promo, atención (Lamb-NY)
4920
            12/1 0200 ID, nx (Kaminsky-NJ)
            SUMATRA Jambi 10/16 1259 SCI, nx, ID, drama (Yamada-JAPAN) 11/5 1145 pops, SCI, ID, nx (D'Angelo-PA) BOLIVIA R San Miguel 11/12 0940 ID, TC, addr (Davenport-TN) 11/13 1003 poor mod (Johnson-MD) 11/27 1008 nx, TC, IDs,
4925
4925.6
            drums, ad string (D'Angelo-PA)
            DOM REP R Barahona 11/16 to 2317* ID, kids singing, promos
4930
            phone in, poor mod (Lamb-NY)
            RUSSIA RS Mayak 11/1 1755 jazz, IS, TP, ID, ad, mx (Serra)
4930
            BRAZIL R Capixaba 11/16 2242 live speech, jingle, TC, ment
4935
            Vitoria (Lamb-NY)
            KENYA KBC 11/24 to 2108* EG nx, IDs, MOR mx (Urbelis-NY)
4935
4935
            PERU R Tropical 11/13 1015 ads, ID, promos (Davenport-TN)
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11/27 1008 folk mx, IDs, ads, ment Tarapoto (Clar-NY)
4945v
           COLOMBIA LV del Rio Arauca morns, spur //4895, thx MRL
           best in FM (Johnson-MD)
           PERU Madre de Dios 11/26 0026 rosary, instls, poor (Pappas)
4950
4954.9
           PERU RC Amauta 12/4 0245 huayños, TC, ID (Rausch-NJ)
4957.5
           AZERBAIJAN Baku 10/30 1943 Azeri EZL, IS, ID, nx (Serra)
4959.6
           VIETNAM Hanoi 11/26 1200 VT IDs, nx, tnx Clark (Davenport)
           DOM REP R Cima 12/3 ID, LA mx (Kamınsky-NJ) 11/25 0340 salsa
4959.8
           jingles, strong & irreg (Alexander-PA) 11/16 0950 lively vcls
           NA, ID, FC, "Mexico en Cima" (D'Angelo-PA)
BOLIVIA R Juan 23 10/21 1002 ment Bolivia, mx, sfx (Field)
4966.4t
4976
           UGANDA RU 11/30 2000 EG nx, hilife, IDs (Urbelis-NY) 12/2
           0406 EG nx, ID, lcl mx (Klinck-NY)
4980
           VENEZUELA Ecos del Torbes 11/11 0245 ID, tlk (Davenport-TN)
           11/2 0235 dance mx, LA mx, class guitar (Newbury-NE)
4990.7
           PERU R Ancash 11/23 0130 ID, jingles, mx (Rausch-NJ)
           SURINAM Apintie 11/15 0836 DT pops, ID (Klinck-NY) 11/5
4990.9
           0404* jazz, ID, drums, orch NA (D'Angelo-PA) 11/23 0254 jazz, tent ID (Clar-NY)
5004
           RIO MUNI Bata 11/12 2130 SP nx, IDs (Urbelis-NY) 11/25
           2025 Malabo & Bata IDs, tape mixup? (Rausch-NJ) 11/27 2200
           hilite, NA to 2203* (Rippel-VA)
5005
           NEPAL RN 11/14 1239 mx bridges //7165, chants, TP, ID, nx
           on as late as 1430! (Clark-ON) 10/31 1525 mx, nx (Yamada)
           COLOMBIA Ecos del Atrato 11/17 0125 pops, TC, echo tlk, ID
5020
           ment Caracol (Lamb-NY) 11/25 0404* mx, TC, IDs (Alexander)
5020
           PERU unid 11/11 1002 opening anmts, Frampton, poss Estacion
           Tarapoto per Klemetz on WoR (Johnson-MD)
5020
           SOL ISL SIBC 11/7 0935 nx, wx, IDs //9545 (Urbelis-NY)
5025
           CUBA Rebelde 11/3 0445 SP rapid tlk (Grenier-NV)
5029.9
           SARAWAK Kuching 11/20 1228 EZL, anmts (Clark-ON)
5030
           BHUTAN BBS UN Radio Thurs 1430, IDs (Ryan-THAILAND) 11/13
           1137 oriental mx, tlk (Berg-VT)
5030
           UNID EG st 11/21 0015 tlk abt Peace Corps (Hardester-NC)
5034
           CENT AFR REP RTV Centafricaine 11/17 2259* FR ID, Afropops
           Juju mx (Ducharme-MA) 12/1 0507 FR tlk, ID (Klinck-NY)
5037.8
           PERU R Libertad 0946 mx, het, ID 1000 (Field-MI)
           ECUADOR LV del Upano 0502* 11/28 tutbol, ID, ads (Alex.)
5040
5040
           GEORGIA Tbilisi 11/25 *0300 IS, ID, C&W, BBC pgm (Rausch)
           11/14 1400 tlk, tones, nx (Clark-ON)
RUSSIA R Ala 11/25 2306 Western pops, etc (Klinck-NY)
5040t
           SUMATRA Pekanbaru 10/17 1530* pops, anmt, chime (Yamada)
ECUADOR R Jesus 11/25 0402* ballads, ID (Alexander-PA)
5040
5049.8
           COSTA RICA TIFC 11/6 0630 SP Bible pgm, ID, hymns (Urbelis) FRENCH GUIANA Cayenne 11/6 0700 Fk nx, ID (Urbelis-NY)
5055
5055
5060.5
           ECUADOR RN Progreso 10/31 0405 chorus, OM (Flynn-OR)
5075
           COLOMBIA Caracol 12/4 0915 ID, LA mx (Kaminsky-NJ) 11/2 0500
           ID, nx, exc (Newbury-NE)
5082.6t
           PERU R Mundo 11/9 1002 comunicados, TC, ad (Clar-NY)
5125
           CHINA CRI 11/27 1606 tlk, mx bridge, 1625 ID (Robertson-CA)
5145
           CHINA CRI 12/7 1156* MG vcls, tlk, ID, IS (Lamb-NY) 12/4
           1125 tlk, CH mx, CH dialect? (Frodge-MI2)
           TAIWAN WYFR 10/22 1220 rel, IS (Yamada-JAPAN)
5275
           RUSSIA Krasnoyarsk 11/15 1119 mx, ID, tnx Nikolai Rudnev (Johnson-MD) 11/27 1110 RS tlk, ID, poor (D'Angelo-PA)
5290
           CHINA CPBS 12/4 1121 vy young YL w/CH tlk (Frodge-MI2)
5320
           CHINA CPBS 10/22 1233 MG tlk pgm //4800, etc (Yamada)
5420
5486.6
           PERU Reina de la Selva 12/3 0057 echo anmts, ID (Johnson-MD)
5597.5p
           VIETNAM Lao Cai 10/24 1144 VT mx, tlks, fair (Yamada)
5685
           USA WWCR w/spurs 11/11 0115 (Hardester-NC)
5882
           VATICAN VR 11/28 2236 IT nx, ID, Science & Tech (Lamb-NY)
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Does anybody have a 1982 WRTH in decent condition they'd like to sell? If so, write me at the addr above. This month we had reporters from 15 states, 1 province and 3 countries! Last month's logs by JAMES KILGALLEN were from Ford Ord, CA, not Spain. Next deadline is

