

**NASA**

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The  
Journal  
of the  
North  
American  
Shortwave  
Association

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Volume XXX, Number 4  
April, 1990

# NEW FROM UNIVERSAL

**ICOM**

**R-1**

## SPECIFICATIONS

Dimensions .....	4"H x 1.9"W x 1.4"D 102.5 H x 49 W x 35 D mm
Weight .....	10 oz (280 g)
Power Required .....	Internal batt. or 6-16 VDC
Frequency Range .....	100 KHz - 1300 MHz 2-905 MHz specs. guar.
Modes .....	AM, FM and FM-Wide
Frequency Step .....	.5, 5, 8, 9, 10, 12.5, 15, 20, 25, 30 or 50 KHz
Sensitivity .....	AM 1.6 $\mu$ V 2-24.95 MHz <sup>1</sup> AM .79 $\mu$ V 25-905 MHz <sup>1</sup> FM .79 $\mu$ V 2-24.9 MHz <sup>2</sup> FM .4 $\mu$ V 25-905 MHz <sup>2</sup> FM-W .3 $\mu$ V 2-24.9 MHz <sup>2</sup> FM-W 3.2 $\mu$ V 25-905 MHz <sup>2</sup>
Squelch Sensitivity .....	FM < .32 $\mu$ V 2-905 MHz
Selectivity .....	AM > 15 KHz -6 dB FM > 15 FM-W > 150 -6 dB
Antenna Jack .....	BNC
Output Power .....	150 mW 8 ohms 10% Dist. (10 dB S/N) $\approx$ (12 dB SINAD)



Unbelievable! Icom has developed a super wideband receiver covering from 100 KHz to 1300 MHz that fits in your hand. (Specifications guaranteed from 2 to 905 MHz). Reception modes include: AM, FM and FM-Wide. This is the smallest wideband receiver available (measuring only 1.9"W x 4"H x 1.4"D), yet is equipped with many advanced functions. Most handheld receivers have only direct keyboard selection. The R-1 also includes a tuning control for easier frequency selection with the added feel of a communications receiver. Eleven different tuning steps are provided: .5, 5, 8, 9, 10, 12.5, 15, 20, 25, 30 and 50 KHz. Moreover, 100 KHz, 1 MHz and 100 MHz steps are also used as the dial select function. A sophisticated 100 channel memory system stores frequency, mode and skip functions. You can even mask memories. Five types of scanning are supported: programmed scan, memory scan, selected mode memory scan and auto memory write scan. A built-in 24 hour clock and automatic timer will turn the receiver on or off for convenient scheduled listening. The R-1 has a built-in Ni-Cad battery or will operate from optional battery packs for longer periods. Other conveniences include a power saver function, adjustable LCD contrast, one touch squelch monitor, a signal indicator, and an external DC jack with battery charge capability. Who could have imagined such coverage and capability in a hand-held portable? Order #2909. Price unknown at press time. Please call Universal Radio for price and availability.

**ICOM**

**R-100**

## SPECIFICATIONS

Dimensions .....	2"H x 5.9"W x 7.1"D 50 H x 150 W x 181 D mm
Weight .....	3.1 lb. (1.4 kg)
Power Required .....	13.8 VDC $\pm$ 15% 1 Amp
Frequency Range .....	100 KHz - 1856 MHz .5-1800 MHz specs. guar.
Modes .....	AM, FM and FM-Wide
Frequency Step .....	1, 5, 8, 9, 10, 12.5, 15, 20, 25 KHz .1-905 MHz 12.5, 20, 25 KHz >905
Sensitivity .....	AM 3.2 $\mu$ V 1.6-49.9 MHz <sup>1</sup> AM 1.1 $\mu$ V 50-905 MHz <sup>1</sup> FM .4 $\mu$ V 50-905 MHz <sup>2</sup> FM 1.0 $\mu$ V 905-1380 MHz <sup>2</sup> FM-W 1.4 $\mu$ V 50-905 MHz <sup>2</sup> FM-W 4 $\mu$ V 905-1380 MHz <sup>2</sup>
Squelch Sensitivity .....	FM < .32 $\mu$ V 2-905 MHz
Selectivity .....	AM > 6 KHz -6 dB FM > 15 KHz -6 dB FM-W > 180 KHz -6 dB
Output Power .....	2.5W 8 ohms 10% Dist. (10 dB S/N) $\approx$ (12 dB SINAD)



Icom's technical know-how from the R-9000 and R-700 has gone into this small-sized, affordable, multi-function receiver. Coverage is from 100 KHz to 1856 MHz (specifications guaranteed from 500 KHz to 1800 MHz). Reception modes include AM, FM and FM-wide. The R-100 is easy to operate. You can use either the keyboard or tuning control to access frequency and memory channels. Of the 121 total memory channels, 100 store operating frequencies, modes, RF attenuator and preamplifier settings. Twenty scan edge memory channels are used for specifying ten pairs of frequency ranges required for programmed scan. Auto-memory write automatically memorizes received frequencies (channels 80 - 99). One channel is used for priority scan. The built-in 24 hour clock-timer even has lithium battery backup. A 15 dB preamp enhances weak signals in the 50 to 905 MHz range. Three separate antenna jacks are utilized for .1 - 50, 50 - 905 and 905 - 1856 MHz. A large LCD display with selectable backlighting insure readability. Other supplied features include: AFC, ANL, mobile bracket and telescopic antenna. Requires 13.8 VDC. Order #0092. Price unknown at press time. Please call Universal Radio for price and delivery information.

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- Prices are subject to change.
- Full catalog \$1 postpaid

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Except Thursday	10:00-8:00
Saturday	10:00-3:00
Sunday	-CLOSED-

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## Universal Radio, Inc.

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Reynoldsburg, Ohio 43068 U.S.A.  
Toll Free: 800 431-3939 Ohio: 614 866-4267

# NASWA Notes

**Bob Brown**  
238 Cricklewood Circle  
Lansdale, PA 19446  
CompuServe 74756,1557



Let's start off April with a look in the NASWA mailbag. We received a nice letter from **Bill Hohnstein** of Waverly, NE telling us "The new NASWA *Journal* format looks super! How could I not renew after seeing the January issue?" Bill also mentioned that he would like to encourage members to mention antennas used as well as receivers with their submissions for the Loggings Contributors Page.

**Nigel Pimblett** from Medicine Hat, Alberta sent a note with his renewal that "The January issue looks real good. Mind you, I find the content far more important than the appearance, but it looks like the changes are for the better. The tropical band loggings are even in d/m/y format now, which is a pleasant surprise. I hope the Intl' loggings will change to that format too, or it could be rather confusing. Keep up the fine job."

**Victor C. Jaar** of Montreal renewed and said that he received his first copy of FRENEX in the early sixties, mailed by Bill Eddings himself (who usually managed to add a personal letter as well). "Can you believe that I almost became a celebrity overnight following my reporting of Panamanian *La Voz del Bar* on 6045... Those were the days..."

**Dale Wagner** of Margate City, NJ wrote that he "looks forward to the new style bulletin. It's a great improvement!" Dale also requested a list of NASWA members in his area as did **Brian Jones** of San Antonio, TX. and **Dan and Sue Cashin** of Haverstown, PA. We had the pleasure of meeting Dan and Sue at the WinterFest. By the way, if for some reason any member does not want his or her name to appear on these list requests as mentioned last month, please let me know.

**Vern Hyson** of Charlotte, NC sent along an interesting article that appeared in the Charlotte Observer about an International Broadcasting course being taught at Wingate College. Vern suggested that members keep their eyes open for other classroom

activities pertaining to SWL'ing and perhaps introducing the instructor and the students to *The Journal*. If you are aware of such classes, let us know and perhaps we can provide a few sample copies for the class.

On a sad note, I received a letter from **Gordon E. Witte** of Torrance, Ca. Gordon wrote to inform me of the passing of his wife, **Margie**, on 10/19/89 after an eight year fight with a very rare progressive liver disease. Margie was quite an active NASWA member with a wall full of NASWA awards including Senior DX Centurion (150 Countries verified). One of her favorite QSL's was one from the Falklands Islands Broadcasting Service dated 23 March 1983 and bearing QSL No. 126. Our condolences to Gordon and his family from the entire NASWA membership.

## NASWA Awards Program

After many years of service to NASWA as Awards Chairman, **John Kapinos** has decided it's time to retire from the duties of managing the Awards Program. Kap did one heck of a job for us and we will miss his always entertaining "kap's comments" that appeared in FRENEX. Let's tip Kap's cap for a job well done!

**Rich D'Angelo** is going to acquire the four big boxes of awards materials and has agreed to assume the position of Awards Chairman. Prior to turning over his post, Kap suggested that we raise the price of the awards. The current prices have been in effect for over 6 years and must now be raised because of increases in postage and handling. Effective immediately, the price will be \$2.00 each in North America. All foreign applications will be handled at \$3.00 U.S. for the first award and \$2.50 for each additional award applied for at the same time. Foreign cheques must be drawn on a US bank. IRC's at a rate of 40¢ each are also acceptable.

The NASWA Radio List Country Committee is currently discussing possible addi-

tions to the country list and a new Radio Country List & Awards Program booklet is in the works. I will pass on info regarding this as it becomes available. All applications for awards, or questions regarding the program should be directed to Rich. His address is 2216 Burkey Dr., Wyomissing, PA 19610. Requests for the Country List and Awards Program Booklet should go to headquarters at \$2.00 per copy.

## Changing Of The Guard

Bob Horvitz has resigned as Executive Secretary of ANARC and Sheldon Harvey has been unanimously endorsed by the Executive Council as ANARC's interim coordinator. Bob served 2 years in the top leadership position with ANARC. He said that his duties with his employer "Whole Earth Review" are consuming the majority of his time and there aren't enough hours in the day to manage ANARC and at the same time fulfill his commitments to WER. In the Feb/Mar. issue of the ANARC Newsletter, Bob said "ANARC as an organization has a lot of forward momentum now. The staff is the best it's ever been, and they will continue to provide valuable services to our member clubs and the monitoring community generally. All of our major projects--the ANARC Convention in September, the Dayton Hamvention Forum, the Sunday morning SWL Ham Net, our BBS, the Committee to Preserve Radio Verifications etc.--will all go on as usual." We at NASWA wish Bob all the best and thank him for his efforts with ANARC.

## WinterFest

Another great Winter SWL Fest is history and comments received by a number of the 148 attendees indicate that a good time was had by all. Folks started moving in to the Holiday Inn in Kulpville, PA as early as Thursday, and by Friday afternoon there was quite a gathering enjoying the suds and sodas and swapping tales in the hospitality room. Saturday was a full day with forums conducted on a variety of topics by some very knowledgeable folks. The forums were well received by both beginners and experienced SWL's and caught us a little by surprise for seating - some were standing room only! Club representatives from SPEEDX,

ADXR, CIDX, ODXA, WDXC, FineTuning, NESN, ANARC, and NASWA had displays in the ballroom. There were also demos of RTTY, FAX, and Receiver Control Software as well as a video tour of WSHB. The banquet brought quite a few laughs with Dr. DX's reminiscing on the 1st WinterFest. Three beautiful Voice Of Indonesia pennants donated by Bob Horvitz were auctioned off and the proceeds of \$151 were sent via Fr. John Eckert as a gift of financial aid to the starving children of Africa. We received a very nice thank you letter from the Missionaries of Africa for this donation. Chuck Roswell of TWR Bonaire sent along a very interesting audio/slide presentation of the TWR facilities on Bonaire. The door prize giveaways ended the banquet with the grand prize, a Panasonic RFB-65, won by Dr. Harold Cones. It was great to meet all of you there and we look forward to next year!

## MT Convention

Larry Miller has written to inform me that all NASWA members are invited to attend the 1st Annual Montoring Times Convention scheduled to be held October 5-7, 1990 at the Hyatt Regency Hotel (1-800-233-1234) in Knoxville, TN. Registration is \$30 by check or money order to Monitoring Times Convention, P.O. Box 98, Brasstown, NC 28902. Workshops, seminars, and exhibits related to all areas of radio monitoring will be represented.

## Corrections Dept.

In last months NASWA Notes, I said that one of the omissions in the 1990 edition of The World Radio TV Handbook was the English Language schedules. This is not entirely true. What is omitted is the repetition of the same information in time order as it used to appear in past issues of the WRTH. Also, we neglected to credit Billboard publications for the reprinting of the AFRICA map on page 13 of the March issue of The Journal. We apologize for any inconvenience or harm caused by these oversights.

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I look forward to your inputs for NASWA Notes. Have a good month - 73 Bob

# DXer's Forum

Rowland Archer  
5524 Hawthorne Park  
Raleigh, NC 27613  
Compuserve 70075,117



**N**ew NASWA member Mike Stone joined at the Winter Fest in Kulpville, and has already made a contribution to DXer's Forum. It's great to see a new member who is immediately active. Mike sent along an article which appeared in the *Washington Post* on March 6, 1990, written by William Booth. Titled "Scientists Won't Take Anybody's Static," it reports on a meeting of the National Research Council's **Committee on Radio Frequencies, CORF**, which represents the interests of scientists who use radio waves for research. Their usage ranges from tracking collars used by wildlife biologists to radio telescopes.

The theme of the article is that an increasing number of commercial radio spectrum users are competing for the finite radio spectrum. The parallels to the concerns of DXers are very clear. CORF's primary interest is to make sure that the portions of the radio spectrum important to scientists don't get usurped by commercial interests. Their secondary concern is to battle spectral noise pollution. The work of radio astronomers is particularly vulnerable to noise pollution; in a very real sense they are the ultimate DXers, listening to incredibly weak, distant signals plagued by noise, interference and distortion.

Thanks for the contribution Mike, and welcome to NASWA!

This month's lead article explains the technique of Spectrum Logging. If your current logbook technique doesn't quite seem to match your listening habits, give this a try!

## Spectrum Logs: A Better Way to Bandscan

by Rowland Archer

**S**cene: It's 0-dawn-hundred, a mug of coffee is steaming by the rig, and it's time to go Indo (or Latin, or whatever) hunting again. The pops in your headphones from distant Spring thunderstorms remind you that the noise-free mornings of deep winter DX are history again for another year. Tune up the 90 meter band...a het on 3222.9, *hmmm*, maybe RRI Mataram will make it in this morning...juggle the log book open, start writing...*"1030 3222.9 RRI Mataram?? Het at 1030, check back later..."* Move up the dial a bit, and there's another het at 3325, maybe Palangkaraya? Back to the log book: *"1035 3325 RRI Palangkaraya? Another het..."*

Many DXers use the bandscan technique at least some of the time, sweeping across the frequency spectrum and

making notes of what's heard. If you keep a chronological logbook, you might note the time, date, frequency, and station ID information, for each signal.

For the new DXer, almost every bandscan turns up a "new" station to log. At this stage in your DXing career, you'll want space for lots of notes on each station, and a traditional log book works well.

After a while, you'll discover that the bands are becoming more and more familiar. You'll move more quickly through the spectrum, pausing for a moment at familiar stations but primarily looking for something new, something out of the ordinary. A chronological logbook is not really set up properly for band scanning.

It's not much fun to write the same things in your logbook, day after day. The

time spent writing the same information is time that could be spent scanning onwards, looking for something new.

When you're trying to sweep across several bands in a short time, such as during the precious few minutes of grayline propagation enhancement, time is of the essence. What you really want is a system that will let you quickly compare today's signals to what you've previously heard on the band. The less time spent doing anything but listening, the more spectrum you can cover, and the better the chance that you'll hear something interesting.

### What, No Logbook?

I was talking with John Bryant one day and he mentioned that he hadn't kept a traditional log book in years. When I

asked what he did use, he explained his "Spectrum Log" technique, which was better adapted to band scanning. I ordered a copy of the Tropical Band Spectrum Log published by Fine Tuning, and put it into service.

