

FRIENDX

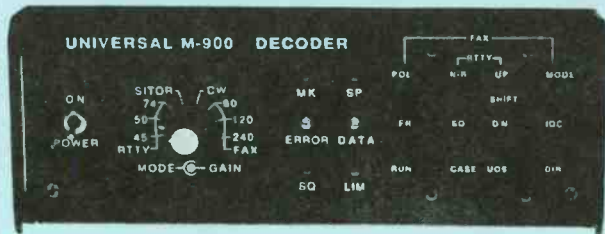
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**South Africa,
the news,
the views.**

UNIVERSAL SHORTWAVE

Universal M-900



The Universal M-900 was designed for the hobbyist or maritime user who wants an affordable compact unit that copies all the basic HF transmission modes. The M-900 receives Morse code to listen to maritime coastal stations or amateur radio operators. It also decodes "regular" RTTY (Baudot) still used by many international press agencies, weather stations and aeronautical concerns. Both Sitor modes are included so you can read the vast amount of maritime and international diplomatic traffic sent in these modes. Facsimile is the transmission of pictures, charts, maps, press photos, marine information and other documents. The M-900 yields high resolution facsimile images to the printer port (not video). It operates in line mode for weather map reception and gray mode for press photos in 16 shaded levels. The M-900 can print right to left or left to right as well as positive or negative.

LED indicators include: mark [MK], space [SP], error, data, squelch [SQ] and limiter [LIM]. In the RTTY mode the six push buttons control: normal-reverse [N/R], squelch [SQ], case change [CASE], shift up [UP], shift down [DN] and unshift on space [UOS]. The status line shows the operating parameters and features a tune for max. indication. In FAX mode the six push buttons control positive-negative polarity [POL], framing [FR], start [RUN], line-gray mode [MODE], IOC [IOC] and direction. Standard print features include multiple scroll inhibit (MSI), over print inhibit (OPI), Automatic C/R & L/F and 8K print buffer. A six position DIP switch allows you to set a 40 or 80 character video line, a 16 or 22 line video page, a 50 or 60 Hz video refresh rate, high-tones or low-tones and a 9 or 24 pin printer. Power input is a 2.5 mm jack, audio input is a mini jack, video out is an RCA phono jack and the parallel printer port is a DB-25. A complete system will require the following components:

- **Universal M-900**
The heart of the system!
- **Your Quality Shortwave Receiver**
Must be stable and selective.
- **Power Supply 12 VDC 1 Amp Filtered**
See #0096 this page or equivalent.
- **Video Monitor**
Any composite video, monochromatic.
(Not EGA, CGA, RGB, TTL or TV's)
- **Compatible Parallel Printer**
Required for FAX mode only.
See page 37 #1642, #0514 or other compatible printer from list below.
- **Printer Cable**
See item #2427 on page 37.
- **Audio & Video Cables**
An audio cable to your receiver and a video cable for the monitor are required.

RECEPTION MODES

- Morse Code with auto speed ranging. 6 to 35 W.P.M.
- RTTY Baudot - Standard Speeds: 45, 50, and 74 baud. 60, 66, and 100 W.P.M.
- Sitor A - (ARQTOR, Amtor A)
- Sitor B - (FECTOR, Amtor B) Collective and Selective
- Facsimile (FAX) - FM 60, 120 and 240 LPM. 288 or 576 I.O.C. Line or Gray. Positive or Negative. Automatic or Manual (To Parallel Printer Port only)

SPECIFICATIONS

Dimensions	9" W x 3 3/4" H x 13 1/4" D
Weight	5 Lbs. (7 Lbs. ship)
Power	12-16 VDC @ 800 ma
Audio Input	4 to 600 ohms .25 V p-p nominal
Printer Output	Parallel ASCII 8 bit Cent.
Video Output	Composite 75 ohms 1.5v p-p (50 or 60 Hz)

COMPATIBLE PRINTERS M-800/900 AND M-7000

Epson FX-85	Sears SR-2000
Epson FX-86e	Star NR-15 [▲]
Epson FX-185	Printer Plus NLQ
Epson FX-286e	Seikosha SL-80A1 [▲]
Epson RX-80	Seikosha SP-100A
Epson RX-100	Seikosha SP-1000A
Epson LQ-500 [▲]	Diconix 150
Epson LQ-800 [▲]	NEC N-5 or N-7
Epson LQ-850 [▲]	NEC P-5/XL or P-6
Epson LQ-1000 [▲]	Star SG-10
Epson LQ-2500 [▲]	Honeywell NP-10
Epson LX-86	IBM Proprinter 2
Epson LX-800	IBM Graphics Printer
Epson JX-80	Panasonic 1595
	CItoh C310-CXP

([▲]24 pin=best choice)

LIMITED WARRANTY

Standard Manufacturer Warranty:	182 days
Optional Extended Warranty To:	365 days
Order #2897	\$19.00

PRICING

M-900 List Price	\$599.00
M-900 Discount Price	
Order #0936	\$549.95
Shipping/Handling/Insurance	\$8.00

Power Adapter

This compact 12 VDC wall adapter is perfect for the M-900. It delivers filtered 12 VDC at 1000 ma (1 amp). Features 2.5 mm plug to connect directly into the M-900 power jack. (No shipping charge on this item if ordered with the M-900).

Universal 12VDC 1 Amp Power Adapter	
Order #0096	\$17.95
Shipping/Handling/Insurance	\$3.00

SYSTEM PACKAGE PRICING

Universal M-900 Converter	\$549.95
Universal 12VDC Power Adptr.	17.95
Magnavox BM-7652 Monitor	109.95
Video Monitor Cable	2.99
Seikosha SP-180A1 Printer	179.95
Printer Cable	19.95
Audio Cable (specify receiver)	2.99
Regular System Total	\$883.73
►► Special System Price	\$799.99
Special System Shipping	\$20.00

- Visa, MC, Discover
- Prices are subject to change.
- Full catalog \$1 postpaid

STORE HOURS

Monday - Friday	10:00-5:30
Except Thursday	10:00-8:00
Saturday	10:00-3:00
Sunday	-CLOSED-

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From the Executive Director

Chuck Rippel
1272 Parkside Place
Virginia Beach, VA 23454
COMPUSERV- 72571,1046

Welcome to the May issue of *FRENDX*! I continue to see positive results from the efforts of the NASWA membership. Our membership continues to grow, and contributions to the bulletin are increasing. Publisher Bill Oliver tells me that the membership in NASWA has grown 18.5% in the first quarter of 1989. I would like to thank all of you who took the time to consider NASWA membership and join. Be aware that others benefit from your effort to share knowledge and experiences. We invite you to share your Short Wave Listening experiences with the membership of the club by contributing to the various column editors.

Speaking of sharing, the 7.240 ANARC SWL NET is going strong. For some real time tips and conversation among NASWA members and other listening enthusiasts, give a listen. The NET meets every Sunday at 10:00 EST on 7.240 MHz LSB. If you possess an amateur radio operator's license, please feel free to join in. If you are not a licensed amateur and can't transmit - no problem! There are "gateway" stations that will take your telephone call and relay your information to the group during the NET. Contributions can also be made by mail to Bob Brown at the address listed on the back cover of *FRENDX* or via CompuServe 71715,1432, the ANARC BBS, or the Pinelands BBS. The coverage of the NET depends on propagation but it is heard regularly as far west as Wisconsin, north into Canada and south into the Carolinas. Come join us whether you can transmit or listen!

I must say that I am encouraged by the size of Log Report "A". I have not seen it that large in years. Log "A" editor Bob Brown and distributing editor Kris Field note that NASWA members are not only going for the tough ones in the Tropical Bands, but they are sharing their experiences with the rest of us. Your information or contribution for all the columns is appreciated!

There are many things happening as a result of some of the behind the scenes efforts I have been alluding to the past few months. Notice that the style and quality of printing in many of the columns has significantly improved. We are striving to overcome some logistical nightmares. The NASWA editorial staff is spread throughout the United States making close coordination of columns very difficult. To the rescue comes good old American technology, often imitated but never duplicated. Several of our editors are now sending their computer generated columns via modem through the CompuServe Network to members of the Editorial Committee who have access to laser printers. The final result is a cleaner, easier to read publication that is truly hi-tech. We hope to expand on this concept and have as many *FRENDX* editors as possible included in this program in the near future.

The benefit to the membership is that they receive the most up to date information offered by monthly publications, presented in the most readable style possible. Did you know that some information in *FRENDX* is only 5 days old? Various other monthly publications strive for a 30 day lead time. Many of the commercial publications must maintain a 90 day lead time. The goal of NASWA is to provide information more quickly as well as more accurately! We will continue to upgrade the monthly bulletin to meet this goal. If members have any specific suggestions, please drop Editor-in-Chief, Dr. Harold Cones, a line! The NASWA staff is always glad to review your suggestions! They are important to us.

Speaking of the bulletin, our March bulletin was a whopping 72 pages long. Because of present postage and printing cost limitations, our limit stands at 56 pages. The Editorial Committee last month recommended that all of the material received by the various editors be included in it's entirety. The committee wanted to demonstrate to the membership how much interest there is in the Short Wave Medium and NASWA.

This month, we have asked all of the editors to shorten their columns somewhat to make room for Tom Sundstrom's complete English Language Short Wave schedule. Tom receives schedules from many different International Broadcasters and enters the time and frequency data for the English Language programs into a computer via a professional level software application he has designed and written. This software application is MS-DOS (IBM) compatible and available for purchase for a very reasonable \$20. For an additional \$25 per year, the data files can be updated via the Pinelands computer bulletin board. The result is like having an accurate, computerized Short Wave version of the TV guide at your fingertips! The capability to produce various hard copy reports including the one appearing in the back of this month's *FRENDX* is included. For ordering information, see Tom's column for details. If some of you can find the time, please mail Tom a copy of any current station schedule you might receive. It makes his job much easier and the information more accurate. Let's face it, the level of personal effort Tom is putting into this project is worth some effort from all of us.

DX'ers Forum

*Dedicated to
Furthering the Art,
Science and
Enjoyment of DX'ing*

Conducted by Rowland Archer, 5524 Hawthorne Park, Raleigh, NC 27613

May, 1989

Our page count is short this month so I'll get right into the meat of the column. A few months ago I promised a series of "DX Panel Sessions," simulating a question and answer session with some accomplished DXers. The first one will run in two parts, concluding in next month's column.

The purpose behind this panel session is to explore the "nuts and bolts" of DXing by asking some experts to share their approaches to the hobby with us. One of the best ways of learning is to watch an expert at work and ask questions. Unfortunately, experienced DX'ers are few and far between. This panel session will bring out, step-by-step, the actual techniques used by three top-notch DX'ers, Rich D'Angelo, Mitch Sams, and Dan Sheedy, to come up with those great loggings. Imagine yourself at their side as we explore:

Fundamental DX'ing Techniques: Part I

A DX'ers Forum Panel Session

With Rich D'Angelo, Mitch Sams, and Dan Sheedy

Forum: *Welcome to DX'ers Forum! Let's start with a quick bio; please fill us in on how long you've been DXing, any special hobby interests, accomplishments, activities? Your current shack setup?*

D'Angelo: I started DXing in 1964 when I discovered my brother's Hallicrafters S-85 in the basement. I was essentially inactive from 1973 to 1978 with marriage, beginning a career, graduate school and being an apartment dweller all teaming up to put my hobby on hold. I resumed DXing when we bought a house and I have been active since. Current rig is an Icom R-70 with an Alpha Delta DX SWL Sloper. Somewhere I have an old National NC 190, a CR-2021 and an RF 2900. My main interest for the last 2-3 years has been Latin America.

Sams: I've been fascinated with shortwave since first tuning around in 1972. My father was in the Air Force and we did travel overseas quite a bit while I was growing up. That experience has given me a real appreciation for what shortwave is. I remember while living in Turkey my family would listen most mornings to the VOA's "Breakfast Show" on my shortwave radio. The local AFRTS MW outlet had a limited sked so the VOA really filled the void.

My current shack consists of a modified HQ-180A and a modified FRG-7. The HQ-180A is the one I turn to when the going gets tough, although the FRG-7 has served me well, too.

Sheedy: I've been playing radio in one form or another since 1960. I'm an inactive Advanced class ham, WB6FJD since 1975. My interests lie in Latins, especially Brazil, lowering my continental QRP total, an apparently lifelong struggle to hear Greenland, hitting 210 HIC, and trying to avoid the label "Senior DXer"! I also helped edit Fine Tuning and the Ozark Mountain DX Club bulletin for two to three years (due to Mitch Sams...trust is a rare commodity, thanks comrade). I belong to Fine Tuning, DX South Florida, Numero Uno and NASWA (I originally joined in 1963 or 1964 when Bill Eddings was running it and it was "NASA").

I've been using a modified Icom R70 since '84, plus a Sony ICF2010 on loan for a month or so, and now have a Philips D1835 for beach SWLing. A Drake R4B in need of about \$200+ worth of repairs also holds a place in my heart. Antennas? An Eavesdropper, an Alpha Delta Sloper and a couple of random wires outside and a 20' indoor wire for the Sony so I can check the hit list (see below) without really committing myself to going downstairs and freezing.

Other than that...I just hit 40, work as a repair technician for Pacific Bell, wear a ponytail, two tattoos and spend evenings at the local muscle-head gym trying to compensate for not hearing Greenland (yet).

Forum: *I've found that as I advance in the hobby, I spend almost as much time gathering and organizing information related to DXing as I do DXing. How do you organize the data that helps you when you sit down to DX?*

D'Angelo: To me, organizing DX-related data is the most important prelude to actual DXing. Keep it simple though. I use a yellow highlighter to note key logs or QSL data in the various DX club bulletins I receive. Each month I summarize all that data on a sheet of paper which is divided into 24 hourly sections. The station/country data that I have highlighted is written in the appropriate place on the 24 hour summary. So, if I can't sleep, and stumble out of bed at say, 0800, I check my target sheet and start hunting. Naturally, all entries are footnoted as to source in case I need more background information.

Sams: There are several very good DX newsletters in circulation today from which I glean a majority of my DX info. These newsletters are filed away in some 10 3-ring notebooks. I read, or at least skim through each week's offerings and then rely on my memory to refer me back to the data when necessary. The notebooks are right there next to the radios.

Sheedy: I run a pretty constant "hit list" from the ridiculous (GREENLAND) to the sublime (TONGA), that's updated through FT/DXSF/NU and FRENDX. With respect to the Indos especially, I tend to delete them every 4-6 months as their frequency volatility seems high and I can always catch up next season when Mitch [Sams], Kirk [Allen], or that tall, distinguished gentleman in Stillwater log everything that's audible. Latins tend to stay on the list nearly forever -- I don't give up on obsessions that easily, especially Brazilians. My wanted countries list is kept current from WRTH, so I needn't wade through it when I'm idly scanning for Lithuania or whoever.

The list itself is split up into ASIA, LATIN AMERICA, and NEEDED COUNTRIES with a MISC. section for generalized weirdness and pet projects (logging all Peruvians with poor mike audio and great music audio for example).

Each station is set down with frequency (current and past, in the case of some Indos, Vietnamese, and Laotians), times heard, and any helpful ID info (such as: ID followed by much laughter and mention of "lagu lagu Stillwater..").

As a confirmed "fussy man" I derive great pleasure from redlining a station from the list. One of these days I may redline them all, heard or not, just to see what it feels like.

Postscript: unlike most(?) DXers, I don't keep permanent logbooks nor do I keep bulletins after I've updated the "hit list". Tidy? You bet! But it does lack the genial ambience of most DXers shacks...and the usual nuclear fallout effect of three years of weekly bulletins trashed and scattered looking for the special Bolivian ID info.

Forum: *OK, it's time to DX. Let's set the scene: It's your favorite time of day to DX. The rig is warmed up, your coffee or favorite DXing beverage is at hand, and you're ready to hit the dials. As Bob Brown posed the question at his first SWL Fest, "what do you do after you turn on the radio?" What's a typical DXing session like?*

D'Angelo: Naturally, you never know what propagation conditions are going to be like until you actually turn on the radio. For the most part, my sessions are predetermined by my target list and the amount of time I have available to DX. Generally, I'm looking for new stations (which sometimes means a new country) or a previously logged station that I haven't verified. The last couple of years I've focused considerable time and effort on QSLing many Latins that I hadn't previously verified. If conditions are exceptionally favorable, I have my special targets (a most wanted list of Indos and PNG's) ready for the occasion. Being ready is very important.

Sams: Depending on the time of day/season I will have usually targeted a specific band to begin tuning. It's usually a frequency range that has provided good DX at this particular time in the past. In other words, 60 & 90 meters at sunrise and sunset, 49 meters at late morning or early afternoon, etc. These checks will give me an idea of how good conditions are at the moment.

My receiver bandwidth will be set around 3 kHz and I will tune in the AM mode. While learning the hobby in the 70's I never did develop the habit of DXing in SSB. I realize that the SSB "whistle" makes it easier to spot a station, but I find that over the length of an extended listening session the SSB whistle becomes difficult to tolerate. I

think I've developed an ear for the "whooshing" sound of an AM-detected carrier.

Sheedy: It's almost 0930, which is untypical, but the 60M band is in mediocre shape, which IS typical..yawn..semi-decent signal from my #1 Latin semi-ID, Nuevo Mundo 4881.7..notch out the 4880 het, and sit...and sit...and wish the mike gain was better. All I hear is time checks and "lo mejor de la musica tropical.." Oh boy! Whoops, mentions of Pucallpa at 0955. Do I want to stick around for the 1000 ID? I've only been chasing an ID here for a few weeks, so why not?! Ahhh! 1000 comes with a TC and "oyentes...en Radio Nuevo Mundo.." and a minute or so later another ID. Three weeks of cold feet and boredom and getting twitchy has paid off. Now what? Cruise 120M for a thrill. 2360? Hmm, Indian language hymn. Swing up to 3325. Yup, //. Back to 2360 for a nice "Maya de Barillas.. Huehuetenango.." ID at 1101. Not new, but with the noise level I have on 120M anything is a keeper. A quick swing through the Indo targets leaves me nothing and so I'll goof off up around 5 MHz. Latin on 5019.7, a bit fuzzy and suffering from Cuba-5025 (yeah, even on the R70). World news, pretty pro job. RN Venezuela has been here before, but all I hear are mentions of CARACOL and telephone remotes from Barranquilla, Medellin, etc. Whozis? Starting to die after a UTC-5 TC and never did get an ID. New HJ? A moved HJ? It's 1130 and I'm ready to do something else..

Not especially "typical" since I nailed a long-sought one and have an interesting UNID. But the pattern is pretty similar to most times at the radio. Check the hit list, get bored, (or not..), rapid scans of 60/90M. Maybe another shot at the list, and so on.

Forum: *One important DXing technique is the bandscan, or tuning up the dial and checking each station in a given range. If our readers could watch you scan the bands, what would they observe?*

D'Angelo: Most of my DX time is spent on the 60 and 90 meter bands. If you spend enough time on certain bands then you know how they should "sound". Finding/hearing something new or interesting becomes relatively easy if you know the band and have your DX reference materials handy. Rarely do I take written notes on what's active on the bands I'm most interested in; if I'm tuning regularly then it all fits into my memory quite nicely.

Sams: I spend more time on the tropical bands and especially enjoy the lower frequency "fringe" limit of propagation, in other words, DXing a band just before it really fades in or fades out. For example: just before sunrise I will check 2

MHz looking for unusual conditions, then move up to scan 90 meters for a quick check. I know the regulars, so this quick scan should reveal whether anything new may be lurking about. As the sun rises and the minimum usable frequency moves up, so do I.

If nothing's happening here I move up to 60 meters. Checking the propagation indicator frequencies I have memorized -- 4087 Blitar, 4607 Serui, 4635 Dushanbe, 4658 Laos, etc. I may skip up the bands hitting these memorized frequencies just to get a feel for conditions.

I repeat this cycle several times in a listening session, always checking the lower frequency limit of propagation and moving upward trying to pinpoint something new. I note potential DX signals on a scratch pad as I'm tuning, returning to those frequencies later to sit on.

This process is most effective when you can rely on your memory to determine whether to stop on a particular station or move on.

Sheedy: Trick question, huh? OK, I usually scan 60M/49M only. 90M/120M are pretty noisy and unless I sort of fall into something on those bands, I tend to avoid them except for targets. Due to somewhat limited DX time, and sticking to two fairly straightforward bands, I can, with clean living and some practice, run through 49M in a few minutes, depending on the time of day (0000-0400). Mornings take a bit longer - say 1/2 hour for a quick look. 60M with its larger grouping of smaller stations may take an hour or so. With a good working knowledge of what's "usually" available, the odd stuff (or lack of it) tends to stand out. The increase in the past few years of utility traffic and general crudiness on 60M, chops large sections of the band into hash. This also cuts down on scan time, unfortunately.

References used? ILG when and if it gets here, hi. Also my hit list and occasionally WRTH for a little more detail than is available in ILG. ILG's format makes color-coding the various stations and times of reception pretty easy. But, familiarity does breed contempt (or at least a too trusting attitude), so from time to time I dispense with the lists and just see if what I'm hearing is what I'm "supposed" to hear. Boring? Yup, especially on 49M, but no one said it was going to be easy.

• • •

Next month: The conclusion of this Panel Session, featuring the technique of station targeting, turning UNID's into ID's, and how to be the first to hear new stations. See you then!



Easy Listening

Editor: Alex Batman, 300 Hill St., Apt. 6, Boone, NC 28607

SUNDAY

1315-1330

Listeners' Corner (Radio Norway International). This show appears irregularly on Sundays and is a better than average mail-bag program. Readers answer listeners comments. (21.705. Repeated at 1615 on 21.705/15.310 and at 2015 on 15.310).

MONDAY

0050-0125

Research File (Radio Netherlands). This is Radio Netherlands science program, and it is an excellent one. Topics discussed so far have been environmental concerns in the Netherlands, protection of the coral reef off Bonair in the Netherlands Antilles, salt production from sea water, new theories about pulsars, and astronomers' theories that a massive gravitational pull will one day make the expanding universe collapse on itself (fortunately a few billion years away). (15.315).

TUESDAY

2115-2130

Business Matters (BBC). A good but perhaps too brief analysis of a host of topics relating to business and the economy, such as the world wide rising interest rates, an interview with an official of the American Stock Exchange, predictions for the future of British stocks, and an interview with the author of One Page Management. If you're interested in economic topics, this is an excellent program. If not, you'll find it as dry as the subject itself. (15.260).

WEDNESDAY

0130-0145

Living In Germany (Deutsche Welle). One of Deutsche Welle's newly revamped shows since the change in programming last September. Focus is on modern life in Germany, and past shows have featured relations between East and West Berliners, the growth of semi-private gardens in Germany, the second rate status of mental health in Germany's public health insurance, and the number of elderly people living together in communal centers. (6.040/6.085/6.145. Repeated at 0330 on 9.545/9.605 /6.130 and at 0530 on 6.120/6.130).

THURSDAY

2250-2305

Industrial and Economic Report (Radio Mediterranean). Reception of this program is variable, sometimes being inaudible because of interference from Radio Budapest, and sometimes being relatively clear. Past programs have featured an analysis of the economy of Cuba, the debt problems facing the Egyptian economy, trade relations among EEC members, etc. Whether this show is worth putting up with the sometimes poor reception or not, all depends on how interested you are in economics (6.110).

FRIDAY

1250-1300

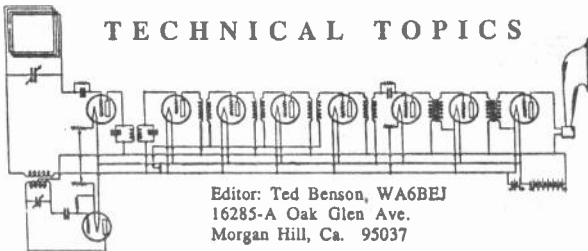
Panorama (Radio Berlin International). This program focuses on cultural, economic and scientific cooperation among the socialist countries. It's about as exciting as it sounds. (21.540/21.465/17.880).

SATURDAY

1410-1500

VOA Jazz Hour (VOA). In case you're wondering whatever happened to Willis Conover and the Jazz Hour now that it has been dropped from both the South American and the African transmissions, this is it (or at least part of it). Willis Conover in his deliberative and careful way presents some of the finest of American jazz, past and present. Past shows have featured Chick Corea's long album "Works", a segment on Woody Herman's first band, "The Band That Plays the Blues" (from a recently released album), and a host of jazz artists that includes everyone from Herbie Hancock to Louis Armstrong. 9.760. Repeated at 2010 on Saturdays and weekdays on 9.760/11.760).

TECHNICAL TOPICS



GROUND ZERO

Most of us who grew up in the "nuclear age" think of ground zero as the impact point of a nuclear warhead. To radio enthusiasts, however, it can mean something completely different.

The ideal ground for radio reception represents zero ohms of resistance, and no impedance whatsoever. As with everything else in our hobby, however, there is the theoretical, and then there is the reality. In reality, perfect ground is impossible to attain. Commercial radio stations bury thousands of feet of copper wire to obtain a good ground, and even this is not perfect. But why is a ground connection important at all?

Electricity flows only when a difference in potential exists between two points. There are two power prongs on our wall sockets (the third is a ground - more on this later). At any one time, one prong has far more electrons than the other. If you connect a circuit between the prongs (such as a lamp) the excess electrons will flow through the circuit to the other terminal, in an attempt to reach a balance. It is the flow of these electrons which performs work - in this case lighting the lamp. Unless current flow can occur, no work can be done. Ah, you say, what about the time as a kid when you stuck a key in the wall socket? Only one prong was connected, but you still got a nasty shock. Where did the current flow to as it coursed through your body? It flowed through your feet to ground. Because the ground wasn't very good, only a little current was able to flow, and you survived (literally folks - this is no joke). Many people are killed each year because the ground was good. Perhaps they were wet or standing in water, or barefooted on moist soil. The better the ground, the more work (or harm) the electricity was able to do.

Your shortwave receiver is in essence a circuit, which is connected to a power source similar to your wall socket. In this case, though, the power source is the radio signal you wish to receive. How can a potential exist when the entire signal flows through the air? The question provides its own answer! The radio energy is almost all *in the air*. Almost none of it is in the ground. The potential exists, therefore, between the air and the ground. But how do we plug our circuit - the receiver - into the air and ground? Well, the air connection is of course made by an antenna, which gathers as much signal as it can. The ground connection is made in any number of ways. Many people simply connect the ground terminal of their receiver to the little screw in the middle of the wall socket. Others drive a stake or rod into the ground and connect this to the radio's ground terminal. *Neither of these techniques are really adequate.* Although the little screw on your wall socket is a moderately good ground for 60 Hz AC, it can literally appear as an open connection at radio frequencies. In other words, relying on this point as your ground is like making no ground connection at all! Driving a copper rod into the earth might provide a good ground connection, *if* the soil around it was very conductive. Most soil, though, is not. Some method must be used to increase the conductivity of the soil around the ground rod. Figure 1 suggests a technique for improving the conductivity of the soil.

Older reference books suggest using copper or nickel chloride instead of the table salt (sodium chloride) shown in figure 1. Although the copper and nickel chloride do work better than sodium chloride, they also contaminate the soil. In this age of ground water contamination, as is rampant here in the Silicon Valley, the last thing we need is to contribute more! Table salt, as shown, is also much cheaper than other salts. In fact, a huge bag of water softener salt works fine, and can cost as little as \$5.00. In areas of very dry soil, it may also be necessary to "water" your ground occasionally to keep the soil moist in and around the pit.

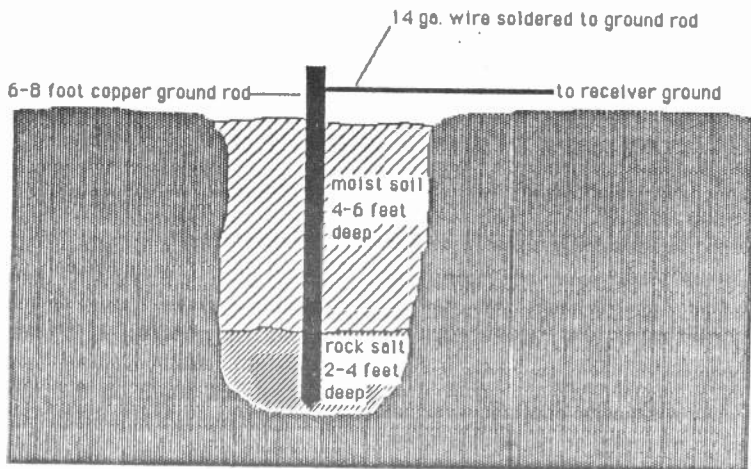


Figure 1. Suggested Ground Rod Installation

Why all this bother about a ground connection? Well, as we saw earlier, the ground is the other half of the power source. The better a connection you make to the power source, the more signal will flow through your receiver's front end. And the more signal that flows, the more you will hear!

CONNECTIONS

Now that we have a good ground, how do we connect it to our receiver? Many receivers, particularly the older ones, have a separate binding post for the ground connection - either as a ground terminal, or as on half of a balanced antenna input (see Figure 2). Newer receivers often come with only a coaxial connector. The outer shell of this connector is ground. When using this type of receiver simply connect the ground wire to the shell of the connector. Be careful when connecting to any other metal part of a receiver - particularly table top models powered by the wall socket. In some of these receivers the chassis may be "hot," that is, it may have a substantial amount of AC voltage present. This voltage will arc and perhaps trip a circuit breaker when grounded. Also, many receivers do not have all of the metal chassis parts connected together, so you may be connecting to an insulated bracket instead of the receiver's front end. Always use heavy gauge wire (#14 as is used for house wiring is good) when connecting to a ground, and keep the length as short as possible.

EXCEPTIONS TO THE RULE

Many antennas are designed to be used without a ground. Instead of using the earth as the other half of the power source, these antennas contain two elements, and each element in effect becomes an opposite pole of the power source. Examples of these antennas are dipoles and Yagi beams. But even with these antennas, a ground can often improve reception, if for no other reason than it lowers the noise level. For the most common types of SWL antennas, like the random wire or vertical, a ground is *absolutely essential*.

One other aspect of the ground has not yet been discussed. Safety can be enhanced by the use of an outside ground. Most have never seen what lightning can do when it strikes an antenna and enters a house while looking for ground. I have. As a Coroner, I once visited a home in which the amateur radio operator had grounded everything to the wall socket ground. Well, lightning can be very unpredictable. Before it eventually found the wall socket ground it travelled around his radio shack, and took a detour *through* him in the process! I implore you, if using a coaxial feedline use a lightning arrestor as well. If using a random wire or similar antenna, use a large switch as close to where your antenna lead enters the house as you can, and use it to short your antenna lead to ground when not in use. In either case, connect the arrestor or switch to the *outside ground*. It's a little inconvenience that can save a lot of inconvenience.

Next month we will look at one of the most misunderstood items in radio - the balun. Until then, happy hunting.

Notice: Figure 2 of this article appears on page 33.

FRENDX PORTRAITS

a look at the members of NASWA

edited by Tom McElvy - P.O. Box 9645 - Norfolk, VA 23505-0645

This month we have a very interesting bio from **Dr. Richard Wood**, a former *FRENDX* editor, who writes us from Hawaii.

"A native of Dundee Scotland, I began DXing as a teenager in Newcastle upon Tyne in the northeast of England in 1957. I have been continuously active since then, mainly on MW and SWBC but when living on the U.S. mainland also successful in FM and TV DX, with FM catches from Guatemala, Jamaica and Cuba.