January 21.

International Band Loggings

5935

5960

5995

5995 6000nf

6000

6005

6005 6020

6040 6040

6070

6085 6090 6095nf?

6095

6095 61091

6110

6115 6120 6130

6135

6140 6140 6150

6190

6250 68033

8638

71.05nf

71653

7370

7385

7405 7415 7475

6070lnf

6005nf?

6030nf?

59849 5990

5901-30000 kHz





LATVIA R Riga in LAT/EG/GM 2120, EG ID/nx 2130, GM 2135, mx (D'Angelo PA 11/26) CANADA R Japan relay in EG 0315, nx re rice imports & trade (McGuire MD 11/11) CONCO RTV Congolaise in FR 0404, ID 0408, QRM under WYFR (Newbury NE 11/8)
MYANMAR V of Myanmar in EG 1440-1540, nx, pop mx "Piano Favorites", tlk, LSB
needed for readability, fanfare 1500, Russ QRM (Flynn OR 11/5, Clark ONT 11/14) MALI RTV Malienne in Vern/FR 2315, mx & info, ID,//4783, 4835 (Urbelis NY 11/18) PERU R Melodia in SP 0913, campo mx, tlks, TC, IDs, f (Lamb NY 12/5)

CANADA RCI Canadian Forces Net in EG *0300-0400*, nx, sports, wx, RCI & CFN IDs, into FR 0330, p w/co-chan Sweden,//9725, 9755, CFN M-F only (Alexander PA 11/27) SWEDEN RS in lang/EG *0200-0400*, IS, covered by RCI s/on 0300 (Alexander 11/28) ITALY RAI in EG 0105, nx, Pope on "World Migration Day", IDs, pgm note, pop song in IT (Clar NY 11/22, Newbury NE 11/1, Lane ONT 11/9) ASCENSION IS BBC relay in EG 0453, tlk on US econ & Clinton (Grenier NV 11/3) SEYCHELLES BBC relay in EG 2100, ID, nx, QRM BBC Cyprus! (Ducharme MA 11/17)
NETHERLANDS RN in EG 2330, ID, world nx, //6165, f (Newbury NE 11/9) SWAZILAND TWR in lang 0331, IS under VOA Cincinnati (Paszkiewicz WI) ANTIGUA D Welle relay in EG 0115, nx, "Living in Germany" (Bickus VA, Newbury NE) BRAZIL RC Paranaense in PT 0907, tlks, IDs, TC, ads, //9725 (D'Angelo PA 11/5) CANADA CFRX Toronto in EG 0150, pgm on Sinatra, phone-in, ID (Newbury NE 11/2) PERU LV de Huanmanga in SP 0930, moved from 6200, QRM Toronto (Johnson MD 11/13) GERMANY Bayer Rundfunk in GM 0250, US/GM pops, ID, nx (Lamb NY 12/2, Newbury NE) CHILE R Esperanza in SP 0935, relig mx/tlk, f w/heavy QRM (Klinck NY 11/15) PERU RN del Peru in SP *1100, NA, ID, mx, QRM China 1115 (D'Angelo PA 11/5) VATICAN STATE VR in EG 0250, ID, message from Pope John Paul (McGuire MD 11/10) CHINA CPBS Nanchang in CH *0953, mx, ID, anomts, pips 1000, nx (D'Angelo 11/2) AZERBALJAN R Baku in Persian? 1246, subcont mx, anomts, ID, g (Valko PA 12/2) PHILIPPINES VOA relay in EG 1548, "Magazine Show", ID, QTH (Robertson CA 12/7) PERU R Union in SP 0434, shouted vcls, ancmts, IDs, NA (Paszkiewicz WI)