Once I started using the Spectrum Log I found it was just right for my needs. I decided to create a similar Log using my desktop publishing computer software, expanding its coverage to include the International bands. John obtained permission from Fine Tuning to donate this enhanced Spectrum Log to NASWA for sale by the NASWA Company Store.

### Basics of the Spectrum Log

The basic concept of the Spectrum Log is very simple; it's a table of frequency by time, with stations at the intersection of

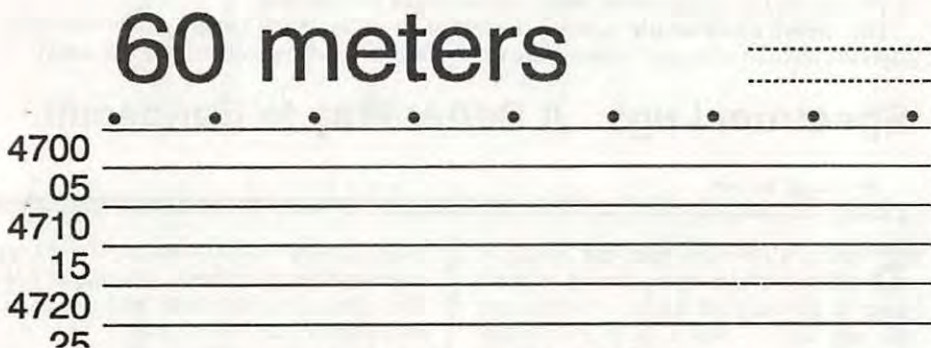


Figure 1: A sample Spectrum Log sheet

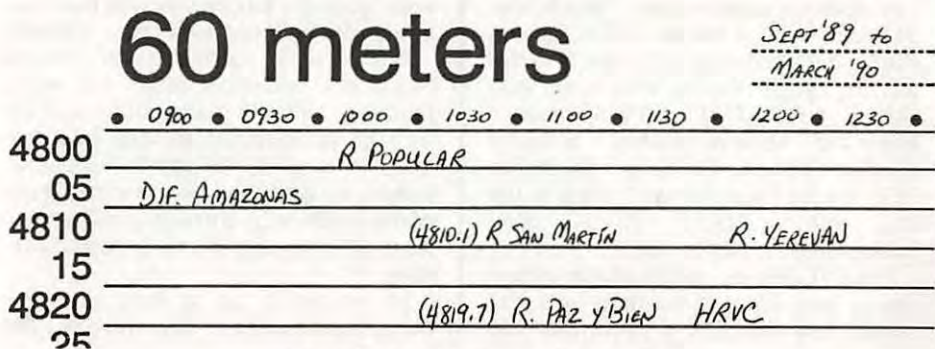


Figure 2: A partially filled-in Spectrum Log

## Perestroika in Mongolia?

by John Bryant

Now is a good time to listen to Radio Ulaanbaatar's English service. [Ed. note: The 1990 WRTH shows this schedule: 0910-0940 on 12015; 1200-1230 on 9615, 12015; 1445-1515 on 15305, 9645, 9575; and 1940-2015 on 12050, 9985, 4080. The WRTH also shows the city I formerly knew as "Ulan Bator" spelled as Ulaanbaatar.] The Mongolian government has been largely a puppet of Moscow since the Red Army installed the government in Ulaanbaatar in 1920 at the end of the Red / White Russian Civil War. The Chinese made "their" Mongolians into a "Autonomous Region" of Nei Meiggu. Since the (Russian) Mongolia was founded, the Head of Government has NEVER "chosen" to travel to a non-Communist country (and few visits beyond Moscow). Last week, the current Mongolian Head of Government visited Japan. Among other public statements, he said that he would "gladly" step aside if the Mongolian Communist Party lost the free ELECTIONS(!!!), scheduled for several months from now.

Besides making for interesting radio from Ulaanbaatar, this has to be infuriating the 85 year old Communist party leaders in Beijing for at least three reasons:

- 1) Afraid that "their" Mongols might want an election, too!
- 2) Afraid that the "Chinese Mongols" might want to hitch up with the "Russian Mongols". (Look how close the border of Nei Meiggu comes to Beijing itself...) Beijing as a capitol was founded by Genghis Khan/Kublai Khan to be between Mongolia and China. Militarily, the Mongols are the Germans of the Asian Mainland. It was no accident that "The Boys in Beijing" brought in Mongolian troops to clean out Tienamen Square.
- 3) This election malarkey was OK in Eastern Europe except for what the Romanians did to poor old Comrade Nikolai; elections were less OK in Moscow and the RSFSR; now there are going to be ELECTIONS IN MONGOLIA!!! Somebody might want elections in Beijing! (or much more likely, Shanghai!!!) This demo cracy nonsense could get SERIOUS!!!

As they say on the radio.... STAY TUNED!

\* \* \*

*Since receiving John's commentary the situation in Mongolia has been covered by NPR (National Public Radio) as well as getting some mention on the networks. The incredibly fast pace of change on the international scene makes DX'ing all the more interesting these days.*

the appropriate frequency and time. Once you've filled it in, it becomes a record of your personal bandscan. Figure 1 shows the top few lines of an unused page from the Spectrum Log as it comes from the NASWA Company Store. Each page of the Spectrum Log covers a 100 kHz portion of the band, with frequencies listed down the left side of the page in 5 kHz increments. Dots across the top and

bottom of the page define up to eight columns, to be filled in with time intervals according to your DXing preferences.

How you divide the page up into time segments is totally up to you. My needs were best met by keeping two sets of Spectrum Logs, one for my morning DXing and one for the evening. I use 30 minute intervals in the morning, starting at 0900 and running until 1200 (see Figure

## Thoughts on Money as Return Postage

by Karl D. Forth

I am concerned with the number of QSL reporters in NASWA that are using money instead of IRC's or mint stamps for return postage. I know how sensitive and defensive people can be about reception reports and verifications, but sending money for QSL's is a short-sighted practice, in my opinion.

As Sam Barto has already pointed out, one station recently replied to a reception report with a letter indicating the "price" of a verification. Other stations will undoubtedly follow suit, or will only respond to letters that include money.

If this practice were limited to rare, hard-to-verify countries where IRC's are not accepted and stamps not available it would be one thing. But I have seen reports in NASWA of dollars being sent to relatively easy-to-verify stations in Europe. Apparently, many QSL hunters are finding it easier to enclose a dollar or two in all of their reports.

I don't think it will take long for a person at a small station in Peru or Indonesia to figure out what he has to do to get more dollars sent his way. After a while, do you think he would respond to a carefully written, detailed report with stamps and perhaps a postcard, or a letter with a five dollar bill?

\* \* \*

*Thanks for giving us your views on this subject Karl. The use of dollar bills for return postage has been on the increase over the last few years. Some stations have responded to reception reports with requests for up to \$100 for a QSL, as reported in DXers Forum by Rich D'Angelo. This is not a healthy trend.*

2). In the evening, 60 minute intervals worked well, running from 2300 to 0600. I chose not to draw vertical lines connecting the dots, but you may like to use this approach to give more structure to the page. The system is very flexible--you might divide the page into 3 columns, the first representing pre-dawn, the second representing dawn, and the third representing post-dawn. Alternatively, let the three columns represent morning, mid-day, and evening. If you really want to focus in on a two hour period, you could assign 15 minute intervals to each of the eight columns.

### Using the Spectrum Log

As you scan across the band, refer to the page covering the frequency range you are tuning. When you hear a signal, make a note at the appropriate spot on the page according to the nearest frequency and

time. What you write for each station heard is as flexible as configuring the time columns. Figure 2 shows one approach.

If you are tracking a het, you might just note "het" at the appropriate spot on the page. Over the course of a series of listening sessions, hopefully you will be able to erase "het" and replace it with an ID'd logging.

If you decide to take a detailed log for reporting to NASWA Log Report or sending a reception report, you will need to use a different form. The Spectrum Log is not intended for recording program details.

The key is to note ID'd stations so when you tune across them again you can make a quick *tentative* ID. Please note the emphasis on *tentative*. As useful as the Spectrum Log is, it is just like any listing by frequency: it can lead you to jump to an erroneous conclusion. Just because

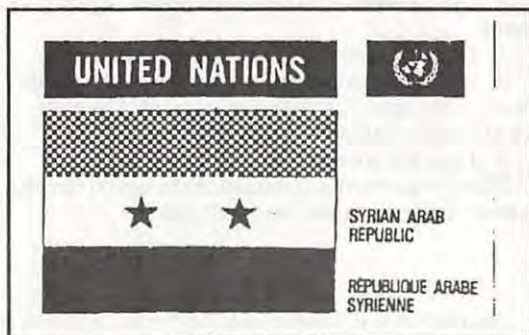
## Another Source for Flags

by Jim Renfrew

I read the item about national flags in the DXer's Forum column of March, 1990, and it reminded me of an idea I have been using for some time that might be of use to others.

To the right is a reproduction of a full-color postcard that I purchased at the United Nations Bookshop:

United Nations Bookshop  
Room GA 32B  
First Avenue and 45th Street  
New York, NY 10017



This store has a similar postcard for every member

nation of the UN. Whenever I am in New York, I try to stop by for a new supply of cards. The Bookshop is located next to the UN Post Office counter in the UN basement. I use the flag cards for self-prepared QSL cards that are sent along with my reception reports.

The postcards cost \$.20 each and can be ordered by mail from the above address. A \$1.00 shipping and handling charge covers up to a full set of 159 cards. If you have any other questions, you can reach the bookshop by telephone at 212-963-7680.

I've used them off and on, especially when I want my report to attract the attention of over-worked station personnel in distant places. I can't say that my response rate has improved any, but maybe it would have been worse had I not used them! Caution should be used when sending the flag cards, as the design of a flag can sometimes stir up angry passions in occupied or contended regions, e.g., the Baltic Republics, Yugoslavia, Kashmir, or parts of Central America.

I hope this helps someone out there.

*Thanks for sharing this tip Jim — the postcard is in full color and would look great in a QSL album as well as making an interesting envelope stuffer for reception reports.*

the frequency and time match, there is NO guarantee that what you're hearing today is the same station you once ID'd there! As you become accustomed to how each station "sounds," and this can take many, many months of listening, you may notice that something isn't quite the same today. That's when sticking around for an ID might result in a new station logging.

I like John Tuchscherer's suggestion in his article in this month's Forum to use different color erasable pens in your logs. A red pen, for example, might be used to indicate *targets* rather than loggings; a green pen might indicate hets or signals you've heard but haven't yet ID'd, warranting frequent checkbacks.

# The PENultimate Schedule Format?

by John Tuchscherer

**A**fter many years of using various methods to record station schedules, I finally settled on this format:

1. Use 12 sheets of white legal paper as per the example below, one side per each hour.
2. Draw the form with permanent ink.
3. Record schedule info using *Eraser Mate* pens. With these pens, make erasures as data changes. Use black or blue ink routinely. Use red ink to highlight countries or stations needed for a new country or QSL.
4. I use this format for non-Latins only.

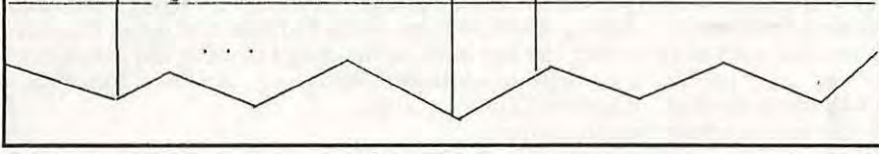
The real key to this approach is the use of the *Eraser Mate* pens. With this method, some of my sheets last over two years!

\* \* \*

*Neat idea John! John is truly the "Dean" of North American DXers and it's an honor to have his contributions to the Forum.*

*Have an idea that has helped you keep your DX records? Send it in to the Forum!*

1700 - 1800			
9560	Jordan - RJ	EG	17-2200
21705			Sun Only
15305	Norway - RN	EG	17-1730
21810	Belgium - BRT	EG	1630-1700



## Spectrum Log Masters

You can design your own Spectrum Log, or purchase Spectrum Log masters from the NASWA Company store for \$6.00 plus \$1.00 shipping for the International Version (41 pages covering 49, 41, 31, 25, 21, 19, 16, 13 and 11 meters), and \$2.50 plus \$1.00 shipping for the Tropical Band version covering 120, 90, 75 and 60 meters. If you order both together, the cost is discounted to \$7.50 plus \$1.00 shipping.

Use the log sheets you buy from NASWA as photocopy masters, so you only have to buy the logs once. This should keep the cost down.

Whether you buy the Spectrum Logs from NASWA or draw up your own, I strongly recommend that you give this form of logging a try. I'll bet you stick with it.

\* \* \*

# 90 meters

3200  
05  
3210  
15  
3220  
25  
3230  
35  
3240  
45  
3250  
55  
3260  
65  
3270  
75  
3280  
85  
3290  
95

fine tuning

**NASA**

Figure 3: A full page from the Spectrum Log

# Easy Listening

Alex Batman  
Route 1, Box 367  
Blowing Rock, NC 28605



If you've been reading "Easy Listening" for the last couple of months, you've probably noticed that we've been spending a lot of time discussing the changes in a number of Eastern European stations in the wake of last fall's political events in East Germany, Romania, Bulgaria, and Czechoslovakia. But what about the granddaddy of all Soviet bloc stations (a term that is only minimally appropriate now and may soon be totally inappropriate)? How has Radio Moscow responded to the turmoil within the Soviet Union's own borders?

## Radio Moscow

Some things never change, it seems. RM's announcers still sound as if they were shouting into a cardboard tube in front of the microphone. In fact, a recent letter from a listener read on "Reviewing Your Letters" (a program which concentrates on questions and comments about Radio Moscow and its programming rather than on the Soviet Union in general) pointed out this very fact. The announcer admitted that the complaint was a common one, and the station is "working on it." One thing I would like to say in defense of RM's announcers, however, is that their English is usually quite good, and most of them speak with a distinct American accent (which may irritate some British or Australian listeners, but seems downright homey in North America).

As for troubles in Azerbaijan and Armenia in January, RM's reporting was of a caliber and openness no one would have expected of Radio Moscow even five years ago. There were some occasional discrepancies with the way the events were portrayed on the CBS or NBC Evening News, but on the whole it was a rather fair job of accurate reporting, or at least reporting with an eye to a certain degree of openness. When CBS News, however, reported that Baku harbor had been cleared of its blockade by shelling

from Soviet gun boats, Radio Moscow only went so far as to say that the harbor had been cleared (no mention of shelling). CBS, also, would show scenes of rows of coffins of those who had been killed in the fighting, while RM acknowledged the reports of huge casualties but claimed they were exaggerated and that the death toll was much lower than reported by some other sources (notably the Azerbaijanis themselves). Nevertheless, Radio Moscow did not, as it once would have done, simply sweep the whole matter under the rug and hope that it would go away. During the last two weeks in January, the news was full of reports from the trans-Caucuses, and any number of feature programs were devoted to the situation there, usually matching (with some discrepancies, as I've pointed out) what one was likely to see on the Evening News in the U.S.

Of course, Radio Moscow was fond of calling the Popular Front "extremists" and "terrorists" when they reported on the violence. Old habits die hard. And while they did broadcast criticisms of the governments response to the situation, the most frequent criticism was the failure to send in the army soon enough before the situation got out of control. As Radio Moscow liked to point out, the reason for sending in the army in the first place was not to quell nationalist sentiment so much as it was to prevent inter-ethnic violence, a fact which, if I remember correctly, seemed to get lost after a week or so in most network news reports.

More recently RM has reported fairly and accurately the victory of the Soyudiz movement in Lithuania, and the victory of Violetta Chamorro in Nicaragua. Although RM has not made much comment about Chamorro's victory as of yet, the day after the Lithuanian election, the station featured an interview with a member of Lithuanias Independent Communist Party on the future make up of the government and the pros-

pects for Lithuania's independence in the future. The term which was once used to describe the previously independent Baltic States ("the bourgeois republics") seems to have been dropped. And when Radio Moscow reported on the nationwide demonstrations in favor of democratic reform, RM was the only station that I heard that did not point out that that crowds were smaller than expected. And yes, Radio Moscow has even admitted that the current economic situation in the country is absolutely terrible, that consumer goods are scarce and that lines are long. Compare that to the "Workers Paradise" that RM was promoting just as little as two or three years ago.