A naturalized U.S. citizen, I have lived and DXed in the following places: 1957-60 - Newcastle, England; 1960-63 - Cambridge England (while getting my B.A. and M.A. in Languages), 1963-67 - Bloomington, Indiana, while getting my Ph.D. in Linguistics; 1967-70 - Oahu, Hawaii, where I taught at the University of Hawaii, Manoa; 1970-82 - various locations in the U.S. mainland; 1982-84 - Abha, south western Saudi Arabia as a professor of English; and from 1984 until now about 12 miles southeast of Hilo, capitol of Hawaii's Big Island.

At my home in the rural, uncrowded Big Island I have six Beverage antennas averaging one mile in length and the potential to expand some of them to over three miles. Two of them run to near the water's edge. I also own an oceanfront lot



where I plan to try different antennas and saltwater grounds, though beverages there will not be possible. My home operates strictly on 12VDC power from a solar collector and is not on the public electric grid. This reduces powerline noise though even then some noise enters the house at times thru the phone wire or by transmission through the ether. However, with six beverages to choose from (all of which can be switched together) I can usually find several noise-free ones.

Reception from Africa in Hawaii is strikingly good, also the Middle East and most parts of Asia. However, years of experience suggest that at least this east side of the Big Island is not a particularly good area for Indonesian reception, and NASWA members in the U.S. Midwest and even in Florida have reported Indonesians which I have yet to hear. I am subject to horizon blockage to my SW, W and NW by Kilauea (the world's largest volcano), Mauna Loa and Mauna Kea. I recently bought some land (with room for beverages) on the southwest side of the mountain range and hope to report results from there within a year or so.

This most southerly part of Hawaii also provides fairly good reception from Europe, probably better than in most parts of the western U.S. During years when the sunspot count was favorable, I logged 13 European countries on MW, as well as 6 African MW countries and on about 30 occasions I observed the stunning phenomenon of the antipodean effect of reception at my local dusk of the SWABC in Gobabis, Namibia, on 747 kHz, a 12,000-mile path. By contrast, the current sunspot cycle has forced me willy-nilly into h.f. SW DXing and it is

over a year since I heard even one European or African MW station, or even Argentina, Uruguay, Paraguay, Ecuador, etc., all of which were regulars on MW around 1984-1986.

Until recently I taught Spanish and linguistics full-time at the University of Hawaii at Hilo, the only accredited 4-year college on the Neighbor Islands of Hawaii. I am currently teaching part-time, linguistics only. Now I am primarily a farmer (white, nonacid pineapples; pumpkins; tomatoes; cucumbers; string beans, you name it, bountiful Hawaiian nature provides it) and the owner/operator of Richard's Fruitstand in Honokaa on the north side of this island, with plans to expand to other locations.

I am interested in most phases of DXing except hobby pirates, though I enjoy political clandestines. I am a firm believer in QSL verifications and here in Hilo I have a lifetime collection of them including some world rarities such as the last verification letter from Emissora de Goa, Portuguese India, delivered to me when the country had already been invaded by India and ceased to exist; a magnificent QSL certificate in French from VTVN Dalat (6112 kHz) in the former royal capitol of Vietnam; the only known QSL letter from Radio Juventud de Ribadavia, Spain, which was licensed to MW 1250 kHz but operated for a week without permission on 7185 kHz (presumably using a ham transmitter); and fondly remembered stations in the old colonial Africa such as Radio Congo-Belge with its service "for Europeans and educated Africans", Radio Diamang serving the diamond miners of Angola, the Aero Clube da Beira in Mozambique, and Usumbura (now Bujumbura, Burundi) on 6195 which was a fall-back station serving the Belgians being evacuated from the Congo during the chaotic days of its hastily-granted independence.

I have a strong interest in world politics and am, of course, a professional linguist,

so I am generally able to follow current political crises around the world via shortwave, especially in Africa, Latin America and the Middle East.

Regarding club memberships, the first I ever joined was the Malmo Shortwave Club of Malmo, Sweden, when I heard a tiny MW station in Spain conducting a DX test for it. I recall that the station first ran a power of 1 kW and then reduced it to 150 watts, but was still audible. Shortly after that I joined the Danish Shortwave Clubs International. I joined NASA (now NASWA) in about 1965 and in the early 1970s was Editor of its main article feature "Shortwave Center." As an active NASWA contributor, I may well volunteer as an editor once more, perhaps for one of the Log Report sections. I have been in many other clubs in the past including the Union of Asian DXers and clubs in Australia, New Zealand and Finland. Since 1959 I have been an active contributor to "Sweden Calling DXers" and I wish to thank the Swedish taxpayers who have



been sending me that fine bulletin for all those years. Some NASWA members may also have heard my course on "Recognition of Languages" broadcast on RCI. My favorite party game, I suppose, is testing DXers and non-DX visitors to my home in instant recognition of languages heard on the air-- I suppose I can identify some 800, without counting numerous dialects of Arabic and other variegated languages. It is nice to be able to add new languages now coming on SWBC for the first time, such as Romantsch and Galician.

My hobby plans include adding more antennas, new receivers (currently use a simple R-1000 and SPR-4, both 12VDC of course) and getting back into QSL reporting, something I have not had the time to do due to pressure of work since 1986. I'd like to start attending DX club and ANARC conventions as I used to on the U.S. mainland, but one problem is that they are generally in the summer when I am busy with the peak pineapple harvest. In addition to DXing, I am also a keen SWL for program content. The BBCWS is my overwhelming favorite, in part because of my British birth, followed by SRI (I will never forget a marathon interviewing session when I visited the SRI studios in Bern. I was interviewed in seven languages and the Portuguese announcer who taped me thought I spoke with a Mozambican accent--something I certainly acquired through listening to stations broadcasting to, and from, Lusophone Africa), Radio Finland, Radio Norway and --- for the music --- Radio Tahiti and Radio Pyongyang. With Tonga now on the air on 5030 I am sure there are many other pleasant surprises in store in short-wave broadcasting, and I look forward to the future of this vibrant medium."

And now from the editorial staff of *FRENDX*;

Ted Bensen, WA6BEJ

"I became interested in shortwave as soon as I figured out how to turn on my father's Fisher stereo by myself. Until recently I have always owned several Hallifrafter or Hammarlund receivers (tube type, of course). Maintaining these on a kid's budget taught me electronics theory in a hurry. When I was 13 I passed my amateur radio license exam, and that same year passed my advanced exam. I have worked on and off for years in the commercial end of radio, and it was at my last radio job that I met NASWA in the guise of Chuck Ripple. I was working for an antenna manufacturer, and Chuck

called for some help. He asked why we didn't make SWL antennas, and I replied that I couldn't interest anyone there in doing so. Pity, I added, because I was a closet SWL myself (one has to be careful of admitting such things when one has a ham license). One thing led to another, and I found myself writing Technical Topics.

It tied in well with my professional career, which evolved into a full time position as a technical writer. I am also a contract writer for Tiare Publications, and have written the now almost famous book *The SWL Antenna Survey*. When I am not writing, I am busy as a volunteer license examiner helping aspiring hams take the plunge (er, I mean test). I count myself as the only person in the United States who holds a radiotelegraph license and has never been to sea. By the way, I hold the record as the youngest person to have been sworn in as a Coroner. For someone who loves to communicate, this job didn't suit me much.

My current radio pursuits include VLF (am a member of the LWCA) and radio astronomy. My column is usually written on a Commodore 128, when I cannot get after hours access to the Macintosh and laser printer I use at work. I have three sons who already show signs of promise in the radio field (they love to twiddle knobs). I am 34, and since I work in the Silicon Valley, I am almost at retirement age!"

Guess that wraps it up for another month! Hope that many of you are making plans to attend ANARCON '89 in Florida, and for those of you who come, I am sure that we will have a most enjoyable weekend! Until next month, 73 and good DX!





Listeners Notebook

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AUSTRALIA RA reported 2/4: today we hope to begin test xmsns from new xmtr site in Brandon, Queensland, 6020 at 08-14, 20-21, directed towards PNG, Solomons, daily (WBI 7/4) 9/4, RA Communicator interviewed controller of resources Ron Place. /Presenter/ Last Sunday we began test xmsns from Brandon, but Cyclone Aivu passed directly overhead damaging our antennas and silencing tests--not before listeners reported good reception on single fq 6020. Why build xmtr in cyclone-prone area? /Place/ Brandon roughly right position, already ABC AM xmtr 4QN there, so building was there, enough land to put of extra couple aerials, meant only to give eve bc to PNG, Vanuatu. We have problem w/northern sites: Darwin taken out by Cyclone Tracy; Carnarvon also damaged last year by cyclone. LP antenna for tests, and three 10 kW xmtrs at Brandon all moved from Lyndhurst, former site in Victoria. LP will stay as reserve; should not be any delay in commissioning of curtains, sometime in July. Svc will be EG much of the time, but also PNG svc, FR to Vanuatu (WBI 14/4) RA Brandon on 6019.85, hrd 3/4 from 1100 EG pgm & IS to 1403*; QRMs XELW, causing bad het, tho many other fqs are clear; RA now has at least 5 xmtrs on 49m, totally unnecessary overkill (Ernie Behr, Kenora Ont, 6/4) RA Communicator 23/4 and Brandon tests resumed on same sked; I hear a het presumably thence, but 6020 dominated by XELW after 1130, and RN Bonaire before then, which is sked 09-1225 (Sunday from 0925), so maybe clear 08-09 (gh, TX)

AUSTRIA RAI total output is 185.30 hours per week, led heftily by CM 111.05, EG 31.30, FR & SP 21 each, Esperanto 0.55, i.e. Suns 0930-10 & 1305-1330 (WBI 7/4) RAI Austrian SW Panorama reported 9/4: 4/4, 3-man delegation from RAI flew to China for talks in Peking about a possibl exch of bcng hours and a relay cooperation agreement. Aim is to improve reception of Vienna in SEAs, Pac. During 10-day visit at invitation of R Beijing, Chinese govt, RAI delegation inspecting xmtr and relay stn sites in capital, Xian, Shanghai. RB in 38 langs, already relays w/Switz, Canada, Mali, Spain (WBI 14/4) ASWP expanded to 24 mins but at fewer times not favoring NAm. Best of the lot is Sun 1430-1454 on 21490, 13730 (gh)

BOLIVIA R San Gabriel, 6080.0, F-P w/RA QRM (Soviet QRM off for now), *0825 light mx, diff selextions every day; 0830 choral anthem, tent. ID "La Voz...(Aymara?)", never hrd mentn of San Gabriel, into pgm of Bol mx, noted 20, 21, 22/3. UnID on 6078.8 LSB, QRM 6080.0, 17/3 1012-1045, VP, Bol mx, maybe R 21 de Dic? (Ron Howard, Santa Barbara CA) Maybe same stn, viz: (gh) 6078.8, R San Gabriel, La Paz, 0909-1105 F 21/3, pgm in Aymara, folk mx, greetings, 1158 ID w/folk mx theme of RSG, "En 610 kc, R-S-G-, LV del Pueblo Aymara, La Paz" Fq presently varying 6078.8 to 6080.1 (Takayuki Inoue Nozaki, Tokyo, Japan, Relampago DX)

BRAZIL R Cultura, Foz do Iguacu, 6104.6, 22/3 0457 PT song, 0449 clear ID as R Cultura but didn't hear Foz mentd, 0500 choral anthem?, 0501* weak and chex thru 27/3 found only vy weak sig (Ron Howard, Santa Barbara CA) Foz = falls

BULGARIA R Sofia in EG: 03-04 Am 11735. 03-04 Af 15140 11765 11720. 0630-07 Eu 11720 9700. 1430-15 Af 15310 11735 9740. 1730-18 Af 15310 11735 9740. 1830-19 Eu 11720 9700 6070. 2030-21 Eu/Am 11735 11720 9700. 2130-2230 Eu 11720 9700. 23-24 Am 11720 9700. Totals 303.40 hpw, led by EG 52.30, FR 37.55, TK 32, SP 31.30 (WBI)

BURUNDI National R of the Republic of Burundi, V of the Revolution, Bujumbura; HF
pgm thot to be composite of the two FM svcs, Ch 1 in Kirundi, Ch 2 in FR, SH, EG.
03-07 3300, 10-1530 6140, 1530-21 6140 3300; except Sunday morns, 03-06 3300, 06-10+
6140. EG pgms: 1145-12 nx. M-F 15-1505 nx summary. 1530-1540 M-F nx. 16-1610 Sat
nx. 16-1610 Sun nx and nx of Southern Africa. 1615-1630 Sat Nx Panorama, weekly nx
roundup. All of this considered domestic svc (WBI 31/3)

CANADA RCI EG changes effective 7/5, compare to April LN-25: M-F 0515-0530 & 0545-
06 Dav 15225 ex-15180. 1445-15 Sackville now on 15160 and Mon-Sat 21545 and new
17795; Sines on 11915 15315. 1830-19 Eu 21675 ex-11945; Dav 9555 ex-5995. 21-22 Eu
17875 ex-11945. Contrary to a mention on Media Network, RCI does not plan to go on
the 13 MHz band until 1/7, when these changes are to take place:

13720 replaces 9755 at 01-03 Tue-Sat, 01-02 Sun/Mon to LA, but different power and
beam 181 degrees; all 13 MHz are shown as 100 kW, while mostother Sack fqs are 250.
To Af 13680 is added to the other 2 fqs at 18-20, exact same 105 degree beam on all.
To Eu 13660 is added at 19-2130. On 13m from Sack, note that 21545 is still used un-
til 1700, then 21675 takes over until 21; info from RCI engineering sked 17/3 (gh)

On 3/4, Xian stn erroneously carried R Beijing Burmese svc at 13-1330 instead of
RCI EG relay (Tetsuya Kondo, Toru Yamashita, Asian Broadcasting Institute)

C H I N A (PEOPLE'S REPUBLIC)

CHINA will adopt a DST as from April 16 this year. (Toru Yamashita)

According to "A Statistic report concerning development of national
economics and society in 1988" published by State Statistics Bureau of
China on Feb. 28, China had 461 broadcasting stations, 645 trans-
mitting stns or relay stns, 422 TV stns and 811 TV transmitting stns
or relay stns with over 1000 watts outlet. As of the end of 1988.
(cf. LN Jun. 1988 page 20) (Satoru Suga)

Radio Beijing Jp pgm announced on Mar. 3 that it would operate a
new frq 1323kHz in place of 1044kHz as from Mar. 15. However
monitoring reveals that it has operated 1323kHz since Mar. 10 in par-
allel with 1044kHz etc. And it has ceased to operate the transmitter
of 1044kHz since Mar. 15 as previously planned. [The feeder frq of
4980kHz has been also inactive since that day.]

According to a letter from R. Beijing, the antenna for 1044kHz is
under repair and it will revert to the use as from Oct. 15.

On 1323kHz the test transmission had been heard between Jan. 15 and
Feb. 15 at 1400-1457. [including R. Beijing Jp pgm between Feb. 13
and 15. (Kunihiro Nishida, Satoru Suga, Akira Yamanaka,
Hirofumi Yamaoka, Tatsuo Gima)]

Voice of the Strait B. S. has changed its shortwave xasn schedule.
First noted on Feb. 6. This schedule includes some new frqs.

The monitored schedule in Mar. is as follows:

1st Program: 2055-0031 & 0955-1751 overall:

11590 0955-1430. 7280 0955-1751. 6170 0955-1751. 6115 2231-0031
0955-1751. 5050 2200-0031. 4940 2200-0031. 4840 2200-0031 1431-1751
3900 2055-2230. 1377 2055-0031 0955-1751. 1269 0955-1751.

2nd Program: 0355-1626 overall;

9505 0355-1626, 6000 0355-1626. 846 and 666 are also transmitted.
[V of the Strait is officially named as Chinese People's Liberation
Army "V of the Strait" B. S., renamed from Fujian Front B. S. on Jan.1
1984. This stn is systematically independent of CPBS & regional PBSs]
(Satoru Suga, Tatsuo Gima, Hiroshi Fujita)

Beijing PBS 1st Program is heard daily on 14340kHz with poor con-
dition. Broadcast from around 2300 to 0540 and signed on again at
0740. The service is parallel with 828kHz & 103.2MHz. (Hiroshi Fujita)

Guizhou PBS 1st Program broadcasts at 2150-0110, 0150-0600, 0850-
1605 on 7275, 3260, 1026, 927, 765kHz. And FM 94.6, 101.6, 103.4MHz.
21825kHz, the 3rd harmonics of 7275kHz can be heard daily with good
condition. (Akira Yamanaka)

Chongqing Economics B. S. was founded on Dec. 20 last year. The
test xasn was started on Dec. 25, broadcast daily at 2145-0500 on
101.5MHz stereo. "Chongqing Radio and TV Journal" published on Dec.
21 reported that the formal pgm would be transmitted at 2145-1000.

This stn becomes the 5th economics radio stn in China, continued
from Zhujiang, Shanghai, Liaoning, Tianjing.

A frq of 101.5MHz had radiated Chongqing PBS 3rd Program until Dec.
24th. This Pgm is now bc on 105.5MHz. (Isami Hyuga - CHONGQING, CHINA)
(East Asian DX News of the Asian Broadcasting Institute, 15/4, compiled and translated
by Tetsuya Kondo, Japan)

Further to an ABI item above, besides replacing 1044 kHz for JP svc at 0930-1530, also seems gone from 918 and 719 kHz, and ancs two new SW fqs 7295 11515.

Xinhua reported 15/3: tea party celebrates 30th anniv of China's bc in Hindu /sic/ language, started 15/3/59. Last year got 4 kiloletters from listeners (WBI 24/3)

CUBA Tele-Rebelde reported 24/3: Comms Ministry will install new xmtrs this year to improve quality of TV sigs, replacing existing ones in use 40+ yrs, in Guanito, Pinar del Rio; Cueva Arriba, Guantanamo; Camaguey prov; and Tele Villa in Havana. Power increased in some cases, qual of TV sigs improved in others, mainly in mountainous area. The 7 contracted xmtrs utilise modern technology, ICs, more reliable. Natl TV nets now cover 85%+ of country. Most reliable reception in Villa Clara, Ciego de Avila, least in Granma. TR reported 15/3: greater exploitation of FM and replacement of radio system's obsolete technology among CM's priority tasks this year. Six MF xmtrs will be replaced, exploitation of FM increased. Natl nets now cover 90% of country; most reliable in Isle of Youth, least in Las Tunas. Certain rugged areas not yet reached such as Escambray mtns, Sierra Maestra, Sierra de los Organos. Now are 173 MW radio xmtrs, fed by microwave, phone lines, radio linx, coax cable.

Monitoring 19-20/3: Since intro of summer time in Cuba 19/3, R Taino, SP & EG to visitors has been 24 hpd on 1160 and 830 kHz. Also obs on unancd 1040 at 00-04, fq relaying R Moscow at other times. Anmts 19/3 stated "proudly on air 24 hpd, new pgms and reruns from 12 to 6 am to give you a more pleasant stay in Cuba" Formerly usually operated 11-05 UTC (WBI 31/3) Monitoring 20-28/3: Since 27/3, R Taino has ancd 1160 only; 830 no longer ancd or-obs, tho continues addl unancd xmtr on 1040 irreg (WBI 14/4) R Rebelde reported 29/3: 1989-90 protocol signed w/USSR on bc cooperation. In Moscow we have a manager operating the Spanish sexion of R Moscow's forn svc. Two ancs also contribute to this stn's bcs in SP. Soviets here and we in Moscow have permanent correspondents (WBI 7/4)

DENMARK As from 7/5, R Denmark bcs to Au/As are to use 25850: 21-2152 80 degrees to Au; 12-1252 80 to Au/SE; 09-0952 40 to Japan; 13-1352 65 to EAs; 14-1452 85 India (Danish PTT via April Australian DX News) On same page it is reported that Norway is now sked on 25850 at 19-23 for SAM/WAF, w/out drawing any connexion. It had been reported that Norway would relay Denmark the second halves of hours, and Norway's sked for its own svcs has been reorganised to first halves of hours, but nothing explicit on whether such a relay has already started and whether any of the R Denmark xmtns we may hear are axually still from a site in Denmark! (gh)

DOMINICAN REPUBLIC Monitoring 16/2- 10/3: Since 16/2, xmtr on 11700 relaying pgms of R Mil, R Clarin. Usually s/on betw 1030 and 1130 w/R Mil Informando morning nx bulletin in progress until end arnd 1230. Then relays of R Clarin local svc, exc for R Mil nx at 16-1730/1745, 2130-23 apx. Relays of R Clarin local svc incl eve nx Clarin Informativo 23-24. These obs Mon-Sat; obs not made on Suns but in past nx bulls not usually bc on that day. Xmtr on 11700 not obs since mid-July 1988 and continues to experience fqt breaks in svc. RC also bcs on 860, 105.5 (WBI 17/3) No obs made on Suns? Highly unprofessional for a monitoring svc (probably FBIS) to take a day off!

ECUADOR HCJB total output is 485.25 hours per week, of which 137.45 is EG, 133.00 SP. In 3rd place is Quechua, 77 hpw (no doubt several dialects). In last place is Macedonian, 2 hpw (WBI 24/3)

EGYPT R Cairo, general pgm in AR on 15685 at 1121-1124* discussion 9/3 //12050, S10 343 (Dave Kernick, UKOGBANI, April DSWCI SW News)

FRANCE RFI ancd 22/3, increase in bcs to EEU, by 45% to USSR, Poland, Romania, Yugoslavia, w/out sacrifice to pgms in FR to EEU. No reduction either in other efforts such as bcs to Af, and EG bcs. Add 8 persons to staff (WBI 31/3)

GERMANY WEST /non/ DPA reported 8/3: All E Bloc jamming known to date of pgms from Western stns now discontinued. DW ancd 8/3 that even jamming vs bcs to Afghanistan in Pashto & Dari silent since 2/3 (WBI 17/3)

DW German svc has a DX program for 15 minutes on the 4th Monday at 0115, 0515, 0915, 1315, 1715. Does this mean that the daily DW pgm cycle now starts at 0000 UTC rather than 0600? Or did BBCM screw up again, so the 0115 and 0515 airings should have been specified as the Tuesday following the fourth Monday (calling it 4th Tuesday would also be incorrect in cases where a month starts on Tuesday). Total output 586.29 hpw, led by GM 166.29 (not 168 since there is a 13-minute break daily at 0547). Just like with HCJB, Macedonian is in last place here too, 3.30 hpw. BBCM shows no relay sites except Radiobras, 23-0050 SP on 15185 6145, 01-03 9545 in GM-- and claims Std Chinese at 1230-1350 is still via R Veritas on 11845 (WBI 31/3)

HAITI Prensa Latina, Havana, reported 7/4 from Santo Domingo: Haitian Natl Guard, holding onto precarious authority of de facto Pres Avril 6/4 cut antennas belonging to major local radio stns, 14 of them. Only 4 stns continued on: the offl R Nationale, private Arc-en-Ciel, Catholic Church's R Soleil, protestant R Lumiere. The two relig stns says seems result of non-compliance w/press censorship decree to prevent forces trying to overthrow him from airing their communiques.

R Soleil reported 7/4: Ants of 4 /sic/ stns hit yesterday, people wounded at some and ants totally wrecked. R Haiti-Inter: director says 20 uniformed soldiers attacked xmtrs before curfew went into effect at 2300 UTC yesterday. R Metropole, which has 2 groups of antennas, one near Fort Dimanche, other in Boutilliers--soldiers first cut off FM; later AM mast near Fort Dimanche stopped mtmg. R Antilles Intl also silent, went off betw 18 and 19; watchman said soldiers held gun to his head, entered site on Cul-de-Sac plain, carted away some mtmg eqp. Soldiers totally destroyed xmtr of R Liberte, on the Bicentenaire; also put ants in Boutilliers out of commission, hurting security guard Antoine Jean-Juste (WBI 14/4)

IRAN Excerpt from a speech by Pres Ali Khamene'i to scholars and clergymen at Qom seminary, on VIRI 16/3: Issue of frivolous music has caused much debate among clergy. Nx on radio and TV before revolution mainly consisted of songs rather than classic Iranian folk music. These songs were like a garbage heap. Tone, context, words, singers drew people to corruption. In no way comparable to a singer now singing poetry from Hafez of Milawi (WBI 24/3)

VIRI reported about news production at VIRI with head of news Mr Hemmati: Forn radio stns did not come into existence because we do not present the news. But because there is a great conspiracy underway against the Islamic revolution. A large number of forn radio pgms consist of "poison against the revolution". Hemmati concedes that forn stns are often able to present nx in such a way that the listener feels the nx is being bc in an objective manner even tho it is in fact biased. A pgm devoted to review forn radio bcs exposes many of the conspiracies, by presenting contradictory statements, Fridays 0400 gmt (WBI 31/3)

IRELAND R Dublin, which stayed on the air in Jan despite govt restrixions, was raided 7/2, govt officials stripping the place of xmtrs, other eqp including SW xmtr on 6910. But it came back on from other locations twice, and was raided two more times, and at last check was still able to bc (Ken Baird, March DSWCI SWN)

RNMN reported 6/4: 500-kW longwave commercial stn project jointly by R Tara and R Luxembourg status per Travis Baxter, stn mgr: xmtr is built and shipped over from Continental in Dallas. Hope to test in summer, launch around September. ID will be All Europe Radio, Atlantic 252. Actually on 254 kHz until next Feb (WBI)

J A P A N

R. Japan has put into operation of M89-2 schedule since Apr. 3 0400 UTC. Before it started, RFI via R. Japan has been prolonged the service 1.5hours/day since Apr. 1 0930UTC. RCI via R. Japan has been also rearranged since Apr. 2 1300UTC.

On R. Japan M89-2 some pgms in the Regional service are altered in bc time: AR 1830-1900 (ex- 1630-1700), FR 1900-1930 (ex- 1700-1730) 2030-2100 (ex- 2000-2030), GM 2000-2030 (ex- 1930-2000), Malay 1200-1230 (ex- 1330-1400), Swahili 1630-1700 (ex- 1730-1800) and Thai 1330-1400 (ex- 1200-1230). [cf. LN Apr. Page 28]

RFI is now relayed 6hours/day at 0930-1230 FR 15215, 1030-1159 FR 17705, 2300-0030 FR 17710.

RCI is relayed 4hours/day as before. Now at 1300-1330 EG 17810 15270, 1330-1400 RS 6150, 1400-1430 UK 6150, 1930-2000 RS 9650, 2200-2230 EG 15440 11705, 2230-2300 FR 11705.

Kaz Matsuda, Producer/Host of DX Corner in EG, shows J89 EG xmsn schedule (effective May 7 through Sep. 2).

General service:

0100-0200 17845 17835 17810 5960(C), 0300-0400 17835 17810 17765 7125(untill 0330, G), 0500-0600 17825 17810 17765 15270 15195, 0700-0800 21690(G) 21500 17810 17765 15270, 0900-1000 17810, 1100-1200 11840 11815 6120(C), 1400-1500 11865 11815, 1500-1600 21700(G) 11865 11815, 1700-1800 11865 11815 9695 9535, 1900-1930 15270 11865 11850, 2100-2130 17890 17810 15270 15230 11815 11800(G), 2300-2400 21610 17810 17765 15195 11800(G).

Regional service:

0100-0130 N.Am/E.Coast 17825, 0300-0330 N.C.& S.Am 21610 17825 15195 and C.Am 15325(F), 0900-1000 Oceania 17890 15270. (Via (C): Sackville Canada, (F): Montsinery, French Guiana, (G): Moyabi. Gabon.)

R. Japan DX Corner will be broadcast as follows:

EG (19min. Producer/Host: Kaz Matsuda);
0925-0944(Sun) 17810(S.E.Asia), 1525-1544(Sun) 21700(Eu, M.E. & Af,

Gabon relay) 11865(N.Am) 11815(S.E.Asia), 0125-0144(Mon) 17845 (S.Asia) 17835(Asian Cont.) 17810(S.E.Asia) 5960(N.Am Canada relay). 0325-0344(Mon) 17835(Asian Cont.) 17810(S.E.Asia) 17765(Asian Cont.) 7125(until 0330, to S.Af, Gabon relay).