CANADA R Japan relay in EG 1100, "Newshour", "Japan Diary", ID (Pappas SD 11/11)

CANADA CHNX Halifax in EG 0535, Tom Lucas oldies request pgm (Paszkiewicz WI) BOLIVIA R Santa Cruz in SP 2230, ballads, anomts, TC, QTH, tlk, ID, phone #, muddy audio, QRM (Paszkiewicz WI, Ducharme MA 11/23) SINGAPORE BBC relay in EG/lang 1540, "Looking at Literature",ID (Robertson 12/7)
AUSTRALIA VLW Perth ABC in EG 1328, ID, 1930's jazz, nx, f-p (Ducharme MA 11/27)
KENYA KBC in SH 2110*, tlks, Afr vcls, pips 2100, ID, nx, NA (D'Angelo PA 11/6) ARGENTINA R Malargue in SP 1003, anomts, ID, QRM St Johns (Johnson MD 12/4)
NETHERIAND ANTILLES R Nederlands relay in EG 2340, wx, country (McGuire MD 11/11)
COLOMBIA LV de la Selva in SP 0313, futbol, jingles, ID (Paszksiewicz WI)
COSTA RICA Faro del Caribe in SP 1009, relig tlk?, IDs, fqy, QRM (Clar NY 11/12) YUGOSLAVIA RY in EG 0211-0229*, interview, fqys, ID, IS, update on Balkan civil war, cmntry on NY Times editorial (Lamb NY, McGuire MD, Clar NY, Lane ONT) BOLIVIA R Metropolitana in SP 0956, ex 61945, ads, ID, tlk (Johnson MD 12/4)
EQUATORIAL GUINEA RN Malabo in SP 2201*, tlks, mx, ID*, NA (D'Angelo PA 11/14)
PERU R Ondas del Mayo in SP 0005, ancmts, huaynos, ID, SP pops (Alexander 11/28) 61961nf AUSTRALIA VNG Llandilo Time Stn 1030-1050, pips, CW "VNG" ID (Jordan PA 11/30) MOLDAVA R Dneister Int Tiraspol in EG *0330-0400*, 9 note IS, full ID, fqys, sked M-W-SA, nx incl tlk re poss separation from Russia (Johnston KY 11/27-28) NEPAL R Nepal in lang? 1305, tlks, mx, TC, ID 1315, //5005 (Clark ONT 11/14) GREECE VOA relay Rhodes in AR 2023, Xmas carols, ID, nx, rock mx (Lamb NY 12/10)
AUSTRALIA RA in EG 2025, ID, C & W mx pgm, exc (Ducharme MA 11/27)
BOTSWANA VOA relay in EG 0400, nx, cmntry, interviews, ID, mx (Cleveley NY 11/8)
CZECH REPUBLIC R Prague in EG 2157, IS, ID, nx, folk mx, //7345 (Lamb NY 11/28) MALAYSIA RTM Kajang in EG 1135, Radio 4, commodities rpt, ID, nx (Ducharme 12/6) BELGIUM R Vlaanderen Int in EG 0035, "Brussells Calling", DX pgm (McGuire 11/13) MONACO TWR in EG 0845, relig pgm, gospel mx, ID, ex-9480 (Alexander PA 11/7) CHINA CRI in EG 1404, nx, mx, "In the Third World", IDs, g (Pappas SD 11/12)
BOTSWANA VOA relay in PT 0449, IS, ID, rock, to Hausa 0500 (Hardester NC 11/14)
TUNISIA RIVT in AR 2115, AR mx, ID, tlks, chants (Urbelis NY, Cleveley NY)