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*'Lenin must be rolling  
over in his grave'*

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But hold on to your hats for the real surprise. Radio Moscow, the official organ of the oldest and most entrenched communist nation in Europe, now broadcasts—you won't believe it—advertisements! Yes, the child of capitalism, the advertisement, is alive and well on Radio Moscow, but only in RM's new feature program "New Market" which focuses on business and investment opportunities in the U.S.S.R. (in itself, kind of a shocker). So far I've heard ads for machine parts, technology, a Moscow restaurant, and even cassette tapes of Radio Moscow's own programs. Lenin must be rolling over in his grave.

Even more traditional Radio Moscow programs have gotten a sort of face-lift. "Top Priority," which once focused almost exclusively on the arms race and its related issues, now has branched out to include a number of topics for panel discussions,

including the situation in the trans-Caucasus, the reforms of the Central Committee Plenum, and the implications of German reunification. Not only that but the panelists are not always Soviet policy experts, but now include American journalists and correspondents as well. Vladimir Posner still hosts the program occasionally but not always.

"Moscow Mailbag", too, is a much improved program. As recently as this past summer Joe Adamov, who countered any troublesome questions or criticism with the official party line, has been replaced, and one feels that the current host (whose name escapes me) is attempting to do a much more sincere job of responding to questions and criticisms more honestly. And the last fifteen minutes of most hour long broadcasts now seems devoted to music, either classical, jazz or Soviet rock.

Don't get me wrong. Radio Moscow programs are still not of the caliber of Radio Netherlands, Deutsche Welle or the BBC, but its news and current affairs department is a lot more open and accurate than it once was. Nor does the editorial policy of the station necessarily agree with everything that the West does. Recent editorials have criticized the U.S. invasion of Panama as a violation of international law (but so did many other stations) and called proposed reductions in U.S. troops in the Pacific (notably the Philippines and Korea) "insignificant" and not in keeping with the new spirit of rapprochement between the U.S.S.R. and the U.S. But if Radio Moscow still has a ways to go before it's really among the top ranked in world band broadcasters (measured by quality rather than quantity), it's certainly come a long way from where it was.

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WANTED: Hammarlund XC-100P crystal calibrator accessory. (P/N 9205-00-00021), HC-10 IF strip, and "noise immunizer." Need not look perfect, but should work. John T. Arthur, RD #1, Box 15A, Belfast, NY 14711. Phone (716) 365-8870 (not collect).

# Listener's Library

John Bryant, AIA  
Route 5, Box 14  
Stillwater, OK 74704  
Compuserve 74730,2145



Welcome back to the Library. It has been a very busy month and all sorts of folks have come by to drop off some super contributions. The first is from Dr. Harold Cones, our Editor-in-Chief. Like most of us, Harold is a long-time fan of the hauntingly beautiful Andean folk music known collectively as *huayño*. Recently Harold went to a concert performance of the North American-based group *Sukay*, and I have never heard "Dr. DX" so excited about anything. He was positively orgasmic about the "musical experience of his life," etc., etc.

*Sukay* plays both traditional music and new folk music of Bolivia, Peru and Ecuador. In these countries, which once formed the Inca empire, the Quechua and Aymara cultures are still very much alive. "*Sukay*" is the Quechua word meaning "to open up the earth and prepare it for planting." In concert, the members of *Sukay* present many ancient instruments such as sikus, antara, rondador, toyos, and other types of pan-pipes; notched flutes such as the kena, choquillas, lechewuayos, etc., and a selection of drums and rattles such as the tinya and ch'ullas, as well as a few traditional stringed instruments such as the charango, developed after contact with the Spanish.

*Sukay* is a quartet which has wowed audiences for more than a decade in the US and Canada. The leader is Quentin Howard. Prior to founding *Sukay*, she traveled throughout the Andes, studying the music and folklore. Quentin plays the pan-pipes and flutes, and lends a beautiful alto/soprano voice to *Sukay*. The three male members of the group are Bolivian Eddy Navia (a founding member of the famous Bolivian group *Savia Andina*), superb Argentine guitarist Enrique Coria and Peruvian Carlos Hilario.

A catalogue of tapes, CDs, sweatshirts

and traditional instruments may be obtained by calling 415-751-6090 or writing to: *Sukay*, 3315 Sacramento St., Suite 523, San Francisco, CA 94118.

Their tapes are about \$12.00 and are worth every penny. Harold tried to buy some at the booth in the lobby after the concert, but the place was a mob scene. By the time the ever-gentlemanly "Dr. DX" got near the booth, they were totally sold out. If you don't or can't buy a tape or two from *Sukay*, talk to your local library. Even the library at our summer home on Lopez Island, Washington (population 1400) now has a tape library for patrons!

## What The Swiss Never Told You...

Ed Januz, a NASWAN more recognizable when wearing his SPEEDX hat, was kind enough to make our first contribution about the cultures of Europe—a book called *Native's Return* by Herbert Kubly (Stein and Day, 1981). The author, an American who grew up speaking Swiss *Glärner* as well as English, wrote this book after four visits to his roots in Switzerland. This book is one of the relatively few documents in English about a surprisingly hidden, unstudied land. Although the book is opinionated, it is a very revealing travelogue.

The author's writing style is quite picturesque: Kubly meets several relatives in and around his ancestral home in Glarus, tries to cope with what seems to be a depressing and tawdry "carnival," participates in a rather awful re-enactment of a "temperance excursion" staged in 1863 by a group of British Baptists (the 20th century version was distinctly lacking in temperance) and talks with a number of truly fascinating people. The overall picture he paints is not especially happy; on a tapes-

try of natural beauty and prosperity, he sees an anxious, culturally uncreative, and rather abrasive society having trouble reconciling its traditional values with the demands of being an international center and Europe's most surprising industrial superpower.

Given Swiss Radio's famous reluctance to talk revealingly about Switzerland (a reticence which matches that of many of its citizens), *Native's Return* seems one of the most interesting ways of achieving a better understanding of this beautiful, wealthy, and contradictory land.

## License? We Don't Need No Stinking License...

Most of you are probably aware that George Zeller of Cleveland is rapidly becoming the journalistic guru of North American Pirate Radio. His first edition of the *Pirate Radio Directory*, published in 1989, was more complete than we had any right to expect from this sub rosa portion of the radio hobby. Well, George and Tiare Publications have outdone themselves in the recently published 1990 edition. It's super. Whether you are a pirate aficionado (this is the definitive history of North American pirates' activity in 1989) or a beginner in this aspect of the hobby, the 1990 edition of the *Pirate Radio Directory* is the place to start.

Virtually every North American pirate that was widely heard in 1989 is listed in the station profile section of the book. Station ID's listed alphabetically can help to identify weak signals. Station formats, frequency tendencies and other programming details found in this section can provide a good idea of what to look forward to in 1990 and '91, since many of these stations have already been heard operating in early 1990. In fact, some of these pirates,

like Radio Clandestine, have been around for years. If pirates are your cuppa tea at all, this is the book to have. I just don't know how George can be such a Pirate fan when the Indians play right in George's back yard!

The price of *The Pirate Radio Directory* is a very reasonable \$7.95 plus \$2.00 S + H to Tiare Publications, P.O. Box 493, Lake Geneva, WI 53147 (Contributed by Bryant).

## Mmmm, Please Pass The Leg Bones, Tuan...

Finally, Kevin Atkins dropped by the Library recently and raved about another "armchair adventure" book entitled *Stranger In The Forest—On Foot Across Borneo*, by Eric Hansen. As the name implies, the author travels on foot from Sarawak to the eastern shore of Kalimantan with two local guides, then back across the island to Sarawak alone.

Bartering his way across the island with shotgun shells and edible bird nests, Hansen manages to survive a number of potentially lethal encounters: infected feet, being mistaken for a legendary white ghost that drinks blood, and a curious tribesman with a five-foot blowgun and a *Sgt. Pepper's Lonely Hearts Club Band* T-shirt, to name a few.

Hansen provides a fascinating look at the people of the rain forest by living with them and adopting their customs, rather than assuming the standoffish air of many travel writers. He attempts to portray the culture in its own terms, rather than from a traditional Western perspective.

And, Kevin swears that if you read this book, you will hear every RPDT2 station still broadcasting from Kalimantan (if indeed there *are* any) using only a portable radio with a clothes hanger as a loop antenna!

---

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Kubly, Herbert, *Native's Return* (New York: Stein and Day, 1981) 342p.

Zeller, George, *Pirate Radio Directory—1990 Edition* (Lake Geneva: Tiare, 1990) 88p.

Hansen, Erick, *Stranger in the Forest—On Foot Across Borneo* (Boston: Houghton Mifflin, 1988) 286 p.

## VOODOO SCIENCE REVEALED

Last month we covered the basics of resistance and reactance, with the promise of finishing with impedance and its practical value to the shortwave listener.

If you are like me, it's always frustrating when an editor blithely refers the reader to something printed in a previous column. Heck, I'm lucky if I can find my magazines a week after they have arrived. So we'll start this month's Technical Topics by repeating the more important formulas introduced last month.

CURRENT = VOLTAGE / RESISTANCE

$$\text{or: } I = E / R$$

REACTANCE<sub>inductance</sub> = 6.283 x  
FREQUENCY x INDUCTANCE

$$\text{or: } X_L = 6.283 \times F \times L$$

There is one other formula I should mention here. When we discussed inductors or coils last month I mentioned that a capacitor is the opposite of a coil. When the frequency goes up, the reactance goes up for a coil, but it goes down for a capacitor. This gives us the formula for the reactance of a capacitor:

REACTANCE<sub>capacitance</sub> = 1 / (6.283  
x FREQUENCY x CAPACITANCE)

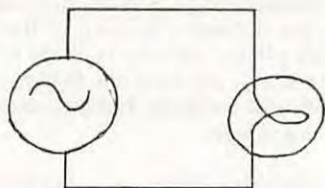
$$\text{or: } X_C = 1 / (6.283 \times F \times C)$$

How about that? We have gone from a basic discussion of resistors to learning formulas with subscripts 'n everything! Let's write these formulas again right next to each other:

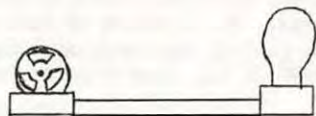
$$I = E / R \quad X_L = 6.283 \times F \times L$$

$$X_C = 1 / 6.283 \times F \times C$$

We have just learned how to predict the behavior of resistors, inductors, and capacitors at any current, voltage, and frequency. But if we are interested in antennas, why do we need to worry about electronic components? Because every electronic circuit and device, even an antenna, behaves partly like a resistor, partly like an inductor, and partly like a capacitor. A simple circuit, shown below, has elements of all three:



Circuit Diagram



Physical Layout

The two wires in the above circuit are close together, forming the two plates of a capacitor, so the circuit has capacitance. The wires

tiny resistance of their own, so there is undesired resistance. And inside the light bulb, the filament is a coil of tungsten wire, which forms a coil - which has inductance. This is probably an oversimplified example, but it does show that resistance, inductance, and capacitance spring up in the most unlikely places. They can't always be ignored. Let's look at a more familiar example of combined resistance and reactance in a circuit - coaxial cable:



Coaxial Cable

## COAXIAL CABLE

In typical coaxial cable, there is a center conductor, a layer of insulation (either foam or solid plastic), and a layer of braided wire or foil. The cable is then coated in an insulating layer of plastic or rubber. This cable is most often used to carry radio frequency signals to or from an antenna. One of the most familiar ratings of coax is *characteristic impedance*. It is called *characteristic impedance* because the value is an average taken for the cable as a whole. Under some circumstances the impedance will vary all along the cable, but we won't get into that now.

In shortwave listening, we most often use 50 or 75 Ohm coax. This is, of course, an *impedance* rating, not a *resistance* rating. If you measure the resistance of coaxial cable (or even a typical shortwave antenna) you would find a reading of *infinity*. There are meters that measure impedance, known as impedance bridges or impedance meters. They are not particularly easy to use for the beginner, so manufacturers rate their coax and antennas for you. The values given are seldom exact, but are normally close enough for average use. If you would like to calculate the

impedance of coaxial cable, the following formula give a very good approximation:

$$Z_{\text{coax}} = (138 \times \log_{10} D1/D2) / k$$

D1 is the inside diameter of the outer conductor in inches

D2 is the outside diameter of the inner conductor in inches

k is the "dielectric constant" of the insulating material. These values are published in most ham radio books. For common coax we can use polyethylene, which has a "k" of 2.3

For an example, then, let's assume we have 1000 feet of unmarked coax cable. We sure would like to use it, but what impedance is it? We measure it and find the inner conductor has an outer diameter of .07 inches. The inner diameter of the outer conductor is .5 inches. We guess from looking at it that the insulating material inside is polyethylene. Our formula gives us:

$$(138 \times \log .5 / .07) / 2.3 \\ = 77.7$$

So our coax is very close to 75 ohm coax, making it great for dipole antenna feeds.

## WIRE ANTENNAS

Although the following discussion pertains to most antennas, there are factors involved with non-wire type antennas that will force us to limit this discussion to "wire antennas."

The impedance of an antenna varies infinity at various places along the antenna. The figure below shows a typical dipole wire antenna, with each of its two lengths equal. This antenna has almost infinite impedance (an "open circuit") at the ends, and very low impedance (sometimes almost a short circuit) at the center.



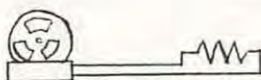
### Dipole Antenna

The signal energy from a dipole is normally put in (while transmitting) or taken out (while receiving) from the center of the antenna. The point at which signals are taken from or added to an antenna is known as the "feed point."

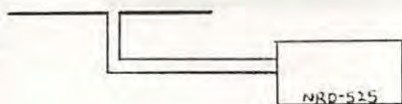
### IMPEDANCE MATCHING

This is where it all comes together. Are you still with me? Good. This is what differentiates the casual hobbyist from the dedicated enthusiast.

We all know that the point of an antenna and its feedline (coax or whatever) is to get the most signal from the airwaves to our receiver. If we fail there the game is over before we start. We can build or buy the best antenna and mount it as high as possible, and buy the best coax (if you make your own I would like to talk to you...) but still not get good results. Why? Because there is a rule sometimes referred to as the Energy Transfer rule. This formidable sounding rule is actually rather simple. To get the most energy from a generator to a load their impedance should be equal. This also includes the cable used to get the energy from one to another. Generator? Load? You thought we were talking about antennas and receivers, you say? We are! An antenna, when used for receiving, can be thought of as a generator. It receives energy from the airwaves, and makes them available to the cable. The receiver is a load. It takes the energy as converts it to another form (audio). Below is a block diagram of a generator and load, followed by the equivalent antenna and receiver arrangement.



Generator/Load



Antenna/Receiver

Following this rule you can see why it is important to use the right coax with the right antenna. If an antenna is made with a 50 ohm feedpoint, then ideally you should use 50 ohm coax and have a receiver with a 50 ohm input. If you use an antenna with a 75 ohm feedpoint, and connect it to a 75 ohm receiver input with 50 ohm coax, you are introducing two impedance mismatches - one at each place 75 ohm impedances hit 50 ohm impedances. And each time there is an impedance mismatch there is precious signal lost. The ideal is not always possible, but as with most other ideals, we can approach it.

Most receivers have inputs rated at "50-75 ohms." This means that the front end of the receiver is designed to be sufficiently broad to accept any impedance in this range without significant losses. The receiver won't mind if you use either 50 ohm or 75 ohm coax. Antennas are not so forgiving.