KR (about 5min, Producer/Host: Toru Yamashita in ABI):

[DX Corner in Korean has been bc on every Sats since Apr. 8. Formerly once a month, the 1st Sat bc. The pgm starts around 1100 and 1400.] 1100a-1105a (Sat) 9580 7210, 1400a-1405a (Sat) 7210 6080. All frqs to Asian Cont. (Toru Yamashita, Tetsuya Kondo)

(E Asian DX News of Asian Being Institute 15/4 xlt'd & via Tetsuya Kondo, Japan)

The new 11865 starting at 1400 is for NAm direct from Japan--must have been picked by someone who never turns on a SW radio, else they'd know that Indonesia 300 kW DS is there, bound to clash; Indo off freq on high side, so het too (gh)

KASHMIR AZAD No controversy over seldom heard Azad Kashmir R, Muzafarabad actually coming from w/in Azad Kashmir. Muz is capital. Pen friend there confirms existence of radio stn, can see studios, ants, tall masts on hilltop. Hrd quite regularly on 792 MW, but SW 3660v by erratic. Noted now in Sri Lanka arnd 1500, sked 0040-04, 1155-1804. And via Islamabad on 4980 0040-0430; 12-1415, 1430-1803 on 4790, 0603-0903 on 7265 (Victor Goonetilleke, Union of Asian DXers, Feb-Mar)

KENYA Daily Nation reported 27/3: Kenya will soon have a private radio & TV channel if 6th natl development plan adopted (WBI 31/3) VOK reported 29/3: KBC will tomorrow launch a Pokot vernacular radio svc, via Kisumu, the 17th vern on VOK (WBI 7/4)

KOREA SOUTH Tong-a Ilbo, S'oul, reported 17/3: To get material necessary for pre-paring pgms on N Korea, KBS plans to install aeriels at border to receive NK TV; MinCom says this does not violate current regs (WBI 24/3)

KUWAIT R Kuwait main AR pgm on SW: 0230 on 9840 6055. 04 on 17895 17850 11665 9840 6055. 05 on 17895 17850 15495 11665 9840 6055. 06 on 17895 15495 11665 9840 6055. 0615 on 17895 15505 15495 11990 11665 9840 6055. 0730 on 15505 15495 11990 11665 9840 6055. 09 on 17885 15505 15495 11990 11665 9840 6055. 10 on 17885 15495 11990 11665 9840 9750 6055 (also on ES 15505). 11 on 15505 15495 11990 9840 9750 6055. 13 on same. 1530 on 15510 15505 15495 11990 9840 6055. 16 on same plus 9880. 18 on 15510 15505 15495 11990 9880 6055. 1830 on 15505 15495 11990 9880 7120 6055. 2115-23 on 15505 15495 11990 6055. R Kuwait Special AR svc 07-13 on 15505 to Eu/Am. Holy Koran Svc at 01-05 on 15495 15245, 16-21 on unknown fqs. Persian 08-10 on 9750. Urdu 16-18 on 17895. EG 05-08 on 15345, 18-21 on 11665. (WBI 24/3)

LIBERIA ELBC now back on SW, hrd *0500, varying up to 15 mins, on 3255 ancg sked as 05-09 & 18-24 on 3255, 09-18 on 6090. But eve xmsn obs several times from *1900 on 3255. Same fq carries BBC Lesotho 1745-2030 in EG (David Kernick, UK, Apr DSWCI SWN)

MALAYSIA R Australia reported 2/4 from Singapore: RTM from 1/7 will prohibit ads portraying Western lifestyles; no Caucasian models; no women in swimsuits. Ads must reflect racial reality of society. Info Ministry must approve ads before aired. Ad agencies protest they could spend 100 kilo\$ on a new beer ad only to be told the actors don't look enough like average Malaysians (WBI 7/4) See also SINGAPORE. Why doesn't Malaysia just stage an Islamic Revolution and get it over with? (gh)

EG DS, Blue Net on 7295 has increased airtime from 1/1. Mon-Thu 22-01, 05-06, 09-16 continues but Fri now 22-06, 09-16. Sa/Su 22-16. On Mon-Thu 01-05 & 06-09 contains educ pgms for schools. From 1990 domestic nets no longer known as Natl Net (Malay), Blue (English), Red (Tamil), Green (Chinese) but as Radio 1 to Radio 7. R 1 will be Malay, currently 24h on 5965; R 2 the FM stereo svc; R 3 English, R 4 local regional bcs, R 5 Chinese, R 6 Tamil, R 7 the Orang Asli (native people) svc (Lim Kong Jin, Penang, March DSWCI SWN) All bc svcs are ultimately to use FMS 18 hpd; meantime, setting up two new regionals in Shah Alam, State of Selangor, and Seremban, State of Negeri Sembilan, so all states would then have own regional stns. Native People svc in Bahasa Malaysia has bc at 06-08 on 6100 not listed in WRTVH. Addr is P O Box 11272, 50740 Kuala Lumpur (Lim Kong Jin, Penang, April DSWCI SWN)

MALTA V of Mediterranean, and R Mediterranean stns are distinct from one another. VOM is joint venture between Malta and Libya. RM is joint Malta/Algeria; both from same xmtrs at Xrobb il-Chagin but at different times. SW is 250 kW omni antenna, MW 600 kW w/three mast system. VOM offl langs AR, EG, FR, the latter to start in a few months; 06-08 1557 9765, 14-16 11925, addr P O Box 143, Valetta. Director is Richard Vella Laurent (Salvatore Placanica, Italy, April DSWCI SWN)

MONGOLIA RUB on new sked incl FR 1720-1750* on new 9985, resuming at *1755, SINPO 35553 (Franz Suss, Romania, April DSWCI SWN)

NEW ZEALAND RA Communicator reported 19/3 from Auckland correspondent: Radio & TV bcing funded by ads and public fee, payable for each household w/TV, about NZ\$72 for a colour set, i.e. about US\$44. Last year this provided NZBC w/ \$52 million; 46% of that went to RNZ, mainly for non-commercial bcs such as those relayed on SW; 31% to TVNZ for cultural, local pgming; 13% to fund NZ Symp Orch. Now MinBC Jonathan Hunt intimates increased fee likely soon. Possibly \$108 a year as from 1/7, a 51% increase (WBI 24/3) RNZI J89 from 6/5 to 2/9: 1830-2105 11780 15150. 2345-0145, 0145-0330 Sat/Sun only, 0330-0730 15150 17705. 09-1205 6100 9850 (Barry Cook, RNZI)

NICARAGUA LV de Nic in SP at 1058 on 6098.6, many ments of Revolution, seems canned as mixed w/SP mx. 1103 ID, people talking, dogs barking in background, 1115 t/out 12/4. Also again 13/4 but weaker (Nick Terrence, Huntington NY) R Sandino reported 16/3: R Catolica dir Mgr Bismarck Garballe and that the "Iglesia" nx bulletins will return to air 27/3. We have right to carry news w/out having to negotiate it (WBI 24/3) Monitoring 28/3: R Catolica bc nx today, first time since stn resumed opns 19/8/88. Would be daily 1800 (WBI 7/4)

NIGERIA R Nigeria reported 15/3: Min of Info & Culture, Prince Tony Momoh, gives assurance that V of Nigeria, ES will soon be reactivated. Also noted that of the 60 xmtrs belonging to the FRCN, no more than half were functioning, due to economic situation (WBI 24/3) PANA reported 24/3 from Abeokuta: OAU radio recording studio, to publicise activities of continental body, and those of libn struggles in S Africa will begin opns in May 1989, per Dir Info Ibrahim Dagash. Studio would record pgms for other stns to bc. Should build a full radio stn to bc 2 hpd w/in next 10 yrs.

R Nigeria reported 22/3: Kaduna Bcing Corp to install two new xmtrs at Zaria and Kafanchan stns to insure full radio cov of state (WBI 31/3) R Nigeria reported 28/3: new director general of FRCN is Alhaji Mohamed Ibrahim (WBI 7/4)

NORTHERN IRELAND /non/? This info dated 6/4 rcvd from new free radio stn Triangle Nighttime Radio: New project is a weekend FM 98.5 stn; hope to operate SW svc on 6273 relaying TNR to E Coast of NAM. Hope to begin 15-16/4; times 22 Sat nite until 01 Sun morn your time (presumably 02-05 UTC Sun - Bares). We're sure this will be of great interest to all radio enthusiasts on E Coast, esply as it is live and comes from Ireland. Stn is vy interested in reports from NAM, addr: Triangle Nighttime Radio, The Strand Hotel, Strand Road, Portstewart, Co Londonderry, Northern Ireland. As a courtesy I believe listeners should enclose return postage (Gregg Bares, CT, 19/4) "relay"? Does this mean it's really from a NAM pirate?? (gh)

PAKISTAN R Pak on 21740 in EG, t/in 1613 w/slow speed nx of ME, 1616 ID, //21580 but not hrd there. More nx, ending at 1630* abrupt 9/4 (Nick Terrence, NY)

PANAMA Melodia reported 17/3: Cland stn Voz de la Libertad yesterday jammed a bc of the Panama City stn R Ondas Populares. Subversive stn, which carried brief msgs against the country's authorities, hrd arnd noon yesterday during nx on O.P. In last few months, 3 local radio stns incl R Nacional jammed by the cland. Subversive bc coincided w/commem of first anniv of unsuccessful mily coup against Genl Noriega (WBI 24/3) Press report says perpetrator of cland bcs arrested (gh)

PAPUA NEW GUINEA R Australia reported 19/3: Chairman of natl FM radio svc, Kalang Advertising, warns svc could fall into forn hands. RA Port Moresby office says Kalang svc nearly had to close down last week because of financial difficulties. But got temporary reprieve when PNG P&T Corp agreed to give stn more time to find money owed for telecomms svc amounting to more than 240 kilo\$. Kalang chairman says financial plight means nation's FM svc could easily be lost to forn buyers (WBI 24/3)

RA Communicator reported 9/4: Per press reports, Comms Minister Malipu Balakau seeks govt permission for NBC to op a TV stn, to promote cultural values of PNG so-ciety. Also said NBC must do away with providing free bcing svcs. Bridging Kalang FM svc under direct control of NBC would be revenue-producing; its debts total a megakina (WBI 14/4)

PHILIPPINES FEBC have begun new DX pgm in EG called "DX", Mon 0145 on 15480, Thu 1540 on 11850 (April ADXN) Innovative name (gh) Since 5/3, RVA using a new 250 kW xmtr on 300 degree beam: 00-0058 15255, 01-0330 15365, 1230-1630 15220. Replaces 50 kW with log periodic which were purchased from short-lived SEARV; EG from RVA now: 0130-02 15325 15365; 15-1530 15465 15220. Due to QRM on 15220 until 15 I have recomm-ended that 1230-15 they use 15215, then 15-1630 15215 #sic; means still 15220?/ so watch out (Victor Goonetilleke, Sri Lanka, Feb-Mar UADX)

PORTUGAL R Renascenca reported 14/3: new head of RDP management board is president Cardoso Meneses. RDP Antena 1 reported 14/3: Asst Secy of State for Media Albino Soa-

res says 150 local radios will be authorised before Easter (WBI 24/3)

March issue of AWR Current, Forli Italy reports: AWR started being from Sines over a sesquidecade ago, still going strong. Producers send pgms to AWR Lisbon office where they are prepared on a special tape, delivered to Sisimbra where goes by relay to xmtrs at RTE Sines, 80 mi S of Lisbon. At Sines, three 150 kW Marconis, Siemens master control, aux eqp, ants by Brown Boveri using curtains, LPs. AWR uses two of the three xmtrs. Since RTE owns Sines opn, AWR buys time each week, paying apx \$300K a year for 7½ hpw bc time, all AWR can now afford. Why don't we just use the money to buy our own 250 kW xmtr at Forli? Would jump at chance if radio laws were stable in Italy; current situation not merit taking such chances. So will continue as present to EEU/NAF, except for EG Sun 08-09 on 9670 (WBI 7/4)

SEYCHELLES FEBA Radio News, Worthing, Apr-Jun issue reports: On 21/2, the Ville de Rouen reached Victoria harbour, Mahe carrying extremely valuable cargo for FEBA--TX4, our new 100 kW xmtr. Old 25 kW, TX 1, replaced by TX4, was switched off 20/2 and has been removed. New xmtr physically needs the space TX1 occupied. As we went to press engineers were installing TX4, aim to have it opl for new sked beginning 5/3 (WBI 7/4) FEBA Radio Fri pgm to ME at 0557-0630 on 11855 and 20/1: this is unfortunately last bc of this pgm for time being (Salvatore Placanica, Italy, SWN)

SINGAPORE AFP reported 21/3: Singapore to ban sale and installation of satellite dishes for receiving TV bcs from abroad, Min of State for Comms and Info Mah Bow Tan told parliament. Unlimited access to pgms beamed by forn TV stns could not be allowed because in developed countries commercial TV was designed to make money, but might transmit harmful values. TV should filter out unacceptable values. Many Sing homes already receive bcs from neighbouring Indo & Malaysia w/out specialized eqp, also concerning parliament. Cantonese pgms from Malaysia run counter to Singapore's offl Mandarin-only policy, plus cigaret ads in direct conflict w/govts anti-smoking policy (WBI 31/3) Whew, what a police state. Why don't they just declare a People's Republic and be done with it? (gh) When will Singapore become "developed"??

SOUTH AFRICA R RSA has nice ham radio DX pgm, Amateur Radio Spectrum, hrd best on Sats 1344-1355 on 21590 and 17755 (Sanmura Sundaram, Tamil Nadu, India, VU2FOT, UADX) Monitoring 5-11 April: Since 5/4, R RSA has bc on 4965 from f/in 1720 till close 2056. 11/4 was hrd //6130. Pgms appear in Ovambo, main indigenous lang of Namibia. Per tent fq sked for J89, new svc in Ovambo 16-21 on those two fqs, and in Afrikaans same 0350-0515; new bc in Kavango to Namibia listed 14-1555 on 11805 (WBI 14/4)

SPAIN RNE Radio Exterior sked excerpts: EG 00-01 & 01-02 & 05-06 Am 15110 9630. 19-20 Eu/ME/AF 15395 15375 15280 11790. 21-22 Eu 15280 11790. Multilingual w/nx in SP, Catalan, Galician, Basque: 0930-10 Eu/ME 21595 17730 15395 12035 11920 11790 9875. one hour later in winter. Also at 0930-10 yearound to Am on 21570 21555 17815= Sunday. 1930-20 Eu/AF in Cat/Gal/Bas one hour later in winter on 17890 12035 11920 9875 9765. 23-2315 in the 4 langs to Am on 21360. Ladino, for Sephardic Jews, Thu 18-1830 to ME on 17770. Spaniards at Sea pgm in SP is Mon-Sat 1405-15 on 21595 21555 17890. Total output is 331h15m per week, ranging from 248.30 in SP to 35 in EG to 0.30 in Ladino (WBI 7/4)

SRI LANKA Visawani, TWR off air 1/3 to 12/3 on 5990 00-0130, 12-1330 the latter in EG, due to tube failure on xmtr. Cost about US\$20K I'm told, back now seems better (Victor Goonetilleke, Sri Lanka, UADX Feb-Mar)

SURINAME R Apintie, 5005.7, logged 10/2 2358-0215 w/phone in pgm 00-01 so I called +597-97950/98800 and got on the air. Had been looking for this months and months. Power seems 350 watts. SINPO 21221 w/VG conX from SAM. Founder of stn Mr Vervuurt died but son continues (Wian Stienstra, Neth, March DSWCI SW News)

SWEDEN R Sweden reported in Swedish 19/3 on changes to ES from 26/3: all half-hour xmsns ended w/IDs repeated in 7 langs. Not really necessary now that xmsns reorganised to remain on same beam for as long as possible; now IS reduced to 8 times a day (WBI 24/3) Same pgm 28/3 reported that Estonian and Latvian at 1645-17 introed due to new openness in Soviet Union out of general budget; anything more than nx would require addl staff, much more expensive (WBI 31/3) R Sweden output totals 181.15 hpw of which 66 is in Swedish, then 24.30 in EG (WBI 14/4)

SYRIA Monitoring 9/4: R Damascus ES hrd to Eu on 17710 15095 in GM 1805-1905, FR 1905-2005, EG 2005-2105 (WBI 14/4) Obviously influenced by Ted Turner (gh)

TAIWAN CNA nx agcy reported 3/4: govt will establish natl nx agcy and natl radio stn in a few years, Shaw Yu-ming, dirgen of govt info office and. Says GIO has met

w Kuomintang-run Central News Agency many times in past years to discuss transforming it into govt-run natl nx agcy w/in 3 yrs. Shaw also expressed hope govt would take over overseas dept of Kuomintang-run BCC and expand it into natl radio stn in a few years (WBI 14/4) Splitting hairs

TANZANIA R Tanzania reported 14/3: Pres Ali Hassan Mwinyi visited R Tanzania today. Chief Editor Ndugu Kassim Mpenda told pres that for long time newsroom unable obtain nx flashes, cause Shihata, Tanz nx agcy, had not paid debts to Brit nx agcy Reuter, which in turn halted info supply to RT. Resultantly, nxroom decided to monitor nx from forn radios (WBI 24/3) RT reported 28/3: RT to begin bcng new pgm by amalgamatng the Commercial and Natl svcs into one dept. Bc dir David Wakati said after amalg, bcs'd begin at 0200 gmt instead of 0300, w/relig pgms, uninterrupted mx until 03 nx in brief, press review, funeral anmts, ads, mx, anmts until 04 nx bulletin; rest of nx sked as before until 2100*. New stn known as R Tanzania, from 2/4. Eqp of Commercial Svc being repaired; was faulty and caused constant interruptions of bcs, to be completed in 3-4 months. First time since inception RT bcs so early (WBI 7/4) And that extra hour should be a big help to WMem DXers (gh)

TONGA R Australia's NZ corresp reported 2/4: CE of Tonga Bcing Comm, Mr Indiran, says new xmtr on 5030 in opn since 28/2. SW svc meant for outlying islands, such as Vava'u and Niua to the north of main island Tongatapu. Power 1 kW, ops 1750-10 6 dpw, no SW frm 1750 Sat to 10 Sun. Also has new 10 kW solidstate on MW 1017 since March 88 (WBI) More details: 5030 is DSB AM full carrier, ant simple dipole. Xmtr locally designed and assembled by TBC staff. Fq arranged by Tonga PTT after tests to determine QRM and coverage; allocated for fixed or bcng. Xmtr xtal controlled. Only available fq is 5030. Reports wanted to Mr Indiran, CE, TBC, PO Box 36, Nuku'alofa (Bob Padula, March ADXN)

UGANDA R Uganda reported 5/4: MInfo & BC has been urged to give more autonomy to R Uganda, TV to boost professional quality as mass media; needs for exchange to buy required components (WBI 14/4)

U S A WORLD OF RADIO sked on WRNO remains as in Apr LN, but Thu 1530 on 11965 has been appearing more often, sometimes w/last week's pgm rather than new one; Sun 2030 on 15420 has varied widely, once at 2000, another week at 2108 after fq change to 13720, yet another week inaudible here and WRNO either off or propped out (gh)

KCEI has 4-min DX internacional pgm in SP M-F 0006 0336 0706 1305, Sa/Su 0005 0405 0700(Sun 0705) and 1330. Fq is 15280 before 0312, 9615 after (Dieter Lippman, GDR, MarchDSWCI SWN)

U S S R Complete listing of langs and fqs for R Stn Peace & Progress, effective 7/5 to 2/9: Eu GM 1430 (invariably 29-min long) 13700 12040 9775 7340 7420 1386; 2030 on 1386 263; 2130 on 15240 11980 9820 9550 7420 7340 1386; EG 20 on 263; 21 on 15240 and rest of fqs as for GM at 2130. To SEAs in Peking dialect (sic) 13 on 17870 17730 17635 17610 15180 11870; 1330 on 17835 17730 17635 17610 15560 15480 15180 11870. To Asia in EG 14 on 17645 17635 17610 15220 11890. SWAs Persian 1530 on 15320 15210 11910 11695 9840; Azerbaijanian (sic) at 16 on 15520 15210 11910 11695 6135 6110 1296. EG at 1630 on 12055 11910 11695 6110 6135 1296. ME in AR 1330 on 17580 15520 15455 15425 11900 9810; HB 1630 on 15520 15500 12065 11975 7305 1170. Af in EG at 1630 on 17615 17595 11775 11670 9830. LAm in SP 00 on 15355 9665 9580-untill 31/7, 7350-from 1/8. 0330 on 17580 15585 15520 15510 15475 15210 11860 11630. Creole 00 & 02 on 15150 12060 11920; Guarani Tue/Fri 01 on 15475 15210 9470; PT 03 on 17580 15575 15520 15510 15475 15210 11860 11630. If you think that's a lot of fqs, original sked had the March-May period, May-Sept, and Sept-on periods!! (Bill Matthews, Columbus OH)

Addl minority lang svcs are being added to various stns: Lithuania thinking about Ukrainian; Kirghiz R has Turkish once a week; Evenk lang for SFE shortly; Chita TV in Buryat. Groznyy, Checheno-Ingushkaya ASSR gives equal air time to Chechen, Ingush and Russian; 90% of pop considers RS their 2nd lang (WBI 7/4) regular radio bcs now in Nivkh lang in Sakhalin oblast; Turkmenia gets to watch TV in Uzbek. Taldy-Kurgan now bcs in RS, KZ, Uigur, German, plans Korean too (WBI 14/4)

Homeland, Tallinn reported 22/3: As of 27/4, Estonian R forn svc bcs weekly pgm in EG, Mons 2030-21 on 1035 and 5925, other days Estonian (WBI 7/4) R Vilnius ancd 18/3: details of our fqs, sites: 666 is Kaunas 500 kw non-dir but slightly turned to 315 degrees; 6100 is Kaunas 50 kw 250 deg. Bcs to ENAm: Until 26/3 9765 is Lvov in W Ukraine 500 kw, 305 deg; from 26/3 9750 Plovdiv, Bulgaria, 500 kw 290 deg; 9860 in Yevpatoriya, Crimea, 500 kw 310 deg; xmtrs rented /sic/ from R Moscow. To WNAm: 15240 Nikolayevsk-na-Amure, 40 km from mouth of Amur river, 240 kw, 40 deg; 15455 in Petropavlovsk/Kamchatskiy, 100 kw 65 deg; 17660(?) ditto (WBI 31/3) R Vilnius quoted Lith DX Club report 27/3: in mid-Feb, Central Committee of Lith CP approved plan to found youth radio stn in Vil on FM; the first non-governmental one in USSR (WBI 31/3)

R Alma Ata hrd 25/2 1245-13 in RS on 15780, 3 x 5260, SINPO 23432 (Nobuyoshi Aoi, Japan, April DSWCI SW News)

Govorit i Pokazyvaet Moskva reported in its 12th 1989 issue: Six republican channels have been xmtd to Moscow on SW since 14/3: Promin, nx & mx ch of Ukrainian R is much like Mayak; 5-min nx not half hour and on hour, but at 15 and 45; Uk folk and tradl mx. Weekdays live pgm Contact 1945-22, weekends From Morning to Midday is live 0715-1020; plus literary pgms from Molodaya Gvardiya stn. Belorussian R pgms incl Morning in Countryside, Restruxing Microphone, Republican Nx, concerts, plays; nx & Mx Spring, Krynitsa in BR, daily 06-11; pgm pvws 0530. On Estonian R channel letters pgm, literary, mx, children's, morning pgms w/nx 0230-06. Lithuanian includes Q&A pgm live.0630 & 14 on every day except Sun, kid pgms, includes sports. Moldavian R pgming is mixed, incl 7 hours of All Union R, and 12 of republican bcng, science, law, roundtable, literary, mx pgms.

GiPM reported 12/1989: From 21/3 these start: Georgia 7215 at 0358-16, 15145 1605-20. Azerbaijan 7300 03-15, 15180 1505-21; Armenia 7175 0533-1530, 15110 1535-20. Presumably one hour earlier due DST from 26/3 (WBI 24/3)

AUR reported 16/3: DST starts at 2300 GMT 26/3 all over USSR, except no change will be made in Latvia, Lithuania, Estonia; in the Astrakhan, Kaliningrad, Kuybyshev, Kirov, Ulyanovsk oblasts of RSFSR, and Uralsk oblast of Kazakhstan (WBI 24/3)

GiPM 13/1989 reported: From 28/3 all republican pgms can be hrd on SW band in Moscow. Shalkar is name of Kazakh R info/mx pgm, similar to Mayak, but also includes block of pgms from youth stn Yeshlik, and the Karmok satirical pgm, some in langs of natl minorities. Azerbaijan R info/mx pgm takes name from river Araz (Araks); also has concert pgm adjusting times to accommodate lengthy musical works. Frequencies: Uzbek on 9595 02-1330, 17840 1335-1900. Kazakh 9690 00-1530, 17730 1535-17. Kirghiz 9735 2257-15, 17785 1505-17. Tajik 9660 2315-13, 17865 1305-1750. Turkmen 9565 0415-1430, 17635 1435-18. These fq's will shortly change due to summer sked (WBI 31/3) R Vilnius reported in EG DX pgm 27/3: from 14/3 Moscow xmtg Lith R domestic first pgm, ex-jamming xmtrs: on 6010 03-16, 9750 1605-22, unconfirmed 50 kW, environs of Moscow, exact site, azimuth unk; G here in Lith up to 18 before Eu QRM (WBI 31/3)

AUR Mayak reported 30/3: Moscow & Leningrad residents can now listen to Uzbek R; for first time the Mashal (Torch) info/mx pgm, Uzbek R 2nd program, on airwaves in these cities, in RS, UZ. Powerful relay stns, until recently jammers, now obsolete due glasnost'. Pgm soon hrd in RSFSR Non-Black Soil Zone /mainly EU RSFSR/where many Uzbek work. Ed note: Obs on 9595 at 02-1330, 17840 1335-19 from xmtrs believed in Moscow area (WBI 7/4)

GiPM reported in 10-16/4 issue: From 11/4, pgms of Tatar ASSR relayed in Moscow on SW, 02-14 on 11945, 1405-18 on 17810, confirmed at 02-14 and 1415-18 11/4, mainly relays of AUR Pgm I from Moscow w/only short local bcs from Kazan in Tatar, RS.

GiPM 10-16/4 issue reported: Armenian pgms include Business Radio Club, arts; Kirghiz R begins daily w/Kyrgyzstan nx/mx pgm; 10 nx bulls in KG, 3 in RS; lots of literary, drama. Turkmen R social political themes. Tajik R in 7 langs, much from listener suggestion, housing pgm, Panorama info hour (WBI 14/4)

Riga-1, new relay via Moscow on 5920 04-14 since 14/3, 33433 (Karel Honzik, DSWCI) On 6125, Tallinn-1 ditto 0425-14, 32332 (Karel Honzik, Czechoslovakia, DSWCI SWN)

Pravda reported 15/3: Airwaves free from 'black holes'. For about 50 yrs was secret dept at USSR MinCom, recently known informally as Krestyaninova Svc, since for 25 yrs Nataliya Yevgenyevna Krestyaninova was in charge of jamming. A 1937 Geneva conference confirmed right of every state to ban all bcs that might incite citizens, adopted by 22 countries, not incl Germany, Italy, Japan, US. Two years later jam svc set up in our country. Now the svc entirely abolished, but naive to think fornicators now operate exclusively in interest of peace, freedom, mutual understanding; still to be hrd are falsifications, distortions, psywar, but glasnost' will not jam them. The jamming eqp in part will be used to air on SW republican svcs from all over the SU in the Moscow area; also plan spl pgms on advertising, medical, for drivers (WBI 24/3)

Sovetskaya Rossiya reported 23/3: AP report from Washington that jamming resumed 13/3 is refuted. Jamming has been terminated! and xmtrs turned over to other uses. Perhaps AP correspondent took the new relays for jamming. R Vilnius reported 27/3: former jamming devices in Moscow now used to xmit radio pgms of union republics. Jammers in Lith reported to have been of slight capacity and no use for normal xmns so being dismantled (WBI 31/3) Somebody pointed out that using 16m to serve Moscow must mean the xmtrs are quite some distance away. Normally this would be true, but don't forget that there were many ground-wave jammers for close-range blanketing (gh)

VATICAN 21650 is a new fq from VR to Af 1515-16 including EG after 1545. VR output total is 251.05 hpw led by EG 31.40, not incl relig svcs in various langs (WBI 14/4)

VENEZUELA R Continental, 4939.6 LSB, QRM from 4940, weak 16/3 0951-1045, TCs, IDs betw selextions of pop, lite Venez mx (Ron Howard, Santa Barbara CA) New stn hrd 19/3 0915-0945 on 4939.6, Buenos Dias Barinas pgm, llanera mx, ancd 4940 1 kW (Inoue, Jpn)

R Nacional, 1059 IS, 1100 s/on w/ID, fqs, hrd on 9540, nx in SP, 1106 ID, comtry 11/4 (Nick Terrence, Huntington NY) R Rumbos on new 9723, 1806-1816 dance mx, ID, ex-9660? 45554 (Manuel Rodriguez, Venezuela, DSWCI SWN; logged 3/3)

YEMEN NORTH Al Siyash reported from Kuwait 19/3: Informed Yemeni source denies holding any contacts to effect an alleged reconciliation between followers of Ali Nasir Muhammad, former Pres of S Yemen, and current leadership in Aden. Referring to the halt to bcs by Ali Nasir's radio, which used to xmit from San'a, source said this positive step by northern part will contribute to success of meetings of Higher Yemeni Council, to be convened in Aden soon (WBI 31/3) Which stn/pgm referred to?

ZAMBIA ZNBC General Svc, in EG: 0240-0530 on 6165 3346. 0530-1530 7235 6165, 1530-2210 6165 3346. Pgms include Rise & Shine, reports from provincial correspondents, Mon-Sat 03-04. ZNBC Home Service, multilingual: 0245-0530 6060 4910; 0530-1530 on 7220 6060. 1530-2105(Sat/Sun 2205) on 6060 4910 (WBI 24/3)

ZNBC ES sent this sked, details not confirmed: 0445-0730 Sun on 11880; 1045-1230 Sun 11880; 1545-21 daily 9505, Fri/Sat to 22; and also on 17895 Suns from 1650. Almost all in EG except during some bland pgms which are: V of Namibia, SWAPO Sun 1130-1230. R Freedom, ANC in Nyanja Fri 1630-17. R Freedom Mon-Thu 17-1745. Workers' Front ANC Fri 17-1745. R Freedom ANC Sun 17-18. V of Namibia SWAPO: Sun/Fri 1815-1915, Mon-Thu 1830-1930, Sat 1845-1945, Fri 1930-20. Other ANC pgms Thu 1930-20 also Wed; Fri 2015-2045; and UN anti-apartheid pgm Mon & Fri 1930-20. (WBI 7/4)

C L A N D E S T I N E C R A N N Y V of Namibia /see also ZAMBIA above/ On 4715 is new stn claiming to bc from Lubango, Angola, irr *18-1930v*, unusually good and strong sig, unseems black. Mainly Fern but some EG, says back at 6:00 but no trace on any fq at 04 or 16 (Vashek Korinek, RSA, NU via Finn Krone, via April DSWCI SWN)

R Cadena del Sur, 9565.1, t/in 0700 to 0759*, in SP, mainly entertainment, pop mx, comedy, "for all those who sympathize w/liberation of South Angola," quite weak, seems Sun only (ibid) Believe I quoted some DX pgm report of this as "Carina"; am positive the middle vowel was "ee", but maybe Cadena mispronounced (gh)

R Siboney, new stn on 6100.2, named for evergreen Cuban song, daily *1757-1940v*, slogan Voice of Cuban Exiles, pgm for Cuban troops in Angola. Better on USB as was always characteristic of 60mb Galo Negro (Korinek, ibid) Same hrd 5/3 1730-1827 6100.2 (WBI 14/4)

R Marti RNMN reported 6/4: Has just expanded to 24h sked; spokesman Tommy Jones says people want to listen 11 pm to 5 am. \$16 million approved for TV Marti; ch 13 seems only one open (WBI 14/4) Haven't found a SW Fq in 03-0930 period, nor in VOA sked (gh)

The Voice of the Resistance, first monitored 13/3/88, pgms hostile to Colombian govt, by Revolutionary Armed Forces of Colombia, 25-min bcs Sunday only in SP: 14 on 6195, 15 on 6150=USB, 17 on 6195, 18 on 4250-USB, 21 on 7425 USB (WBI 7/4) axually hrd???

North American Pirates WJDI may test to Europe in late April, arnd 2200, some Saturday nite with sesquikilowatt xmtr (Ken Baird, April DSWCI SWN) Fq same as this? (gh) WJDI on 1620 kHz 27/3 0429-0535* SIO 444, mostly recent pop mx, shows more fun w/DJ talk. 0503 said someone brought pizza, soda, so on a while longer. Addr PO Box 142, Cottaack Hill NY 12419. WKND, 6240, 14/3 *0236-0320*, SIO 444, 70s metal mx, lots of electronic IDs, many hard to understand. Also on 1620 1/4 0507-0520+, SIO 312, bits of mx in terrible QRN; call from stn made ID definite. Has started QSLing. V of Tomorrow, 7410, 19/3 *2200-2258* SIO 555, unhrd since 7/84. Entire show was talk about Wm Joyce aka Lord Haw-Haw and his involvement w/Nazi Germany, "a man of unbelievable heroism". When is FCC gonna stop wasting time on harmless pirates like CBOR, KBBR, KKMO and go after these weirdos? Radio USA, 7415, 1/4 2220-2242*, SIO 455, medly of punk tunes, contest for listeners to name original songs and groups. DX show w/many recent pirates, fqs, ads for "tongue on a stick". Maildrop info: Any stn wanting to use my addr as a drop can; just write me at: 3007R 4th Ave, Beaver Falls PA 15010. Hilo HI addr is still open and accepting stns too (A Yoder, PA)

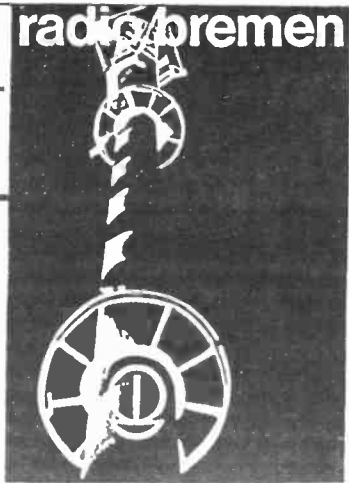
October Storm (Std CH: Shi Yue Feng Bo) hostile to Chinese govt, shares xmtr w/V of PLA, Contingent of Proletarian Fighters, R Spark, irr since 1968 w/long absences. Fqs used in past: 9659.5, 9267.6 or 7524.6; 1984/85, 10-min pgms betw 09 & 1130. Now on 9270.3 Fri/Sat/Sun 1445-1455, 15-1510 (WBI 14/4) open & close w/4 bars of Internatio-nale, IDs have provincial accents, hrd 7/1 & 29/1 for 7 mins at above times (Peter Wilhelm Mueller, FR Germany, Mar DSWCI SW News)

Eelam National Democratic Liberation Front returned first week of Feb to back candidates for 15/2 elexion but stayed on, modulation often terrible. Govt uninterested but some weak jamming probably from other Tamil groups; in TM 0130-0215, 1030-1115 on 6925, quite strong here but unk how far hrd; also readable in S India (Victor Goonetilleke, Sri Lanka, Feb/Mar UADX)

...until the next, 73, Glenn

QSL REPORT

radio bremen



Please send your QSL reports to:

Sam Barto, NASWA QSL Editor
47 Prospect Place
Bristol, CT 06010 USA.