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CHINA RCI in EG *0300, new fqy with //9690,11715, QRM 9388 (Hardester NC 11/11)
9390nf?
9420
            GREECE FTH Athens in EG 0130, tlk re Greece's budget problems (Newbury NE 11/6)
            RUSSIA RS Nadezhda in RS 1305, long tlks, IDs, nx, orch mx, f (Jordan PA 11/21)
9490
9510
            SRI_LANKA D Welle relay in Persian 1758, EG ID, nx, tlks, mx (Urbelis NY 11/23)
            PHILIPPINES R Veritas Asia in IN 1159, EG ID, ezl mx, tlks, f (Lamb NY 11/20)
9520
            PORTUGAL D Welle relay in EG 0300, IS, TC, nx, interviews, f (Cleveley NY 11/8) SOLOMON IS SIBC in Pidgin EG 0840, "World Nx Picture", lcl nx (Frodge MI 12/4)
9535
9545
            ANTIGUA D Welle relay in EG 0345, tlk on business in Barbados (McGuire MD 11/16)
JORDAN RJ Amman in EG 1500, feature on new Museum of Culture, "Listeners Choice"
9545
9560
            pop mx w/dedications, TC, ID, nx (Frodge MI 12/2, Berg MA 10/28, Lamb NY 12/11)
9565nf(t) PAPUA NEW GUINEA NBC Port Moresby in EG 0845-1330+, nx, mx, lcl TC, Karai Svc,
            IS, said to be new Intl Svc of NBC at 100 kw w/plans to move fgy to 9675 on Dec
            14 (see below), NA 1401*, plan to run continuously from 2000-1400 daily and will use 4890 as standby only (Frodge MI, Valko PA, Berg MA, Clark ONT)
9570
            PORTUGAL RPI in PT 0015, folk mx, cmntry, ID, TP, nx (Robertson CA, Newbury NE)
9610
            AUSTRALIA ABC Perth in EG 1215, panel tlks, pop mx, nx (Jordan PA, Lamb NY 12/6)
            COSTA RICA REE relay in SP 0202, nx re Maastricht treaty, ID, vg (Lamb NY 11/30)
9630
            SO AFRICA Channel Africa in PT 0400, IS, ID, mx, Africa svc (Cleveley NY 11/8) CHINA CRI in EG 1200, world nx, tlk re RR's in China, mx, f (Jordan PA 12/7)
9650
9655
9655nf
            NEW ZEALAND RNZI in EG 1303-1500, wx, ad, jingles, pop mx, IDs, g (Jordan 11/20)
            CYPRUS BBC relay in EG 1348, "Newsdesk", Beatles mx, f-p (Lamb NY 11/28)
PAPUA NEW GUINEA NBC Port Moresby in EG 1200, pips, drum beat, ID, nx, pop mx,
9660
9675nf
            wx, abrupt s/o 1345*, repl 4890 and 9565-t (Ducharme MA 12/14, Rausch NJ 12/7)
9675
            TURKEY VoT Ankara in EG 1346, TK vocal mx feature, f (Frodge MI 12/5)
            PORTUGAL R Renascenca in PT 1900*, relig mx & tlks, IDs, nx, f (Lamb NY 12/6)
THALLAND VOA relay in CH 1659*, tlks, pop mx, nx, IS, ID, f (Lamb NY 11/20)
ANTIGUA D Welle relay in GM *0600, IS, ID in EG/GM, nx, f (Robertson CA 11/18)
SPAIN China R Intl relay in EG 0356*, "Music Album", IDs, mail, IS (Lamb 11/29)
9680
9680
9690
9690
            NEW ZEALAND RNZI in EG 0940, class mx, Mozart & Mendelssohn, g (Jordan PA 11/28)
9700
9730
            SO AFRICA Channel Africa in EG 0305, nx, ID, feature, pgm notes (Clar NY 11/13)
            CANADA RCI in EG 0022, sports feature, tlk, ID (Robertson CA 12/4, Grenier NV)
MALI China R Intl relay in EG 0400*, Asian seminar on nuclear energy, CH lesson,
ID, fqys, sked, //11715 (Lamb NY 11/16, Newbury NE 11/2, Cleveley NY 11/18)
TADJIKISTAN RMI to Asia in EG 1300, intl nx, co-channel w/KHBI (Rausch NJ 11/28)
9755
9780nf
9830nf?
9845
            KAZAKHSTAN R Nederland relay in EG 0120, "Newsline", mx hits, g (Flynn OR 11/17)
9885
            BOTSWANA VOA relay in EG 0300*, IS, "Daybreak Africa", nx, f (Newbury NE 11/2
9925
             BEIGIUM R Vlaanderen in Flemish 1525, new sked, pop mx deds, nx (Flynn OR 11/3)
            GREECE RS Makedonias in GK 1355-2130, nx, GK mx,//11595 (Pappas SD, Urbelis NY)
INDIA AIR Delhi in HD 2016, prayers, Indian film songs, sitar mx, into EG 2045,
9935
9950
            nx, IDs, //7412, 11620 (Lamb NY 11/28, Ducharme MA 11/16)
            USA WRMI R Miami Intl in EG/SP 1740-2245, testing w/instrml mx, IDs, test tone,
9955nf