Antennas are given an impedance rating, as mentioned earlier.

This rating is for the center of the antenna's operating frequency. At other frequencies, this impedance figure will change. What's to be done, especially with antennas used over a comparatively huge frequency range? You use an antenna tuner. This device, as described in previous *Technical Topics* columns using impedance matching circuits to make the receiver think it is seeing its desired impedance. If the antenna and coax don't match it doesn't matter. They are treated as a "lumped impedance" and matched accordingly.

### CONCLUSION

We have come a long way to discover why an antenna, coax, and receiver system should be matched. But perhaps knowing why this is so will have meant more to you than just being told it should be. I have presented a lot of math here, as well as advanced topics, at the risk of chasing away some *Journal* readers. I hope this hasn't occurred. I sincerely welcome your comments about this or any other *Technical Topic* column, and would like to again extend an invitation to anyone who has an urge to write about a technical topic to contact me. The past contributions have made some very interesting (and controversial) reading, judging from the mail they have generated. And at the risk of being boring, this is your club, and by extension, your column. An Editor is simply someone who alters or refines something that has already been written.

### MEA CULPA MAXIMA

In January's *Technical Topics* column I referred to radio noise from appliances and power lines as "QRM." My reasoning was that QRM was man made noise, and nature didn't create fluorescent lighting, man did. But Bill Hohnstein of Waverly, NE takes exception to this, and, as any involved member should, Bill wrote to point this out. Point well taken, Bill! QRM is most correctly interference to one station caused by others. Unfortunately, I do most of my hamming on the UHF and microwave bands, where "Q" signals are not used (or even welcome), so I

goofed when I used "QRM." The correct term should have been "QRN," where the "N" refers to "Natural."

Bill also advised of a pet peeve of his: people who spend \$1,000 on a receiver, and then spend \$50 on an antenna. I agree with Bill so far, as anyone who has read my past columns would know. But Bill suggests that one spend at least \$50 of the cost of a receiver on an antenna. Well, Bill, although you probably could find a commercially made general coverage shortwave antenna for \$500, I can't for the life of me see why anyone would need to spend that much. Your sentiment is in the right place, though. A Datong active antenna, or similar quality unit, can be had for around \$150. An although just about everyone has room for an NRD-525 on his desk, not everyone has the wide open spaces of Nebraska in which to erect a multiband log-periodic antenna, with a boom length of 60 feet and a weight of 1200 pounds! Even the best multiband wire antennas cost under \$100. I would much prefer to see someone spend extra money on top-grade coax and an antenna matching unit to improve their reception.

### CONFERENCE ALERT!

I have long maintained that there is SWL life west of the Mississippi, though guessing from the locations of most SWL conferences this view is not shared by our brethren on the east coast. To this end, several NASWA members and I are soliciting comments from Midwest and west coast SWL's about an SWL conference to be held in Southern California. We have tentatively selected San Diego (the fact that I now live there is strictly a coincidence) as the place, and the Fall of 1990 as the time. We welcome comments and suggestions on this idea. Interested SWL's should forward comments to me at:

426 Fulvia Dr.  
Encinitas, Ca. 92024  
619) 944-0639

73's Ted Berman

# Company Store

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



The Winter SWL Festival kept the Company Store busy during the weekend of 23 - 25 February. Thanks to the many club members that stopped by to say hello. You kept Dave Turnick and I busy during the FEST. I'll be running pictures of some of the attendees that stopped by during that memorable weekend over the next few months in this column.

Pictured to the right is the Journal's chief Librarian John H. Bryant at the West Coast Branch of the NASWA Library. Besides being a top flight DXer and superb Librarian, John is also a snappy dresser. Note the coordinating NASWA sweatpants. Now where did he get those? [For those interested, they are priced just like the sweatshirts.]



Reprint Service Distribution Manager Dave Turnick reports a abundance of orders for reprints from the catalogue. Consequently, we are experiencing a slight delay in filling orders. Your patience is greatly appreciated, thanks. Hopefully we will be all caught up in the near future. However, don't hesitate sending in those reprint service catalogue orders. All orders will be filled as soon as possible.

Last month we introduced the lined windbreaker jacket. Member Fred Kohlbrenner had his order in my mailbox before my JOURNAL arrived. I wonder how he did that? It was a pleasure seeing Fred at the FEST!

## The Spring Line - Part II

By popular demand, this month we introduce the NASWA poplin golf hat. Made by Imperial, this top of the line hat has a handsome leather strap with a brass fastener in the back to adjust the size. Naturally, it is in NASWA Royal Blue with the club logo in white. Order Now!

**POPLIN GOLF HAT      US\$14.00**

Remember, we still carry the other items that make NASWAns the best dressed DXers:

**SWEATSHIRT:** Available in sizes small (S), medium (M), Large (L) and extra large (XL) for US\$20.00. There is a US\$2.00 extra charge for extra, extra large (XXL).

**T SHIRT:** Available in sizes S, M, L and XL for US\$11.00. There is a US\$1.00 charge for XXL.

**LINED WINDBREAKER JACKET:** Available in the usual sizes with an extra US\$2.00 charge for XXL.

All items are in NASWA Royal Blue with the club's logo in white over the heart. There is an additional US\$3.50 charge for UPS shipments to major metropolitan areas in Canada. Overseas inquires are encouraged. We have already made arrangements for overseas shipments. Please ask.

Remember to order your Reprint Service Catalogue for only US\$1.00      73 - RAD  
Make checks payable to either Richard D'Angelo or The NASWA Company Store

# Listener's Classroom

Dr. Harold Cones  
2 Whits Court  
Newport News, VA 23606  
Compuserve 71570,411



Welcome to *Listener's Classroom* for April. The mail has been good and I have heard from a number of you since January. I have sent your questions along to various authorities in the hobby and look forward to sharing their responses with you in the months ahead. Please "keep them cards and letters comin'!"

This month's question is one that several of you have asked and, although it does not relate to the shortwave hobby in general, April seemed like a good time to answer it (not to mention the fact that I have not received any answers back so far this month). Basically, the question is something like, "I'm new to *NASWA* and would like to know who does what in the organization."

The day-to-day activities of the North American Shortwave Association are conducted by the Executive Director, Bob Brown. A typical decision for Bob might be if we should buy a *NASWA* Banner to hang over our booth at ANARC Conventions or at the Winter Fest (we did, by the way--a large oil cloth banner with our new logo in *NASWA* tee shirt blue). Bob spends several hours every night tending to the many things that need to be done to keep *NASWA* running smoothly. Bob also works closely with Kris Field, the Assistant Executive Director. Kris helps Bob in many ways, especially with correspondence and record keeping. These two guys are the chief *NASWA* cheerleaders and publicity getters.

Once a month, Bob and Kris go over to Headquarters at 45 Wildflower Road and help the publisher, Bill Oliver, put the *Journal* together (for those of you who envision a tall office building with printing presses in the basement and a flag fluttering gently overhead, dream on--I will take you on a tour of Headquarters in several months). Bill is magic with the layout work and is the chief contact with the printer. Bill also receives all club monies and writes the checks to settle accounts. Before the reorganization, Bill did all the work that the Executive Director, Assistant Executive Director, Publisher, and Editor in Chief do now. Bill's dedication to the hobby was recently recognized when he was presented with the very first *Fine Tuning* Outstanding Achievement Award.

The Editor in Chief (currently me) is responsible for all that is found between the covers of the *Journal*. I correspond with the editors and relay change in policy as well as your comments. I rely on the Editorial Committee (Rowland Archer and John Bryant) and the Graphics Committee (we call it "GRAFCOM" 'cause it sounds official)--John Bryant, Kevin Atkins and Guy Atkins (no relation)--for help, ideas and support. The Editor in Chief orchestrated the work done by the various subcommittees that led to the new *Journal*.

Overall control for everything that goes on in *NASWA* is vested in the Executive Council. The Executive Council is made up of the Executive Director, the Assistant Executive Director, the Publisher, the Editor in Chief, and four members-at-large, currently Jerry Berg, Gerry Dexter, Glenn Houser, and Don Jensen. Examples of recent Executive Council activity was the approval of the new dues structure and the new format of the *Journal*.

The real meat of the *Journal* (and *NASWA*), of course, comes from the hardworking column editors, who spend a great deal of their time (and often their money) to provide you the quality publication you hold in your hands. No one on the *NASWA* staff receives club money for their work (other than postage expenses).

I hope this helps you better understand *NASWA*. If you have further questions about club operation, please feel free to contact anyone whose name appears on the back cover.

# the page

COMMITTEE TO PRESERVE RADIO VERIFICATIONS

JERRY BERG, Chairperson • 38 Eastern Ave. • Lexington, MA 02173 • (617) 861-8481

To Spain this month. The Spanish Civil War was still going on in 1938 when these were received by Art Hankins. As reported in the January 1937 Radio News, "Shortly after hostilities broke out, the Spanish rebels seized EAJS at Seville, and immediately began broadcasting propaganda, war news, claims of victory, and other military news meant for the public. . . . Within one week every major broadcasting station in Spain was directly controlled by either the Rebels or the Loyalists." +++ The veris at the lower right says Salamanca, but "Burgos" is penned in on the back. Salamanca was the site of Radio Internacional, which was well heard and often reported on 10370 kHz. +++ The larger card is a schedule that was sent separately and that lists some of the Spanish SW stations of the day: FET1, Valladolid, 7008 kHz; Radio Espana in Bilbao, 7248 and San Sebastian, 7204 (variously known as Radio San Sebastian and Radio Journal); Radio Nacional in Madrid on 6750 and 7050 (also

calling itself Radio Norte); EA9BJ in Alcazarquivir, Spanish Morocco on 7125; FET5, Burgos, 7351; EA8AE, Las Palmas (Canaries), 7152; EA2BH, Jaca (Spain), 14115 and 7717; and EA9AH, Tetuan (Spanish Morocco), 13982. And there were many others. The broadcasting scene appears to have been as chaotic as the politics and the fighting, but a DXer's delight. We'll come back to EA9AH, and the Spanish foreign service (EAQ), another time. That's all for now --

**ESTADO ESPAÑOL**  
RADIO NACIONAL DE ESPAÑA  
Lugar: \_\_\_\_\_  
página: \_\_\_\_\_  
fecha: \_\_\_\_\_

Arthur M. Hankins,  
1006, Lyones Street,  
Lakobe.

4 OCT 1938

Radio Nacional de España

**Programas y Programas de emisión de las principales Emisoras Nacionales**

<b>FET SALLADOLID</b> 703 de 6210 M 12-30 información 17-30 información 18-30 part. 19-30 20-30 deportes 21-30 del. 22-30 23-30 información	<b>MADRID</b> 701 de 6195 M 12-30 información 13-30 esp. y fr. 20 esp. y fr. <b>RADIO E A F 101</b> Zamora 830 de 6125 M 12-30 información 13-30 esp. y fr. 14-30 esp. y fr. 15-30 esp. y fr. 16-30 esp. y fr. 17-30 esp. y fr. 18-30 esp. y fr. 19-30 esp. y fr. 20-30 esp. y fr. 21-30 esp. y fr. 22-30 esp. y fr. 23-30 esp. y fr.	<b>ALCAZARQUIVIR</b> 7125 de 6210 M 12-30 esp. fr. y info 13-30 esp. fr. <b>FET 5 BURGOS</b> 7351 de 6251 M 12-30 información 13-30 información 14-30 información 15-30 información 16-30 información 17-30 información 18-30 información 19-30 información 20-30 información 21-30 información 22-30 información 23-30 información
<b>RADIO ESPAÑA BILBAO</b> 7248 de 6190 M 12-30 información 13-30 información 14-30 esp. y fr. 15-30 esp. y fr. 16-30 esp. y fr. 17-30 esp. y fr. 18-30 esp. y fr. 19-30 esp. y fr. 20-30 esp. y fr. 21-30 esp. y fr. 22-30 esp. y fr. 23-30 esp. y fr.	<b>RADIO NACIONAL A Z</b> Tetuan de Madrid 8790 de 6475 M 12-30 información 13-30 información 14-30 información 15-30 información 16-30 información 17-30 información 18-30 información 19-30 información 20-30 información 21-30 información 22-30 información 23-30 información	<b>LAS PALMAS - HABAE</b> 7152 de 6190 M 12-30 información 13-30 información 14-30 información 15-30 información 16-30 información 17-30 información 18-30 información 19-30 información 20-30 información 21-30 información 22-30 información 23-30 información
<b>RADIO ESPAÑA</b> San Sebastian 7204 de 6154 M 1447 de 1207.3 M 12-30 información 13-30 información 14-30 información 15-30 información 16-30 información 17-30 información 18-30 información 19-30 información 20-30 información 21-30 información 22-30 información 23-30 información	<b>RADIO NACIONAL A Z</b> Tetuan de Madrid 8790 de 6475 M 12-30 información 13-30 información 14-30 información 15-30 información 16-30 información 17-30 información 18-30 información 19-30 información 20-30 información 21-30 información 22-30 información 23-30 información	<b>JACA</b> 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M 14115 de 7125 M 7717 de 7125 M



A Committee of the Association of North American Radio Clubs

# Listener's Notebook

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**AFGHANISTAN** - Radio Afghanistan observed on new frequencies. Monitoring research 4-11 Mar 90: 1630-17 AR 17590, 15295; 17-18 Pashto & Dari, 1830-1930 EG 15440, 11830. (WBI 3/16) Radio Afghanistan Freq change as 3/4: 1830-1930 EE 15440, 11830 (both via USSR), 9635 (weak seems to be from Afghanistan) & FF at 1930. (Andy Sennitt, WRTH, via Radio Nederland's 'Media Network' on 3/8). EG Service to SE Asia heard 09-1030 21600, 17720, 9635, 4945. (Mathias Gatske, W. Germany via 'Sweden Calling DXers' 3/14 via Mike Fern, CA) Note: This is a change from WBI Sked in 'March LN' (bmm)

**ALBANIA** - Radio Tirana EE Sked as announced on 3/1: Eur: 0630 9500, 7205; 1830 9480, 7120; 2230 9480, 7215; NA: 0230, ~~0330~~ 11825, 9760; 2330 11825, 9760, 6120; Asia & Australasia: 0700, 11835, 9500; 1300 11855, 9500; Africa: 0430, 1530 11835, 9500. (WBI 3/9)

**ANGOLA** - Radio Nacional has made some changes to its international service: FR at 19, EG 20, SP 21 on 9535, 7245, 3375. MW has been dropped. The Domestic A program is being heard on 5500 replacing 4953 from 15-05. It is also being heard at 04 on 6530 in parallel w/5500. The location of the 6530 kHz transmitter is unknown.