AHU DHABI: Voice of the UAE 11965 p/d folder cd. for * the **Capital Radio** relay in 3 wks. for 1 IRC. v/s Ahmed Shouly. (Wallace-MA). 11965, 6170 and 9595 same w/ sticker for the relay in 5 wks. (Barto-CT). 11965 p/d ltr. in 26 ds. for 1 IRC. (Weber-OH). f/d folder cd. in 3 1/2 wks. (Huniwell-NJ). same in 3 wks. for 2 IRCs. Schedule rcvd. (Kohlbrener-PA).

ALASKA: KNLS 6065 f/d cd. in 19 ds. (Connor-PA). same in 1 mo. for \$1.00. (Kohlbrener-PA).

ANTARCTICA: Radio Nacional LRA36 15476 f/d cd. in 82 ds. for a SP rpt. v/s Raul Marcelo Navarro, Jefe Oficina Radiopostal. (Cichorek-NJ). in 2 1/2 mo. for a SP rpt. and 4 IRCs. Also sent a registered tape w/ my rpt. (Wallace-MA).

ARMENIAN SSR: Radio Yerevan 9470 f/d cd. w/ schedule in 139 ds. (Cichorek-NJ). (Wallace).

ASCENSION ISLAND: HBC 15400 p/d cd. via London in 5 wks. for a rpt. direct to the site.

ASIATIC RUSSIA: Radio Moscow 7310 via **Khabarovsk** f/d cd. in 38 ds. (Zobro-MI). 7490 and 9545 f/d cds. in 75 ds. 7490 was for USB reception. (Rigas-IL). 9780 via **Nikolayevsk-on-Amur** f/d "Yuri Gagarin" cd. in 1 1/2 mo. (Wallace). 17825, 17890 and 9875 via **Irkutsk** f/d cd. in 38 ds. (Zobro). 17860 via **Chita** f/d cd. in 1 mo. (Moore-OH). 17880 via **Irkutsk** f/d cd. in 1 mo. (Moore). 12010 via **Petropavlosk-Kamchatsky** f/d cd. in 38 ds. (Zobro). 9705 via **Vladivostok** f/d cd. in 1 mo. (Moore).

AUSTRALIA: VLM15 15425 f/d personal ltr. in 157 ds. for 2 IRCs. v/s Murray Green, Station Manager. Also rcvd. sticker and a receipt for my IRCs: (Brouillette-IL). **VNG** 5000 f/d folder cd. w/ personal ltr. in 36 ds. for 1 IRC. (Hazard-PA). **VLO9** 9660 f/d "ABC" cd. in 2 mo. for \$1.00. (Wallace). **VLBA**, **VLBT** and **VLBK** p/d ltr. in 5 wks. for a taped rpt. and ms. v/s Sandra McCormack. (Huniwell-NJ).

AUSTRIA: Radio Austria International 9875 f/d cd. w/ schedule in 90 ds. (Turnick-PA). f/d "Rural Costume" cd. in 59 ds. w/ schedule. (Levison-PA).

BANGLADESH: Radio Bangladesh 17710 p/d cd. w/ ltr. in 7 wks. for 3 IRCs. v/s Munshi Ahsan Kabir. (Kohlbrener-PA).

BOLIVIA: Radio San Miguel 3310.4 p/d personal ltr. w/ 20th * Anniversary pennant in 99 ds. for a SP rpt. v/s Hector Salas Takana, Director. (Archer-NC).

BRASIL: Radio Cancao Nova 4825 f/d "Clock" cd. w/ sticker in 4 1/2 mo. for a PT rpt., tape and ms. (Huniwell). same in 4 mo. for a PT rpt. My 110th QSL from Brasil. (Field-MI). **Radio Record** 15135 f/d cd. w/ personal ltr. in 2 mo. on my 5th try for a PT rpt. Two different stickers rcvd. (Field). **RadioBras** 11745 f/d cd. w/ sticker and schedule in 107 ds. (Turnick). **Radio Alvorada de Londrina** 3335 f/d prepared cd. w/ ltr. in 26 ds. for an SASE and ms. (not used). v/s Pe. Jose Guidoren. Postcard rcvd. from Laura Bozzfan at the station. (Moore-OH). **Radio Cultura de Sao Paulo** 17815 p/d ltr. w/ info. sheet, sticker and photo in 38 ds. for a PT rpt. and \$1.00. v/s Jose Munhoz, Coodenador de Engenharia. (Wakisaka-MD). n/d ltr. w/ stickers and photos in 51 ds. for a PT rpt. and ms. (Moore-OH).

Radio Tabajara 4795 f/d prepared cd. for SASE (not used) and a f/up on an 81 reception. (Moore) **Radio Nacional Amazonia** 11780 f/d prepared cd. in 2 mo. for a PT rpt. and \$1.00. v/s Eudson Monteiro Lima. (Palmerheim-MN).



Radio Canada International

RADIO DEUTSCHE WELLE
German Shortwave Service & Service Allemand sur Ondes Courtes
الخدمة القصيرة الألمانية وخدمة موجات قصيرة
P.O. Box 100 844
D 4000 Aachen

The Voice of Germany - La Voix de l'Allemagne - La Voiz de Alemania - A Voiz de Alemania

South West Germany - Allemagne du Sud - Alemania del Sur - Brasil

Radio 4DVE

via John Carson

BOX 1
CAP HAITIEN
HAITI
WEST INDIES



CZECHOSLOVAKIA: Radio Praha 5930 f/d cd. in 45 ds. (Levison). f/d "Castle" cd. in 45 ds. (Connor-PA).

DOMINICAN REP: Radio Mil HIBE 11700 via Radio Clarin p/d ltr. in 89 ds. for a SP rpt. Also rcvd. a German language tourist brochure! v/s Pedro Justiniano P., Vice Pte. Director General. Addr: Maximo Gomez 65, Apartado 1372, Santo Domingo. (D'Angelo). Onda Musicales 4780 f/d prepared cd. in 48 ds. for a SP rpt and SASE (used) for a 1974 reception. (Moore-OH).

ECUADOR: HCJB 17790 f/d "Ecuadorian Sketchbook" cd. in 1 mo. (Blight-MD). 11775, 9720 and 6230 f/d "Postage Stamps" cd. in 25 ds. (Connor). Radio Jesus del Gran Poder 5050 p/d cd. in 140 ds. for a SP rpt. and ms. v/s Jorge Enriquez S. (Paszkievicz). Radio Federacion Shuar HCSK7 4960 n/d cd. w/ f/d prepared cd. and personal ltr. in 9 mo. for a SP rpt. and ms. v/s Angel Arutam Kuja, Director. (Palmerheim). p/d cd. w/ ltr. in 7 mo. for a SP rpt. and \$1.00. (Wakisaka). La Voz del Napo HCVN7 cd. w/ pennant and decal in 1 mo. for a SP rpt. (Huniwell). Radio Zaracay 3395 f/d folder cd. in 132 ds. for a SP rpt. and ms. Pennant rcvd. v/s Elissy Cun C., Secretaria. (Brouillette)

ENGLAND: Spectrum Leisure Communications 25796.5 f/d ltr. w/ info. sheet and personal ltr. in 42 ds. for 2 IRCs. 80 watts! (Bishop-FL). Radio Orion 6815 cd. w/ ltr. in 1 mo. for a taped rpt. of test transmission. v/s Mike Wilson. Mike said my rpt. was the first correct one from the US. Power was 20 watts!! He also mentioned hearing me interviewed on Radio Apollo while visiting the UK. (Bares-CT)...Gregg give me a call...Sam. Radio Gemini 6230 cd. w/ info. sheet and personal ltr. in 6 wks. for a taped rpt. v/s Edwin Borg. 150 watts! (Bares-CT).

ESTONIA: Radio Tallinn 5925 p/d cd. w/ schedule in 96 ds. for ms. (Archer-NC). f/d cd. in 104 ds. (Paszkievicz). f/d "Barns at a Farm" cd. in 4 1/2 mo. for an Estonian/EG rpt. (Swar-

EUROPEAN RUSSIA: Radio Moscow 9880 via Moscow f/d cd. in 65 ds. (Rigas). ingen-NC). 9515, 15150 and 15560 f/d cds. in 1 mo. (Moore). 7175 via Blagoveschensk f/d cd. in 38 ds. (Zobro). 5980 via Armavir f/d cd. in 38 ds. (Zobro). 7170 via Kazan f/d cd. in 1 mo. (Moore). 9620 via Zhigulevsk f/d cd. in 1 mo. (Moore). 15540 via Ryazan f/d cd. in 1 mo. (Moore). 17765 via Tula f/d cd. in 1 mo. (Moore).

FERNANDO POO: Radio Nacional Malabo 6250 f/d "Map/Antenna" cd. in 3 mo. direct from station for \$1.00. Card is of my own design and was delivered to the station by the President of Pierce International - I guess they liked it and will probably use it for their own QSL cards. (Behr-ONT). p/d ltr. in 63 ds. for a SP rpt. and \$1.00. v/s Cipriano Somori Suakin. (Wakisaka-MD).

FRENCH GUIANA: Radio Beijing 11695 via RFI site w/ f/d cd. w/ pin in 47 ds. (Connor). f/d cd. in 7 wks. (Huniwell). RFI 11670 f/d cd. in 33 ds. (Washburn-ME). burn-ME).

GABON: Africa No. 1 4830 p/d cd. in 368 ds. for a FR rpt., tape, 1 IRC and \$1.00. (Wash-Germany, FEDERAL REP. OF: Bayerischer Rundfunk 6085 p/d cd. in 55 ds. for \$1.00. (Wakisaka)

GUAM: KSDA 11980 f/d cd. in 51 ds. for \$1.00. (Blight-MD).

GUATEMALA: Radio K'ekchi TGVC 4845 f/d cd. w/ pennant in 5 mo. for a SP rpt. and ms. (Lobdell-MA). f/d cd. in 6 mo. for a SP rpt. Pennant rcvd. QSL rcvd. from Medios Educativos A.C., Apartado 310, CD Satellite, Edo. de Mexico, 53100 Mexico City. (Field-MI). n/d ltr. w/ card and paper pennant in 7 mo. for a SP rpt. and ms. v/s David Daniell, Asesor de Comunicaciones. (Moore). La Voz de Nahuala 3360 cd. w/ form ltr. in 351 ds.

for a SP rpt. Pennant rcvd. v/s Juan Fidel Lepe Juarez, Jefe de Mantenimiento y Tecnico Auxiliario. (Archer-NC). TCNA 3300 f/d cd. in 14 mo. v/s Mariella Posadas. (Eckert-PA). Union Radio/AWR 5980 f/d cd. in 53 ds. for a SP rpt. and \$1.00. Also rcvd. personal ltr. and pennant. v/s Juan Francisco Lopez, Sub-Gerente. (Archer-NC). Radio Mam TGMN 4825 p/d ltr. in 26 ds. for a SP rpt. Paper pennant rcvd. (D'Angelo-PA).

TO: STATION <u>Crazy Jacks</u>	FROM STATION <u>ORION</u>
THIS IS TO CONFIRM THE RECEIPT OF EQUIPMENT AS FOLLOWS:	NAME <u>26 watt</u>
DATE <u>7/1/78</u> STARTED <u>0804</u>	TIME FINISHED <u>0815</u> FREQUENCY <u>6815</u>
CHARACTER <u>AM</u> MODE <u>AM</u>	REMARKS <u>first positive report from USA great stuff</u>
SIGNAL STRENGTH 12345678910 <u>224422</u>	
RADIO ORION RADIO 13344	
REMARKS <u>first positive report from USA great stuff</u>	

*h have dipole
Sorry picture
Cheap
QSL
I'll try to get
a some more of them*

Rock Radio International.
103 QUINN'S ROAD,
COLERAIVE,
CAPLOWCERRY,
BT52 2GS,
NORTHERN IRELAND U.K.

2nd FEBRUARY 1983.

DEAR ORION.

We were very surprised to receive a letter from the USA, it was very exciting and surprising to find your letter and below to this day, I would love to thank you personally for leaving the time to do this for Rock Radio Ireland.

I have ordered our QSL, Programme schedule and a first card of Northern Ireland.

Our transmitter has a power of 200 watts and is located on the North Coast of Northern Ireland.

I have marked an X where we are situated, on the QSL SHEET.

We were concerned transmissions to the East Coast of North America, but our transmitter would not be strong enough. But if we could do anything I will make sure and write to you first.

RRI's first broadcast was on 11 December 1982, we are the only Free Radio Station in the State of Northern Ireland, which by the way is part of the United Kingdom.

and again thank you very much.

Yours in Free Radio.

Audrey O'Brien.

MY CARD - CO ROCK RADIO WIRE

VIA G. Bares



Tahiti



POLYMERISE FRANÇAISE BP 125 PAPERETE

FREQUENCES	
146 KHZ	20 Kw
8135 KHZ	4 Kw
8150 KHZ	4 Kw
11020 KHZ	25 Kw
16130 KHZ	30 Kw

R.F.O. votre Radio

taped rpt. and \$1.00.(Hazzard-PA).

INDIA: AIR 4860 f/d "Mughal Garden" cd. w/ schedule in 56 ds. for 2 IRCs.(Moore-OH).

INTERNATIONAL WATERS: Radio New York International 1620 ltr. in 2 wks. v/s Al Weiner.

* (Bares-CT).1620 and 6240 f/d prepared cds. in 10 ds. for SASE.(Rigas). World Mission Radio 6215 cd. w/ info. sheet in 6 wks. for ms. sent to the CA address.(Bares). Radio Caroline 6210 f/d prepared cd. signed by Paul Graham at the Communicate 88 Convention in Blackpool, UK.(Bares-CT). 6215 f/d form ltr. in 93 ds. for \$1.00. v/s Mike Watts, Station Engineer. Addr: P.O. Box 146, Playa D'Aro, Gerona, Spain.(Frodge-MI).

TURKEY: Radio Baghdad 15230 f/d large folder cd. in 113 ds. after a f/up rpt.(Turnick).

IRELAND: Radio Pandora International 6820 cd. w/ info. sheet in 1 mo. for a taped rpt.

* and ms. v/s Gary Lewis. He sent me 5½ hours worth of cassette tapes!(Bares-CT).

ITALY: RAI 9575 f/d "Venus Portrait" cd. in 115 ds. for \$1.00.(Kacir-MI). n/d cd. w/ schedule in 199 ds.(Turnick). Advertiser World Radio 7257 via Forli f/d cd. w/ ltr. in 47 ds. for \$1.00. v/s Lina Lega, Secretary.(Wakisaka-MD).

JAPAN: RFI 17710 via Yamata f/d cd. in 1 mo. for a FR rpt.(Field-MI).

JAVA: RRI Jakarta 7269.9 p/d cd. in 2 mo. for an IN rpt. and ms. after a f/up rpt. v/s Drs. R. Baskara.(Palmerheim-MN).

KIRGHIZ SSR: Radio Moscow 15420 via Frunze f/d cd. in 38 ds.(Zobro-MI).

KOREA, PEOPLES DEM. REP: Radio Pyongyang 11735 f/d "Flowers" cd. in 161 ds.(Washburn-ME).

KOREA, REPUBLIC OF: Radio Korea 15575 f/d "Folk Village" cd. w/ stickers in 30 ds.(Conn-

LATVIAN SSR: Radio Riga 5935 f/d cd. w/ schedule, pennants and sticker in 55 or-PA). ds. for 1 IRC.(Wakisaka-MD).

LIBERIA: VOA 6035 and 7280 via Monrovia f/d cd. in 2 mo. v/s Kathryn Ziehm.(Wakisaka).

LITHUANIAN SSR: Radio Vilnius 6100 f/d cd. in 134 ds.(Paszkiwicz). 7400 f/d "National Lithuanian" cd. w/ schedule and postcards in 98 ds.(Turnick).

LUXEMBOURG: Radio Luxembourg 6090 f/d cd. w/ stickers in 24 ds. for 2 IRCs. (Monaco-NY). f/d cd. w/ stickers in 24 ds. for \$2.00.(Kacir). same in 3 mo.(Huniwell-NJ).

MALAWI: MBC 3380 n/d ltr. in 5 wks. for a 4 yr. old rpt. for ms. v/s Henry Chirwa, General Manager.(Swaring-NC).

MALTA: Radio Mediterrean 6110 f/d cd. w/ sticker in 118 ds.(Turnick). Voice of the Med-

iterranean 9765 f/d cd. in 50 ds. for \$1.00. Site is at Xrobb il-Ghagin.(Hoffman-PA).

MEXICO: XEPP Radio Educacion 6185 f/d ltr. w/ photo in 1 mo. for a SP rpt. v/s Gustavo Lopez.(Eckert-PA). same in 287 ds. for a SP rpt. and ms.(Archer-NC). XENW La Voz de la Latina 6165 f/d prepared cd. w/ personal ltr. and a very attractive pennant in 72 ds. for a SP rpt. v/s Ing. Miguel Angel Barrientos V.(Archer-NC).

NEWFOUNDLAND: CKZN 6160 f/d folder cd. in 7 wks. for 1 IRC. v/s Rich Knowles.(Kohlbrener)

NEW ZEALAND: RNZI 9850 f/d "Rugby" cd. w/ pennant in 1 mo.(Huniwell-NJ).

NIGER: La Voix du Sahel 5020 f/d form ltr. in 108 ds. for a FR rpt. v/s Yacouba Alwabi.(Wakisaka). f/d ltr. in 2 mo.

for a taped rpt. and ms.(Huniwell-NJ).

NORTHERN IRELAND: Rock Radio International

* 6272.5 postcards and info. sheets in 10 ds. for a taped rpt. 200 watts! v/s Andy Craig...Very pleased!(Bares-CT).

NORWAY: Radio Norway 15310 f/d cd. w/ sticker and schedule in 1 mo.(Turnick).

PAKISTAN: Radio Pakistan 11570 f/d cd. w/ pennant and decal in 2 mo.(Huniwell).

PERU: Radio Frecuencia Lider 4418.4 f/d

* prepared cd. w/ postcard in 146 ds. for a SP rpt. v/s Oscar Peralta Rojas, Secretario y Evangelico.(Archer-NC).

ROCK RADIO INTERNATIONAL

1275 KHz
9 mW
SHORT WAVE

PROGRAMME SCHEDULE FROM FEBRUARY 2, 1969

Act: Radio International, 105 BURNVILLE ROAD, COLLEEN, CO. LOUTH, IRELAND.

PROGRAMME SCHEDULE FOR FEBRUARY

10:00 TRANSMISSION BEGINS AT 10:30

11:00 THE COUNTRY SHOW WITH Andy Craig, Mike, Carol, and Andrew's Quintet

11:00 CHARTS SHOW WITH low low blues the hottest the best low low by southern Ireland

11:30 INTERLUDE OR RELAY.

ALL TIMES GMT

ALL PROGRAMMES RECORDED THE PREVIOUS WEEK.

via Bares

12:00 THE ROCKSNOCK WITH WALLY
The bands were all leaders of the time and some of the best of the time

13:00 low's M.C. MECA MIX the music for your's generation

14:00 IT'S Andy's the afternoon

15:00 RECEPTION REPORTS and national transcription

TRANSMISSION ENDS AT 15:15.

PHILIPPINES: Radio Veritas 15465 f/d cd. in 2 wks. (Huniwell).

POLAND: Radio Polonia 7270 f/d cd. w/ station pennant in 148 ds. (Levison-PA).

PORTUGAL: RFE 17725 via Gloria f/d ltr. w/ schedule in 1 mo. for ms. v/s Dave Walcutt. (Moore-OH). RFE/RL 15215 p/d "Map" cd. in 5 wks. (Huniwell).

QATAR: QBS 11820 f/d cd. in 4 mo. for ms. (Wallace-MA).

RWANDA: Radio Rwandaise 3330 p/d cd. w/ form ltr. in 129 ds. for a FR rpt. v/s Fidele * Nkulikiyumukiza, Chef du Section Documentation et Censure. (Archer-NC).

SALPAN: KFBS 12025 f/d "Map" cd. in 51 ds. for ms. v/s Erna I. Kapileo, QSL Secretary. (Washburn). KYOI 17780 n/d "WCSN" cd. in 1 mo. (Connor-PA).

SAUDI ARABIA: BSKSA 15060 f/d cd. in 71 ds. for a taped rpt. (Blight-MD).

SCOTLAND: Weekend Music Radio 6317 f/d cd. w/ paper pennants in 2 mo. for a taped rpt. v/s Jack Russel. (Lobdell-MA). f/d cd. w/ ltrs. and stickers in 48 ds. for a taped rpt. and \$2.00. (Archer-NC). 6312 and 6317 2 f/d cds. w/ ltr. in 51 ds. Banners and info. sheets rcvd. Jack says that a possible DX program on 15045 may be started in the Spring around 2200UTC. (D'Angelo-PA). 15044.5 same as above in 37 ds. for 1 IRC. 100 watts. (Bishop-FL). 6312.7, 6317.2 and 15043 same as above for a series of 7 rpts. on tests to the USA. (Bares).

SEYCHELLES: BBC 11750 f/d prepared cd. in 25 ds. v/s Peter J. Loveday, Senior Transmitter Manager. (Rigas-IL).

SOUTH AFRICA: Radio Orion 3320 f/d prepared cd. w/ sticker, flashlight and sticker in 257 ds. v/s Bill Sharp, Manager. (Archer-NC). Radio RSA 6010 f/d "Sandstone Cliffs" cd. in 81 ds. v/s Minnie Visser. (Kacir-MI). 9615 f/d cd. in 12 ds. (Kacir). Radio Five 4880 f/d cd. in 5 wks. for 2 IRCs. (Kohlbrener-PA). (Brouillette-IL).

SPAIN: Radio Exterior de Espana 9630 f/d "Alcazares" cd. in 70 ds. for a SP rpt.

SPANISH MOROCCO: Radio Medi Un 9575 f/d "Globe" cd. in 9 wks. for an AR/EG rpt. and 1 IRC. Sticker and schedule rcvd. (Swaringen). cd. in 2 mo. w/ sticker. (Behr-ONT).

SRI LANKA: Trans World Radio 11920 f/d ltr. in 18 ds. for ms. v/s Vic Flaming. (Wash-SULAWESI). RRI Manado 3215 f/d prepared cd. w/ f/d personal ltr. in 36 ds. burn-ME). for ms. v/s Daniel Narande, Kepala Stasiun. (Archer-NC).

SUMATRA: RRI Jambi 4927 f/d prepared cd. w/ personal ltr. in 38 ds. for an IN rpt. v/s Drs. H. Ali Amran and M. Yazad. (Archer-NC).

SYRIA: Radio Damascus 15095 f/d "Globe" cd. in 5 mo. for 3 IRCs. Sticker rcvd. (Kohlbrener). f/d "Map/Logo" cd. w/ sticker and 1 UK stamp! in 161 ds. for 2 IRCs. (Brouillette). 12085 f/d cd. w/ flag in 208 ds. via registered mail. (Turnick). f/d cd. in 5 mo. w/ pennant and sticker. (Field).

TADZHIK SSR: Radio Moscow 15140 via Dushanbe f/d cd. in 38 ds. (Zobro-MI).

TAIWAN: Voice of Free China 15345 f/d cd. w/ stickers in 28 ds. (Hazzard-PA). 9955 f/d "Global View" cd. w/ stickers in 27 ds. (Connor-PA).

TANGIER: Radiodiffusion Television Marocaine 17595 f/d "Logo" cd. w/ schedule in 3 mo. for a FR rpt. and 1 IRC. v/s Tanane M'hammed Jamal Eddine, Technical Director. (Kohlbrener-PA).

TURKEY: Voice of Turkey 9445 f/d "Tapestry" cd. w/ sked. and stickers in 23 ds. for \$1.00. (Kacir-MI). same in 7 wks. w/ pennant for \$1.00 (Kohlbrener). Voice of Meteorology 6900 p/d form ltr. in 2 mo. for \$1.00. v/s M. Cemil Ozgul, Director General. (Wakisaka-MD).

UKRAINIAN SSR: Radio Moscow 17680 via Simferopol f/d "Gargarin" cd. in 7 mo. v/s Tanya Lavrova. (Eckert-PA). 7195, 7165, 7105 and 15475 f/d cds. in 38 ds. (Zobro). 5980, 17810 and 15475 f/d cd. in 1 mo. (Moore-OH). 7115 and 7310 via Ivano-Frankovsk f/d cd. in 38 ds. (Zobro-MI).

TONGA BROADCASTING COMMISSION

Telegrams to Cubin
Broadcasting, Tonga
Telephone: 21-111
P. O. Box 24

NUKUNALOFA .

Date, 30 March, 1982.

Ref: 6/2/1

via James Young !!!

Thanks for thge phone call Jim.

Mr. James V. Young,
P.O. Box 576,
Wrightwood,
California - 92397-0576,
U.S.A.

RECEPTION REPORT OF OUR SV SERVICE 5030 KHZ.

Dear Mr. Young,

Thank you very much for your Comprehensive reception report of our new SV service on 5030 KHZ. The programme details were verified and found to be OK. As present we do not have appropriate QSL card and hence this letter is being issued.

It is heartening to note that you have taken keen interest in our station and tried to get it verified through our announcers, and through your 'ham' friends in New Zealand and Tonga. I am extremely pleased with your keen interest. I wish that you continue to monitor our service.

We have started 5030 KHZ service using a "EDWOOD" 1KW transmitter and a simple dipole antenna on 28.3.1982. This is mainly meant for our outlying Islands, such as Niue group and Vava'u group where our SV service 1017 KHZ is not received satisfactorily. To our astonishment, we have received reports not only from our outlying Islands but also from New Zealand and Australia. Yours is the first report from America.

I hope that our new service should help not only the Tongans living abroad but also the been foreign nationals, MIKES and 'ham' like you. I also thank you for your picture no Halley's Comet.

Yours sincerely,

[Signature]
S. Yafaka P.
General Manager





UKRAINIAN SSR: Radio Moscow 7150 via Lvov f/d cd. in 1 mo. (Moore). 7150 and 9765 f/d cd. in 38 ds. (Zobro). 11705 via Kiev f/d cd. in 1 mo. (Moore-OH). 4795 via Kharkov f/d cd. in 75 ds. (Rigas-IL). **Radio Kiev** 13645 f/d cd. w/ schedule in 73 ds. (Levison-PA).

USA: AFRIS 6030 f/d cd. w/ schedule for last day of broadcast in 120 ds. (Bishop-FL). **WMLK** 9465 f/d ltr. in 66 ds. for ms. v/s Elder Jacob O. Meyer. (Wakisaka). same in 2 wks. for ms. (Lobdell). **Radio Marti** 9525 f/d cd. w/ schedule in 33 ds. (Connor). **WWV** 5000 f/d folder cd. in 13 ds. (Hazzard). 10000 same in 2 wks. for ms. (Monaco). **WYFR** 11830 f/d cd. w/ stickers * in 1 mo. for ms. (Hazzard). **WSIB** 11700 p/d form ltr. in 8 ds. for ms. v/s C.E. Evans, Station Manager. (Palmersheim). **VOA** 9575 via Bethany f/d cd. in 2 mo. * (Wakisaka). **KJES** 15140 f/d cd. in 11 ds. for ms. v/s Ellen Hogarty. (Paszkiewicz).

USA (Pirate): WJDI 1620 2 f/d info. sheets w/ photo in 1 * mo. 1000 watts. (Bares-CT). same in 10 ds. for ms. and SASE. Addr: P.O. Box 142, Cottekill, NY 12419. (Frodge-MI). p/d ltr. in 24 ds. w/ photo. (D'Angelo-PA). f/d ltr. in 1 wk. for SASE. (Sgrulletta-NY). **Falling**

Star Radio 6241.4 f/d cd. in 2½ mo. for ms. (Palmersheim). 6240 f/d prepared cd. in 60 ds. for ms. (Rigas). **WRPT** 7415 3 f/d cds. in 30 ds. for ms. (Rigas-IL). **WKND** 1621.2 f/d info. sheet in 59 ds. for SASE. Addr: 3007R, 4th Ave., Beaver Falls, PA 15010. (Frodge-MI).

VATICAN: Radio Vatican 9605 f/d cd. in 43 ds. for \$2.00. (Kacir). **VENEZUELA: VVZR Radio Continental** 4940 f/d cd. in 4 mo. for a SP rpt. * My 12th YV State! (Moore-OH). f/d cd. in 4 mo. for a SP rpt. and * ms. (Lobdell). **Radio Carora** 4910 f/d prepared cd. w/ stickers and ltr. in 53 ds. for a 1979 reception. v/s Marconi Gonzalez Campos, Director General. (Moore-OH).

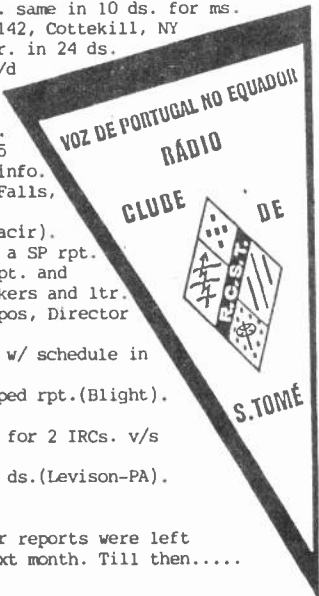
USSR: Radio Station Peace and Progress 7360 f/d "Logo" cd. w/ schedule in 42 ds. (Connor-PA).

UZBEK SSR: Radio Tashkent 15470 f/d cd. in 140 ds. for a taped rpt. (Blight). 15455 f/d cd. in 51 ds. (Hazzard-PA).

YEMEN ARAB REPUBLIC: Radio Sana'a 9779.3 p/d ltr. in 3½ mo. for 2 IRCs. v/s Abdullah Farhan, Technical Director. (Eckert-PA).

YUGOSLAVIA: Radio Yugoslavia 9620 f/d cd. w/ schedule in 62 ds. (Levison-PA).

That's it for yet another month. You may notice a few of your reports were left out this month due to space constraints. They will be in next month. Till then.....



usual transmitter 100w jack russel in his studio

QSL THE VOICE OF SCOTLAND QSL

WARR ENOJ MUSE

Radio

WMR confirmation of reception /qso:

To: EDWARD KUSAKI

Date: 29/10/88

Time: 2144-2210 UTC

Freq: 15044-57k

Power: 100w

Signed: Jack Russell

42 arvan close, cambridge, england

Weekend Music Radio

Scottlands Only

Only JW

Prate

Sam



FRENDX CONTRIBUTORS SECTION -- MAY 1989 ISSUE

The following members submitted loggings this month:

Brian ALEXANDER, Mechanicsburg, PA	FRG 8800
Donald BERHENT, Willowick, OH	XCR 30
William BLIGHT, Baltimore, MD	NRD 525
Norman BOBB, Minneapolis, MN	FRG 8800
John BRYANT, Stillwater, OK	ICF 2010
Edward CIHOREK, Somerset, NJ	R71A
Keith CUSHING, Louisville, KY	DX 400
Richard D'ANGELO, Wyomissing, PA	DX 302
Peter DILLON, Greece	DX 160
Rufus JORDAN, Pittsburgh, PA	R70
Dennis KELLY, Mt. Clemens, MI	ICF 6700W
Tom LASKOWSKI, South Bend, IN	NRD 515
Harold LEVINSON, Philadelphia, PA	ICF 2010
Dale PARK, Honolulu, HI	R 5000
Sheryl PASZKIEWICZ, Manitowoc, WI	
Edward RUBIN, Port Chester, NY	
Roland SCHULZE, Stuttgart, West Germany	
Dan SHEEDY, Encinitas, CA	
John TUCHSHERER, Neenan, WI	R70, FRG 7700


Hi everyone! Thanks to Kap for his help in putting this months contributors section together. I hope I haven't misspelled any names or left out any information. I'm already receiving loggings for next months issue. Thanks to everyone for the kind words of encouragement! For anyone who hasn't already copied it down, send your loggings to me:

Kris W. Field, 431 Babylon Road, Ambler, PA 19002-2302
Deadline: 12th of each month.