            QTH for rpts (Berg MA 11/13-2145, Alexander PA 11/25-1940, Clark ONT 11/13-2150,
            D'Angelo PA 11/16-2211, Hardester NC 11/11-2125, 11/13-1744*)
            LEBANON Wings of Hope in EG 0410, Dr G Scott w/relig tlk, mx (Alexander 11/26) in RS 1933, relig pgm, ID in EG 1945, p (Fredge MI 12/2)
9960nf
            SPAIN R Uno Domes Svce in SP 1705-1920, mx, ID, nx, ex 14880 (Alexander 11/26)
11430nf?
11445
            CHINA CRI in FP/EG 1200, nx, ID, CH class mx, into Urdu 1230 (Ducharme MA 11/19)
11587
             ISRAEL KI in EG 2230, tlk on Israel meeting w/PLO, p (McGuire MD 11/13)
            NETHERLANDS RN Flevo in AR 1728, IS, IDs, nx, AR mx, g (Urbelis NY 11/29)
11655
             AUSTRALIA RA in EG 1910, world nx, //11880 (Frodge MI 12/4, Lane ONT 11/7)
11660nf
11680
             FRENCH GUIANA CRI relay in EG 0415, pgm on CH press clippings, mx (Newbury NE)
11705
             FRANCE RFI in EG 1558, IS, TC, ID, African nx, //17620, f-g (Lamb NY 11/28)
            MALI CRI relay in EG 0332, pleasures of shopping in open mkts (Newbury NE 11/5)
11715
11760
             PHILIPPINES VOA relay in EG 2157, IS, ID, VOA nx (Rausch NJ 12/2)
11785nf?
            COLOMBIA R Dif de Nacional in SP 1905, L Am mx, IDs, tlk, ad string, "Superman"
             theme mx, nx, f-p (Urbelis NY 12/2, Jordan PA 11/19)
11800
            AUSTRALIA RA in EG 1545, French contrib to study of Aus biota (Bickus VA 11/9)
            GUAM KTWR Agana in EG 0930, Bible pgms, ID, f (Orbelis NY 11/7)
COSTA RICA REE relay in SP *0059, site ID, fqys, C Am relay (Ducharme MA 11/20)
11805
11815
11825
            ALBANIA R Tirana in EG *2300, nx to Eur, cmntry, mx, QRM WEWN (Ducharme 11/19)
11830
            BRAZIL R Anhanguera in PT 2245, IDs, fqy, US oldies, ad (Bickus VA, Ducharme MA)
11840
            SEYCHELLES FEBA in Oromo 1720, songs in lang, prayer, hymn, IS (Paszkiewicz WI)
11850
            UNIDENTIFIED Stn suddenly on 1429 w/instr mx & W in Asian lang, 15 secs of rapid
            tones & abrupt s/off, p (Hardester NC 11/19) Dem Voice of Burma rptd *1430-1500* PORTUGAL RFE/R Liberty in RS/EG 2304, ID, RS mx, EG lesson (Robertson CA 12/4)
11885
11885
            JAPAN RJ Tokyo in EG 0509, world nx, fqys, cmntry, exc (Klinck NY 11/24)
            TURKEY VOT Ankara in EG 2300, nx, cmntry, TK mx, //9445 (Urbelis NY 11/2)
11895
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BOTSWANA VOA relay in EG 0347, "Now Music USA", ID, IS, Somali 0400 (Lamb 12/7)
GABON Swiss R Int relay in EG 2000, site ID, fqys, nx, g (Ducharme MA 11/19)
               KUWAIT R Kuwait in EG 1805, rock & pop mx nonstop, anomts (Newbury NE 11/5)
  13620
               CROATIA CR Zagreb in CR 1537, rock mx, nx, music box IS?, f (Flynn OR 11/15)
  13640nf
               FRANCE RFI in EG 1300*, contest ancmt, sked, ID, sci pgm, f-g (Jordan PA 12/7)
  13640nf
  13690nf
               CANADA RCI in EG 2210, sci pgm, ID, fqys, QTH, to FR 2230 (Robertson CA 12/4)
  13720
               GUAM AWR in Indian lang 1630, mx in lang, M preaching, f (Newbury NE 11/3)
  13730
               AUSTRIA RAI in EG 1230, IDs, Aust Pres visits Mexico, g (Robinson TN 11/23)
  13790
               CANADA D Welle relay in GM 1505, nx, relig svce?, choral mx, ID (Jordan PA 12/5)
  13830
               CROATIA CR Zagreb in CR 1640, rock mx, ID on hr, nx, Mozart mx (Newbury NE 11/3)
               ICELAND INBS Reykjavik in IC 1235, nx, wx, lcl info, g (Urbelis NY 11/30)
  13835
  14880usb
              SPAIN RN de Espana in SP 1555, ID 1600, tlks, instrml & vocal mx, possible
               R Uno feeder to the Canary Is but see 11430 above, f-p (Hardester NC 11/19)
  15084
              IRAN V O Islamic Rep in Farsi 1030, nx, revolutionary tlk, g (Urbelis NY 11/21)