The UNITA radio is being heard irregularly on 7390NF//9700 at 05. It is also heard at 1100 on 9850NF//11830. (Richard Ginbey on Radio Nederland's Media Network 3/16 via Mike Fern, CA)

**ARGENTINA** - 9115.0USB, R. Continental, 2330-0000 on 2/9, fair, SS. Football relay program by Continental Network. Many local advertisements. ID as "Es la Cadena Continental de Argentina integrando todo el equipo de futbol..." In Feb. not heard R. Rivadavia. (Takayuki Inoue Nozaki, Tokyo in his Relampago DX No. 1 EE Edition 2/19)

**AUSTRALIA** - The DX program "Communicator" and the "Bright Spark" series on the history of radio have been replaced at 1430 Mon UTC by a new series titled "Points of Law." Heard on 3/6,7. Radio Australia now using 13700 from 06-08. Also heard on this freq around 1400. (Mike Fern, CA)

Programmes produced by the "Top End Aboriginal Bush Broadcasting Association" - TEABBA - are now available on shortwave, from the transmitter at Katherine, Northern Territory. TEABBA is an organization consisting of representatives of 16 Top End Aboriginal Communities, and was established late in 1989. This means that Aboriginal people living in remote areas of the Top End of the Northern Territory are now producing their own radio programmes, with Top End languages being used, as well as English and Kriol. Many Top End people will be hearing their own language on radio for the first time, according to this station. Studios are at Batchelor, and the station has the slogan "Radio Rum Jungle". It broadcasts on Mondays to Fridays local days, from 2020 to 2100 on 2485; 21-23 on 5025, and from 0705-08 on 5025. The morning programme is called the "Bush Breakfast Show", and includes community news, documentaries, oral histories, music, weather, interviews, sport, as well as taking ABC National News and the current affairs show "AM" from Sydney. The afternoon programme is known as the "Drive Time Show" and features music, requests and community news. Our thanks to the Department of

Aboriginal Affairs for passing along details of "Radio Rum Jungle". (R. Australia's Japanese DX Time 3/3) Melvin Gorr, WI says he is hearing Australia on 2410 coming on at 1130 on freq of 2410. Has anyone heard this? (Note: Radio Enga, PNG is also on this freq.) Update on 3/4 RA Sked: Recommended freqs to United Kingdom/Europe: 21775 10-14 325/C250; 15240 05-09 118/S100; 13700 1530-18 325/C300; 9505 18-20 325/C300. United States: 21740 22-0730 063/S50; 9580 0830-1430 063/S100. This reception is directed to the Pacific. Reception further afield is influenced by propagation conditions and frequency congestion. (Keith Synnott, RA's Publicity Officer) 11720, 1448, RA, EG, Waltzing Matilda t/\*1500 (New Time)//15485 (where I heard announcement of test transmission on 1720 on 3/22 (bmm) 13700 (New Time), \*0600, RA, EG on 3/21. (bmm). Mike Fern CA says this is \*06-08\*. 13740NF, 1603, RA, W w/Int'l Report ex 13700//15485NF ex 15160//11930, 9770, 9655, 9580, 7240, 6060, 5995 on 3/15 (bmm)

BELGIUM - BRT EE from 3/25 broadcasts 1 hour earlier and Joe Hanlon, PA tells me the 2330 will be on 13675, 11695 & the 2100 will be on 9925 & Mon-Sat at 1230 on 17555 but Sun at 1130 17555. Radio Australia's Japanese DX Time Program on 3/3 says BRT now rearranged sked and there will now be a daily service to Australia from 0630-07 on 11695//6035 & 13675 intended for Europe. To SE Asia from 1230-13 Mon-Sat & 1130-12 on Sundays on 21810. Both broadcasts will also be carried on 17555 intended for NA.

BOLIVIA - 4830, 1011-1125, R. Grigota, f/p w/QRM from R. Tachira, Venezuela on co-channel, SS. Program "Amanecer Ranchero" w/Mexican Ranchera music & listeners' salutation service on 1/21. (Takayuki Inoue in his Relampago DX Pub No.1 EG Edition, 2/19)

BRAZIL - Radio Clube de Marilia, 3235 kHz., 1000 watts, from 08-04 UTC. Sub-Gerente is Dorival Lopes dos Santos. Information from him via wife of former Director of Station. (Marlin A. Field, MI)

CHINA - 15385NF, 2130-2155, CPBS Minority Broadcast, KK & from 22-2225 Mongolian. (Bob Padula, Surrey Hills on RA's Japanese DX Time on 3/3)

COLOMBIA - 4884.9, Ondas del Meta, Reactivated again! Noted at 0720-08 on 2/10, Fair, SS. Program "Bailable Sabatino" w/musica bailable as Salsa & Vallenato. ID at 0729 as "Escuchando Ondas del Meta, su onda en primer lugar de sintonia." Don't confuse w/ZY stations. (Takayuki Inoue Nozaki in Relampago DX No. 1 EE Edition 2/19.)

COSTA RICA - La Voz de Centro America en el Caribe (the Central American freedom station using Radio Impacto's transmitters) still going on 3/6,7. Both 5044 and 6150 kHz heard between 06 and 0645. It has cleaned up its act, may have brought in producers from the Voice of America or Radio Marti. The typical Mexican heavy-handed approach is gone. So apparently are the correspondents in Central American capitals. Still using the two-announcer team to read the news at high speed. But it has its own recorded musical ID. Now doing interviews with third parties about the future of Nicaragua. I think this station will be around for some time, well after Mr. Chamorro takes office, because of the Nicaraguan inflation. With the cordoba trading at 50,000 to the dollar, very few Nicaraguan stations will be able to afford an American news wire. (Mike Fern, CA)

CUBA - Radio Habana DX Spotlight Feb. 25 by A. Coro (Program Presenter): Radio Rebelde, Havana is testing in the 90m tropical band on 3385 kHz. (no times provided). May try other frequencies. Heard here 0645-0707 on 2/28. Weak fading. Musical ID at 0707. 5025 not heard at same time, so maybe not heard at same time, so maybe only one transmitter & note Soviet Cuba relay on 4765v good at this time. (Mike Fern, CA)

Observations on Radio Rebelde's shortwave outlets: Monitoring research Feb-Mar 90: Radio Rebelde's second tropical band outlet, which was first observed during February on 3383.7 kHz, is now heard on 3359.8 kHz. This frequency relays Radio Rebelde's mediumwave service 24 hours a day. Radio Rebelde's main shortwave outlet, on 5025 kHz, continues to operate in parallel from sign-on 1000 gmt until

sign-off at 0500 gmt. This frequency occasionally moves to 5022.5 kHz, possibly to avoid interference from Radio Impacto, Costa Rica, which sometimes uses 5030 instead of 5044 kHz. (WBI 3/16)

Radio Moscow closed MF relay in Cuba? Radio Netherlands, Hilversum, in English 1050 gmt on 3/8: Excerpt from "Media Network" report: There was a meeting in Washington recently at the US-USSR information talks and it appears that Radio Moscow's broadcasts on 1040 kHz from Cuba will end at the end of this month. Monitoring research 9-12 Mar 90: Relays of Radio Moscow's World Service and North American Service were heard on 1040 on 9 March as usual, but the transmitter appeared to be the air when checked on 10th and 11th March. Other Radio Moscow relays from Cuba (on 11840 and 4766 kHz) continue to follow normal schedules. (WBI 3/16)

DENMARK - Radio Denmark via Radio Norway Int'l, all bdcsts 25 minutes:  
0030 SAM 15225, SAsia, Indian Ocean, Austral. 11865; 0130 N&CAM 9615, C&SAM 15360; 0230 NA 15360, 9560; 0330 NA 11735, 9565, ME, Afr 11925; 0430 NA 15310, 11865, ME, Afr 15170, ME, Indian Ocean 11925; 0530 NA 11840; 0630 Eur 9590, Pacific 15165, ME, Afr 21725, Afr 15175; 0730 Eur 9590, Eur, W Afr 15165, Far East, New Zealand 21730, Far East, Austral. 25730; 0830 FE, New Zealand 21730, FE, Austral. 25730, Eur, W Afr 17785(KS), NA 15165(KS); 0930 FE, Australia, New Zealand 25730, SAsia, Indian Ocean, Austral. 21730; 1030 FE, New Zealand 21730, SAsia, Austral. 25730, Greenland 15165, Eur, Afr 21640; 1130 S&CAM 17780, SAM 21640, FE, Austral. 17860(KS); 1230 NA 15165, N&CAM 21705, SAsia, Austral. 21640(KS); 1330 Eur 9590, SAsia, Indian Ocean, Austral. 21710, FE, Austral. 15195, N&CAM 21705; 1430 SAsia, Indian Ocean, Austral. 21710, SAM 25730, N&CAM 21705; 1530 NA 17765, 15310, Afr 25730; 1630 ME 15175, ME, Afr 25730, N&CAM 21705, 17765; 1730 Eur 9655, Eur, Afr 15220, Afr 25730, NA 17765; 1830 NA 17765, Eur, ME, Afr 15165, ME, Indian Ocean 15265, Eur, Afr 15210; 1930 Eur, ME, Afr 15165, W Afr, SAM 21730, Eur, S Afr 15190(KS); 2030 Eur, Afr 11860, W Afr, SAM 21730, Greenland 15165(Summer); 2130 Far East 11790, W Afr, SAM 21730, Austral. 15185, Greenland 15165(Winter); 2230 SAM 17705, W Afr, SAM 15180, FE, Austral. 11790(KS); 2330 N&CAM 11930, N&CAM 15325. (KS) =Not Sun (via World News by Noel Green in DSWCI 3/90)

ECUADOR - HCJB DX Party Line on 2/27 w/Brent Allred announcement: "At about 2 a.m. on February 21, some unidentified men entered the HCJB transmitter site at Pifo and took some transmission equipment as well as a station vehicle. There have been no reports of any physical or personal damages involving any of the personnel stationed at Pifo. We have been able to maintain some of our transmitters on the air but we are operating on a reduced transmitter schedule. Therefore, if you can't find us on one of our published frequencies, please try another one. You may also experience delays in transmitter and antenna switching. Please bear with us during this time. We hope we can be back to full operation as soon as possible." (John Carson who called me and sent tape, and Mike Fern, CA for written transcript.)

The following changes in HCJB's EG services have been made because of the theft from the Pifo transmitter site on 2/21: 11740 not used in the EG morning release from 1130. This program is now heard from 1200 on 17890 and 15115. The second evening English-language release for NA on 15230 is unchanged. The 500kW transmitter is not in service. 6230 kHz is not used between 05-07 to NA. 15155 is used from 0030-05 and 05-07. 11795 kHz has replaced 11775 kHz (because of QRM from Radio Nacional de Espana's Latin American service in SP). It is in use from 0030-07. 9745 is used to NA from 0035-03 and 05-07. No changes have been made in the South Pacific Service. 9585 is not used in the European morning service. 21470 is not used in the European evening service. 15270 to Europe is used only until 2000. (HCJB DX Party Line on 3/6 w/Presenter Brent Allred via Mike Fern, CA.) Note: Brent made no mention of SP-language services. 11960 not heard 3/1 in the SP-language morning and evening releases for NA. (Mike Fern, CA)

RN's Media Network 3/16 interview w/ Brent Allred concerning HCJB transmitter-site robbery. via Mike Fern, CA.

Allred: Well, early on the morning of Feb 21, some armed men entered our transmitter building in Pifo, which is about half an hour away from us here in Quito. They tied up the two operators who were

on duty and stole about 50 circuit boards. These boards, amongst other things, control the antenna switching units at Pifo, and our 500-kilowatt transmitter, and our audio processing system. They also stole a station vehicle.

They left a note demanding 250,000 U.S. dollars and threatened additional damage to our facilities. There were also some threats made against our personnel.

At mid-morning on the day of the robbery our engineers had us back on the air with all but the 500-kilowatt transmitter.

The established contingency plans were activated by the leadership of HCJB and immediately implemented. A crisis management team sought advice from the Ecuadorian authorities and they have been very helpful. We also received valuable assistance from the U.S. Embassy in Quito.

We believe that this attack was a criminal activity rather than a terrorist attack. The motive seems to be money. The robbers have contacted us several times since the attack, and have re-stated their demands and their threats. Our management is considering what our response should be to those demands.

Marks: That's the situation as far as the robbers are concerned. But what are you doing from the engineering point of view to put matters right?

Allred: Our engineers are right now building new circuit boards to put into the transmitter and the antenna switching system. We are having our engineers in the U.S. construct some of these boards and send them down, and other boards are being made here in Quito.

Marks: And how long do you think it will be before that 500-kw is back? I mean, is it a matter of days, a matter of weeks, or what?

Allred: We are looking in terms of weeks. I think what has been taken out of it (the 500 kW transmitter) is quite vital -- and it's going to take quite a bit of time to get that back running. Since the 500-kw's been down we have also lost another transmitter due to a mechanical failure, and that should be back on the air in at least a couple of weeks. So we're really running on a tight sked at the moment.

INDIA - 500-kw external-service transmitters commissioned at Dodballapur - All India Radio Doordarshan, Delhi, in EG 1600 gmt 9 Mar 90. Text of report: Two modern shortwave transmitters of 500-kw each, for beaming programmes of the external services of All India Radio, were commissioned today (9th March) by the Minister of Information and Broadcasting, Mr. P. Upendra, at Dodballapur, near Bangalore. The shortwave transmitters have been built at a cost of 160 million rupees. This is the first time that such powerful transmitters have been commissioned for the All India Radio Network and are believed to be the largest available shortwave transmitters in the world. This will help All India Radio to enhance the efficacy of its external broadcasts and overcome the problem of interference. The objective of commissioning these transmitters is to reach listeners in the far-flung countries of Europe, North Africa and Australia. Our Bangalore correspondent, Keshav Chandrika, reports that for the first time in the network, feeder line systems interfacing the transmitters have been designed, fabricated and erected by Indian engineers. (WBI 3/16)

INDONESIA - The Voice of Indonesia in EG/Indo at 01-03 and EG/Malay at 08-10 seems to have moved to 11750v ex 11755v w/11785 in parallel. Noted this during the 0100 EG service on 3/6, however the 11750NF suffers severe co-channel QRM and only has a weak signal which may prove to be quite difficult to hear. (Lim Kong Jin, Penang, Malaysia in his "SE Asia DX News" No. 7) 2390, RRI Cirebon, 1451-15 on 2/9, poor to very poor, Indo. Local exotic vocals w/flutes. 1458 Rayuan Pulau Kelapa, then ID "Inilah Radio Republik Indonesia, Cirebon." 1500 M w/news. Don't confuse w/R. Huayacocotla which is also heard regularly on co-channel. (Takayuki Inoue Nozaki, Tokyo in his Relampago DX EE Edition No. 1 dtd 2/19) 2429.8, RRI Banjarmasin, 1450-1501 on 2/8, very poor, Indo. Local pops, M talk. ID at 1457 as "Radio Republik Indonesia, Banjarmasin...warta brita-brita." (Takayuki Inoue Nozaki, ibid) 2432.7, Banda Aceh, 1510-1515 on 2/9, very weak signal, Indo. M talk. (Takayuki Inoue Nozaki, Ibid) 3355, \*1700-

2115\*, RRI, Sumenep. (Craig Tyson, Radio Australia's Japanese DX Time Pgm on 2/24) 7809.82H(t), RRI Merauke, 0930-0940 on 2/12, poor, Indo. 0933 ID was heard, but not so clear. (Nobuyoshi Aoi, via NTDXC Tune. No. 73)

IRAN - MF and high-power HF transmitting station inaugurated in Zahedan. Voice of IRI, Tehran, in Persian 1030 gmt 13 Mar 90. Excerpts from report from Zahedan on transmitting station inauguration ceremony.

Mr. Mohammad Hashemi, the head of the Voice and Vision organisation... said that the Zahedan shortwave radio transmitting station, which is now operational, can bring the countries of the Persian Gulf region, Pakistan, part of the Indian sub-continent, part of the Soviet Union, Kuwait, part of Iraq and the Saudi Arabian peninsula under the coverage of radio programmes.

Mr. Hashemi added that with the operation of this radio transmitter, we will be able to bring the message of the revolution and Islam to the oppressed and to the devotees of the Islamic revolution in all those locations of the world. That is the most important and most fundamental mission and duty of the Voice of Vision organisation. With the inauguration of the transmitters, the complex, which consists of two 50-kw mediumwave transmitters for broadcasting network (domestic) and external programmes two 500-kw shortwave transmitters for broadcasting external programmes and one 10-kw mediumwave transmitter for broadcasting the programmes of Radio Koran and the Voice of the Majlis, has been named the Balai radio transmitter complex. (Editorial note: a later report on the Vision of IRI stated that the transmitter site would be used for broadcasts in English, Arabic and Urdu). (WBI 3/16)

IRAQ - Radio Baghdad in EE at 21 on 11720NF (Ernie Behr, Kenora, Ontario via Glenn Hauser on RCI's SWLD)

ISRAEL - An article in the Chicago Tribune, 2/11, described objections by Israelis to the Voice of America's proposed relay station at Iddan, near the town of Hatzeva, south of the Dead Sea. Local residents are concerned that the radio broadcasts could create health hazards and harm fruits and vegetables grown in the area. The transmitter site is also in a major bird migration route. The \$274 million project includes transmitters and 37 antennas in a 2,500-acre site. The station will be used for VOA, Radio Free Europe and Radio Liberty broadcasts. (Karl D. Forth, Chicago, IL.)