As always, kindly cut your loggings apart and sort them in frequency order unless a Log Report Editor specifically asks otherwise. Log Report Editors, please let me know how I can continue giving you the reliable service you've been used to getting with the loggings.

Until next time - 73

Kris



LOG REPORT

section A

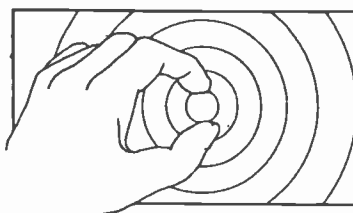
2000 to 4899 kHz

Editor: Bob Brown, P.O. Box 591, Colmar, PA 18915

- 1620 USA (PIRATE) WJDI *0359-0427 EG, NA, ID, Oldies/dedications. ID's, mention Central NY/1500 watts. PO BOX 142 Cottekill, NY 12419. SIO454 (D'Angelo-PA 3/13)
- 2360 GUATEMALA R. Maya de Barillas 1100-1105 SP/Indian, campo mx in Indian dialect, ID @ 1101 then Indian yak. //3325 better. Fair. (Sheedy-CA 3/19)
- 3204.4 INDONESIA RRI Bandung 1358-1405+ IN, westrn pops, ad/promo, new piano synth IS, lcl ID & nx. Spur on 3180.7 also hrd fairly well. Good. (Sheedy-CA 3/25)
- 3214.9 CELEBESE RRI Manado 1155 Lagu pops 'til 1158, then SCI + Jakarta relay. Sig excellent (Bryant-OK 4/20)
- 3215 S.AFRICA R. Oranje 0414 AK/EG. EG ID, pgm notes/ads in AK..90M quiet for once! Fair. (Sheedy-CA 3/13)
- 3220 ECUADOR HCJB 0910-0930 Quechua svc by M/W, simple mx, ID in EG. Fair/QRN (Bobb-MN 4/1)
- 3220 PAPUA TERRITORY Radio Morobe 1157 Modern pops w/ male ann. and probable ID in Pidgin at 1200. Good sig (Bryant-OK 4/21)
- 3222.9p NUSA TENGGARA RRI Mataram SCI + Jak relay at 1200. Fixed their tx after years of awful mod! Great mod on med sig (Bryant-OK 4/21)
- 3245 PAPUA TERRITORY R. Gulf 1128-1154 Pidgin, Tribal sndng vcls, drums etc. mx w/OM tlk. ID @ 1130 and EG ment of Ntl Besting Comm @ 1145. SIO353 (D'Angelo-PA 2/28)
- 3250 HONDURAS R. Luz Y Vida 0231 SP, CA mx, ID by OM (Cushing-KY 3/8)
- 3264.7 CELEBESE RRI Gorontalo Inst mx until 1200 Jakarta Relay. ID by YL before SCI. Goron been drifting arnd here lately. No sign of near co-chan RRI Bengkulu. Good (Bryant-OK 4/20)
- 3270 NAMIBIA SWABC 0440 EG (unsked then!) nx of UN in Namibia, 0442 abruptly into AK; not African lang. as sked in WRTH '89, Good (Wood-HI 4/4)
- 3274.8 VENEZUELA R. Mara 0726- SP, non-descript LA ballads, "R. Mara" slogans & ID tag to TCs, splc Sun pgm or what, not usually till 1000 or so. Fair. (Sheedy-CA 3/19)
- 3306.1p NUSA TENGGARA RRI Dili Presumed this w/Jakarta relay at 1200 til 1210 Fair sig (Bryant-OK 4/21)
- 3320 SOUTH AFRICA R. Orion 2340-2400 EG/AK, Pop mx, DJ chatter, ID. //4810 (Alexander-PA 3/12)
- 3324.8 GUATEMALA R. Maya 1026-1040 SP, t-in to ID w/call,loc & freqs, NA. Ranchera mx at 1030 & tlk by DJ. Strong. (Alexander-PA 3/25)
- 3330.2 RWANDA Rdiff de la Republique Rwandaise 1725- ,Venecular, Afr folk mx, ID by YL as "R. Rawanda", Excellent! (Schulze-W. Germany 3/12)
- 3345 MOLLUCCAS RRI Ternate During Ramadan, this station tuning continuous Islamic rel. prgs. No Jak relay heard in multiple 1200 loggings. Unusual. (Bryant-OK 4/*.*)
- 3370 GUATEMALA R. Tezulutlan 0235-0247 SP, marimba mx, tlk by OM. Anmnts @ 0245 followed by ID and more marimba mx. SIO343 (D'Angelo-PA 3/8)
- 3375 NEW GUINEA TERRITORY (PNG) R. Western Highlands 1133-1202 f/out, Pidgin, var lcl vcl mx w/YL tlk. ID @ 1200 followed by OM w/nx. SIO252 (D'Angelo-PA 2/27)
- 3395 NEW GUINEA TERRITORY (PNG) R. Eastern Highlands 1148-1210 f/out, Pidgin, Stringed instr, lcl vcls w/OM, ID @ 1200 followed by more lcl mx. SIO353/252 (D'Angelo-PA 2/28)
- 3774.9 NUSA TENGGARA RKPDT2 Sumbawa 1140 Male speaker in Indo, w/ many ments of Sumbawa faded out before max dawn on both 4/18 and 4/22. Good lvl. (Bryant-OK)
- 3909.4 CHINA Yunnan PBS 2240-2300 Relay R. Beijing, ID, Vietnamese, OM/YL tlk, TP (Schulze-W. Germany 3/25)
- 3965 FRANCE RFI 0520 FR, political discussion, Good for listed 4 KW. (Wood-HI 4/2)
- 4461.8 PERU R. Nor Andina 0346-0412 SP, Vcls, anmts, mention Celendin. (Paszkievicz-WI 3/13)
- 4485a UNID Peru? 0135-0141+ SP, OA style vcls, few ancmnts & weaker than mx, Bagua Grande here in 85/86. Poor (Sheedy-CA 3/21)
- 4518.5 BOLIVIA R. Nuevo Horizonte 1002-1025 ID & pres. opening anmnts, orch NA, huanyos, OM w/TC's & tlk. Fair (Atkins-AL 3/30)

- 4607.3 NETH. NEW GUINEA RRI Serui Playing gangbusters Melan/Micronesian mx 1100-1200 during Ramadan (?!). Usually fair to good at max dawn in OK (Bryant-OK 4/*.*)
- 4699.0 JAVA RKIP Surabaya 1200 Jakarta relay after partial local ID by male. Fair sig at max dawn. (Bryant-OK 4/18)
- 4705 PERU R. Imperio 1017-1103 fade, campo mx w/OM anmnts/TC's; YL ID "R. Imperio, Rioja" @ 1059 foll. by flute bridge. Fair w/usual ute absent. (Atkins-AL 4/6)
- 4719.3 CELEBESE RRI Ujung Pandang 1200 Jakarta relay at 1200 daily. Moved here from 4753 at the start of Ramadan. (Bryant OK 4/*.*)
- 4760 LIBERIA ELWA Monrovia 1936-2000 EE, ID, rel pgm "The World Of Love" (Schulze-W. Germany 3/15)
- 4780 UNID ASIAN 1305-1325 /out. JP/KR?/, SEAs or China? M/W yakking away w/ breaks for CH style vcls. Lang snds more JP than choppy KR. Maybe Viet or Laos? Poor. (Sheedy-CA 3/19)
- 4789.7 NETH. NEW GUINEA RRI FakFak 1207 Koranic recitation and no Jakarta relay at 1200. Sig very strong here lately. (Bryant OK 4/21)
- 4790 PERU R. Atlantida 0932-1030 SP, Andean mx w/ nice flute playing. Ment of Peru & Stn. Poor-Fair (Bobb-MN 4/2)
- 4800h CUBA R. Rebelde 0017 SP, SP pops, YL anc. 8th harmonic of 600 khz. Hd //600 & 6th harm., 3600. Also @ 0830 on same freqs. (Alexander-PA 3/25)
- 4800 GUATEMALA R. Buenas Nuevas 1128-1158 Lang/SP, ID @ 1129, rel svc, tlk/mx. ID @ 1157. F/G (Bobb-MN 4/3) 0045 (Jordan-PA 4/5)
- 4805 BRAZIL R. Difusora do Amazonas 0145-0220* PT, Live coverage of Futebol by 2 OMs, many ments of Brazil. Sudden off during coverage. SIO353 (D'Angelo-PA 3/10)
- 4810 SOUTH AFRICA R. Orion 0200 EG/AK, bilingual ID after bilingual wx for Pretoria, Durban, etc. hrd as early as 0045 & past 0400. Good (Sheedy-CA 3/13) (Alexander-PA 3/11) (Tuchscherer-WI 3/23) (Paszkievicz-WI 3/9)
- 4820 BOTSWANA R. Botswana 0448 Setswana tlk, ID Good (Wood-HI 3/24)
- 4820.8 PERU R. Atahualpa 0120-0133 SP, OA vcls, "R. Atahualpa..onda corta.." @ 0130, and tightly produced ad string (blanqueria, etc.) Fair (Sheedy-CA 3/21)
- 4824.9 BRAZIL R. Cancao Nova 0012 PT, several "Cancao Nova" IDs, slo mx, on air phone calls, //9674.9 but weaker. (Laskowski-IN 3/27)
- 4825 BRAZIL R. Educadora 0846-0905 PT ezl mx, M/W w/ tlk & rel. svc., rooster crow, BR. mx. F/QRN (Bobb-MN 4/1)
- 4835 GUATEMALA R. Tezulutlan 1145-1200 M in lang, simple inst/vcl mx. ID on hr. F (Bobb-MN 4/1)
- 4844.5 GUATEMALA R. Kekchi *1057-1115 Indian lang, s/on w/ opening anmts, chorus @ 1058 followed by rel tlk & lcl rel. mx. (Alexander-PA 3/25) 0155 (Schulze-W. Germany 3/27)
- 4850 CAMEROON CRTV Yaounde 1756-1800 EE, Afr folk mx, IS, TP, ID "This is Yaounde, the National Serv. of Cameroon R." (Schulze-W. Germany 3/12) 2302 (Cushing-KY 3/8)
- 4851l ECUADOR R. Luz y Vida 1045-1100 SP, rel svc by M & congregation. (Bobb-MN 4/4)
- 4860 INDIA AIR Delhi 1729-1735 EE, ID, nx. (Schulze-W. Germany 3/25)
- 4865 COLOMBIA LV del Cineruco 0856-0908 SP, M w/ tlk, ID, ment of Caracol, LAM mx. Good/QRN (Bobb-MN 4/4)
- 4871 INDONESIA RRI Wamena 1141-1210* lagu pops @ t-in, then tracked 1 side of Conway Twitty/Loretta Lynn album. NA & Love Ambon @ clsing. G. (Atkins-AL 4/3)
- 4875 BRAZIL R. Nac. Boa Vista *0859-0920 orch mx intro, om w/opening anmnt/ID/ freqs, mix of Brasopuz & ranhero mx. F-G (Atkins-AL 3/17) 0358* (Jordan-PA 3/12)
- 4875.4 BOLIVIA R. Cruz del Sur 1009-1030 Indian lang, tlk, hymns, 2 ID's @ 1025, jingles, Andean mx. (Paszkievicz-WI 3/26)
- 4881.7 PERU R. Nuevo Mundo 0928-1002 SP, "lo mejor de la musica tropical..", ID tags after TCs..best hrd by 1000 w/ "oyentes.. en R. Nuevo Mundo.." Fair (Sheedy-CA 3/19)
- 4897.5 GABON RFI Via Moyabi 0442 FR, goofing off up here //9800, ID/Sked @ 0455, Bck on 4890 3/17. Good (Sheedy-CA 3/15)
- 4920 ECUADOR R. Quito 0311 SP, mx "Love is Blue" by P. Mauriat. ID SIO322 (Blight-MD 3/5)
- 4931.6 JAVA RRI Surabaya 1205-1215 w/ Jakarta relay followed by local nx. Sig generally good in multiple loggings in April. (Bryant-OK 4/*.*)

Whew, it all fit! John Bryant tells me that all his Indo and PNG loggings should be hearable on the East coast. I received a nice veri from RRI Bukittinggi this month, so yes, they do verify! Remember to use Compuserve 74756,1557 or the BBS's if possible. 73 - Bob KW3F



LOG REPORT

section B

4900 to 6199 kHz

Editor: Sheryl Paszkiewicz, 1015 Green St., Manitowoc, WI 54220-6231

- 4905 BRAZIL, R. Araguaia, 3/25, 0050-0140 w/ID, QTH refs, FC, poss. nx 0100, tlks, lite vocals. (Jordan-PA)
Also at 0835-0845 w/IDs, ads, ballads. (Alexander-PA)
- 4905 BRAZIL, R. Relogio Federal, 3/5, 2220 w/ID, ID, mx, time sigs, mixing w/R. Beijing. (Schulze-FRG)
- 4911 ZAMBIA, R. Zambia, 3/24, 0445 w/EG ID, Fish Eagle IS, Afro rhythms, good sig. (Wood-HI)
- 4915 GHANA, GBC-1, 3/12, 0612 in EG w/sports, lotto numbers, 0615 ID & drum IS. SIO=333. (Cichorek-NJ)
- 4934 KENYA, Vo Kenya, 3/12, 0250-0325 in EG w/continuous rock mx, TC, mx fanfare, nx, TC, ID & Afr. vocals. (D'Angelo-PA)
- 4935 PERU, R. Tropical, 4/05, 0956-1025 w/Andean mx, ID 0957, echo effects, noisy. (Bobb-MN) 4/1, 1027-1040 w/jingles, ads, ID, OA mx. (Alexander-PA)
- 4940 VENEZUELA, R. Continental, 3/16, 0320 w/lively Latin vcls, ID 0330, nx, TC. Also good 0930. (D'Angelo-PA) 0951 w/TC, IDs between songs. Fair. (Howard-CA)
- 4965 BRAZIL, R. Alvorada, 3/25, *0855-0910 w/instl mx, tlk, FC, ID, ballads & pop mx. Good. (Alexander-PA)
- 4965 BRAZIL, R. Poti, 3/26, 0137-0154 w/ID, Latin mx. (Schulze)
- 4970.4 VENEZUELA, R. Rumbos, 3/18, 0238 w/EZL mx, 0256 ID, TC, ads, anncd numbers (maybe lottery?--sp) (Cichorek-NJ)
- 4980 CHINA, Xinjiang PBC, Urumqi, 3/11, 2343 in Mongolian w/folk mx, IS, ID. //5060. (Schulze-FRG)
- 4980 VENEZUELA, Ecos del Torbes, 3/4, 1059 w/horns, "proud" type of ID by M. Poor sig. (Park-HI)
- *5003.7 SURINAM, R. Apintie, 3/26, 0250 in DD w/ID, lcl mx, instl mx, 0300 ment. Apintie. CW splatter. (Schulze-FRG)
- 5014.9 BRAZIL, R. Pioneira, 3/19, 0815-0845 w/ads, anmts, IDs, ballads, pop mx, tlk. (Alexander-PA)
- 5015 BRAZIL, R. Cult. de Cuiaba, 3/18, 0836-0904 w/long tlks, ment Brasil & Cultura, TC, vcls, ads, Sanfona mx, ID 0901. (D'Angelo-PA)
- 5015 CLANDESTINE, R. Truth, 3/25, 0415-0432 in vern/EG w/ID, Afr. pops, bird IS 0430, EG anmts w/"Hello Zimbabwe" & ID. (Alexander-PA)
- 5025 AUSTRALIA, VL8K Katherine, 3/5, 2134 w/ID, country mx, ID TC, anmt. (Schulze-FRG)
- 5025 BENIN, ORTB Parakou, 3/26, 2105 w/ID, Afr. folk mx, drums before the hour. (Schulze-FRG)
- 5025 CUBA, R. Rebelde, 3/4, 1128 w/corres. rpt, 4 TP 1130, jingle rapid tlk. (Park-HI)
- 5030 COSTA RICA, R. Impacto, 3/18, 0209 w/ID, beautiful ballads, ID 0213, EZL mx. (Cichorek-NJ) 3/28, 1055 w/rapid tlk, interviews, electronic mx bridge. (Jordan-PA)
- 5030 PERU, R. Los Andes, 4/9, 0907 w/lcl mx, sev. IDs (Howard-CA)
- *5030 TONGA, TBC, 4/11, 0615 tent. w/ID in lang, island mx, EG at 0700, nx, more tlk in lang, mx, weak. (Howard-CA)
0640 on 4/10 w/commercials--Winston, supermkt, requests, air conditioner ad, EG speech on tourism in the presence of "Your Royal Highness." (Wood-HI) Great, guys!--sp.
- 5035 BRAZIL, R. Aparecida, 3/5, 2204 w/rel, prayer, choir, ID w/call sign & QTH. (Schulze-FRG)
- 5040 ECUADOR, LV del Upano, 3/18, 0115 w/ID, mx, mixing w/Maturin. (Schulze-FRG)
- 5040 VENEZUELA, R. Maturin, 3/18, 0115 w/clear ID, mx. (Schulze) 4/4, 0925 w/mx, ID, very heavy QRN. (Bobb-MN)
- 5050 COLOMBIA, LV de Yopal, 3/18, 0004 w/ID, mx, "Informe la Hora." (Schulze-FRG)
- 5055 FRENCH GUIANA, RFO Cayenne, 3/3, 0205, ment. Cayenne, tlks, Faro del Caribe in background. (Schulze-FRG)

5055 FRENCH GUIANA, RFO Cayenne, 3/12, 0659-0745 w/trl, instl
bridge, ID, nx. Poor sig w/QRN, USB. (Jordan-PA)

5274 PERU, R. Onda Popular, 3/4, 0451-0501* w/vcls, 0453 ID,
vcls alt. w/IDs/anmts. Orch NA. SIO=242. (D'Angelo-PA)

5955 COLOMBIA, LV de los Centauros, 3/5, 0434 w/lively Latin vcls
TC, IDs. Also 2330 w/sports tkl, ads. (D'Angelo-PA)

5960 CANADA, R. Japan relay, 3/5, 0300 in EG w/nx, features.
(Jordan-PA)

5960t CHINA, unid station, 4/4, 1158 in CH w/trl, IS on flute.
(Bobb-MN)

5985 USA, VOFC via WYFR, 3/4, 0215 in EG w/trl, ROC Today, CH
drama. (Berhent-OH) 3/17, 0227 w/tlks abt tea. (Levison-PA)

5995 AUSTRALIA, RA, 4/3, 1200 in EG w/lntl & SEAs nx. (Bobb-MN)

6000 BRAZIL, R. Guaiba, 3/19, 2340 w/trl, ads, jingles, ID.
7/11785, both poor w/co-channel QRM. (Alexander-PA)

6005 CANADA, CFCX, 3/25, 1232 w/sports, wx, ID, EZL, lotto
numbers, pop mx. Nice sig. (Cichorek-NJ)

*6005 USA, WSHB, 3/17, 0429 EG w/test tone, full ID. (Jordan-PA)

6015 CYPRUS, BBC relay, 3/4, 1620-1645* in Farsi. (Dillon-GREECE)

6020 BRAZIL, R. Gaucha, 3/19, 2310 w/ID, tkl, ads, //11915. Both
w/co-channel QRM. (Alexander-PA)

6020 MEXICO, La U de Veracruz, 4/4, 1140 w/singing ID, mx, tkl.
Fair sig. (Bobb-MN)

6024.9 PARAGUAY, RN, 4/1, 0850-0910 w/mx, ID, echo anmts, DJ tkl,
very weak. //much stronger 9735. (Alexander-PA)

6025 DOMINICAN REPUBLIC, R. Amanacer, 3/19, *1032 w/ID, anmts,
location, mx pgm. (Laskowski-IN)

6025 HUNGARY, R. Kossuth, 3/4, 1645-1735 in HH w/folk mx, story,
ID, IS, TP, nx 1730. (Dillon-GREECE)

6030 CYPRUS, CBC, 3/11, 2234 in GM w/drama, ID & 2245* (Dillon)

6030 OMAN, BBC relay, 3/8, 1855 in AR w/"Huna Lundun" ID, world
nx, co-channel QRM. (Dillon-GREECE)

6035 IRAN, VOIRI, 3/8, 1910 in FR w/world nx, sked, clx mx, ID,
addr, IS, EG at 1930. (Dillon-GREECE)

6040 ENGLAND, VOA relay, 3/9, 1715 in EG w/nx, ID, stories, sked,
FC, "Now Music U.S.A." (Dillon-GREECE)

6040 ANTIGUA, Deutsche Welle relay, 3/3, 0105 in EG w/nx, ID.
(Berhent-OH)

6070 PAKISTAN, RP Peshawar, 3/23, 1445 in Urdu w/Pak. mx, tkl
abt Pakistan, good. (Wood-HI)

6075 WEST GERMANY, DW, 3/11, 1616 in GG w/sports, IS. (Dillon)

6078.8 URUGUAY, 3/17, 1012-1045 w/bolivian type mx but very weak. QRM
from 6080. (Howard-CA)

6080 ALBANIA, R. Tirana, 3/11, 1730 in RS w/IS, NA, ment. Albania
"Govorit Tirana" ID. (Dillon-GREECE)

6080t BOLIVIA, R. San Gabriel, 3/20, 21, 23, *0825-0900 w/lite mx
choral anthem, "La Voz. (Aymara?)" Bol. mx. (Howard-CA)

6085 WEST GERMANY, Bayerischer R. 3/13, 1731 in GM w/accordion,
yodeling, nx 1800. (Dillon-GREECE)

6090 BRAZIL, R. Bandeirantes, 3/19, 2323 w/ID, ads, pops. (Alexander)

6090 LUXEMBOURG, RL, 3/13, 1810 in GM w/pop mx, ads, nx, wx
1900, ID, fair. (Dillon-GREECE)

6100 USA, WHRI, 3/24, 0637 w/rel, ID. (Schulze-FRG)

6104.6 BRAZIL, R. Cult. Poz do Iguacu, 3/26, 0457 w/ID, NA. (Howard)

6105 BRAZIL, R. Cancao Nova, 3/18, 2330 w/trl, ballads (Alexander)

6116 COLOMBIA, LV del Llano, 3/15, 0003 w/nx, ads, ID 0013.
Geomagnetic storm with A Index of 175! (D'Angelo-PA)

6130 ECUADOR, HCJB, 3/5, 0810 w/EG rel, DW QRM 0830. (Schulze)

6134.8 BOLIVIA, R. Santa Cruz, 3/25, 0925 w/lcl mx, tkl, ID 1000,
poor in QRN. (Alexander-PA)

6135 SWITZERLAND, SRI, 3/10, 0205 in EG w/nx, mx, rpt from Afr.
World Bank Director. (Berhent-OH)

6180 CYPRUS, BBC relay, 3/19, 1630 in EG w/nx, features (Dillon)

6185 MEXICO, R. Educacion, 4/1, 0940 w/mx pgm, ID. Fair in QRN.
(Bobb-MN) 3/25, 1113 w/sev IDs, pop mx. (Alexander-PA)

Welcome to our new reporters--tnx for the support. I'm out of room
but more April loggings will appear next time! CUN30



LOG REPORT

section C

6200 to 11699 kHz

Editor: Jerry Ervine, Box 5204, Hidalgo, TX 78557

- 6210 JAPAN RJ 0320 EG/JP om re. food & restaurants; 222 (Frodge-MI)
- 6210nf CANADA R.Japan via Seckville 0310-0335 EG nx, ID, mx pgn, // 5960, pos spur. (Alexander-PA 3/5)
- 6214 CLAND R. Quince de Septiembre 2350 SP catry, anthea (Frodge-MI)
- 6215 PIRATE R.Caroline 0604 EG "Wld Mission R.", 333 (Frodge-MI 2/24) / 0258 nx w/Nick Jackson, pop & oldies mx after ad./0232 located off of Kent. Brit. DJ w/EG,FR pop mx, om w/wx. 225 (Frodge-MI)
- 6239.9 USA.PIRATE WKND 0308-0340.EG rock mx, ID's, 'WKND, commercial free weekend radio' strong signal; (Alexander-PA 2/12)
- 6240 USA.PIRATE ? 0200-0324* EG Big Ed playing hard rock; 'Kiss', Stepenwolf. 252 (D'Angelo-PA 2/11)
- 6248 VATICAN VR 1708-1720 Romanian/Bulgarian om w/tx abt Christ, IS, organ mx. Jammers w/Bulgarian. (Dillon-GR 2/18)
- 6250 EQ.GUINEA RNEG *0500 SP ID by yl, high life mx. g (Wood-HI 3/13)
- 6275 USA.PIRATE Vo Communism 0348-0443* EG hilarious px of satire. re: Jetsons, My Three Sons. First heard in 1987.(Wallace-MA 3/5)
- 6305 CUBA LV del CID 0557 SP 2 oms w/cmtry, mx, nx, 433. (Frodge-MI)
- 6590 CLAND R. Venceremos 0217 om w/cmtry mx, p. (Frodge-MI 2/10)
- 6595t CLAND Farabundo Marti 0223 SP yl w/cmtry, mx. (Frodge-MI 2/15)
- 8728.5 PERU R. Satelite 0200-0255* SP LA ballads, ID, ancnts, TCs, om DJ. closing ancnts by yl, NA. (Alexander-PA 2/19)
- 6895 PERU R.Sensation 0115-0204* SP mx, om w/TCs, IDs, yl hosted px of vocals, s/off ancnts, NA. 322 ute QRM (D'Angelo-PA 2/8)
- 7115 Bulgaria R.Sofia 0450 EG 'Music from Bulgaria', IS, Turkish svc 0500 ID as 'Burasl Sofia Radyosu' 545. (Blight-MD 1/17) / *0400-0459* ID, wld nx, vg. (Jordan-PA 2/14) / 0434 yl w/contest promo to folk mx. 333 (Frodge-MI 2/13)
- 7145 GERMANY.FR R. Free AFGH *0300-0329* Lang. yl w/address info, om into prayers, ME mx, ID, ment of Kabul mx.vg signal.Jordan-PA
- 7145 GERMANY.FR R. Liberty *0330-0345 RS yl ancr s/on, ID, tx by oa, g. (Jordean-PA 2/15)
- 7170 QATAR DOHA 0243-0300 AR ID'd via NA before VOA s/on DOHA continued w/cmts at dawn. (Tuchscherer-WI 2/14)
- 7199 SOMALIA SBS,R. Mogadishu *0300-0330 SOMALI (p) anthea, ID, tx, ME mx, Afro Hi-life, mx. (Jordan-PA 2/26)
- 7205 AUSTRALIA RA 1310 EG nx of Aus. sports. //6080, 6060, 5995. g. (Wood-HI 1/26)
- 7255 NIGERIA VoN 0502-0530 EG pop mx, ID W, Afr. svc. (Tuchscherer)
- 7260 VANUATU Vila 0700 Bjlama ID, nx. g. (Wood-HI 3/7)
- 7260 INDIA AIR-Bombay *0128-0150 Hindi oc, IS, ID, tx into Vividh px. nice background subcont. vocals. f. (Sheedy-CA 2/16)
- 7270 INDONESIA RRI-Jakarta 0624-0630 IN nx, IS, ID 'Paysaun Pulan Kelepa' EG ID 'The Song of the Coconut IS.'434 (Streitmatter)
- 7270 POLAND R.Polonia 2330-2355 EG study of Polish business management, TV mx px. (Becker-NY 2/12)
- 7285 GERMANY.FR DW 0212 EG re: Afganistan, ID, usb good. (Cichorek)
- 7285 UK/SEYCHELLES BBC-Skelton (ILG) *0528 FR IS, opening, ID, st-no way. //7105 Ascension. f. (Sheedy-CA 2/21)
- 7255 BOTSWANA RB 0343-0430 Vern/EG IS, NA, rlg pgn. (Alexander-PA)
- 7310 UKRAINIAN SSR RM-Simferopol 0429 EG yl w/nx, 'RS by R.' (Frodge)
- 7355 USA.ALASKA KNLS 1530 EG request reports, dance mx, (Wood-HI 2/19)
- 7365 USA.ALASKA KNLS RS IS, ID,also FCC-licensed WCSN.(Wood-HI 1/31)
- 7380 USSR RM 0000 RS yltx, classical mx. 22332. (Beiarnhuber-NY 2/14)
- 7400 LITHUANIAN SSR R.Vilnius 2305-2328 EG mailbag, Lithuanian by Radio. (Becker-NY 2/12) / wld nx, nx abt Lithuania, 'Youth in Focus' 45424. (Bauernhuber-NY 2/14)
- 7400 USSR RM via Krasnodar 0226 RS om tx abt Pushkin, mx bridges. 444. (Cichorek-NJ 2/11)

7405 CHINA,PR RB 1545 EG yl/om w/'Listener's LetterBox',yl,zked.
 222. (Frodge-MI 2/26)

7412 INDIA AIR 2225 EG 43444. // 0910, beaton usb. (Courtney-KY 2/9)

7430 GREECE ERT,Athens 0500 GR IS, flute and sheep bell. NA, ID,
 SIO-353. (Blight-MD 2/18)

7465 ISRAEL KOL 0000-0020 EG [and 7460, but txmt on 7465]. (Becker)
 / wld nx magazine. 3312. (Bauernhuber-NY 2/14)

7475 TUNISIA RTV Tunisienne 0515 AR tx. (Courtney-KY 2/9)

7520 USA WHRI 0415-0448 EG Christian mx. (Becker-NY 2/8) / EG 'R.
 Earth-Wld wide Commercial R. "Swiss SW Merry-go-round" 443.
 (Frodge-MI 2/21)

7650 USA VOA 0100-0110 URDU. AN SSB txmsn. (Becker-NY 3/5) / 7651
 usb 0244 EG/Estonian IS, ID by om in EG, nx by om in Estonian.
 544. (Cichorek-NJ 2/11)

9022 IRAN IRIB 2015-2030* EG/SP ID, address, om nx, into SP @2040
 re: territory still occupied by Iraq. (Birkhueser-CT 2/19) /
 0325 pres. Iran, audio hrd but dominated by bubble jam. (Frodge)

9275n2 ICELAND ISBS *2301-2337* IC s/on w tx by yl, chimes, 8-note
 mx bridge & tx by om. S/off. // 17558. (Alexander-PA 2/5)

9320 USSR R. Rodina 2325-2335 RS usb feeder mx, ID, IS. tx by om/yl.
 AF freq. // 4795. (Alexander-PA 2/17)

9395 GREECE VoG 0333 EG/GK vocal mx, yl/EG nx, promo for VoG contest
 continues in GK. 333. (Frodge-MI 2/10)

9420 GREECE VOG 0340 EG omncr w/lcl & wld nx. 444. (Bauernhuber-NY)

9435 SUDAN Nat'l Unity R. 1435-1503* AR/EG tx by om, AR mx. (2/15) /
 vocal mx sels, om w/s/on ancmts, ID's, tx. (Jordan-PA 2/17) /
 1433-1500* AR px, EG ID, nx, lcl mx. nx, mx, s/off, address.252.
 (D'Angelo-PA 2/12)

9435 ISRAEL KOL 2243 EG M-East nx. 45444. (Courtney-KY 2/8)

9440 CHINA,PR RB *1300-1341 Cambodian (p) 'Voice of Dem. Kampuchea'
 via RB. om tx, oriental mx, (Jordan-PA 2/26)

9445 TURKEY VOT 0025 Turkish prayers, tx by om & yl. (Bauernhuber-NY)

9455 EGYPT R. Cairo 0406-0451 AR prayers, om w/cmtry, ID. (Jordan-PA)

9465 NO. MARIANAS KFBS 1406-1441 RS (p) om w/rlg tx, mx, ID. (Jordan)

9470 EGYPT R. Cairo 0255-0326* EG readingsfrom Q'ran, re: book fair.
 (Birkehoiser-CT 2/15)

9505 CZECHOSLOVAKIA RP *0555 CZ ID, multilingual/. g.(Wood-HI 3/6)

9509 ALGERIA R. Algiers 1845-2000 EG/SP ID, US pops, lcl mx, yl ancr.
 // 15215 (Alexander-PA 3/4)

9510 ROMANIA *0400 EG IS to N.A., mx; f. (Wood-HI 3/7)

9515 IRAQ R. Bagdad 0400 EG 'Wld of Lit', rock mx, QRM WYFR; (Frodge)

9525 LIBERIA VOA-Monrovia 0420 EG CH econ. rpt. & new cars. // 3990
 f. (Sheedy-CA 2/3)

9535 CANADA RCI 0035 SP wld nx by om to CA & SA. -4- (Bauernhuber)

9540 MADAGASCAR RN 2050 EG Newaline for AF. dis ID. 44234 (Courtney)

9550 JORDAN R. Jordan 2000-2015 EG om w/several ID's, pop mx-Bon Jovi
 (Birkhueser-CT 2/14) / also reported between 1900-2042 by the
 following: Cichorek-NJ, Courtney-KY, Wallace-MA.