VATICAN ST VR in Amharic 1634, relig tlk, synthesizer mx, ID, fqys (Lamb 12/11)

NEW ZEALAND RNZI in EG 0439, pops, Cushen DX nx, mail, ID, nx, cricket match,
  15090
  15115nf?
              f-g (Lamb NY 12/6) ED: Perhaps a move back of 5 khz to avoid AIR and VOA hets?
  15205
               ALGERIA R Algiers Intl in EG 1600*, stn anod EG sked as follows: 1500-1600 on
               11715, 15205, 17745 and 1700-1800 on 7155, QTH (Johnson MD 12/5)
               AZERBAIJAN R Dada Gorgud in EG 1715, top pop tunes, nx briefs, g (Newbury 11/6)
  15240
              RWANDA R Rwanda in FR 1936, cmntry, nx, relig tlk, ID, pop mx, g (Clar NY 11/27)

SINGAPORE BBC relay in EG 2150, sports nx, ID, nx, lost 2201 to *RHC (Rausch NJ)

LUXEMBOURG RL in GM 1650, GM pops, US oldies, IDs, QRM WYFR & HCJB (Urbelis NY)
  15340
  15340
  15350
               FINLAND RF in EG 1330, IDs, nx of Finnish ice hockey, exc (Robinson TN 11/23)
  15400
  15415
               LIBYA R Jamahiriya in AR 1130, IDs, nx of Palestine, band mx, g (Robinson 11/25)
  15430
              JAPAN NHK Tokyo in EG 2138, Radio Roundup w/feature by Larry Magne (Grenier NV)
              JAPAN R France Int relay in FR 2351, FR lesson, IDs, fqys, IS, nx (Lamb 12/5) BRAZIL Radiobras in EG 1225, contemp mx, environm'l tlk, vg (Newbury NE 11/4)
  15445
  15445
              AUSTRALIA RA in EG 0555, guitar mx, ID, nx, "Pacific Beat", f-g (Lamb NY 11/23)
USA KJES New Mexico in EG 2012, relig pgm, ID by child, kids chorale mx, g
KJES means "King Jesus Eternal Savior" (Robertson CA 11/30)
  15510nf
- 15545nf
              BOTSWANA VOA relay in FR 2035, Afr drum mx, ID in FR/EG, nx (Robertson 11/30)
ISRAEL Kol Israel in EG 1409, "Israel Mosaic", ID, //15640, f (Lamb NY 11/30)
 15625nf
  15650
              ICELAND INBS Reykjavik in IC 1955, nx, tlks, instrum mx, g (Jordan PA 11/25)
EGYPT R Cairo in EG 1230, AR mx, IDs, Koran, historical tlk (Urbelis NY 11/29)
FRANCE RFI in EG 1600, ID, nx, cmntry on trade & Afr problems (Newbury NE 11/2)
  15770
 17595
 17620
  17630
              CABON Africa #1 in FR 1153, outdoor story w/farm sounds, ID, TC (Lamb NY 12/8)
 17795
              AUSTRALIA RA in EG 0140-0500+, tlk re churches in Hungary, world & lcl nx,
              sports scores, nx, cricket update, ID (Robertson CA 11/18, Grenier NV 11/12)
  17810
               ANTIGUA D Welle relay in GM 2035, sports scores, ID, IS, nx (Robertson CA 12/4)
              RWANDA D Welle relay in GM 1935, tlk, ID, rock mx, TC, IS, nx (Robertson 11/30)
SWEDEN RS in EG 1430, IDs, nx of Stockholm film festival (Robinson TN 11/23)
  17860
  17870
  21590
              NETHERLANDS ANTILLES RN relay in EG 1829, nx, opera mx, fqys, ID (Robertson CA)
              UNITED ARAB EMIRATES Dubai in EG 1330, nx, wx, Islam tlk, AR mx (Urbelis 11/24)
  21605
  21800
              UKRAINE R Ukraine Int in UK 1445, debate?, heated exchanges, IDs (Jordan 11/25)
  21810
               BELGIUM R Vlaanderen in Flemish 1330, IDs, nx, mx, information (Urbelis 11/29)
  CLANDESTINE STATIONS
              Is Voz del Cid-Gustemala in Sp 0400
```

11965 12035

/343	La voz dei Cid-Guatemaia in SP 0400, tik on Caribbean econ (Cleveley NY 11/8)
96703	V of Islamic Revolution in Iraq in AR 1445, press review, ID (Johnson MD 11/29)
9940v	La Voz del Cid-Guatemala in SP 0500, rpts of funding problems, anti-Castro
	polemics, patriotic mx, ID (Jordan PA 12/4, Cleveley NY 11/8)
9965	Radio Caiman-Guatemala in SP 1420, ezl orch mx, ID, tlks, f-p (Jordan PA 12/4)
11940	La Voz del Cid-Guatemala in SP 1158, ID, usual rhetoric, f-q (Ducharme MA 11/23)
15050	R Patria Libre-Colombia in SP 1400, speeches, LAm mx. ID. promo (Frodge MI 12/1)
*****	*********************************

Best wishes for 1994 to all NASWA members! Despite the holiday madness, I have logged a couple of new frequencies which I forgot to list in order above. They are:

6185nf ANTIGUA D. Welle relay s/off w/site ID in EG 0550* 11/26 NORWAY RNI Oslo w/pgm in NO 1600, //11850 12/18 11880nf

English Schedules

Tom Sundstrom
P.O. Box 2275
Vincentown, NJ 08088-2275
MCI Mail 244-6376
Fax 609-859-3226
PICS Online RBBS 609-753-1549
GEnie T.SUNDSTROM



Prepared 12/27/93 at 11:53 AM.

This month, thanks to Dan Ferguson (VOA), Mike Fern (CA), Bob German (George Jacobs & Assoc.) Joe Hanlon (PA), Adam Lock (WWCR), Hans Johnson (MD), Jon Klinedinst (PA), Jonathan Marks (R Netherlands), Richard McVicar (HCJB), Richard Measham (WBI-BBCM), Andy Sennitt (WRTH) and George Thurman (IL).

New

KWHR on 9930 kHz commenced testing on



December 19 at 0700 UT. Thanks to George Thurman who alerted us to the activity, George and I listened from 1400 UT onwards, running s7 or so for about an hour. At 18 KWHR UT showed up for 13 minutes on 13625, and that too was quite good, although I could hear some long-path echos. Doug Garlinger, the engineer, told me that the digital audio, fed by satellite, comes from a new system using 80486/50 PCs as the server. Two days later I found I could also hear the 20 UT release to Japan on 13720. and Jonathan Marks told me 7425 has been making it into Europe. Regular programming commenced at 12 UT Friday, December 24, corresponding to Christmas Day in the Pacific just across the International Date Line.