ITALY - Italian Radio Relay Service on 9815USB Sunday only at 0632 w/an EG ID. (Ernie Behr, Kenora, Ontario via GH on RCI's SWLD). Heard hear at 0648 tune in in EG w/W giving religious talk w/IRRS ID at 0716 giving address which was hard to copy. At 0717, 'Midnight Cry' (relig pgm) on 3/18 thanks to tip on RCI SWLD. (bmm) Voice of Europe on 7557. New SW Station giving this address: PO Box 26, Pordenone. Heard in UK on 3/3, best around 1630 announcing regular programming to start from 3/15. (Mike Barraclough, UK via RN's 'Media Network' on 3/8) Apparently not Sunday only as Jonathan Marks heard them from 1600 on 3/6 & in 'Play DX' Dario Monferini says the correct address for V. of Europe, 24 hrs, on 7556.6v is Box 26, 33170 Pordenone, Italy. (via GH on RCI's SWLD) (bmm) European Christian Radio 6205 kHz broadcasts from Ravenna using 7 kW. The schedule is as follows: Sundays only 0730-09 UTC in EG, GM, IT and Daily from 1630-17 in Albanian; 17-1730 in Romanian; and 1730-18 in Croatian. Reports are verified by QSL card. While the broadcasts originate from Italy, administrative offices are in Austria. Correspondence should be addressed to ECR at Postfach 500, A-2345 Brunn, Austria. (Bill Matthews, OH)

IVORY COAST - 500kW transmitter out of order since September. 'Fraternite Matin', Abidjan, in French 14 Feb 90. Excerpts from report. Akuedo was the first transmitting centre in the country to be visited by the minister of communications, Auguste Miremont, not because it is located near Abidjan, but because it is equipped with four AM transmitters. This centre is the first to cover the whole country and the equipment includes two 20 and one 25kW transmitters. The centre also houses a 500kW transmitter which is our most powerful

one and enables long range coverage that goes as far as the Maghreb countries.

"The 500kW transmitter has been out of order since September. Spare parts were ordered from abroad but they did not correspond to what we needed", according to Mr. Ballo, director of the centre.

In his response, minister Miremont declared: "I appreciate your problems, but you should also understand that we are facing hard times. I recommend you make suggestions to my ministry so we can help you find the suitable solution. But do not expect the ministry or the government to solve all the problems." (WBI 2/23)

JORDAN - Updating March 'LN', Radio Jordan not being heard on 9560 in EG now. Presume only 13655 until 1315 or 1415\*(t) on 3/18 (bmm)

KOREA - Via Radio Korea's SW Feedback Program on 3/12 - EE Broadcasts to the Americas as of 4/2: 1030-11 on 11715 (via Sackville)(Note: Correction to March's "LN" showed two broadcasts in EE); 1215-1315 on 9570; 2400-01 15575. Programs for 1030-11(via Sackville): First 10 minutes each day except Sunday - News. On Sunday - Weekly News, Review; Mon - Seoul Calling along w/a special Interview Corner 'How Do You Do' which introduces to you some personalities in and around Korea. Tue - Seoul Calling featuring 'Touring Korea'; Wed - Music Box (5 minutes) & 'Pulse of Korea'; Thu - Music Box & Focus This Week; Fri - Let's Sing Together; Sat - Abbreviated versions of From Us To You & Shortwave Feedback. Radio Korea will send out a special QSL Card & Color Brochures for the Sackville relay broadcast at 1030-11. During Winter time in NA the Sackville relay broadcast will be from 1130-1200 on 9700.

LAOS - National Radio of Laos, Vientiane External Sked: Except for 11-1130 to Europe via USSR transmitters, the frequency for all broadcasts is 7116v to Asia. 0000-0030 Cambodian; 0030-01 FF; 01-0130 EE; 04-0430 Cambodian; 0430-05 VV; 05-0530 Thai; 0530-06 FF; 06-0630 EE; 11-1130(via USSR transmitters) FF t/Eu 15190, 11870; 11-1130 Thai; 12-1230 VV; 1230-13 Cambodian; 13-1330 FF; 1130-14 EE; 23-2330 Thai; 2330-24 VV. (WBI 2/23)

MALAYSIA - The domestic EG service of Radio Malaysia, Radio 4 has extended their transmission time on Fridays effective 1/5. It is now 22-16 non-stop which was previously 22-06/09-16. This means the transmission times for Fri, Sat, & Sun are now the same. (Kindly correct info in WRTH 90). Also correct info on 'Malaysia' Page 211 under Home Services: The transmitting language stated for Radio 3 'in English' should read for 'Radio 4' and not for Radio 3 though the latter has an EG transmission over the capital city service from Kuala Lumpur at 10-11 UTC daily on FM97.20MHZ, otherwise all other regional transmissions are carried in Bahasa Malaysia and come through the 'Radio 1' frequencies. (Lim Kong Jin, Penang, Malaysia in his 'SE Asia DX News' No. 7)

MALTA - Voice of the Mediterranean - Many listeners have been asking us to supply them with information as to the aims of the 'Voice of the Mediterranean', as to whether 'Voice of the Mediterranean' uses the same transmitter as the one used by Radio Mediterranean, as to the power with which we transmit, as to when 'Voice of the Mediterranean' started and similar questions which seem to arouse the interest of our listeners.

As regards the first question the management of the 'Voice of the Mediterranean' would like to state that this Radio Station is a joint venture between Malta and Libya (the station is co-owned by the Governments of the Republic of Malta and Socialist People's Libyan Arab Jamahiriya) and administered by a Council composed of 2 high level representatives from each country with a Managing Director, nominated by Malta and a Deputy Managing Director nominated by Libya. These in turn are assisted by staff from both countries chosen by 'Voice of the Mediterranean' on the basis of their professional competence. The idea of setting up this station goes back to 1984 but for the reason or another the idea never took off the ground. It was towards the end of 1987 that two countries came together again to

launch this idea.

'Voice of the Mediterranean' symbolizes the spirit of friendship and solidarity between the two friendly peoples of Libya and Malta and, using Dr. Vincent Tabone's words (Dr. Tabone is the President of Malta) 'Voice of the Mediterranean' is in line with Malta's vocation as a bridge between Europe and North Africa. It is for this reason that there is a need for 'Voice of the Mediterranean' to broadcast news, cultural, literary and entertainment programmes, which aim at strengthening the relations between the two friendly peoples and with the countries of the Mediterranean through the preparation of impartial factual news and information."

In its inaugural programme of the 1st of September 1988 Minister Tabone made a short address stating that 'the Mediterranean has been throughout the years a region where different cultures and different religions have mingled and cross-fertilized one another. Mediterranean countries have had a different and checkered history and it is certainly high time that they should now co-operate to establish a common endeavour from which a Mediterranean heritage should emerge for the well being, prosperity and solidarity of the peoples who live within this important region of the globe. The agreement establishing this new broadcasting station will serve the cause of peace and the cause of mutual understanding between nations and their common desire for the peaceful settlement of international issues.'" Minister Tabone trusts that this would also be an effective instrument of cultural enrichment of all the people in and around the Mediterranean.

The station's official languages English, Arabic and French, although for the time being no French broadcast has yet been transmitted. As our listeners know the frequencies for the station are 1557kHz on the 192.67 MW band and 9765kHz on the 31 metre SW band every morning between 0600 and 0800 UTC and 11925kHz on the 25 metre SW band every afternoon from 1400 to 1600 UTC. The station's postal address is: P.O. Box 143, Valletta, Malta.

It must be emphasized that 'Voice of the Mediterranean' and Radio Mediterranean are distinct one from another. 'Voice of the Mediterranean', as has been stated already, is a joint venture between Malta and Libya and Radio Mediterranean, which broadcasts in different hours of the day, is a joint venture between Malta and Algeria. Both stations, however, use the same transmitter facilities in Cyclops or Deutsche Welle broadcasting station in a place situated in the South of Malta known as Xrobb il-Chagin.

The Short Wave frequency has a power of 250 kilowatts and uses an omnidirectional antennae whilst the Medium Wave frequency has a power of 600 kilowatts and uses a 3-mast antennae system.

As regards the French transmission, these will start in a few months' time once the English and Arabic service consolidate itself.

As regards programme schedule the following information will interest our listeners. The English service includes: 'Great Men and Women' dealing with famous Mediterranean personalities transmitted on Tuesday, 'Panorama' which gives information about Mediterranean countries transmitted from Monday to Friday, 'Campus Corner' a Maltese University programme transmitted on Wednesday with a repetition on a Saturday, 'Mailbag', made up of listeners letters is transmitted on a Tuesday with a repetition on Friday, 'Sugar & Spice' transmitted on Thursday, 'Doctor's Corner' transmitted on Monday, 'Libyan Heritage' transmitted on Monday, 'Economic Survey' transmitted on Friday, 'Nice and Easy' transmitted on Sunday and a weekly commentary transmitted on Saturday. Interspersed with these programmes one can listen to music and folk programmes on Mediterranean countries, including, of course, (with an extra dosage) information on Maltese music, folklore, history and current events happening in Malta.

Our programmes are meant primarily to reach Mediterranean countries but with such a powerful SW transmitter 'Voice of the Mediterranean' is happy to know that it is being received in so many countries beyond the Mediterranean including New Zealand, Australia and the United States of America. Added on to these we have other northern countries in Europe.

We hope that with this lengthy information we satisfy all our listeners. Further questions are welcomed and the management will be happy to answer other queries. (Similar information on the Arabic

service can be supplied on request). - Richard Vella Laurenti, Managing Director. (via Randy Coupal, NH)

MEXICO - Radio Huayacocotla, "La Voz de los Campesinos," broadcasts from 12-15 and from 21-02 Mon-Sat w/500 watts of power. A Gates transmitter is used. An educational and cultural station, it is sustained by donations from foundations. Most of the employees have other jobs, working as volunteers at the station when not working at their other positions. The station's director is Javier Jaime Villaseñor, and the coordinator of news is Elvia Sanchez Alvarez. The station is located in the Sierra Norte Mountains in the state of Veracruz, 125 miles northeast of Mexico City. Reception reports may be sent to Apartado 13, 92600 Huayacocotla, Veracruz, Mexico. (Translated from personal letter from station, Marlin A. Field, MI.)

MAURITANIA - Mauritanian Radio, Nouakchott Sked: 0000-0630 Multilingual (during Ramadan only) Dom 4845; \*0630-09\* overall on 4845. At 0630-0633 Programme preview (AR); 07-0710 News (AR); 0730-0740 News (FR); 0740-0755 except Friday News (Vernaculars); 0755-08 Fri Programme preview (AR); 08 Frequency change 9610(Fri), 4845(not Fri); 0810-09 Fri News (Vernaculars); \*09-12\* overall Friday Multilingual on 9610. At 0930-0940 Fri News Summary(FR); \*1200-2400\* overall Multilingual. At 12-1205 ews (AR), 1205-13 News (Vernaculars), 1430-1445 News (FR), 15-1505 News summary (AR) on 9610; 1700 freq change 4845; 17-1705 News summary (AR); 1705-1710 Fri Programme preview (FR); 19-1920 except Fri Programme preview (FR); 19-1920 News(during Ramadan) (FR); 1930-20 News(not during Ramadan) (FR); 2030-21 News(Arabic); 2230-2310 News review(AR); 2400 s/off. Additional data: The following alternative frequencies have been used in the past: 7245 instead of 9610 kHz (seasonal) and 4820 instead of 4845 kHz. (WBI 2/23)

NAMIBIA - Broadcasting Corporation to be renamed. SWABC, Windhoek, in Afrikaans 1900 gmt 20 Feb 90. Text of report:

The shadow cabinet has decided that the name of the Southwest African Broadcasting Corporation (SWABC) should be changed to that of the Namibian Broadcasting Corporation. This was announced by Mr. Hidipo Hamutenya, shadow minister of information and broadcasting services. In a statement issued in Windhoek, he said the change of name will formally take effect when the broadcasting act is amended after independence. According to the statement, the director of SWABC has recommended that the change of name be implemented on 1st March in light of this decision and because of the role the corporation will be playing in the weeks ahead during the independence process. (WBI 2/23)

NEW ZEALAND - Arthur Cushen, Invarcargill, New Zealand reported to RN's Media Network on 3/2 that New Zealand to return to standard time on 3/18, and RNZI to have a 'Mailbox' Program 1st & 3rd Monday of the month hosted by Tony King and he (Arthur) would give listening tips. First program was to be on 3/5 at 0330 but John Carson, OK let me know his letter was to be acknowledged on 3/19 at 0430. The first 'Mailbox' program was at 0430 on 3/19 hosted by Tony King. My (bmm) letter was the first acknowledged along w/letters from other listeners including John Carson, OK and Gerry Dexter, WI.

NORWAY - Radio Norway Sked (all broadcasts 30 minutes): 0000 Norwegian As,Au,Am 15225(not Monday), 11865; 0000 Monday EG Am 15225; 01 Norwegian Am 15360, 9615; 02 Norwegian Am 15360, 9560; 03 Norwegian ME,Af,Am 11925, 11735, 9565; 04 Norwegian ME,Af,As,Am 15310, 15170, 11925, 11865; 05 Norwegian Am 11840; 06 EG (Sun) Eu,Au 15165, 5990; 06 Norwegian Eu,ME,Af,Au 21725, 15175, 15165(Not Sun); 07 Norwegian Eu,Af,As,Au 25730, 21730, 15165, 9590; 08 EG (Sun) Au,Am 25730, 15165; 08 Norwegian As,Au 25730(Not Sun), 21730, 17785(Sun only); 09 EG (Sun) As,Au 25730; 09 Norwegian As,Au 25730(Not Sun), 21730; 10 Norwegian Af,As,Au 25730, 21730, 21640, (15165?); 11 Norwegian As,Au,Am 21640, 17860(Sun only), 17780; 12 EG(Sun) Am 15165; 12 Norwegian As,Am 21705, 21640(Sun), 15165(Not Sun); 13 EG(Sun) Eu 9590; 13 Norwegian Eu,As,Au,Am 21710, 21705, 15195, 9590(Not Sun); 14 EG(Sun) As,Au 21710; 14 Norwegian As,Au,Am 25730, 21710(Not Sun), 21705; 15 Norwegian Af,Am 25730, 17765, 15310; 16 EG(Sun) Am 21705, 17765; 16

Norwegian ME,Af,As,Am 25730, 21705(Not Sun), 17765(Not Sun), 15175; 17 EG(Sun) Af,Am 25730, 17765; 17 Norwegian Eu,Af,Am 25730(Not Sun), 17765(Not Sun), 15220, 9655; 18 EG(Sun) ME,Af 15165; 18 Norwegian Eu,ME,Af,As,Am 17765, 15265, 15210, 15165(Not Sun); 19 EG(Sun) Eu 15165; 19 Norwegian Eu,ME,Af,Am 21730, 15190(Sun), 15165(Not Sun); 20 Norwegian Eu,Af,Am 21730, 11860; 21 Norwegian Af,As,Au,Am 21730, 15185, 11790 (15165?); 22 EG(Sun) Af,Am 15180; 22 Norwegian Af,As,Am 17705, 15180(Not Sun), 11790(Sun); 23 EG(Sun) Am 11930; 23 Norwegian Am 15325, 11930(Not Sun). (WBI 3/9)