9565 MONSERATT DW 0103 EG nx, catry, 444. (Levison-PA1/31)

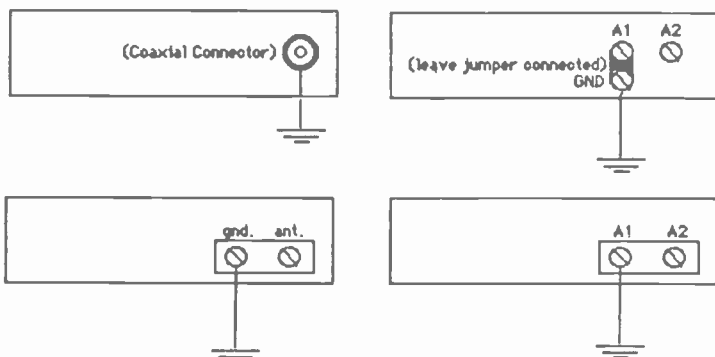


Figure 2. Various Ground Connections



LOG REPORT

section D

11700 and above

Editor: Wallace C. Treibel, 357 N.E. 149 St., Seattle, WA 98155

- 11700 ALASKA KNLS in JP 2010-2059, ID, "Watch to the World", mx (Schulze W. GERMANY)
11715 MALI R. Beijing relay in EG 0030, tlk, ID, Silk Road Music (Berhent OH 3/3)
11720 BULGARIA R. Sofia in EG 0042, cmntry on concert, interview, g (Levison PA 3/11)
11730 SOUTH AFRICA RSA in EG *0200-0254*, ID, nx, pop mx, discussions & interviews, amateur radio pgm, g-vg (Jordan PA 4/2) "Music from Africa" 0230 (Schulze W.GER)
11735 BULGARIA R. Sofia in EG *0400, IS, ID, sked, nx, f (Jordan PA 3/5)
11735 YUGOSLAVIA RY in EG 0100, nx, ID, mx, "Spotlight on Culture" (Berhent OH 3/2)
11735 NO. KOREA R. Pyongyang in FR 1448*, ID, hymn, //11855, both g (Wood HI 3/23)
11780 AUSTRIA RAI in GM/EG 2208, tlk, ID, nx, promo, into EG 2230 (Berhent OH 3/17)
11785 EAST GERMANY RBI in EG 0504, mass transit in GDR, Easter pgm (Kelly MI 3/25)
11810 SEYCHELLES FEBA in SH 0310, IS, ID, sermon, //9610, both g (Wood HI 4/3)
11810 WEST GERMANY DW in EG *0700, IS, nx, tlks, xmsn to Africa, p (Jordan PA 3/19)
11830 LIBERIA EDWA Monrovia in EG/FR 0706-0803, relig pgm, ID, f-p (Jordan PA 3/5)
11870 BULGARIA R. Sofia in TK 1944, tlk, ID 1945, mx bridges, f-g (Cichorek NJ 3/21)
11880 SOUTH AFRICA R. Five in EG 0500, ID, nx, g (Wood HI 3/28)
11885 MALAYSIA WOM in CH *1030-1106, IS, ID, modern CH pops, //15295 (Sheedy CA 3/5)
11910 HUNGARY R. Budapest in EG 0039, polit tlk, ID 0041, g (Cichorek NJ 3/11) in EG 0031, tlk, ID, mx by the Beetles, disc of Hungarian TV (Berhent OH 3/22)
11915 PORTUGAL R. Canada relay in EG 1553, nx, ID 1556, p (Cichorek NJ 3/22)
11930 NETHERLANDS ANTILLES TWR in EG 0500, "Caribbean Nite Call", g (Rhyne NC 3/27)
11965 UNITED ARAB EMIRATES V of UAE in AR 1601, nx, ID 1608, relig mx (Cichorek 3/22)
11980 GUAM AWR in EG 1613, relig tlk, choral singing, drama, p (Cichorek 3/22) in KR 1345, relig mx & tlks, ID in EG 1359, into JP 1400 (Alexander PA 3/11)
11990 KUWAIT RK in AR 2245, mid-East mx, vocals, ID 2257, g (Cichorek NJ 3/10)
11990 CZECHOSLOVAKIA R. Prague in EG 0338, mx, kids singing, nx, g (Levison PA 3/12)
11991 MONGOLIA R. Ulan Bator in EG 1208, nx, mx bridge, ID, //12015, f (D'Angelo PA) in lang (CH?) *1125, chimes, ID 1127, IS 1200, second ID 1202, p (Alexander PA)
12005 TUNISIA R. Tunis in AR 1722, call to prayer, ID, discussions (Dillon GREECE 3/3)
13650 NO. KOREA R. Pyongyang in EG 0610, political nx, //15115, both g (Wood HI 4/4)
13665 PAKISTAN RP in TK 1658, ID, nx, TK pop mx (Schulze W. GERMANY 3/17)
13715 CZECHOSLOVAKIA R. Prague in EG 1753, polit cmntry, ID 1756, f (Cichorek NJ 3/22) xmsn in EG to Africa-Asia *1530, g (Wood HI 3/27)
13720 GUAM AWR in EG 1358, ID, Hong Kong addr, into Burmese 1400 (Alexander PA 3/11) in EG *2000, ID following pgm in KR, exc signal (Schulze W. GERMANY 3/27)
14917nf KIRIBATI RK in EG 1858, local mx, ID, relay of R. Oz, ex-14802 (Park HI 4/4)
15050 TURKEY VOT in TK 1525-1555*, TK w/YL annrc (Tuchscherer WI 3/21)
15110nf SPAIN Span. Natl R. in EG 0105, nx, SP mx (Tuchscherer 3/16) in EG 0148, travel talk (Cushing 3/6) in EG 0045-0200, mx, lang lesson, nx, econ disc (Jordan 3/21)
15130nf USSR R. Moscow in AR 0442-0500*, tlks, interviews, AR mx, f (Jordan PA 3/25)
15140 AUSTRALIA RA in EG 1444, ID, local mx artists, new time slot (Cichorek NJ 3/22)
15150 MADAGASCAR R. Nederlands relay in EG 1525*, list freqs, g (Wood HI 3/28)
15150 NEW ZEALAND RNZ in EG 0602, nx, soccer scores, wx, ID 0607,g (Cichorek NJ 3/12)
15165 NORWAY RNI in NO/EG *0600, ID, nx in NO, g (Wood HI 3/27)
15165 CHINA R. Beijing in EG 1530, tlk on Catholics in Shanghai, g (Wood HI 3/21)
15171 SOCIETY IS. RFO Tahiti in TT/FR 0554, nice island mx, ID, nx (Cichorek NJ 3/12)
15185 FINLAND RF in FN 1525, ID, list freqs, into SW 1530, f (Wood HI 3/21)
15195 BANGLADESH RB in EG 1241, cmntry, ID 1242, mx, QRM from VOA, p (Cichorek 3/19)
15205nf USA WSHB in EG 2300-2330, nx, "Kaleidoscope", promo for CSM (Jordan PA 3/29)
15220 PHILIPPINE IS. R. Veritas in Tamil 1401, tlk, ID, addr, f-g (Cichorek NJ 3/22)
15235 LIBYA V. of the Greater Arabs Homeland in AR 0300-0435*, instrum'l & vocal mx, nx, tlk segments, patriotic chorus, prayer at close out, g-vg (Jordan PA 3/9)
15240 EAST GERMANY RBI in EG 1314, IS, ID, xmsn to Africa, nx, p (Cichorek NJ 3/19)
15245 ITALY RAI in IT 0138-0201, nx, ID (Tuchscherer WI 3/18)
15260 CANADA BBC relay in EG 1700, nx, cmntry on Tibetan uprising, play (Blight MD)
15315 NETHERLANDS ANTILLES RN relay in EG 0119, "Happy Station" pgm, f (Park HI 3/27)
15325 YUGOSLAVIA RY in EG 1304, polit cmntry, ID 1313, TC, mx, f (Cichorek NJ 3/24)
15355 ANTIGUA D. Welle relay in GM 2155*, tlks, ID, abrupt s/off (Tuchscherer WI 3/22)
15360 SINGAPORE BBC relay in EG 1032, "Vintage Chart Show", ID, nx, g (Park HI 4/3)
15385 NETHERLANDS ANTILLES TWR in PT 2159, mx bit, ID, nx (Tuchscherer WI 3/22)
15390 JAPAN RJ in JP 0838, Day 12 of Grand Sumo tournament, g (Park HI 3/23)

15395 SPAIN RNE R. Exterior in SP 0600, req repts, sports, //9650, g (Wood HI 3/27)
15400 FINLAND RF in EG 1302, tlk, ID, mx, summer fqys (Berhent OH 3/24)
15425 PHILIPPINE IS. VOA relay in EG 1006, nx, ID, "Newslines", g (Park HI 4/5) in EG 1419, jazz hr w/Willis Conover, oldie jazz, f (Cichorek NJ 3/18)
15465 PHILIPPINE IS. R. Veritas in EG 1505, nx, ID, relig pgm (Schulze W. GERM. 3/24)
15540 CHINA R. Beijing in EG 1200, nx, f-g (Rhyne NC 3/24) in EG 0046, drama, ID, fqy annmcs, addr, IS 0056 (Cichorek NJ 3/24)
15560 MADAGASCAR R. Nederlands relay in EG 1858, "Media Network", p (Park HI 3/30)
15575 SO. KOREA RK in EG 1434, sights & sounds show, mailbag, f (Cichorek NJ 3/18)
15615 ISRAEL Rashuth Hashidur in HB 2008, jazz mx, ID?, f (Cichorek NJ 3/21)
15640 ISRAEL Kol Israel in EG 0000, nx, vg, //11605 (Rhyne NC 3/22) in EG 2245 w/tlk about the "Islamic Movement", //12077 (Tuchscherer WI 3/11)
15685 CHINA Clandestine "Voice of Unity" in Pashto/Dari 1610, "semi-intense" tlk by W, martial mx, ID 1625, 1 khz tone, and into uniden lang 1630 (Sheedy CA 3/20)
17558 ICELAND ISBS Reykavik in IC 2337, tlk, local wx (Paszkiwicz WI 3/2)
17725 INDIA AIR in EG 0115*, sked in Indian Std time & UTC (Paszkiwicz WI 3/8)
17725 PAKISTAN RP in Gujrati 0500*, ID "Pakistan zihdabad", no NA, g (Wood HI 3/28)
17745 ALGERIA RTA in AR 0600, ID, chimes, nx, g (Wood HI 4/8)
17795 FRANCE RFI in EG 1635, tlk, ID, mailbag, mx from Mozambique (Berhent OH 3/5)
17810 ANTIGUA D. Welle relay in GM 2155*, mx, tlks, EG ID at s/off (Tuchscherer 3/31)
17815 SWEDEN RS in EG 1530 after IS 1528, multiling ID, nx, g (Wood HI 3/21)
17860 RWANDA D. Welle relay in GM 1907, nx at 1907 tune in, mx 1915 (Tuchscherer 3/20)
21450 EAST GERMANY RBI in EG 0523, tlk re agriculture, //21540, g (Wood HI 4/2)
21460 BELGIUM RTBF in FR *1600-1645*, Afro drums, ID, fqys, mx intro into tlks, nx, interviews, sels of FR pops, f (Jordan PA 3/18)
21460nf SPAIN RNE in SP 1915-2045, soccer game, many ID's, fqys, nx, sports round-up, SP pop & classical guitar, into serious polit tlks, vg (Jordan PA 4/1)
21495nf SPAIN REE in SP 2320-0100*, heroic choral mx, classical guitar, ID's, tlks, interviews, folk mx, local & world nx, not hrd at 0200 retune (Jordan PA 3/12)
21505nf SAUDI ARABIA BSKSA in AR 1630-1700*, pips, ID, nx, AR songs, g (Iwai JAPAN 3/14) in AR 1515, AR recitations, somber flute mx, ID?k, tlks, f (Jordan PA 4/4)
21510nf SAUDI ARABIA BSKSA in AR 0830, Holy Koran pgm, f-g, //21495 (Iwai JAPAN 3/11) in AR 0605, Qur'an recitation, g (Wood HI 4/4)
21540usb EAST GERMANY RBI in EG 1308, cmntry, pop mx, g (Levison PA 3/8)
21545nf CANADA RCI in FR/EG 1600-1625, IS, into EG 1615, g (Treibel WA 4/8) Note: This might be a relay of R. Canada but there was no site annmt.
21555nf SPAIN RNE in SP 0055-0157*, tlks, ID 0100, nx, mx, f //21495 (Jordan PA 3/29)
21565nf QATAR QBS in AR 1225-1306*, piano mx, ID 1230 & 1250, interviews (Jordan PA 4/3)
21570nf PAKISTAN RP in Urdu 0645*, nx, tlk, folk song, f (Iwai JAPAN 3/36) Note: Iwai reports that RP is usually on 21580 and was back on that fqy on 3/27.
21595 SPAIN RNE in SP 1525, nx, cmntry, g (Wood HI 3/27)
21600 USSR R. Afghanistan in EG 1010, folk songs, nx, cmntry, f (Iwai JAPAN 3/11) Note: Iwai rpts RS pgm of R. Pyongyang on this fqy at 0900 3/16. No R. Afghan!
21605 UNITED ARAB EMIRATES R. Dubai in EG 1337, nx, wx, ID 1340, f (Cichorek NJ 3/22)
21625 ISRAEL Kol Israel in HB 1500, nx, cmntry, g (Iwai JAPAN 3/12)
21645 FRENCH GUIANA RFI relay in FR 1646-1659*, pop mx, dialogues (Tuchscherer 3/31)
21670nf SOUTH AFRICA RSA in EG 1500, ID, nx, g, //21590 (Iwai JAPAN 3/26)
21670nf VATICAN STATE VR in EG/FR 1757, Holy Mass, ID 1805, choir (Cichorek NJ 3/24)
21685 FRANCE RFI in FR 1639, pop mx, annmcs, nx (Tuchscherer WI 3/22)
21730 NORWAY RNI in NO 0700, ID in EG, nx in NO, g (Wood HI 3/24)
21810 BELGIUM BRT in DT 0620, interview, ID, g (Wood HI 4/8)
21815 BELGIUM BRT in EG 1331, nx, cmntry, press review, g (Levison PA 3/1)
25675nf NETHERLANDS RN in lang 1310, test tones 1310, tlks, IS, pop mx, test tones for 6 mins to 1356, pips, then test tones to 1400, g (Jordan PA 3/15)
25790 SOUTH AFRICA RSA in EG 1410, tlk, ID, mx by Bright Blue (Berhent OH 3/24) in EG 1436 w/travel promo, interview, ID, fqys (Cichorek NJ 3/24)

CORRECTION: Dr. Richard Wood on Hawaii rpts that the 17710 logging by Hart of Malaysia listed in April LR-D is actually a relay of R. Canada from Yamata, Japan. Thanks, Richard!

Several loggings were repeats of items listed in the April LR-D and thus were not included above. Please check the April FRENCH for a more complete update. Also, R. Moscow and some other powerful outlets could not be included due to space limitations. Special thanks to those sending in the several new frequency reports noted above.

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PO Box 2275	MCI Mail: 244-6376
Vincentown	The Source: BCF811
NJ 08088-2275	CompuServe: (send via MCI Mail)
Voice: 609-859-2447	Packet Radio: W2XQ @ WB2MNF
Fax: 609-859-3226	Pinelands RBBS: 609-859-1910

Notes in no particular order: Austria seems to have dropped much of its English language schedule. Austria does not print a decent schedule or announce its target areas and frequencies, so it makes it very difficult to determine what is going on. Thanks to Al Quaglieri (NY) for acquiring the actual schedule. SW Panorama now is aired only three times (on Sunday at 1030, 1130 and 1430. The 17870 kHz outlet at 1130 to NA is reasonably decent here, although there is another station underneath that eventually gets pushed down as Austria's signal gets stronger. Also thanks to John Carson (OK) for the schedules from South Africa, Wellington and Prague -- first time I have seen a printed schedule from Prague in years -- which corrected some typos. The program content listing was dated 1988; it probably has not changed in more than a year, John. Paul Garland (TX) sent along a host of schedules and loggings via the fax machine -- thanks Paul -- which shed light on some postings here. Per an announcement on Communicator April 2, R Australia began testing from the new Brandon, Queensland, site on 6240 kHz 08-14 and 20-21 UT. Within a week a storm destroyed antenna systems and delayed tests; it should be on again by the time you read this. Vietnam on 15010 has a consistently good signal all day long; the announced schedule does not coincide with the WBI information Glenn had last month. The complaints about 31m spurs from the Bonaire transmitters of R Nederland must be a figment of someone's receiver or imagination. At the request of Jonathan Marks I did some extensive checking using the JRC NRD-525s, a Kenwood R-2000 and TS-940S and a Sony 2010 with a variety of antennas. No spurs. The R Moscow WS frequencies listed last month have all changed. China's 11840 04 UT Canada relay is almost unreadable here. I must be too close. Despite some reports that Austria moved English to 05 UT, I still hear it at 0530 UT. The V of UAE is not yet announcing its new 22m frequency at 22-24 UT. The "new" Yugoslavia 13 UT listed in Hauser's LN last month is at 12 UT, on a shift from standard to summer time. Thanks to George Jacobs & Associates for info on his clients. WWCR info via Jonathan Marks, Media Network.

Chuck Oliver (TX) sent along a list of 77 R Moscow frequencies he found that are not listed in the WRTH, and wonders "why not?" Some transmitters are not in the Soviet Union, and others may not have been active at the time the WRTH monitors had to submit material for press deadlines. Two examples of the first group are 4765 via Cuba (c.f. page 279) and 7115 via Bulgaria. Another possible explanation is that some frequencies were heretofore used for jamming. As mentioned in a recent FRENEX, Roger Legge's USSR Newsletter is an excellent source of USSR site information.

Look up the April 24th issue of INSIGHT containing a cover story titled "Getting the Word Out with Shortwave." Daniel Kagan is to be commended for this excellent 10-page feature on the politics and programming found on shortwave. The recent one-page "world band" article generated more mail than any other story Insight had run. This feature article was a direct result of the reader interest.

Tom Sundstrom, Editor

It never fails. As soon as the schedule is printed for FRENEX, a day later something additional with significant changes arrives in the mail.

CHINA: Effective May 8, the following Radio Beijing schedule will be in effect. Note that the main NA frequency of 15440 moves up to 17855. Relays not identified, but the known relays are noted. All 1 hour broadcasts except as noted.

Eastern NA

0000 17855, 17715 (v Mali), 15130 (v Mali)
0300 15130 (v Mali), 11715 (v Mali), 9690 (v Spain)
0400 11840 (v Canada), 11685 (v Fr Guinea)
1100 17855
1200 17855 (note no mentions of Mali relay frequencies)

Western NA

0300 17855, 15130 (v Mali), 11715 (v Mali), 9690 (v Spain)
0400 15195, 11840 (v Canada), 11685 (v Fr Guinea)
1300 11855
1400 11855

South Pacific

0830 17710, 15440, 11755
0930 17710, 15440, 11755
1200 15450, 11600
1300 11600

Southeast Asia

1200 15400, 11660, 1341
1300 15400, 11660, 1341

South Asia

1400 15165, 11795
1500 15165, 11795

East & South Africa

1600 15110 (v Mali), 11715 (v Mali), 9570
1700 15165, 11575, 9570
2000 11715 (v Mali)

West & North Africa

1900 11515, 9440
2000 15110, 9440

Europe

2000 11500, 9820
2100 11500, 9820
2100 3985 (-2130, v Switzerland)

All Records Included

ENGLISH LANGUAGE SW BROADCAST SCHEDULES: By Start Time

Compiled by Thomas R. Sandstrom, W2XQ

Start End Time (UTC)	(UTC)	Country	Station	Freq 01	Freq 02	Freq 03	Freq 04	Freq 05	Freq 06	Freq 07	Freq 08	Target Area	Notes	Record Last Updated
0000	0100	Australia	R Australia	21740	17795	17750	15320	15240	15160	15140		As/Pac/PapNG		12/10/88
0000	0100	China	R Beijing	15540	11715	9770						EMA	0243 v Mali	03/27/89
0000	0200	Cuba	R Havana	11820								Americas		03/26/89
0000	0030	Israel	Kol Israel	15640	15615	11605						NA		04/24/89
0000	0050	North Korea	R Pyongyang	15160	15115							As		11/13/87
0000	0030	Norway	R Norway	11845								SA	Eng Mon only	03/30/89
0000	0100	Spain	Spanish Mat'l R	15110	9630							NA		03/06/89
0000	0200	USA	VDA	15205	11580	9775	9455	5995				Caribbean/LA		11/12/88
0000	0200	USA	MCSN	9850								W Afr	90 deg	08/13/88
0000	0200	USA	WFR1	9495	7365							Eu/CA/SA		08/13/88
0000	0300	USA	WRHO	7355								NA/CA	20 deg	03/08/89
0000	0200	USA	WGBB	13760	7405							CA/SA/NE Canada	16725 deg	04/24/89
0000	0100	USA	WYFR	13695	5950							NA	Network	03/25/89
0000	0300	USSR	R Moscow	17605	9685	9720	9605	7310	7215			EMA	and other freqs	03/27/89
0000	0045	Yugoslavia	R Yugoslavia	11735	9620	5980						W Eu/NA		03/26/89
0030	0130	Ecuador	HCBJ	15250								Americas		02/18/89
0030	0230	England	BBC	12095	9915	9590	7325	6175	5975			MS; NA/CA/Carib	#3 Bethany	04/04/89
0030	0100	Hungary	R Budapest	15160	11910	9835	9585	9520	6110			NA		03/26/89
0030	0125	Netherlands	R Mederland	15315	6165	6020						EMA	#12 v Bonaire	03/17/89
0030	0230	Pakistan	R Pakistan	15115	11570							S & SE As	World Service	09/06/87
0035	0500	Ecuador	HCBJ	15155	11775	9745						NA		04/15/89
0045	0100	South Korea	R Korea	15575								6DS	World News Service	11/05/88
0050	0110	Vatican State	Vatican Radio	11780	9605	6150						NA		03/27/89
0100	0200	Australia	R Australia	21740	17795	17750	17715	15395	15320	15240	15180	As/Pac/PapNG		12/10/88
0100	0200	Canada	R Canada Int'l	13720	11940	11845	9755	9535				LA	Sw-Mo 122m eff 7/11	03/22/89
0100	0400	Costa Rica	R for Peace	21565	13660									04/13/89
0100	0157	Czechoslovakia	R Prague	11990	9625	9540	7345	6055	5930			NA		03/26/89
0100	0150	Fed Rep Germany	R Deutsche Welle	15105	11865	9735	9565	6145	6085	6040		EMA		03/07/89
0100	0145	German Dem Rep	R Berlin Int'l	11890	6080							EMA		03/26/89
0100	0130	Israel	Kol Israel	15640	15615	11605						NA		04/24/89
0100	0120	Italy	RAI	11800	9575							NA		03/19/88

0100	0200	Japan	R Japan	17880	17845	17835	17810	5960	60S/Asia/WA	17835 -0130:49g Can	04/09/89
0100	0200	Spain	Spanish Int'l R	15110	9630				WA		03/06/89
0100	0130	Sweden	R Sweden	17790	15390				As/Pac		03/21/89
0100	0500	USA	KUSH	11695					Canada	70 deg	10/14/88
0100	0400	USA	KVOH	13695					CA/Carib	100 deg	10/30/88
0100	0500	USA	WYFR	9505	5950				WA	Network	03/25/89
0130	0200	Austria	ORF	13370	9875	9870			WA/SA	News in Eng ex Su	04/01/89
0130	0138	Greece	V of Greece	11645	9420	7430			WA	Tu/Wr/FSa	12/19/88
0138	0145	Hungary	R Budapest	15160	11910	9835	9585	9520	WA		03/26/89
0130	0330	Iraq	R Baghdad	11880	9515				Ind/Pakis/WA/SA		04/10/89
0130	0200	Philippines	R Veritas Asia	15345	15275				As		02/20/89
0145	0230	German Dem Rep	R Berlin Int'l	11890	11785	9620	6080		EMA/WMA		03/26/89
0145	0330	New Zealand	R New Zealand Int'l	17705	15150				Pac/Aus/Melanesia	Sat & Su only	03/06/89
0200	0300	Argentina	RAE	9690					Americas		03/13/89
0200	0300	Australia	R Australia	21740	17795	17750	15395	15240	As/Pac/PapMG		03/17/89
0200	0250	Brazil	R Bras	11745					WA/CA	Tu-Sat 22m eff 7/1	02/28/88
0200	0300	Canada	R Canada Int'l	13720	11940	11845	9755	9535	LA		03/22/89
0200	0400	Cuba	R Havana	11820	9655				Americas		03/18/89
0200	0330	Egypt	R Cairo	9675	9475				WA		07/20/86
0200	0250	Fed Rep Germany	R Deutsche Welle	15235	11945	11835	9690	9615	As	Eng 02-03	03/07/89
0200	0700	Guaa	KSQA	15225	11700				As	340 deg	04/24/89
0200	0800	Mariana Is	KY01	17780					Japan		12/03/87
0200	0255	Romania	R Bucharest	11940	11830	9570	9510	6155	WA		06/05/88
0200	0256	South Africa	Radio RSA	11730	9615	9585			WA		02/26/89
0200	0230	Switzerland	R Swiss Int'l	17730	12035	9885	9725	6135	WA	17730 v Brazil	11/12/88
0200	0300	Taiwan	V of Asia	7285					SE As		07/20/87
0200	0300	Taiwan	V of Free China	15345	11840	11740	9765	9680	WJap/As/CA/AusNZ	WYFR: 11740, 9680, 5985	09/29/88
0200	0400	USA	WCSN	9850					E Afr	75 deg	06/13/88
0200	0400	USA	WHR1	9495	7345				Eu/CA/SA		04/24/89
0200	0400	USA	WSH	13760	9455				CA/Canada	188/315 deg	03/08/89
0200	0230	USSR	R Kiev	17645	15455	15240	9840	9800	WA		03/26/89
0200	0400	USSR	R Moscow	17898	17825	17765	17740	15280	World Service	7310 03-04	03/26/89
0200	0215	Vatican State	Vatican Radio	9650	7125	6025			SE As/India/Pak		03/21/89
0210	0430	Netherlands Antilles	Trans World Radio	11930					WA	Su/Mo-0530:alt	11/12/88
0230	0300	Albania	R Tirana	9760					WA		02/20/89
0230	0330	England	BBC	12095	9915	9660	7325	6175	MS: WA/CA/Carib	83 Bethany	04/06/89
0230	0257	Finland	R Finland	15185	11755				WA/SA		04/03/89
0230	0315	German Dem Rep	R Berlin Int'l	11970	9750	6165			LA		03/26/89
0230	0245	Pakistan	R Pakistan	17725	17760	15580	15115	7175	S & SE As	Slow-speed news	05/13/88
0230	0300	Portugal	R Portugal	11840	9705	9680	9690		SA/WA	Tue-Sat	11/17/88
0300	0400	Australia	R Australia	21740	17795	17750	17715	15395	As/Pac/PapMG/Afr		12/10/88
0300	0330	Austria	R Canada Int'l	11730					ME	Sa/Su-04: v Australia	03/22/89