Notes

Australia: The demise of VLW, Western Australia, was postponed at the last minute due to a flood of telephone calls and faxes. VLW lives, but it remains to be seen for how long.

Iraq: BBC Monitoring assembled the data on R Baghdad was assembled in early November. Admittedly suspect and subject to

change, it is still an improvement over what I had been carrying in the files.

Lithuania: The NAm service of R Vilnius ceased on December 31, as the broadcaster could not afford the rent on the Ukrainian sender.

Moldavia: WBI lists a new service at 0330 on 7105, but their data also shows Armenia on the same frequency at the same time. Something is probably on 7105... check it out, and we'll do the same.

Portugal: In early December R Portugal was reported by some sources to be using 9635 at 0230 UT. I checked throughout mid-month and found them in Portuguese at 0200, but not continuing in English at 0230.1 can only hear 9570 and 9705, the other three announced frequencies — if active — are covered by other stations.

USA: As of late December WRMI still had not made it to air WWCR's reported move to 5890 was put on hold a day after the announcement due to complaints from Australia

... and more



You don't have your 1994 World Radio TV Handbook yet? It rolled off the presses

on December 30. Run, don't walk, to your favorite supplier.

A footnote. Because of the larger data files that break out the target data, the BBC data — which now includes the entire World Service schedule to all target areas — and the DX shows listing can no longer be included in this column. The page count goes beyond reasonable bounds. The full data set is distributed on diskette as part of our Schedules software.

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LAST	Update	12/10/93 12/10/93 12/18/93	12/04/93	12/23/93 12/13/93	12/11/93	12/04/93 12/08/93 12/10/93	12/23/93 12/10/93	12/11/93	12/13/93	12/11/93	12/25/93	12/13/93 12/10/93 12/04/93	12/08/93	12/13/93 12/13/93 12/04/93 12/11/93	12/02/93	12/13/93 12/04/93	12/16/93 12/11/93
	Notes	K##3				Tu-Sa	Slow-speed news Tu-Sa				Exc Fr						Mo-Sa
	TARGET AREA	LAm/NAm Pac EuMEhAf	SAmMAm	As India	As/AusnZ	Americas sAs Japan	s&seAs SAmNAm	NAm	wAs	eAf	Am	eAf Japan/China eEu/CIS	NAm	EurnAIME wAf Japan/China Eu Eu	Pacific	nEu UKAwEu	Pacific ME/Eu/wCIS
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DSTROM						6035											
BY SUB						6130											1530
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	COUNTRY	Costa Rica USA USA	Belgium	Iraq Russia	Vatican State	0200 0300 Argentina 0250 Germany 0400 USA	Pakistan Portugal	Vatican State	Russia	Vatican State	Moldavia	Russia USA USA	Germany	0600 2215 Italy 0700 Russia 0800 USA 0700 USA 0620 Vatican State	New Zealand	Russia USA	Netherlands Vatican State
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Last Update 12/04/93 12/23/93 12/13/93 12/10/93 12/13/93 12/23/93 12/23/93 12/11/93 11/27/93 12/23/93 12/25/93 12/24/93 12/02/93 11/30/93 11/30/93 12/13/93 12/13/93 12/10/93 11/28/93 2/18/93 11/27/93 12/04/93 12/25/93 12/13/93 12/01/93 11/26/93 12/02/93 12/05/93 Slow-speed news 1615 Slow-speed news occasional use News/Eng lews/Eng Sa -1430 Notes Mo-Fr Mo-Sa Mo-Fr M-Sa seAs/NAm India/China India sChina/Malaysia NAm/CAm/SAm FARGET AREA neAt/ME/Eu Eu/ME/Af India/China As India sAs e&seAfME eAf Pac seAs/NAm As/AusNZ wEu China MEA SCHEDULES BY SUMBSTROW 6110 1548 7125 6170 1530 9645 1225 6245 7305 9700 9425 15210 11740 15205 9585 15515 15180 13680 11715 9760 13640 15205 15650 11645 17590 9815 17900 15205 11640 1422 21520 17900 17590 17535 15630 REQUENCIES 21655 21520 15395 17740 21810 21645 17940 9965 7180 21810 9355 13790 9930 9355 9355 9830 9455 15090 7145 13680 17725 11610 7425 9655 9655 R New Zealand Int'l R Deutsche Welle R Pakistan AWR Russia KWHR R New Zealand Int'l R Vlaanderen IntT KHBI/1 AWR Russia KWHR R Vlaanderen Int'l R France Int' R Iraq Int'i KHBN R Korea R Algiers Int'l KHBI/1 KHBN AWR Russia Vatican Radio Vatican Radio R Algiers Int1 V of Greece / of Greece R Pakistan KWHR R Iraq Int1 KHBN R Pakistan STATION START End COUNTRY 0750 Greece 0800 Pakistan 1400 USA 1200 Iraq 1300 Palau 1120 Pakistan 130 Pakistan 130 Palau 130 Pakistan 130 Palau 1400 Palau 130 Palau 1400 Palau 1500 Rosaland 1500 Rosaland 1500 Rosaland 1500 USA 1445 Greece 1500 Algeria 1600 Vatican State 1600 Vatican State 1600 Cemany 1600 <th

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MEMPHIS AREA SHORTWAVE HOBBYISTS

NEWS RELEASE

For more info, call Jim Pogue, (901) 544-3348 weekdays or (901) 873-4291 evenings or weekends

Short Wave Radio Group To Form