PAKISTAN - Azad Kashmir Radio, Muzaffarabad - Most news bulletins in English and Urdu are relayed from Radio Pakistan, Islamabad. Frequencies are variable. Sked: Multilingual 0045-0605 overall on 7268, 4980, 3665. 0100 News (Urdu), 02 News (Urdu), 03 News (EE), 04 News (Urdu), 05 News (EE), 06 News (Urdu); 1050-1810 Multilingual overall on 7268, 4980, 3665 w/News at 11 in EE, 12 Urdu, 1230 Gojri, 13 Gojri - local news, 1350 Kashmiri, 14 EE, 15 Urdu, 16 EE, 17 Urdu, 18 Urdu. (WBI 3/2)

PHILIPPINES - Radio Veritas schedule per my constant and serious monitoring(!) & also per Yukimasa Matsushita in Japan Shortwave Club Guide, SW DX Guide March 90: Transmissions are divided into 2 different blocks: (1) 21-2225 Mandarin 11795; 23-2320 Indo 11820; 23-2355 VV 11705; 0000-0030 Sinhala, 0030-01 Tamil, 01-0125 Telugu 15305; 0130-0230 VT 11660; 10-1025 VT 9555; 1030-11(-1125 on Sun) RR 15110; 1105-1125 (Mon-Sat) VT 9555; 1130-1155 Mandarin, 12-1225 Indo, 1230-1255 JP, 13-1330 Telugu, 1330-14 Sinhala, 14-1425 Tamil, 1430-15 VT. (2) 21-2125 KR 9710; 2230-2255 Mandarin 9560; 23-2325 JP 15270 Yukimasa Matsushita); 2330-24 Myanmar, 0000-0030 Karen, 0030-0055 Kachin 9560; 01-0130 Hindi, 02-0230 Urdu 15330; 10-1055 Mandarin 9520; 11-1125 VT 11790; 1130-12 Myanmar, 12-1230 Karen, 1230-1255 Kachin, 13-1325 KR, 1330-14 Hindi, 14-1430 Bengali, 1430-1455 Urdu 9555; 15-16 Mandarin 9615. Address as announced remains the same: P.O. Box 939, Manila, Philippines. ID as "This is Radio Veritas Asia, Quezon City, Philippines..." EG seems to have been taken off. (Lim Kong Jin via his SE Asia DX News No. 7)

ROMANIA - Romania has changed the name of its SW service to Radio Romania International as heard by John Carson on 3/5. Thanks for the phone call (lmm)

SIERRA LEONE - Sierra Leone Broadcasting Service, Freetown Sked: 0559-2315 overall Multilingual on 3316 w/0610-0615 Programme preview (EE); 0630-07 News (Vernaculars); 08-0810 News (EE); 0810 Freq change 5980. 10-1728 No details available; 1728 Freq change 3316; 18-1830 News (Vernaculars); 19-1915 News (EE) 20-2010 News (EE); 21-2110 News (EE); 2110-2130 "The Latest" - Current affairs (EE); 22-2215 News (EE); 23-2310 News (EE). 2315\* (WBI 3/2)

SOMALIA - Radio Mogadishu HF transmitters unheard. Monitoring research Feb 90. Radio Mogadishu's external service, which previously broadcast on 6095 or 9585 kHz, has not been traced for over a year and now appears to be defunct. The domestic outlet on 7200 kHz was last heard in mid-November and also appears to be off the air. (WBI 2/23)

SOUTH AFRICA - Radio RSA has added 9555 to S&SE Afr from 12-1555. Carries EG at 1200, 13, 14. This is the only change announced for the J90 sked. (Radio RSA DX Corner on 3/5 via Mike Fern, CA)  
Radio RSA signing on with Kavango Service (not in WRTH 90) at 1758 on 11805. Kavango is a district of Namibia with three native languages; see WRTH90. Native singer with guitar after news had distinct (U.S.) Country flavor. Alleluia by native choir, then old style (1960) African pops on 3/4. (Mike Fern, CA)

SUDAN - Radio Omdurman was heard on 3rd March on 9550 at 13-14 gmt. However, the 14-15 gmt relay of Radio Juba was on 11711.2 instead of 9540 or 9550. At the end of the Juba relay, 11711 remained on the air and carried Radio Omdurman.

Radio Voice of Ethiopian Unity's 1900 gmt transmission in Amharic

on 3rd March was also heard on 11711 instead of its usual frequency of 9540. (WBI 3/16)

TAIWAN - Observations on BCC broadcasts to Chinese mainland. Monitoring research 15-20 Feb 90. Since 15th February, broadcasts in Standard Chinese consisting mainly of Chinese popular music have been observed on 15125 kHz. An announcement at 1200 gmt on 16th February identified the station as the Broadcasting Corporation of China (BBC) (SIC - should have been BCC). At 2305 gmt on 19th February, this programme was also heard on 11725 and 9610kHz in addition to 15125 kHz. This service from Taiwan appears to be a relay of one of BCC's domestic networks intended for the Chinese mainland. It is believed to have started in June 1989 and is observed from 2100-1700 gmt. (WBI 2/23) 15280, 21-22, Broadcasting Corporation of China, Taipei, Mandarin w/good signals. Some interference was caused from the Spanish Foreign Radio, at Madrid, also using this frequency at the same time. (Bob Padula, Surrey Hills via RA's Japanese DX Time 3/3)

TURKEY - Voice of Turkey M-90 Pub Sked: Eur: 15267 04-16 Turkish; 9640 16-22 Turkish, 9685 22-23 EE; 9685 23-03 Turkish; 9515 05-09 Turkish; 9515 10-15 except Fridays Turkish; 9795 1630-1730 GG, 1930-20 GG, 20-21 EE, 21-22 FF. Balkans: 6140 03-05 Turkish; 11875 0930-10 Hungarian, 10-1030 Rumanian, 1030-11 Serbo-Croat, 11-1130 Albanian; 7180 1430-15 GK; 7110 1730-1830 GK; 5980 16-17 Bulgarian, 17-21 Turkish, 21-22 Bulgarian. ME: 11955 09-10 AA, 10-15 Turkish, 15-16 AA; 9665 22-23 EE. NAfrica: 15160 09-10 AA, 10-15 Fridays only Turkish, 15-16 AA; 11775 16-22 Turkish. NE Asia: 6120 03-04 Azerbaijani; 11925 04-09 Turkish; 11735 14-1430 RR. SE Asia: 15405 03-04 Azerbaijani, 04-09 Turkish; 17785 12-1230 Urdu, 12-13 EE, 13-14 Persian; 9665 1830-1930 Azerbaijani. Australia: 17880 22-23 EE, 23-03 Turkish, 03-04 English. NA: 9445 22-23 EE, 23-03 Turkish, 03-04 EE. Far East: 17785 1130-12 CC. (via Coskun Arslan, Deputy Director General for Engineering)

UNITED KINGDOM - For the first time, the BBC in London plans to use the 22 metre band, and from 25 March two outlets are scheduled. They are 13660, from 12-20 w/AA service, and 13770 from 1030-1130 in Polish and 1315-1515 in Polish and Slovak. Both freqs are listed from Ramphisham, England. Also from 25 March, the BBC plans to use an additional freq in the 11 metre band. This will be 25870 scheduled 12-1245 w/FF service to Africa from Daventry, England. Thanks to BBC for this info. (via RA's Japanese DX Time 3/3)

UNITED STATES - Family Radio, Oakland, CA 94621, broadcasts in SP over three stations in Peru, including Radio Ancaz and Radio Huaraz. Some of the programs are produced in Peru by Peruvian Christians. WYFR has grown from four transmitters in 1973, when the station started operating from Scituate, MA, to twelve 100,000 watt transmitters and two 50,000 watt transmitters at Okeechobee, FL. Twenty-three directional antenna systems concentrate the radio energy toward the target areas. Family Radio has been heard over Radio Nueva Vida in Colombia; the Oakland office, however, states that WYFR does not broadcast from there. (Family Radio Newsletter and personal correspondence, Marlin A. Field, MI)

U.S.S.R. - New HF frequencies announced for Voroshilovgrad and Alma-Ata radios. Radio Moscow NA Service, Moscow in EG 0000 on 3/6. Excerpts from DX programme report: Local programmes of the Ukrainian station Radio Voroshilovgrad are now relayed on the shortwave frequencies of 7245 and 15260 by the former jamming transmitters. Radio Alma-Ata in Kazakhstan operates on 4375 and 7100 in RR and Kazakh & monitoring research on 3/10: A relay of Ukrainian Radio's First Programme was observed at 0340 on 3/10 on 7245. When checked at 0000 gmt on 3/11, Kazakh Radio's "Shalkar" programme was found on 9705, 9595, 9505, 7280, 7115, 6125, 5970, 5960, 5945, 5260, 5065 and 4395. (WBI 3/16)

Radio Kiev announced EG Sked on 3/7: 1900 6010, 6165, 7240; 0030, 0300 on 11770, 12005 (nothing heard), 12060, 15180, 17665, 17690. (bmm)  
Radio Moscow NA EG service to ECNA as monitored by Mike Fern, CA: 2300-24 17720, 17700, 17605, 15425, 12050, 11950, 11735, 9720, 9685, 9530.

Radio Moscow NA EG Service to WCNA effective 3/4 via Mike Fern, CA:  
04-05 17605; 04-06 17720, 17700; 04-07 17690, 17665; 04-08 15180,  
12050, 9825; 0430-08 9580; 0530-08 13665; 0630-08 12010, 1770.

Radio Vilnius announced EG Sked on 3/6: 2230 on 9675, 6110; 23<sup>00</sup> on  
6110, 11770, 12060, 15180, 17665, 17690. (bmm) Note: Eric Swedberg,  
Lee Murray, Jan Collins at Bob Bodell's, OR annual SW Meeting on 3/18  
noticed Radio Vilnius missing at 2300 the day Gorbachev had given them  
to renounce their independence declaration, but I (bmm) heard them  
back on 3/19 (bmm)

Turkmen Radio First Programme, Ashkhabad - During summer time in  
the USSR all programmes will be heard one hour earlier than shown.  
Turkmen's Radio's First Programme relays All-Union Radio's Orbita 4  
programmes in Russian from Moscow when not carrying local programmes.  
Turkmen Radio's Second Programme relays All-Union Radio's Mayak  
programme in Russian from Moscow when not carrying local programmes.

0000-1903 overall on 4825 w/freq change at 0515, 7145 added; 1600  
Freq change w/17635 replacing 7145. (WBI 3/16)

Turkmen Radio Second Programme, Ashkhabad - 13-17\* overall but  
4895(inactive) (WBI 3/16)

VENEZUELA - The Venezuelan government will inaugurate two new  
international services shortly, one on medium wave and one on  
shortwave.

The shortwave service will broadcast in English, Portuguese and  
French.

Frequencies have not been announced, but see WRTH 90. The medium  
wave service will broadcast to Colombia, Brazil, and the Netherlands  
Antilles. It will use a new station on 1240 kHz. w/two 500-kw  
transmitters which can be combined to give one megawatt. Broadcasting  
may begin in April. (RNMN 3/16 w/Jonathan Marks quoting their Radio  
Enlace correspondent in Venezuela via Mike Fern, CA.) (The Venezuelan  
correspondent claimed this is the first time a government has operated  
two int'l svcs, but he's in error. West Germany does the same thing  
w/DW on SW and Deutschlandfunk on MW. Deutschlandfunk broadcasts to  
East Germany among others, which was a bit of a provocation in the old  
days. (Mike Fern, CA)

VIETNAM - The regional station at Son La has been heard from 12-14 on  
6296 kHz. It was on 6323 kHz but moved to get clear of the Voice of  
Khmer on 6325 kHz. (Isao Ugusa via Radio Japan DX Corner on 2/25 via  
Mike Fern, CA)

CLANDESTINES - Voice of the National Army of Democratic Kampuchea -  
Voice of the National Army of Democratic Kampuchea (Cambodian: Smleng  
Kangtoap Cheat Kampouchea Pracheathippatai) inaugurated its  
broadcasts on 14th Feb 1983. It supports the coalition government of  
Democratic Kampuchea and is hostile to the present Phnom Penh  
government and to Vietnamese involvement in Cambodia. 2315-02  
Cambodian, 08-09 Cambodian, 10-14 Cambodian, 14-15 VT, 15-16  
Cambodian. (WBI 3/16)

The Voice of Malaysia Democracy with their broadcasts in Malay and  
Chinese closed down on January 1, 1990. This follows the peace  
agreement signed a month earlier on December 2, 1989. The peace  
agreement was signed by the Communist Party of Malaya (CPM) who  
obviously ran the station and the government of Malaysia and Thailand.  
In the agreement, 4 main things were agreed between the CPM and  
Malaysia; that the CPM would cease all its armed activities, the CPM  
would disband all its armed units, the CPM would destroy all its  
weapons, bullets, explosives and booby traps in Malaysia and Thailand,  
and that the CPM members wishing to return to or reside in Malaysia  
would be allowed to apply to do so, and such application would be  
processed according to legal requirements and certain procedures of  
the country. The armed units of the CPM who were formerly in the Thai  
jungle have now surrendered their arms and are now placed in 4  
villages in southern Thailand and are under the control of the Thai  
authorities. It is reported that the Malaysian government would not  
have any special priorities given for those CPM members wishing to  
return to Malaysia and will thus have to follow the normal procedure.  
From the report that the armed units were formerly putting up in the

Thai jungle, establishes my suggestion that the Voice of Malaysian Democracy must have transmitted from there, contrary to some who claim they came from China. Also, the good strength of their signal proves this. (Lim Kong Jin, Penang, Malaysia, in his 'SE Asia DX News' No. 7)

Iran's Flag of Freedom Radio - Am now hearing them at \*1630 & \*0330 on 11620NF ex 11615 as noted on 3/6 (bmm)

Al-Quds Radio - Palestinian radio station heard on 5990 kHz. Monitoring research 26-27 Feb 90. Al-Quds Radio was observed at 1158 gmt on 26th Feb broadcasting on 5990 kHz in parallel with 702 and 630 kHz just before signing off at 1200 gmt. The frequency 5990 kHz was unheard when the second transmission period began at 1400 gmt but was observed operating at about 1515 gmt again in parallel with 702 and 630 kHz. Al-Quds Radio was heard again on 5990 at 0930 on 27 Feb. The station was last heard on shortwave during 1988 when a low-power transmitter was tested on 7460 and 4320 kHz. (WBI 3/2) Note: Jonathan Marks on RNMN on 3/2 says yet to be confirmed in Europe. (bmm)

New Star Broadcasting Station (Standard Chinese: Hsin Hsing) was first monitored during October 1989, although it is believed to have been in existence for some time.

The station signs on with music and an identification in Standard Chinese, generally followed by coded messages. The transmitters are believed to be in Taiwan.

Transmissions are observed at indeterminate periods between 22 and 1630 gmt, often starting on the hour or half hour.

New Star Broadcasting Station No. 1 - 22-1630 on 11430.

New Star Broadcasting Station No. 2 - 22-1630 on 15388.

New Star Broadcasting Station No. 3 - 22-1630 9725

New Star Broadcasting Station No. 4 - 22-1630 8300. (WBI 3/2)

Radio SNM - Frequency change observed - Monitoring research Feb 90. The Somali opposition station, Radio SNM, is now observed on a frequency of 6250-6252 kHz for its broadcast at 1500-1700 gmt. (WBI 2/23)

Voice of the Libyan People - 9480, \*0458-0648\*, AR, Koran, news, commentaries, Mutt and Jeff question and answer routines, poetry, music. Freq announcements just after sign-on and before signoff. Sig very good to start, slow fade. Power-saw jammer in background on 3/12,13 but not 3/14. (Mike Fern, CA) & also them on 9480 at 2245 over jammer in AA & there was also a jammer on 9450. (bmm)

Voice of the Resistance of the Black Cockerel - UNITA radio station announces additional frequencies. Voice of the Resistance of the Black Cockerel in Portuguese 0530 gmt 20 Feb 90. Text of announcement:

As part of the improvements that Vorgan (Voice of the Resistance of the Black Cockerel) is carrying out, we will also broadcast on the following wavelengths and frequencies: At 0600 (0500 gmt) on the 41 metre band, 7145 kHz. At 1200 and 1900 (1100 and 1200 gmt) on the 31 metre band, 9850 kHz.