0306	0400	Bulgaria	P Sofia	11840	11735	9540	7115	Air/MA	03/26/89				
0306	0406	China	R Beijing	15310	11715	9770	9490	unk.	03/27/89				
0306	0357	Czechoslovakia	R Prague	11990	9625	9540	7345	MA	03/28/89				
0306	0350	Fed Rep Germany	F Deutsche Welle	15205	11810	9605	9545	MA	03/07/89				
0306	0345	German Dem Rep	R Berlin Int'l	11785	9626			unk.	03/26/89				
0306	0475	Hungary	TBC	3300					12/23/87				
0306	0430	Japan	R Japan	21610	17835	17825	17810	17745	15325	15195	11905	905/Asia/NA	Jia Sabi:15325 Fr Sat
0306	0436	Netherlands	Trans World Radio	9535				MA	11/12/88				
0306	0445	South Africa	Radio 5	4880					03/26/89				
0306	0470	South Africa	Radio Orange	3215				MA	03/21/89				
0306	0336	Sweden	R Sweden	11705	9875			MA/Jap/As/Am/EU	09/29/88				
0306	0400	Taiwan	V of Free China	15305	11745	9745	9680	7445	5985			SE As/NA	04/15/89
0306	0330	Turkey	V of Turkey	17740	9945			Canada	03/06/89				
0306	0500	USA	WBUR	9815				MA/CA	20 deg				
0306	0400	USA	WBUR	6185				MA/CA	70 degrees use				
0306	0700	USSR	R Moscow	15455	15425	15740	17050	unk.	add'l freqs in use				
0310	0327	Switzerland	Int'l Red Cross	12035	9885	9725	6135	MA/CA	Txdr after last Su				
0310	0330	Vatican Radio	Vatican Radio	6150				MA	news in English				
0315	0325	France	R France Int'l	11995	11700	11670	9800	9790	9550	7175	Am/Afr/Ind/Am/Eu	11/05/88	
0330	0400	Albania	R Tirana	9787	7665			MA	04/06/89				
0330	0430	England	BBC	9915	5975			US: MA/CA/Carib	15325 Fr Guinea				
0330	0400	Japan	R Japan	17835	17810	17745	15325	MA	v Bonaire				
0330	0425	Netherlands	R Netherland	6990	6145			Pac/As/NA/Melanesia	03/17/89				
0330	0730	New Zealand	R New Zealand Int'l	17705	15130			MA	02/24/89				
0330	0400	United Arab Emirates	R Dubai	17795	15435	14940	9440	MA	news/Eng enc Su				
0340	0348	Greece	V of Greece	9420	9395	7430		MA	03/26/89				
0345	0430	German Dem Rep	R Berlin Int'l	11785	9420			S As	04/03/89				
0350	0410	Italy	RAI	17795	15330			MA	04/14/89				
0350	0400	USSR	R Yerevan	17455	15445	15740	9640	9745	news in English				
0400	0500	Argentina	TBC	9690				Americas	12/10/88				
0400	0500	Australia	R Australia	21740	17795	17750	17715	15375	15320	15740	15160	As/Pac/Pap/SE/AFR	R-Fly Austria
0400	0430	Austria	R Canada Int'l	15275				MA	02 Canada:83 Fr Sat				
0400	0500	China	R Beijing	15195	11840	11685		unk.	03/18/89				
0400	0400	Cuba	R Havana	11820	11740	9940	5945	Americas	09/30/88				
0400	0450	Fed Rep Germany	F Deutsche Welle	11745	9745	9545	7225	7150	SACB Afr				
0400	0415	Israel	Kol Israel	17450	17575	15440	11455	11585	As/As/NA/ME Eu				
0406	0430	North Korea	R Pyongyang	17745	15180	15160		SE As	11/25/86				
0406	0455	Romania	R Bucharest	11940	11820	9570	9510	6155	5990	MA	04/05/88		
0406	0415	South Africa	Radio RSA	11990	9580	7295		Afr/NE	02/26/89				
0406	0430	Switzerland	R Swiss Int'l	12035	9885	9725	6135	MA	95/21/86				
0406	0400	USA	WESH	9870				MA	03/08/89				
0406	0400	USA	WBUR	9495	7345			S Afr	04/24/89				
0406	0400	USA	WBUR	13740	9455			Eu/CA/SA	03/08/89				
0410	0410	Zambia	R Zambia	4970				CA/Canada	01/14/89				
0415	0445	Pakistan	R Pakistan	17460	15465	12015		MA	news/English R-F				
0425	0440	Italy	RAI	7275	5980			MA	04/08/89				
0425	1640	South Africa	Radio Orange	7285				NE	09/06/87				
0430	0500	Albania	R Tirana	11835	9480			Mediterranean	04/17/89				
0430	0545	England	BBC	9915	9510	5975		MA	12/24/86				
								US: MA/CA/Carib	04/04/89				

0430	0453	Netherlands	R Nederland	13700	9895	13700	9895	NE/E Afr	03/02/89
0432	0530	Seychelles	FEBA	17820	15375			SE As	03/11/89
0443	1630	South Africa	Radio 5	11880				H & Sa	03/26/89
0500	0600	Australia	R Australia	21740	17795	17750	17715	As/Pac/PapMG	03/05/89
0500	0630	Ecuador	HCJB	11775	9745	6230		NA	04/15/89
0500	0550	Fed Rep Germany	R Deutsche Welle	11810	11705	9700	9670	E Afr/WMA	03/07/89
0500	0545	German Dem Rep	R Berlin Int'l	13610	11810	9643	6115	Afr/NE/Eu	03/26/89
0500	0600	Japan	R Japan	17825	17810	17745	15270	50S/As/NA/Oceania	03/21/89
0500	0800	Kuwait	R Kuwait	15345				Fair E/SSE As/News/Hz	04/18/87
0500	0600	Spain	Spanish Nat'l R	15110				NA	02/06/89
0500	0700	USA	KUSW	6175				Canada	06/13/88
0500	0400	USA	WFR	17640	15366	11390	5950	84 Network	03/25/89
0500	0515	Vatican State	Vatican Radio	17730	13190			E Afr	03/27/89
0515	0530	Canada	R Canada Int'l	15275	11775	9750	7295	81,4,6 v UK	03/22/89
0515	0600	German Dem Rep	R Berlin Int'l	17880	15240			As	03/26/89
0530	0400	Austria	ORF	6015				v Canada	04/09/89
0530	0535	Romania	R Bucharest	17790	17720	15380	11940	Afr	12/26/88
0530	0630	Seychelles	FEBA	17820				Fr	09/30/88
0530	0600	United Arab Emirates	R Dubai	21700	17845	15435	11770	Fair E/Aus/As	02/24/89
0545	0600	Canada	R Canada Int'l	15225	11775	9750	7295	81,4,6 v UK	03/22/89
0545	0730	England	BBC	9640	5975			8S; NA/CA/Carib	04/06/89
0600	0630	Australia	R Australia	21740	17750	17715	15395	As/Pac/PapMG/Afr	03/05/89
0600	0600	Cuba	R Havana	11835				Americas	04/08/89
0600	0450	Fed Rep Germany	R Deutsche Welle	17875	15185	13790	11745	W Afr	09/30/88
0600	0700	Malta	R Mediterranean	9745					09/24/88
0600	0650	North Korea	R Pyongyang	15180	15160	15115	13650	SE As	11/25/88
0600	0630	Norway	R Norway	21725	15165			NE/Pac	03/30/89
0600	0700	South Korea	R Korea	9570	7275	6060		Afr/60S	11/05/88
0600	0700	Taiwan	V of Asia	7285				SE As	07/20/87
0600	0800	USA	WGSN	9840				Eu	04/24/89
0600	0800	USA	WRTI	9620	9495			Eu/CA/SA	03/08/89
0600	1200	USA	WRMO	6185				NA/CA	02/15/88
0600	0800	USA	WSHR	11980	9455			CA/Canada	04/24/89
0600	0700	USA	WFR	17640	15366	13760	7355	Eu/NA/NA	03/25/89
0600	0620	Vatican State	Vatican Radio	7645	6185			Eu	03/27/89
0615	0630	Vatican State	Vatican Radio	17730	13190			EU5 Afr	03/27/89
0630	0700	Albania	R Tirana	9500	7065			Eu	12/24/84
0630	0700	Australia	R Australia	17790	17715	15395	15320	As/Pac/PapMG/Afr	03/17/89
0630	0700	Bulgaria	R Sofia	11720	9700			W Eu	03/26/89
0630	0655	Finland	R Finland	11735	9560	6120		Eu/NE/Afr	04/03/89
0630	1415	Jordan	R Jordan	13655					03/13/89
0630	0700	Switzerland	R Swiss Int'l	17570	15430	12030		Afr	05/09/87

0645	0830	Ecuador	HCJB	11835	9810				Sat-Sun 0700-0830	02/18/89
0645	0715	Romania	R Bucharest	21665	17805	17790	15340	15230	11940	11/13/86
0700	0730	Australia	R Australia	17750	17715	15395	15320	15240	15160	03/17/89
0700	0725	Belgium	BRT	21815	11695					03/11/89
0700	1030	Ecuador	HCJB	11925	9745	6130				02/18/89
0700	0900	Guam	KSEA	15725	11700					04/24/89
0700	0800	Japan	R Japan	21695	17810	17765	15270	15235		03/21/89
0700	1115	Pakistan	R Pakistan	17640	15605					05/13/88
0700	0800	Taiwan	V of Free China	5985						07/21/86
0700	1100	USA	KUSW	6135						02/13/88
0700	0800	USA	WFR	15566	13740	7355				03/25/89
0715	0730	Vatican State	Vatican Radio	17730	15190					03/27/89
0727	0835	Seychelles	FEDA	17780	15275					03/11/89
0730	0800	Australia	R Australia	17750	17715	15395	15320	15160	9653	03/17/89
0730	0800	Austria	ORF	21490	15490	13730	6155			04/09/89
0730	0800	Czechoslovakia	R Prague	21705	17840	11685				04/14/89
0730	0815	England	BBC	9640						04/06/89
0730	0800	Italy	AMR Europe	7125						-10/30/88
0730	0825	Netherlands	R Nederland	9715	9630					04/08/89
0740	0757	Switzerland	Int'l Red Cross	21695	17670	15685	9560			03/18/89
0745	0830	German Dem Rep	R Berlin Int'l	21465	21540	9730	7185	6115	6040	03/26/89
0800	0830	Albania	R Tirana	11835	9500					01.3.4.6 Su only
0800	0830	Australia	R Australia	17750	17715	15395	11770	9655	9580	12/24/86
0800	0830	Bangladesh	R Bangladesh	17710	15195					03/05/89
0800	0855	Finland	R Finland	17795	15245					03/04/89
0800	1600	Mariana Is	KYBI	9530						04/03/89
0800	0850	North Korea	R Pyongyang	15180	15160	15115	11830			04/24/89
0800	0830	Norway	R Norway	21730	15165					340 deg
0800	0900	South Korea	R Korea	13670	7550					11/25/88
0800	0900	USA	KMLS	11715						03/30/89
0800	1100	USA	WHR1	7355						10/03/87
0800	1000	USA	MSH	17855	9455					08/13/88
0805	0930	Guam	KTHR	11805						04/24/89
0828	0855	Netherlands	R Nederland	9770						09/14/88
0830	0900	Australia	R Australia	17750	17715	15395	11770	11720	9655	03/05/89
0830	0930	China	R Beijing	15445	11755	9700				03/05/88
0830	0900	Czechoslovakia	R Prague	21705	17840	11685				04/14/89
0830	0925	Netherlands	R Nederland	21485	17575					09/19/86
0830	0900	Switzerland	R Swiss Int'l	21695	17670	15685	9560	9535	6165	04/11/89
0900	1000	Afghanistan	R Afghanistan	21690	17720					04/09/89
0900	0915	Australia	R Australia	17715	15415	11770	11720	9760	9655	03/05/89
0900	0925	Belgium	BRT	26050	21810	17595	9925			03/30/89
0900	0950	Fed Rep Germany	R Deutsche Welle	21680	21650	21660	17785	17780	11945	03/07/89
										9650 Aus/As/SC/EE Afr

0900	0945	Geraan Dem Rep	R Berlin Int'l	21445	21540	11890	Far E/EMA	81 Sa-Su only	03/26/89
0900	1000	Guaa	KSB6	11986	11700		As		03/08/89
0900	1000	Japan	R Japan	17810			60S/As/Dc		03/21/89
0900	0930	Norway	R Norway	17840			F East/NL/As	Eng Sun only	03/30/89
0900	0400	Papu-N Guinea	ABC-Port Moresby	4920					09/08/85
0900	0130	Portugal	AMR Europe	9670					10/30/88
0900	1400	South Africa	Radio RSA	11805				Sunday only	04/23/89
0910	0940	Mongolia	R Ulan Bator	21770	12015		Eu		01/11/89
0915	0930	Australia	R Australia	15415	11770	11720	As/Pac/PapMG		03/05/89
0930	1030	Australia	R Australia	15415	9740	9655	As/Pac/PapMG		12/10/88
0930	0940	Canada	R Canada Int'l	9755	5960		Carib	W-F	03/22/89
0930	1030	China	R Beijing	15445	11755	9700	S Pacific		05/25/88
0930	1100	Guaa	KTR	11805			AusKZ		06/31/87
0945	1030	Geraan Dem Rep	R Berlin Int'l	6115			Eu		03/26/89
0945	1000	Hungary	R Budapest	15160	11910	9835	Eu	Su	03/26/89
1000	1100	Guaa	KSB6	13720	11980		As	Eng 1000-1030	01/29/89
1000	1100	India	AIR	17837	15335	15155	60S/E As/Aus/NZ		05/31/88
1000	1030	Israel	Kol Israel	21740	17590	17578	98E Est/As/As		04/24/89
1000	1205	New Zealand	R New Zealand Int'l	11780	9850		Aus/Melanesia		02/24/89
1000	1030	Switzerland	R Swiss Int'l	21695	17670	13485	Aus/NZ		04/17/89
1000	1200	USA	MSRB	9495	9455		CA/SA/NE Canada		03/08/89
1000	1100	USA	WFR	5950			NA	ZS/167 deg	03/25/89
1000	1030	Vietnaa	V of Vietnaa	15010	12030	9840			09/25/88
1030	1100	Austria	DRF	21490	15450		As/As		04/09/89
1030	1130	Ecuador	HCJB	11925	6130		S Pac		02/18/89
1030	1045	Hungary	R Budapest	15160	11910	9835	Eu	Sa	03/26/89
1030	1040	Netherlands	R Nederland	9675	6020		Aus/Carib	via Bonaire	03/02/89
1030	1040	Taiwan	V of Asia	5980			SE As		07/20/87
1030	1130	United Arab Emirates	R Dubai	21605	17865	15435	Eu/Afr		04/01/89
1040	1057	Switzerland	Int'l Red Cross	21550	17830	15570	Far East	Hostile after last Su	03/18/89
1000	1130	Australia	R Australia	11800	11705	9770	As/Pac/PapMG		05/21/88
1100	1200	China	R Beijing	15540			EMA		03/27/89
1100	1330	England	BPC	11775	9515	6195	US: MA/CA/Carib	8183 Act:19 2 Sack	04/06/89
1100	1150	Fed rep Germany	R Deutsche Welle	21600	17800	17765	W Afr	17800,15410 v Kigali	09/30/88
1100	1125	Finland	R Finland	21550	15400		NA	W-F	04/03/89
1100	1145	Geraan Dem Rep	R Berlin Int'l	17775	13700	9645	Eu/NE		03/26/89
1100	1400	Guaa	KSDA	13720	11980		As/Indonesia		01/29/89
1100	1200	Japan	R Japan	11840	11615	6120	60S/Asia/NA	6120 v Canada	03/21/89
1100	1150	North Korea	R Pyongyang	11735	9977	9600	Am		01/14/89
1100	1158	South Africa	Radio RSA	21550	21535	11900			02/26/89
1100	1200	South Korea	R Korea	35575			NE/Afr		10/03/87
1100	1130	Switzerland	Int'l Red Cross	7210			Eu	Last Su of month	03/18/89

1100	1130	Switzerland	R Swiss Int'l	21550 17850 15570 13635	SE As/Aus/NZ	04/17/89
1100	1200	Taiwan	V of Asia	7445 5980	SE As	07/20/87
1100	1600	USA	KUSU	9650	Canada	03/08/89
1100	1400	USA	WRR1	11790 9445	Eu/CA/SA	03/08/89
1100	1300	USA	WYFR	11580 9950	NA	03/25/89
1100	1130	Vietnam	V of Vietnam	15010 12030 9840	NA	09/25/88
1110	1257	Netherlands Antilles	Trans World Radio	15345 11815	NA	06/03/88
1115	1130	Pakistan	R Pakistan	17660 15605	Eu	09/06/87
1115	1130	Vatican State	Vatican Radio	17840	E Afr	03/27/89
1130	1200	Albania	R Tirana	11855 9480	As/Aus	12/24/86
1130	1200	Australia	R Australia	11800 11705 9770 9710 9645 9580 7215 6080	As/Pac/PapMG	05/21/88
1130	1200	Austria	ORF	17870 15450	EMA/As/Aus	04/09/89
1130	1200	Ecuador	HCB	11740	Americas	02/18/89
1130	1215	Berain Ben Rep	R Berlia Int'l	21540 21445 17880 15445	As	03/26/89
1130	1225	Iran	R Tehran	11790 9670 7215 7115	ME	04/13/89
1130	1225	Netherlands	R Nederland	21615 21480 17575 9715 5955	Eu/ME/As	03/02/89
1130	1200	Seychelles	FEBA	15325	India	09/30/88
1130	1230	Thailand	R Thailand	9655		09/11/88
1200	1230	Australia	R Australia	11800 9770 9710 9580 7215 7205 6080 6060	As/Pac/PapMG	05/21/88
1200	1300	Canada	R Canada Int'l	17820 11655 9635	Carib/USA	03/22/89
1200	1300	China	R Beijing	17715 15540 15280 15110 11660 11600 7820	EMA/SE As/S Pac	03/27/89
1200	1600	Ecuador	HCB	17890 15115 11740	Americas	02/18/89
1200	1225	Finland	R Finland	21550 15400	NA	04/03/89
1200	1300	Ivor v Coast	AMR Africa	17890	Af	02/28/88
1200	1230	Monqolia	R Ulan Bator	12015 9615	Far East	04/11/89
1200	1230	Norway	R Norway	15325	NA	03/30/89
1200	1230	Romania	R Bucharest	17720 15280	As	06/05/88
1200	1236	South Africa	Radio RSA	21590 11900 9585	EAS Afr	02/26/89
1200	1400	USA	WRHO	9715	NA/DA	03/08/89
1200	1400	USA	WSIB	11930 9495	CA/NE Canada	03/08/89
1200	1300	USSR	R Moscow	17660 17645 15595 15550 15490 15465 15225	World Service	03/08/89
1200	1225	USSR	R Tashkent	15470 11785 9600 9540 7325	As	04/01/89
1200	1215	Vatican State	Vatican Radio	21485 17845 17840 15190	CISAM Af/Aus/NZ	03/27/89
1200	1230	Yugoslavia	R Yugoslavia	11735 9620 5960	W Eur/NA	03/26/89
1200	1330	Egypt	R Cairo	17595	As	06/18/88
1230	1300	Australia	R Australia	9770 9710 9580 7215 7205 6080 6060 5995	As/Pac/PapMG	05/21/88
1230	1300	Bangladesh	R Bangladesh	17795 15195	Eu	04/09/89
1230	1255	Belgium	BR1	21815 17555	SE As/NA	04/08/89
1230	1315	Berain Ben Rep	R Berlin Int'l	13700	ME	03/26/89
1230	1300	Sweden	R Sweden	21610 17705	As/Pac	03/21/89
1230	1300	Turkey	V of Turkey	17785	SW As	04/01/89
1235	1243	Greece	V of Greece	15630 11645	NA	03/08/87
						Eng news

1245	1310	France	R France Int'l	21445	17720	15345	15195	15155	11670	As/Afr/Ind/As/Eu	news/English	03/11/89
1245	1330	German Dem Rep	R Berlin Int'l	21540	21445	17880	15445			As		03/28/89
1300	1330	Australia	R Australia	9710	9580	7205	6080	6060	5995	As/Pac/PapMG	Su	05/21/88
1300	1400	Canada	R Canada Int'l	17820	11955					Carib/NA		03/22/89
1300	1400	China	R Beijing	15280	11660	11600				WWA/SE As/S Pac	via China	12/10/88
1300	1330	China	R Canada Int'l	15435	11955					As & Pacific	SatSu -1400	03/22/89
1300	1325	Finland	R Finland	21550	15400					NA		04/03/89
1300	1345	German Dem Rep	R Berlin Int'l	6115						Eu	via Japan	03/26/89
1300	1330	Japan	R Canada Int'l	17810	15270					As & Pacific		03/22/89
1300	1350	North Korea	R Pyongyang	11735	11335	9600	9345	9325		SE As/Aw/Eu		11/25/88
1300	1330	Norway	R Norway	9590						As	Eng Sun only	03/30/89
1300	1345	Pakistan	R Pakistan	15405	13675	11615	9475			WE	World Service	05/13/88
1300	1355	Rosania	R Bucharest	21550	17850	15405	11940			Eu		12/24/88
1300	1336	South Africa	Radio RSA	21590	17735	9585				Ind/Pak/FE/S Af	via VDFC	02/26/89
1300	1500	Taiwan	WFR	15055						NA	01,2,3,5 Netwot	03/26/89
1300	1500	USA	WFR	17895	13495	11830	11590	6015	5950	NA	11840 v Cuba	04/01/89
1300	1400	USSR	R Moscow	17660	17445	15395	15350	15540	15490	15445	15225	03/18/89
1310	1327	China	Int'l Red Cross	11695	9620					SSE As/Far East	Month after last Su	05/21/88
1330	1400	Australia	R Australia	9580	7205	6080	6060	5995		As/Pac/PapMG	Air	03/26/89
1330	1400	Bulgaria	R Sofia	15310	11840	11735				Afr		04/17/87
1330	1500	India	AIR	15335	11810	9545				SES/SE As		04/17/87
1330	1400	Switzerland	R Swiss Int'l	21695	17830	15570	13435	11695	9620	E Afr/India/Aus/RI	11695K9620 v China	04/17/89
1330	1400	United Arab Emirates	R Dubai	21605	17845	15435	15320			Eu/Afr		03/26/89
1330	1355	USSR	R Tashkent	15470	11785	9600	9540	7325		As		03/29/89
1330	1400	Vietnam	V of Vietnam	15010	12030	9840				Eu		09/25/88
1345	1430	German Dem Rep	R Berlin Int'l	9730						Eu		03/24/89
1345	1400	Vatican State	Vatican Radio	11740	9645	7250	6248			Eu		03/27/89
1400	1430	Albania	R Tirana	11895	9500					As/Aus		11/12/88
1400	1500	Australia	R Australia	9580	7205	6080	6060	5995		As/Pac/PapMG		12/10/88
1400	1500	China	R Beijing	15165	11600	7405				S Asia/INA		12/04/88
1400	1425	France	R France Int'l	17495						SE As	news/English	03/18/89
1400	1700	Guam	KSOA	13720	11980					As/India	Eng 16-17	03/18/89
1400	1500	Japan	R Japan	11815	9505					SES/As/Aw		03/21/89
1400	1500	Malta	R Mediterranean	11925						S As/Aus	Eng Sun only	03/30/89
1400	1430	Norway	R Norway	21705						UK/Eu/NA/Afr/WE		09/24/88
1400	1556	South Africa	Radio RSA	25790	21670	21590	17355	11925		Am/SE As		02/26/89
1400	1500	South Korea	R Korea	15375	9750	9570				As/Pac		11/05/88
1400	1430	Sweden	R Sweden	21610	17705					Eu		03/21/89
1400	1430	Switzerland	R Swiss Int'l	12030	9535	6165				Eu	45 deg	05/01/88
1400	1600	USA	WCSN	21780						Eu/CA/SA		04/24/89
1400	1500	USA	WFR	15105	9495					NA/LA		04/24/89
1400	1500	USA	WFRD	11965							20 deg (Su only)	03/08/89

1400 1600 USA	MSB	17535 13760	CA/Canada	245/315 deg	03/08/89
1400 1500 USSR	R Moscow	15540 15530 15490 15135 11840	World Service	11840 v Cuba	04/01/89
1400 1430 USSR	R Sin Peace & Progress	17645	As		04/11/89
1405 1430 Finland	R Finland	17800 15185 11925	Eu/NE/AFr		04/03/89
1415 2200 Jordan	R Jordan	9540			02/18/89
1420 1430 Sudan	National Unity Radio	9635			12/19/88
1430 1500 Austria	ORF	21490 13730 11780 6155	N AM/SE As/Eu	nr/EE some days	04/01/89
1430 1457 Czechoslovakia	R Prague	21505 17705 15155 15110 13715 11685 9605	AFr/S As		04/14/89
1430 1500 Italy	AMR Europe	7125	Eu		10/30/88
1430 1525 Netherlands	R Nederland	17605 17575 15150 13770 5955	SE As/Eu		01/22/89
1445 1500 Canada	R Canada Int'l	21545 17820 17795 15325 15305 15160 11935	CSE Eu	02,4,5,7 v Eu relays	03/22/89
1445 1530 German Dem Rep	R Berlin Int'l	17880 15240	As		03/26/89
1445 1515 Mongolia	R Ulan Bator	15305 9575	S As		01/11/89
1458 1610 Seychelles	FEMA	11870 15325	India	Su & M & Sa	02/11/89
1500 1530 Australia	R Australia	9580 7215 7205 6080 6060 5995	As/Pac/PapMG		12/10/88
1500 1600 China	R Beijing	15165 11600 7405	S Asia/MA		06/13/88
1500 1745 England	BBC	15260 11775	MS: MA/CA/Carib		04/06/89
1500 1550 Fed Rep Germany	R Deutsche Welle	21600 17810 11965 9735	SE/CSE Afr	01 Sact:02 Antigua	05/01/88
1500 1640 Guat	KTR	11650	India	Su -1650	11/30/88
1500 1600 Japan	R Japan	21700 11815 9505	605/As/Am/Eu/NE	21700 v Gabon	03/21/89
1500 1550 North Korea	R Pnyongyang	11740 9325	Eu		11/25/88
1500 1530 Philippines	R Veritas Asia	15460 15220	As		12/19/88
1500 1530 Portugal	R Portugal	15245	India/NE	H-F	04/19/89
1500 1530 Romania	R Bucharest	17745 17720 15335 15250 11940 11775	As		06/05/88
1500 1515 Taiwan	WFR	11550	India	via VOF	03/26/89
1500 1600 USA	KMLS	9750	As		03/23/89
1500 1700 USA	WRN	21840 15105	Eu/CA/SA		01/02/89
1500 1515 USA	WFR	17895 13695 11580 5950	MA/CA	20 deg	03/08/89
1500 1600 USSR	R Moscow	17810 17660 15490 15135 11840	MA	01,2 Network	03/26/89
1500 1515 Vatican State	Vatican Radio	17870 15090 11955	World Service	11840 v Cuba	04/01/89
1515 1530 Hungary	R Budapest	15160 11910 9835 9885 9520 6110	SE As/India/Pak		03/27/89
1515 1600 USA	WFR	17895 13695 11580 5950	Eu	M/Th	03/26/89
1530 1600 Albania	R Tirana	11835 9480	MA	01,2 Network	03/25/89
1530 1900 Australia	R Australia	9580 7215 7205 6080 6060 6035 5995	AFr		12/24/86
1530 1555 Belgium	BRT	21610 17650 17595	As/Pac/PapMG		12/10/88
1530 1625 Czechoslovakia	R Prague	21505 17705 15155 15110 13715 11990 11685 9605	AFr/S As/Eu	H-Sa	03/11/89
1530 1538 Greece	V of Greece	17960 15630 11645	MA	Eng news	03/20/89
1530 1600 Sweden	R Sweden	21610 17880 17705	MA/As/Pac		03/21/89
1530 1600 Switzerland	R Swiss Int'l	21630 17850 15430 13685	NE/E Afr		04/25/88
1530 1630 Taiwan	V of Asia	7445 9980	SE As		01/20/87
1545 1630 German Dem Rep	R Berlin Int'l	17775 15255 9730 7295	AF/Eu		03/26/89

1545	1630	Pakistan	R Pakistan	21740	21580	21480	17640	15605	11895	ME/EAS Afr	Slow-speed news 1615	04/16/89
1545	1600	Vatican State	Vatican Radio	17730	15120	11810				E Afr		03/27/89
1600	1700	China	R Beijing	15130	11715	9570	7795			EAS Afr	19 t 25a v Mali	12/10/88
1600	2400	Costa Rica	R for Peace	25945	21565						schd sub to chg	04/13/89
1600	1630	Fed Rep Germany	R Deutsche Welle	21680	17825	15595	15105	7225	6170	Am/As	11705 v Gabon	03/07/89
1600	1655	France	R France Int'l	17795	17620	15360	11705	6175		ME/AE/Az/N Eu	Eng Sun only	11/05/88
1600	1630	Norway	R Norway	17780	15310					NA/CA	best later in zen	03/30/89
1600	2100	Saudi Arabia	BC Serv of Kingdom of SA	9720						ME/Afr/BOG	07/20/86	11/05/88
1600	1700	South Korea	R Korea	9870	5975					Eu/Afr	04/01/89	03/23/89
1600	1640	United Arab Emirates	R Dubai	17865	15435	15320	9640			As	70 deg	10/14/88
1600	1700	USA	KMLS	12025						Canada	105 deg	02/15/88
1600	2200	USA	KUSW	15650						S Afr		04/10/88
1600	1800	USA	WGLK	21640	9445					Af/Eu/NA	63.7 Network	03/25/89
1600	1700	USA	WYFR	21615	21525	17895	17612	15440	15215	World Service	11840 v Cuba	04/01/89
1600	1630	Vietnam	R Moscow	17810	13135	11840				SE As	03/11/89	03/22/89
1610	1625	Seychelles	V of Vietnam	15010	12030	9840				CAE Eu	6345 v Eu relays	04/01/89
1615	1630	Canada	R Canada Int'l	21585	17820	15325	15305	11935		W AF/SE As/Eu		03/26/89
1630	1700	Austria	ORF	21490	13730	11780	6155			Afr	World Service	03/13/88
1630	1700	Bulgaria	R Sofia	15310	11840	11735				S Afr		06/17/87
1630	1830	Egypt	R Cairo	15255						SSE Afr		03/02/89
1630	1725	Netherlands	R Nederland	15570	6020					Eu		03/26/89
1630	1900	Pakistan	R Pakistan	11570	9400							04/17/89
1630	2200	South Africa	R Radio 5	4880								10/26/87
1630	1700	USSR	R Stn Peace & Progress	15140	13615	12030	11775	11670	9830			12/10/88
1645	1930	South Africa	Radio Orange	3215						Eu		04/24/89
1700	1750	Brazil	R Bras	15265						EAS Afr		03/21/89
1700	1800	China	R Beijing	9570	9500	7295				BOG/As/NA		11/29/88
1700	1715	Israel	Kol Israel	11655	11585					Eu	Eng Sun only	03/30/89
1700	1730	Japan	R Japan	11815	9695	9335	9505			W Afr/NA	No after last Su/mo	03/18/89
1700	1750	North Korea	R Pyongyang	11740	9325					Afr		11/12/88
1700	1730	Norway	R Norway	25730	17780					Eu/CA/SA	20 deg	03/08/89
1700	1730	Switzerland	Int'l Red Cross	7210						NA/CA/Eu	target date 5-29-89	04/27/89
1700	2200	USA	VOA	17785	15580	15410	11740			W Afr/NA	81.3 Network	03/25/89
1700	1800	USA	WRR1	15105	13760					World Service	11840 v Cuba	03/26/89
1700	2100	USA	W960	15420						Africa	MoTh after last Su	03/18/89
1700	0200	USA	WPCR	15650						Eu		03/26/89
1700	1900	USA	WYFR	17895	15215	13695	11380					
1700	1800	USSR	R Moscow	15475	11840	9875						
1710	1727	Switzerland	Int'l Red Cross	17630	15525	15430	11955	9885				
1715	1800	Breuan Bea Rep	R Berlin Int'l	9730	7295	7260						