The Memphis Area Shortwave Hobbyists (MASH) will hold their first organizational meeting Tuesday, Jan. 18, 1994 at 7:00 p.m. at the Bartlett Public Library, 6382 Stage Road in Bartlett. The group will also meet there the third Tuesday of each month thereafter.

Anyone interested in the exciting hobby of listening for distant or hard-to-hear radio stations is urged to attend. Persons interested in learning about the hobby are also invited to join the group.

Although the group's name refers to only short wave, hobbyists that listen to medium wave broadcast band stations, FM and TV stations, utility stations, pirate and clandestine stations, and stations on other bands are also invited to attend.

If you'd like more information about the club or radio listening in general, please call Jim Pogue, (901) 873-4291 or Brandon Jordan, (901) 373-8046. You may also write to: MASH, P.O. Box 3888, Memphis, TN 38173.

 \underline{FOR} SALE: JRC NCM-515 frequency controller. This is the keypad for the $\overline{NRD-515}$ that allows direct frequency entry. Price \$120.00. JRC CLF-260 and CLF-230 (cw filters) mounted on filter board. Price \$115.00) Both items plus shipping. Steven R. Lare, 824 West 25th Street, Holland, MI 49423. Phone (616) 335-2270.

FOR SALE: RS PRO-30 portable VHF/UHF scanner, \$75.00. PRO-37 VHF/UHF/800 MHz scanner, \$125.00. QF-1A Audio Filter for AM/CW/SSB, \$45.00. Palomar Antenna Amplifier and loops for LF and BCB, \$100.00. Sony ICF-2002 digital shortwave portable, \$75.00. Jim Vecchiola, 11 Acorn Hill Drive, Voorhees, NJ 08043. Phone (609) 424-9555 after 6 pm EST.

Winter SWL Festival

March 11-13, 1994 Holiday Inn Sumneytown Pike Kulpsville, Pennsylvania

For the seventh year in a row, we are pleased to announce the Annual Winter SWL Festival! Due to last year's success, we will officially open the Forums on Friday morning and continue all day Saturday. Meet with friends from past SWL Fests, exchange tips and techniques of the hobby, and enjoy a weekend of fun and Festivity. There will be door prizes, station freebies, a silent auction, and a banquet on Saturday night.

The usua	I high quality Forums to inc	lude:		
O Inside Your Receiver	O A SW tour of Germany	O Utility Listening		
Medium Wave DXing	O Beginners Forum	O Scanners		
An An	d More To Be Announced			

Registration Options:

FULL - Includes forums, hospitality room, lunch and banquet - \$32

PARTIAL — Includes forums, hospitality room but NO meals — \$15

SPOUSE — Includes hospitality room and meals — \$17

Past raffle Grand Prizes include JRC NRD-535 and Kenwood R5000 radios!

Special Register early and win a SW portable! Your registration received by midnight February 11, 1994 will allow you one FREE entry towards this early bird registration door prize.

Please bring items for the Silent Auction. Proceeds are donated to charity.

Checks should be made payable to WINTER SWL FEST. Registration for hotel rooms should be made directly to the Holiday Inn at (215) 368-3800—As soon as possible! Special rates - \$59 single, \$64 double. Our function code with the hotel is WINTER SWL FEST. Please refer to this to get the special room rates. Listen to the ANARC SWL NET on 7.240 LSB at 10 AM Sundays for up to the minute info.

The Holiday Inn is located at EXIT 31 of the PA Turnpike Northeast Extension—Lansdale Interchange improved access from the south with the Blue Route—ask for details. Limo service is available from Phila. Intl Airport directly to the Holiday Inn.

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

Winter SWL Festival PO Box 591 Colmar, PA 18915

Name	
Address	
City State	ZIP Phone
Cirde: FULL PARTIAL SPOUSE (Spou	se Name:
Banquet — Check: Roast Beef Chicken	Registration Fee Enclosed: \$
I wish to purchase raffle tickets	Tickets Fee Enclosed: \$
(\$1 ea./ 6 for \$5/ Special 13 for \$10)	
,	Total check/money order enclosed: \$

Registration cancellations after 2/28/94 cannot be refunded, however we will refund raffle ticket money if you have to cancel.

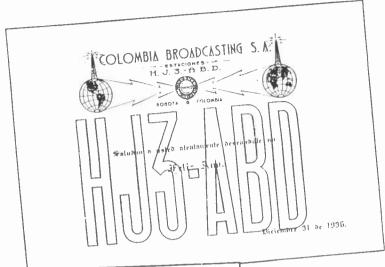
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As observed in an earlier column, Colombia was the source of many Interesting SWBC signals. A 1939 station list supplied by the Minister of Mails and Telegraphs and published in the Summer issue of RADEX revealed a high ratio of SW stations--21 out of 58--in operation at the time. Stations were classified as cultural. regional. iocal, and International. Most of the shortwave outlets were in the 500-750 watt range. The call letter prefix, then as now, was HJ, tollowed by a number designating the province, and then three letters. Regular four-letter calls had replaced the "number and letter" calls by 1940. The card from HJ3ABD, Emisora Nueva Granada, is a Christmas card from 1936. The Emisora Sur-America card is from 1940, and the one from the still-active Radlo Bucaramanga is from 1938.

North American Shortwave Association 45 Wildflower Road Levittown, Pennsylvania 19057

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