1730	1800	Albania	R Tirana	9480	7155		Eu		04/05/88
1730	1830	Argentina	RAE	15345			Eu/Afr		03/13/89
1730	1755	Belgia	BRT	11695	5910		Eu		03/11/89
1730	1825	Czechoslovakia	R Prague	21505	15110	13715	Afr/S As		04/14/89
1730	1815	German Dem Rep	R Berlin Int'l	15255	15145	13610	Af		03/26/89
1730	1800	Romania	R Bucharest	17745	17720	15365	Afr		03/22/89
1731	1804	Seychelles	FEBA	11810			SE As	F&Sa -1824	03/11/89
1800	1830	Canada	R Canada Int'l	17820	15260	13680	Afr	SatSu -1900:22a 7/1	03/22/89
1800	1827	Czechoslovakia	R Prague	7345	5930		Eu		09/08/87
1800	2000	India	AIR	15360	11940		SMS/E Afr		04/17/87
1800	1900	Ivory Coast	R Cote-d'Ivoire	7215				exc Sundays	12/05/87
1800	2100	Kuwait	R Kuwait	11665			Eu/Af/NA/Aus/NZ		10/20/88
1800	2200	Mariana Is	KYOT	9455			Japan		03/08/89
1800	1830	Norway	R Norway	21730			E Af	340 deg	03/30/89
1800	1856	South Africa	Radio RSA	21535	17795		UK/Ireland	Eng Sun only	02/26/89
1800	1900	South Korea	R Korea	15575			Eu		11/05/88
1800	1830	Sweden	R Sweden	9615	6065		Eu/Af		03/21/89
1800	1900	USA	KMS	11650			As		03/23/89
1800	2000	USA	MCSN	21640			E Afr	75 deg	10/14/88
1800	2100	USA	MRI	17830	13760		Eu/CA/SA		02/15/88
1800	1830	USSR	R Kiev	7240	6185	6090	Eu		03/26/89
1800	2100	USSR	R Moscow	11840			World Service	11840 v Cuba	04/01/89
1800	1830	Vietnam	V of Vietnam	15010	12030	9840	Eu/NE		09/25/88
1815	1900	Bangladesh	R Bangladesh	11510	7520		W Eu		03/13/89
1830	1900	Bulgaria	R Sofia	11720	9700		W Eu		03/26/89
1830	1900	Canada	R Canada Int'l	21675	17875	15335	W Eu	H-F : 0445 v UK	03/22/89
1830	1900	Ethiopia	V of Ethiopia	9660			W Eu		01/22/89
1830	1845	Finland	R Finland	15185	11755	9550	Eu/NE/Afr		04/03/89
1830	1900	Hungary	R Budapest	15160	11910	9835	Eu		03/26/89
1830	1925	Netherlands	R Netherland	21685	17605	15560	Afr		04/08/89
1830	2105	New Zealand	R New Zealand Int'l	15150	11780		Pac	13a.17a Bon, 19a Madg	02/24/89
1830	1900	Switzerland	R Swiss Int'l	11955	9885		Afr		05/09/87
1830	1900	Yugoslavia	R Yugoslavia	9660	9620	5980	Af/Eu		03/26/89
1845	1945	India	AIR	11620	7412		SMS/W Eu		07/04/88
1900	1930	Afghanistan	R Afghanistan	11830	9640		Eu		04/09/89
1900	2000	Algeria	R Algiers	17745	15215	9640			01/30/88
1900	2000	Australia	R Australia	9580	7215	7205	As/Pac/Pap/NE		12/10/88
				6060	6060	6035			

1900	1930	Canada	R Canada Int'l	17820	15260	13680	Afr	03/22/89
1900	2100	Cuba	R Havana	11800			Eu/Af	10/13/88
1900	1957	Czechoslovakia	R Prague	7345	5930		Eu	09/08/87
1900	2000	Ecuador	HCJB	21470	17790	15270	Eu	02/18/89
1900	1950	Fed Rep Germany	R Deutsche Welle	21600	17810	15390	M Afr	03/07/89
1900	1930	Israel	Kol Israel	17630	17590	15640	Af/ME/Eu/NA	04/24/89
1900	1930	Japan	R Japan	11850	11705	9505	60S/Am/Oc	02/20/89
1900	1930	Norway	R Norway	15220			Eu	03/30/89
1900	1930	Portugal	R Portugal	15250	11870		Afr	04/10/89
1900	1956	South Africa	Radio RSA	21590	17795	7295	Afr/ME	02/26/89
1900	2000	Spain	Spanish Nat'l R	15395	15375	15280	Afr/ME/Eu	03/06/89
1900	2000	USA	WFR	21615	17895	15566	Eu/Nk	03/25/89
1900	2000	USSR	R Moscow	9685	9450	7350	UK/Ireland	03/26/89
1900	1930	Vietnam	V of Vietnam	15010	12030	9840	Af	09/25/88
1915	2000	German Dem Rep	R Berlin Int'l	15255	13610	9665	Eu	03/26/89
1920	1930	Greece	V of Greece	11645	9905		Eu	04/11/89
1930	2000	Austria	ORF	13730	12010	5945	S Af/ME/Eu	04/09/89
1930	2030	China	R Beijing	11855	11515	9440	MM Afr	08/06/88
1930	2025	Iran	R Tehran	9022	6035		ME/PAf/Eu/ENA	04/13/89
1930	2025	Romania	R Bucharest	7195	7105	6105	Eu	12/26/88
1930	0300	South Africa	Radio Orion	4810	3320			04/17/89
1930	2000	Switzerland	R Swiss Int'l	9535	6165	3985	Eu	11/12/88
1940	2010	Mongolia	RAI	11800	9710	7275	Great Britain	04/08/89
1945	2030	German Dem Rep	R Ulan Bator	11870	9654		Eu	01/11/89
1945	2045	India	AIR	11860	11620	9910	9910 2000-	03/26/89
1950	2010	Vatican State	Vatican Radio	9645	7250	6190	60S/W Eu/Afr	12/26/88
2000	2030	Australia	R Australia	9620	9580	7215	Eu	03/27/89
2000	2100	China	R Beijing	11500	9720		As/Pac/Pap/NG	12/10/88
2000	2200	England	BBC	5975			Eu	09/30/88
2000	2100	Guam	KSDA	15225	13720		MS; NA/CA/Carib	04/06/89
2000	2200	Hungary	R Budapest	15160	11910	9835	As	04/24/89
2000	2200	Iraq	R Baghdad	9770			Eu	03/26/89
2000	2050	North Korea	R Pyongyang	9345	6576		Eu	04/19/89
2000	2030	Portugal	R Portugal	11740			Eu	09/10/88
2000	2050	Turkey	V of Turkey	9825			Eu	04/01/89
2000	0100	USA	KVOH	17775			Eu	04/10/89
2000	2200	USA	WCSN	15390			CA/Carib	100 deg
2000	2200	USA	MSJB	21640	17555		Eu	60 deg
2000	2200	USA	WFR	21615	21525	17895	CA/Canada	313/137 deg
2005	2105	Syria	R Damascus	17710	15095		Eu/Af/NA	03/25/89
2025	2045	Italy	RAI	11800	7235	5990	Eu	04/09/89
							Near East	04/08/89

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2030	2100	Albania	R Tirana	11835	9375		Afr	06/05/88
2030	2100	Australia	R Australia	9620			As/Pac/PapMG	12/10/88
2030	2100	Bulgaria	R Sofia	11735	11720	9700	Eu/NA	03/26/89
2030	2130	China	R Beijing	11855	11515	9440	NA/NA Afr	08/06/88
2030	2200	Egypt	R Cairo	15375			W Afr	08/17/87
2030	2125	Netherlands	R R Nederland	15560	13700	9860	W Afr	04/09/89
2030	2130	South Korea	R Korea	15575	7530	8480	Eu/NE/Afr	11/05/88
2030	2100	Vietnam	V of Vietnam	15010	12630	9840		09/25/88
2040	2140	Cuba	R Havana	15340	11725		Carib	09/04/88
2045	2230	India	AIR	11715	11620	9910	60S/W Eu/Aus/NZ	03/28/87
2045	2100	Vatican State	Vatican Radio	15120	11760	11700	CRSM Afr	03/27/89
2100	2130	Australia	R Australia	21740	17795	15320	As/Pac/PapMG	03/17/89
2100	2125	Belgium	BRT	9925	5910		NA/Eu	03/30/89
2100	2115	Cameroon	R Cameroon	5010			news in English	12/04/88
2100	2100	Canada	R Canada Int'l	17875	15325		W Eu	03/22/89
2100	2200	China	R Beijing	11500	9720		Eu	09/30/88
2100	2150	Fed Rep Germany	R Deutsche Welle	15435	11785	9745	Aus/As	03/07/89
2100	2125	Finland	R Finland	11945	11755	6120	Eu/NE/Afr/Aus/SASE As	04/03/89
2100	2145	German Dem Rep	R Berlin Int'l	9730			EMA	03/26/89
2100	2110	Ghana	Ghana BC Corp	3366			news in English	12/23/87
2100	2200	Gua	K50A	15310	15225		E As/London	04/24/89
2100	2130	Japan	R Japan	17890	17810	15270	60S/As/Oc/Eu	03/21/89
2100	2125	Kosovo	R Bucharest	7195	7105	6105	11845 v Gabon	12/26/88
2100	2200	Spain	Spanish Mat'l R	15280	11790		Eu	03/06/89
2100	2130	Sweden	R Sweden	11705	9655		Eu/Afr	03/21/89
2100	2130	Switzerland	R Beijing	3985			Eu	03/28/89
2100	2130	Switzerland	R Swiss Int'l	15525	13635	9885	Afr	04/17/89
2100	2400	USA	WR1	17830	13760		Eu/CA/SA	03/08/89
2100	0000	USA	WR10	13720			NA/CA/Eu	04/24/89
2100	2200	USSR	R Moscow	11840	9765	7530	World Service	04/10/89
2100	2130	USSR	R Stn Peace & Progress	7360	7340	6145	Eu	03/26/89
2100	2200	Yugoslavia	R Yugoslavia	9660	9620	7130	W Eu/NA/India/Af	03/26/89
2105	2205	Syria	R Damascus	17710	15095		NA/Aus/NZ	04/09/89
2115	2245	Egypt	R Cairo	9900			Eu	04/02/88
2130	2200	Albania	R Tirana	9480	7245		Eu	04/10/89
2130	2200	Australia	R Australia	21740	17795	15320	As/Pac/PapMG	03/17/89
2130	2230	Bulgaria	R Sofia	11720	9700		NA/W Eu	03/26/89
2130	2200	Canada	R Canada Int'l	17820	15150	11880	Afr	03/22/89
2130	2200	Ecuador	HCJR	21470	17790	15270	Eu	02/18/89
2130	2200	USSR	R Vilnius	6100			Eu	03/26/89
2145	2230	German Dem Rep	R Berlin Int'l	9730	5965		EMA/Eu	03/26/89
2200	2300	Argentina	RAE	9690			Eu/Af	03/13/89
2200	2400	Australia	R Australia	21740	17795	15320	As/Pac/PapMG	12/10/88

2200	2230	Canada	R Canada Int'l	11905	9755	5960	USA	03/22/89	
2200	2230	Czechoslovakia	R Prague	6055			Eu	05/14/87	
2200	0030	England	BBC	12095	9915	9590	8345 Sact:16 Antigua	04/06/89	
2200	0200	Spain	KSDA	15225	15125		Eng 23-01	03/18/89	
2200	2225	Italy	RAI	9710	5990		Japan	11/26/88	
2200	2230	Japan	R Canada Int'l	15440	11705		As & Pacific	03/22/89	
2200	0200	Mariana Is	KY01	15405			Japan	12/03/87	
2200	2230	Norway	R Norway	25730			340 deg	03/30/89	
2200	2300	Taiwan	V of Free China	17845	15440	15370	Eng Sun only	03/27/89	
2200	2250	Turkey	V of Turkey	17760	9685	9445	8182 v NYFR	04/15/89	
2200	2400	United Arab Emirates	V of UAE	13605	11965	9595	6170	04/10/89	
2200	0100	USA	KBEI	15280			SA	04/17/88	
2200	2400	USA	KUSW	15580			Canada	04/20/88	
2200	0000	USA	WCSN	15300			B Afr	03/08/89	
2200	2300	USA	WSHB	17555	9495		SA/NE Canada	04/24/89	
2200	2300	USA	WYFR	21525	17612	11580	41/NA	03/25/89	
2200	2300	USSR	R Moscow	11750	9770	9485	7310	03/27/89	
2200	2230	USSR	R Vilnius	17665	15455	15240	9860	03/26/89	
2205	2225	Vatican State	Vatican Radio	11830	9615	6015	ENA	03/27/89	
2230	2330	Israel	Kol Israel	17630	17575	15640	13750	09/25/88	
2230	2300	Vietnam	V of Vietnam	15010	12030	9840	NA/LA/NE Eu	04/24/89	
2245	2255	Ghana	Ghana BC Corp	4915	3366		NA/ML	03/27/89	
2300	0000	Bulgaria	R Sofia	11720	9700		News in English	12/23/87	
2300	2330	Canada	R Canada Int'l	11730	9755		NA/W Eu	03/26/89	
2300	2330	Israel	Kol Israel	15640	15615	11605	Carib	03/22/89	
2300	2400	Japan	R Japan	15230	15195	11815	11810	04/24/89	
2300	0100	Luxembourg	R Luxembourg	6090			805/As/Eu/NE/AF regional	02/20/89	
2300	2350	North Korea	R Pyongyang	13650	11735		As	03/26/89	
2300	2330	Norway	R Norway	15190			NA/CA	12/29/87	
2300	0000	USA	WYFR	11580			NA	03/30/89	
2300	0000	USSR	R Moscow	17605	11750	9685	9720	03/25/89	
2305	2355	Poland	R Poland	9525	7270	7145	6135	also other freq's	03/27/89
2330	0000	Albania	R Tirana	11825	9760		EMA	03/26/89	
2330	2355	Belgium	BRT	9925			NA	03/26/89	
2330	0030	Canada	R Canada Int'l	9735	5960		NA/SA	03/11/89	
2330	2340	Greece	V of Greece	11595	9375		USA	03/22/89	
2330	0000	Hungary	R Budapest	15160	11910	9835	9585	News/Eng etc Su	03/26/89
2330	0030	South Korea	R Korea	15575			As	11/05/88	
2330	2400	Switzerland	R Swiss Int'l	6190			Eu	05/01/88	
2330	0000	USSR	R Kiev	17645	15435	15240	9860	9800	03/26/89
2330	2400	Vietnam	V of Vietnam	15010	12030	9840			09/25/88
2345	0030	Sri Lanka	R Berlin Int'l	11890	6080		EMA	03/26/89	
2345	0145	New Zealand	R New Zealand Int'l	17705	15150		Par/Aus/Melanesia	02/24/89	

All Records Included

ENGLISH LANGUAGE DX SHOWS: By Day of Week.
Compiled by Thomas R. Sundstrom, W21Q

Shortwave DX Program	Show Time	Less Start Time	Zone	Country	Station	Freq							Target Area	Notes re DX Show	Record Last Updated	
						81	82	83	84	85	86	87				
48 DAY OF THE WEEK: Sunday																
SML Digest	0005	2330		Canada	R Canada Int'l	9735	5960							USA		03/22/89
Dxers Unlimited	0035	0000		Cuba	R Havana	11820								Americas		09/25/88
Communications World	0110	0000		USA	VQA	15205	11580	9775	9455	5995				Caribbean/LA		11/12/88
SML Digest	0130	0100		Canada	R Canada Int'l	13720	11940	11845	9755	9535				LA		03/22/89
DX Party Line	0200	0035		Ecuador	HCJB	15150	11775	9745						NA		02/18/89
SM Merry-Go-Round	0220	0200		Switzerland	R Swiss Int'l	17750	12035	9885	9725	6135	6095			NA		05/16/86
Communicator	0230	0200		Australia	R Australia	21740	17795	17750	15395	15240	15160			As/Pac/PapNG		05/21/88
DX Asiawaves	0230	0200		Guam	KSDA	15225	11700							As		02/05/89
Dxers Unlimited	0235	0200		Cuba	R Havana	11820	9855							Americas		09/25/88
Amateur Radio Spectr	0240	0200		South Africa	Radio RSA	11730	9415	9585						NA		03/18/89
Bonaire Wavelength	0330	0210		Netherlands Antilles	Trans World Radio	11930								NA		02/19/89
SM Merry-Go-Round	0420	0400		Switzerland	R Swiss Int'l	12035	9885	9725	6135					NA		05/16/86
Dxers Unlimited	0435	0400		Cuba	R Havana	11820	11760	9655	5965					Americas		09/25/88
DX Party Line	0600	0500		Ecuador	HCJB	11775	9745	6230						NA		03/29/89
Dxers Unlimited	0635	0600		Cuba	R Havana	11835								Americas		09/25/88
SM Feedback	0635	0600		South Korea	R Korea	9570	7275	6060						Am/SOS		11/05/88
Communicator	0730	0730		Australia	R Australia	17750	17715	15395	15320	15160	9655			As/Pac/PapNG		12/27/87
SM Feedback	0835	0800		South Korea	R Korea	13670	7550							Eu		02/26/89
Pacific DX Magazine	0845	0805		Guam	KTMR	11805								Eu		04/22/88
AMR DX Program	0915	0900		Portugal	AMR Europe	9670								Eu		10/30/88
DX Corner	0925	0900		Japan	R Japan	17810								SOS/As/Dc		04/03/88
SM Club	0945	0945		Hungary	R Budapest	15160	11910	9835	9585	9520	6110			Eu		03/26/89
Shortwave Panorama	1030	1030		Austria	ORF	21490	15450							Aus/As		04/01/89
Shortwave Panorama	1130	1130		Austria	ORF	17870	15450							EMA/As/Aus		04/01/89
SM Feedback	1135	1100		South Korea	R Korea	15575								HE/Afr		02/26/89
DX Programme	1200	1200		USSR	R Tashkent	15470	11785	9600	9540	7325				As		11/05/88

Su after 2nd Sat/eo

Communicator	1230	Australia	R Australia	9770	9710	9580	7215	7205	6060	As/Pac/PapMG	12/25/87
Shortwave Panorama	1430	Austria	DRF	21490	13730	11780	6155			M Afr/SE As/Eu	04/01/89
SW Feedback	1435	South Korea	R Korea	15575	9750	9570				Am/SE As	11/05/88
DX Corner	1525	Japan	R Japan	21700	11815	9505				60S/As/Am/Eu/ME	04/03/88
SW Feedback	1635	South Korea	R Korea	9870	5975					ME/Afr/60S	11/05/88
Communicator	1730	Australia	R Australia	9580	7215	7205	6080	6060	6033	5995 As/Pac/PapMG	12/27/87
DX Show & Mailbag	1815	USSR	R Kiev	7240	6165	6090	6010			Eu	03/26/89
SW Feedback	1835	South Korea	R Korea	15575						Eu	11/05/88
DX Corner	1840	South Africa	Radio RSA	21535	17795					UK/Ireland	02/05/88
DX Corner	1920	Israel	Kol Israel	17630	17590	15640	13750	11605		Afr/ME/Eu/NA	04/24/89
DX Spot	1930	Spain	Spanish Nat'l R	15395	15375	15280	11790			Afr/ME/Eu	01/01/89
DX Corner	1940	South Africa	Radio RSA	21590	17795	7295				Afr/ME	02/05/88
Communicator	2030	Australia	R Australia	9620						As/Pac/PapMG	12/25/87
World of Radio	2030	USA	WRND	15420						NA/Ch/Eu	03/08/89
World of Radio	2100	Costa Rica	R for Peace	25945	21565					Eu/ME/Afr	04/13/89
SW Feedback	2105	South Korea	R Korea	15575	7550	6480				Eu	11/05/88
DX Spot	2130	Spain	Spanish Nat'l R	15280	11790					Eu	01/01/89
DX Corner	2150	Israel	Kol Israel	11720	9700					NA/M Eu	04/24/89
R Sofia Calling	2215	Bulgaria	R Sofia	11730	9755					Carib	03/22/89
SML Digest	2305	Canada	R Canada Int'l	15640	15615	11605				NA	04/24/89
DX Corner	2320	Israel	Kol Israel	15225	15125					As/SE As	02/05/89
DX Asianwaves	2330	Buau	XSDA	11720	9700					NA/M Eu	03/26/89
R Sofia Calling	2345	Bulgaria	R Sofia	17665	15455	15240	9860	9800	9750	NA	03/26/89
DX Show & Mailbag	2345	USSR	R Kiev	17665	15455	15240	9860	9800	9750	NA	03/26/89
** DAY OF THE WEEK: Monday											
SW Feedback	0005	South Korea	R Korea	15575						Am	11/05/88
DX Corner	0020	Israel	Kol Israel	15640	15615	11605				NA	04/24/89
DX Spot	0030	Spain	Spanish Nat'l R	15110	9630					NA	01/01/89
DX Corner	0120	Israel	Kol Israel	15640	15615	11605				NA	04/24/89
DX Corner	0125	Japan	R Japan	17880	17845	17835	17810	5960		60S/Asia/NA	04/03/88
DX Spot	0130	Spain	Spanish Nat'l R	15110	9630					NA	01/01/89
DX Show & Mailbag	0215	USSR	R Kiev	17665	15455	15240	9860	9800	9750	NA	03/26/89
DX Corner	0245	South Africa	Radio RSA	11730	9615	9585				NA	02/28/88
DX Corner	0325	Japan	R Japan	21610	17835	17825	17810	17765	15325	15195 60S/Asia/NA	04/03/88
R Sofia Calling	0345	Bulgaria	R Sofia	11840	11735	9560	7115			Afr/NA	03/26/89
Haveguide	0530	England	BBC	9915	9510	5975				WSI NA/Ch/Carib	12/19/88
DX Spot	0530	Spain	Spanish Nat'l R	15110						NA	01/01/89
Radio World	0705	Belgium	BRT	21815	11695					SE As/AmS	03/11/89

DI Party Line	0800	0760	Ecuador	HCJB	11925	9745	6130		S Pac	03/29/89
Radio World	0905	0900	Belgium	BRT	26050	21810	17595	9925	Afr/Eu	03/11/89
DI Party Line	1030	1030	Ecuador	HCJB	11925	6130			S Pac	03/29/89
DI Asinaves	1030	1000	Guam	KSDA	13720	11980			As	02/05/89
Radio World	1235	1230	Belgium	BRT	21815	17555			SE As/NA	03/11/89
SW Club	1515	1515	Hungary	R Budapest	15160	11910	9835	9585 9520 6110	Eu	03/26/89
Diers Calling	2030	1945	India	AIR	11860	11620	9910	9755 7412	SOS/W Eu/Afr	12/26/88
RBI DI Club	2120	2100	German Dem Rep	R Berlin Int'l	9730				ENA	03/26/89
DI Party Line	2130	2130	Ecuador	HCJB	21470	17790	15270		Eu	05/03/86
RBI DI Club	2205	2145	German Dem Rep	R Berlin Int'l	9730	5965			ENA/Eu	03/26/89
DI Program	2245	2200	USSR	R Moscow	11750	9720	9685	7310	ENA	03/27/89
** DAY OF THE WEEK: Tuesday										
RBI DI Club	0005	2345	German Dem Rep	R Berlin Int'l	11890	6080			ENA	03/26/89
DI Program	0045	0000	USSR	R Moscow	17605	9685	9720	9605 7310 7215	ENA	03/27/89
RBI DI Club	0120	0100	German Dem Rep	R Berlin Int'l	11890	6080			ENA	03/26/89
SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585 9520 6110	NA	02/18/89
DI Party Line	0200	0035	Ecuador	HCJB	15155	11775	9745		NA	03/26/89
RBI DI Club	0205	0145	German Dem Rep	R Berlin Int'l	11890	11785	9620	6080	ENA/WNA	03/27/89
DI Program	0245	0000	USSR	R Moscow	17605	9685	9720	9605 7310 7215	ENA	03/27/89
Sweden Calling Diers	0305	0200	USA	WHRI	9495	7365			Eu/CA/SA	04/24/89
RBI DI Club	0320	0300	German Dem Rep	R Berlin Int'l	11785	9620			WNA	03/26/89
SW Merry-go-Round	0320	0200	USA	WHRI	9495	7365			Eu/CA/SA	04/24/89
DI Program	0345	0300	USSR	R Moscow	15455	15425	15240	12050	WNA	03/27/89
RBI DI Club	0405	0345	German Dem Rep	R Berlin Int'l	11785	9620			WNA	03/26/89
DI Program	0545	0300	USSR	R Moscow	15455	15425	15240	12050	WNA	03/27/89
DI Party Line	0600	0500	Ecuador	HCJB	11775	9745	6230		NA	03/29/89
Waveguide	1115	1100	England	BBC	11775	9515	6195		MS: NA/CA/Carib	12/19/88
SW Digest	1230	1200	Canada	R Canada Int'l	17820	11855	9635		Carib/USA	03/22/89
Sweden Calling Diers	1240	1230	Sweden	R Sweden	21610	17705			As/Pac	09/21/88
Sweden Calling Diers	1410	1400	Sweden	R Sweden	21610	17705			As/Pac	09/21/88
Sweden Calling Diers	1540	1530	Sweden	R Sweden	21610	17880	17705		NA/As/Pac	09/21/88
World of Radio	1700	1600	Costa Rica	R for Peace	25945	21565			Eu/AF	04/13/89
Sweden Calling Diers	1810	1800	Sweden	R Sweden	9615	6065			Afr	03/22/89
SW Digest	1905	1900	Canada	R Canada Int'l	17820	15260	13680		Eu/AF	09/21/88
Sweden Calling Diers	2110	2100	Sweden	R Sweden	11705	9655			Eu/AF	04/13/89
World of Radio	2300	1600	Costa Rica	R for Peace	25945	21565			As/Pac	03/21/89
** DAY OF THE WEEK: Wednesday										
Sweden Calling Diers	0110	0100	Sweden	R Sweden	17790	15390			As/Pac	03/21/89

SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	NA	03/26/89
World of Radio	0300	0100	Costa Rica	R for Peace	21565	13660					ME	04/13/89
SWL Digest	0305	0300	Austria	R Canada Int'l	11730						NA	03/22/89
Sweden Calling	0310	0300	Sweden	R Sweden	11705	9695					S Pac	03/21/89
Haa Radio Today	0800	0700	Ecuador	HCJB	11925	9745	6130				S Pac	03/26/88
Haa Radio Today	1030	1030	Ecuador	HCJB	11925	6130					Eu/Afr	03/26/88
Dyer's Special	1750	1730	Argentina	RAE	15345						Eu	02/26/88
Haa Radio Today	2130	2130	Ecuador	HCJB	21470	17790	15270				Eu	01/30/88
Dyer's Special	2220	2200	Argentina	RAE	9690						Eu/Af	02/26/88

** DAY OF THE WEEK: Thursday

Waveguide	0130	0030	England	BBC	12095	9915	9590	7325	6175	5975	MS; NA/CA/Carib	12/19/88
Haa Radio Today	0200	0035	Ecuador	HCJB	15155	11775	9745				NA	02/18/89
Dyer's Special	0220	0200	Argentina	RAE	9690						Americas	02/26/88
Dyer's Special	0420	0400	Argentina	RAE	9690						Americas	02/26/88
Haa Radio Today	0600	0500	Ecuador	HCJB	11775	9745	6230				NA	03/29/89
Media Network	1050	1030	Netherlands	R Netherland	9675	6020					Aus/Carib	04/10/88
Media Network	1150	1130	Netherlands	R Netherland	21615	21480	17575	9715	5955		Eu/ME/As	08/22/86
Media Network	1450	1430	Netherlands	R Netherland	17605	17575	15150	13770	5955		StE As/Eu	09/04/86
SW Club	1515	1515	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	Eu	03/26/89
World of Radio	1530	1500	USA	WRNO	11965						NA/CA	03/08/89
Media Network	1650	1630	Netherlands	R Netherland	15570	6020					StE Afr	09/04/86
World of Radio	1700	1600	Costa Rica	R for Peace	25945	21565					Afr	04/13/89
Media Network	1850	1830	Netherlands	R Netherland	21685	17605	15560				Afr	08/22/86
Media Network	2050	2030	Netherlands	R Netherland	15560	13700	9860				W Afr	08/22/86
World of Radio	2300	2100	USA	WRNO	13720						NA/CA/Eu	03/08/89

** DAY OF THE WEEK: Friday

Media Network	0050	0030	Netherlands	R Netherland	15315	6165	6020				ENA	03/17/89
SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	NA	03/26/89
Media Network	0350	0330	Netherlands	R Netherland	9590	6165					WNA	03/17/89
DX Show	1515	1500	Portugal	R Portugal	15245						Indi.a/ME	04/10/89
DX Show	1915	1900	Portugal	R Portugal	15250	11870					Afr	11/13/87
DX Show	2015	2000	Portugal	R Portugal	11740						Eu	04/10/89
R Sofia Calling	2045	2030	Bulgaria	R Sofia	11735	11720	9700				Eu/NA	03/26/89
World of Radio	2100	1600	Costa Rica	R for Peace	25945	21565					Eu/NA	04/13/89
R Sofia Calling	2325	2300	Bulgaria	R Sofia	11720	9700					NA/W Eu	03/26/89

1st of wkend series

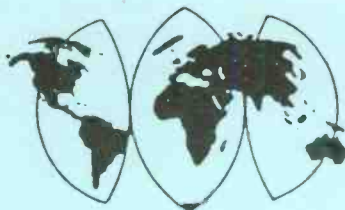
** DAY OF THE WEEK: Saturday															
World of Radio	0100	0100	Costa Rica	R for Peace	21565	13660									04/13/89
SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	MA	SA/NA			03/26/89
DX Show	0245	0230	Portugal	R Portugal	11840	9705	9680	9600			MA/CA				01/16/88
World of Radio	0300	0300	USA	WRND	6185						ME				03/08/89
SWL Digest	0330	0300	Austria	R Canada Int'l	11730						W Eu				03/22/89
R Sofia Calling	0645	0630	Bulgaria	R Sofia	11720	9700					S Pac				03/26/89
DX Party Line	0800	0700	Ecuador	HCJB	11925	9745	6130				Aus/NZ				03/29/89
Pacific DX Magazine	1000	0930	Guam	KTWR	11805						S Pac				10/28/88
DX Party Line	1030	1030	Ecuador	HCJB	11925	6130					Eu				03/29/89
SW Club	1030	1030	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	SE As/Aus/NZ				03/26/89
SW Merry-Go-Round	1115	1100	Switzerland	R Swiss Int'l	21550	17830	15570	13635			SE As/NA				09/06/86
Bonaire Wavelength	1145	1110	Netherlands	Trans World Radio	15345	11815					As				02/05/89
Radio World	1240	1230	Belgium	BRT	21815	17555					2nd Sat of month				03/11/89
DX Programme	1330	1330	USSR	R Tashtent	15470	11785	9600	9540	7325		E Afr/India/Aus/NZ				11/05/88
SW Merry-Go-Round	1345	1330	Switzerland	R Swiss Int'l	21695	17830	15570	13635	11695	9620	India				09/04/86
Pacific DX Magazine	1515	1500	Guam	KTWR	11650						Afr				02/22/88
Radio World	1540	1530	Belgium	BRT	21810	17650	17595				ME/E Afr				03/11/89
SW Merry-Go-Round	1545	1530	Switzerland	R Swiss Int'l	21630	17830	15430	13685			As/India				05/24/86
DX Asiawaves	1630	1400	Guam	KSDA	13720	11980					Eu				02/05/89
Radio World	1740	1730	Belgium	BRT	11695	5910									03/11/89
World of Radio	1800	1600	Costa Rica	R for Peace	25945	21565					UK/Ireland				04/13/89
Amateur Radio Spectr	1945	1800	South Africa	Radio RSA	21535	17795					Eu/Af				02/28/88
DXers Unlimited	1935	1900	Cuba	R Havana	11800						Eu				10/08/88
DX Radio Tips	2020	2000	Turkey	V of Turkey	9825										04/15/89
SWL Digest	2105	2100	Canada	R Canada Int'l	17875	15325					W Eu				03/22/89
Radio World	2110	2100	Belgium	BRT	9925	5910					MA/Eu				03/11/89
Communications World	2110	1700	USA	VOR	17785	15580	15410	11760			Afr				11/12/88
SW Merry-Go-Round	2115	2100	Switzerland	R Swiss Int'l	15525	13635	9885				Afr				05/24/86
DX Party Line	2130	2130	Ecuador	HCJB	21470	17790	15270				Eu				05/03/86
SWL Digest	2135	2130	Canada	R Canada Int'l	17820	15150	11880				Afr				03/22/89
DX Radio Tips	2220	2200	Turkey	V of Turkey	17760	9685	9665	9445			SE As/Eu/ME/NA				04/01/89
World of Radio	2330	2100	USA	WRND	13720						MA/CA/Eu				03/08/89
Radio World	2340	2330	Belgium	BRT	9925						MA/SA				03/11/89



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