We wish good reception to all our listeners and we urge you to tell us how you are receiving us, particularly in the liberated areas.

Voice of Eelam, Trincomale, Sri Lanka broadcasts from 02-03, 1230-1330 in all 3 Sri Lankan languages on a freq that varies from 7000-7025 kHz. This station may not last very long because with the withdrawal of the Indian troops and also the imminent collapse of the eastern administration, this station may disappear altogether from SW freqs in a couple of weeks. (Victor Goonetilleke, Colombo, Sri Lanka on RNMN 3/..)

Voice of Oromo Liberation - Evening broadcast retired - Voice of Oromo Liberation in Oromifa 1630 gmt 27 Feb 90. Text of announcement. It will be recalled that the Voice of Oromo Liberation Front broadcasts in Oromifa every evening from 1930 to 2000 Ethiopian time (1630-1730 gmt).

To satisfy the needs of our listeners, we would like to inform them that, starting today, 27th February 1990 or 20th Yekatit 1982 in the Ethiopian calendar, the Voice of Oromo Liberation will change its schedule and broadcast from 2000 to 2030 (1700 to 1730 gmt). (WBI 3/2) 3888, 1743, Vo the Communist Party of Iran, Farsi, Talk by W//4480 on 1/25 (Valery Ostroperkh, Kazakh SSR) 4200NF, 1630-1830\*, Vo the Iranian Kurdistan, Kurdish, ID, NA, tlk, Holy Quran//6310-6330 on 12/6 & on 1/25 at 1735 in Farsi, talk by M//6325 not synchro, QRM R. Beijing. (Valery Ostroperkh, Kazakh SSR) 4220, 1730-1735, "Kardogoran", Farsi,

IS, 4TS, "Int'le", announcement, ID, music on 1/25 (Valery Ostroperkh Kazakh SSR) 4377, 1718-1737, "Charib-koh...Irana", Farsi, songs. At 1732 IDs, "Int'le" on 1/26 (Valery Ostroperkh, Kazakh SSR) 4480, 1658, Vo the Communist Party of Iran, Farsi, music, announcement, ID, "Int'le" on 12/6 (Valery Ostroperkh, Kazakh SSR) 11825.0, Voice of the Libyan People, 1636-1654\* on 2/13. Fair to very poor, AA. M talk. sometimes ID as "Huna Sawt Sha'abi Libi.". At 0153, cls announcement, then ID "Huna Sawt Sha'abi Libi, Sawt al-Sha'abiyati al-Wataniyati...Libiya", close music. (Junichi Nishikawa in his NTDXC Tune No. 73)

PIRATE - La Voz de las Canas - A broadcast station in the 60-meter band which mystified DXers in Europe and the Americas for over a year has been exposed as a hoax. The station pretended to be in Colombia.

La Voz de las Canas on 5068 kHz. made its final broadcast on Jan 21. A tape recording describing the history and goals of the station was received by Radio Enlace, Radio Nederland's Spanish-language media program on Feb 7.

La Voz de las Canas (Canas with a tilde, which my computer lacks) was built and operated by five DXers in Madrid, Spain. It had a power of 100 watts and was built entirely from parts which the operators swapped or scrounged.

The project organizers were Mauricio Molano and Nicolas Barandiaran (who is Radio Enlace's Madrid correspondent). Their helpers were Manuel Carbonell, Juan Carlos Perez, and Jorge Garcia.

Barandiaran was interviewed (in Spanish) by Radio Enlace. A translation of his interview was broadcast by Radio Nederland Media Network on Feb 15.

"It was a combination of two things -- a desire to make programs and an experiment. We wondered whether the majority of technically-oriented listeners or DXers really scan the bands themselves waiting for a station identification and deducing sites from propagation. Do they just grab a list of loggings from a hobby magazine, tune to a chosen frequency at the time listed, and just assume that the weak, garbled noise in the background is the station in that list in the magazine?"

"So our plan was, first of all, to start up a radio station, with everything that that involved. We had to build a transmitter and put the signal on the air. Then, there was the experimental side, namely, to watch how the DX community would react to such a mysterious station."

"Well, it would be immediately obvious that a Spanish-speaking station on the pirate bands of 49m or 41m would probably be coming from Spain. So we thought it would be a lot more fun and much more interesting to invent a tropical-band radio station and make its location somewhat vague. Spanish spoken in Spain and Latin America sounds very different. We went to great lengths to insure that the station sounded like it was coming from Colombia or Venezuela. That's how the idea was born, and we operated the station at regular intervals between November 1988 until a few weeks ago."

"We never thought of it as being a profit-making venture, but we also didn't want to spend a single penny. So it did take many hours of work, but we didn't invest any money in the operation. We built the transmitter with spare parts and we used equipment people had at home, like hi-fi's, double-deck cassette players, etc. That's all La Voz de las Canas had. We didn't have a studio nor a big transmitter."

"To make the broadcasts sound more authentic and more realistic, we had some commercials. This was the idea of my friend Mauricio Molano. We heard some DXers say that they got in touch with companies who financed those commercials to find out more about our station. But those companies have never existed. There was a car dealer, some stores with anything a housewife might want, but they didn't exist. We used fake names. That's it. We just used the commercials to make the station sound more authentic and realistic, using the South American style."

"It does sound like a typical tropical-band station. That's why it was confused with a new medium-wave station in Colombia called La Voz de la Cana. (no 's'--mf) It was also confused with the station La Voz de las Casas, belonging to Brother Bartolome de las Casas."

"Mauricio Molano and I thought up the idea of starting the station in 1988 in a bar in Madrid, while we were drinking a couple of beers. In Spain, a standard sized beer is called a 'cana.' There's an expression in Spanish which goes 'let's go have some canas,' or simply, 'let's have a few beers.' That's how we got the idea for the name of the station. It sounds like something you might hear on the air and it also refers to the location where we got the idea. So it was a proper station identification in every sense: La Voz de las Canas. (Jonathan Marks asked whether the staff felt like 'clandestine or pirate operators. N.B. said no.) "... because Mauricio Molano and I are professionally involved in radio. We weren't trying to push a particular political or religious belief, and we didn't broadcast any commercials. I think the transmissions were completely harmless."

"We especially designed the transmitter to insure that it was free of harmonic signals, and with only 100 watts of power there wasn't much that could go wrong. We carefully selected the frequency we used so it couldn't create any problems for radio broadcasting services here in Spain. It was simply an experiment - at the start (three words garbled).

"We ourselves decided to stop the operation. But the Spanish authorities could have done it too if they wanted."

"We called the transmitter 'Andromeda.' That was a secret name among us here at La Voz de las Canas, a bit like the BBC's great medium wave transmitter nicknamed Aspidistra which operated during the Second World War. We if we had lost it, well, we wouldn't have gone to great lengths to replace the transmitter."

The hoax began to unravel - or to pay off - when a Radio Nederland contributor in Venezuela reported that the station, supposedly located in Barina, Colombia, was actually much weaker in the Caribbean area than signal reports made in Europe would indicate. (via Mike Fern, CA) & via DSWCI Shortwave News March 1990 "FALSE AS A GENUINE SPANIARD". - Under this heading "False (i.e. deceitful) as a Spaniard" which is a twist of a common Swedish idiom, there will be full account, in next issue of Eter-Aktuellt, on La Voz de las Canas, which has been haunting many listeners in Southern Europe. The account is based on a letter I received February 8, 1990.

According to this 8-page letter, mailed from Spain (sender specified as "La Voz de las Canas", and with an enclosed photo of the 60 W transmitter that has been operating on 5068 kHz, the station closed down entirely on January 21, having been in operation on Fri and Sat nights just over a year.

The people behind the pirate, whose names are given in the letter, are ironically, two of them employed with Radio Nacional de Espana, Nicolas Barandiaran (editor of RNE/REE DX programme "Amigos de la Onda Corta", Sats 1845-1900 UTC), and Mauricio Molano (DJ on Radio 5, Toledo). The remaining two are Manuel Carbonell (interviewed by Barandiaran on his show, on Nov. 18), and Juan Carlos Perez, of Valladolid. As their contact and cover-up in Venezuela, finally, Jorge Garcia Rangel, of Barinas.

The idea came up while having a go at draught beer, in European Spanish, "cana". The objective has not been, in the first place, to play tricks on DXers, they claim, but rather to see what reception reports look like. Their objectives have not been met, they say, as only two reports have been forthcoming, and three more on the way.

Their close down was motivated by the 1st anniversary of the station they explain.

However, personally I think they would have been still going on, were it not for some of us closing in on them. Last year, Dario Monferini, on a trip to Spain, questioned Molano in person, and on Nov. 13, I did the same (conversation reprinted in Eter-Aktuellt) Finally on Dec 30, I arranged a bearing-finding scheme (Umea, Milan, Marbella), which gave us reason to believe that Central Spain was the QRA. Two weeks later, Monferini phoned Molano during transmission time, asking him to give a signal reading. "S9 +20", he answered after some moments of hesitation, "but that is because I'm using a loop antenna!"

Finally, the previous discussed "guion 31" announcement was, as Molano concedes in his report voiced by himself. (Henrik Klemetz, in SWB) 73's & Good Listening! *Bruce*

# QSL Reports

**Sam Barto**  
47 Prospect Place  
Bristol, CT 06010



## Radio Finland

**AFU DHABI: UAE Radio** 13605 p/d cd. w/ ltr. in 31 ds. for \$1.00. v/s Ahmed A. Shouly. (Estes-AL). 11985 f/d folder cd. in 21 ds. w/ schedule for \$1.00.

**ALASKA: KNLS** 7365 f/d cd. in 36 ds. (Kacir-MI). for ms. (Blight-MD).

**ALBANIA: Radio Tirana** 9760 p/d "View of Apollonia" cd. in 32 ds. w/ schedule and a pin. (Barhydt-OR). p/d "Museum of Natural History" cd. w/ schedule and

pin in 53 ds. (Hart-FL). 11835 f/d cd. in 44 ds. w/ same goodies. (Swedberg).  
**ANDAMAN ISLANDS: All India Radio** 4760 f/d "Court Dancer, Brihadisvara Temple" cd. w/o \* site in 2 mo. WRTM lists the site as Port Blair. I guess I'll go w/ that until something better [or should I say worse?] comes along. (Barto-CT).

**ASIATIC RUSSIA: Radio Moscow** 7305 via Novosibirsk f/d "Arbat Square" cd. in 2 mo. (Lare-MI). 15420 via Petropavlovsk-Kamchatsky f/d "Moscow State University" cd. in 65 ds. (Butcher-MA). 15425 f/d cd. in 60 ds. (Hart). 17880 via Irkutsk f/d cd. in 60 ds. (Hart-FL). 11790 via Vladivostok f/d cd. in 88 ds. (watts-KY). 12050 via Khabarovsk f/d cd. in 88 ds. (watts-KY).

**AUSTRALIA: Radio Australia** 9580 via Shepparton f/d "Parliament Buildings" cd. w/ schedule in 15 mo. for 2 IRCs. (Kacir-MI).

**AUSTRIA: Radio Austria International** 6155, 5945, 9870 and 13730 f/d "Tyrol Costumes" cd. w/ schedule and stickers in 1 mo. (Barto). 13730 f/d cd. w/ schedule in 10 ds. (Rugg-QUE)

**AZORES: Radio Club de Angra** 13584 f/d cd. in 3 wks. (Eckert-PA). Station stated they can be heard on 13584.

**BANGLADESH: Radio Bangladesh** 15195.2 and 17850 f/d cd. w/ personal ltr. in 7 wks. Also rcvd. schedule. v/s Dilruba Siddiqua, Radio Engineer. (Barto-CT).

**BOLIVIA: CP66 Radio Centenario** 4854 p/d ltr. w/ stickers and decal in 5 wks. for a SP \* rpt. of a 73 reception. v/s Pedro Salces Ruiz, Director. (Barto-CT).

**BRASIL: Swiss Radio International** 17730 via Brasilia f/d "Berne - Old Town" cd. in 16 ds. w/ schedule. (D'Angelo-PA).

**BULGARIA: Radio Sofia** 7115 (Plovdiv?) p/d series cd. in 42 ds. w/ schedule and diploma details. v/s Nadzhda Gecheva, Listeners Letters Dept. (Peake-IA).

**BULGARIA: Radio Sofia** 9700 via Sofia f/d cd. in 60 ds. (Hart).

**BYELORUSSIAN SSR: Radio Moscow** 17700 via Orsha f/d cd. in 2 mo. (Lare). 11745 via Minsk f/d cd. in 88 ds.

**CAMEROON: Radio Waja** 3970 f/d prepared cd. (Watts-KY) w/ personal ltr. in 50 ds. for \$1.00. v/s James Achanyi-Fontem. (Palmerheim-MN).

**CANADA: Radio Japan** 6120 and 5960 n/d cds. in 7 wks. (Barto-CT). **CKZI** 6160 f/d "CBC Centre Vancouver" cd. in 44 ds. v/s Dave Newbury. (Barhydt). **CFPX** 6005 p/d cd. w/ ltr. in 12 ds. v/s John Stubbs, VP - Operations. (Hart-FL). **Radio Canada International** 5960 f/d "National Film Board" cd. in 14 ds. (Washburn-ME)

**CHAD: Radio Nationale Tchadienne** 4904.5 f/d ltr. w/ \* stickers in 13 wks. for a FR rpt., tape and 2 IRCs. (Klinck-NY)...Stickers! That's a new one...Sam.

**CHINA, PEOPLES REP. OF: CPBS** 11515 via Beijing f/d cd. in 2 1/2 mo. (Barto). 3909.6 via Kunming f/d cd. in 2 mo. (Barto). 11040 via Xian f/d cd. in 3 mo. (Barto). **CPBS-1** 5880 p/d cd. in 30 ds. (Barhydt). **CPBS-2** 15030 via Beijing f/d "Great Wall" folder cd. in 19 ds. w/ schedule. (Butcher-MA). **Radio Beijing** 11715 (Bamako?) f/d cd. in 19 ds. w/ paper cut. (Levison-PA). 11855 via Jinhua f/d cd. in 25 ds. w/ schedule. (Swedberg). **Xinjiang PBS** 4970 via Urumqi f/d cd. in CH in 26 ds. v/s Gud Ying. (Swedberg).



Spanische Tracht aus dem Museum. Österreich  
Bund Österreichischer Nationalbank  
Custodia Nacional del Patrimonio Cultural  
Banco Nacional de España

RADIO OSTERREICH  
INTERNATIONAL  
RADIO AUSTRIA  
INTERNATIONAL  
RADIO AUTRICHE  
INTERNATIONALE  
RADIO AUSTRIA  
INTERNACIONAL

CHINA, PEOPLES REP. OF: Radio Canada International 15210 via

\* Xian f/d cd. in 3 wks. (Matthews-OH).

CLANDESTINE: Flag of Freedom Radio 9045 f/d prepared cd. in 20 ds. after 2 tries via the French addr. v/s Iraj Valijan, Director of External Services. (Palmerheim). Radio Farabundo Marti 6833 f/d prepared cd. in 22 ds. for EG rpt. and \$1.00. v/s Jaime Suriano, US Representative. Addr: El

\* Salvador Radio Aid Project, P.O. Box 1614, Old Chelsea Station, NY, NY 10011. (D'Angelo-PA).

COSTA RICA: TIFC 5055 f/d cd. w/ ltr. and a "40th Anniversary" pennant w/ sticker and calander in 33 ds. for \$1.00. v/s Juan Jacinto Ochoa F., Manager. (Hart-FL). Radio Reloj 4832 p/d cd. in 48 ds. for a SP rpt. and \$1.00. v/s Francisco Barabona G. (Barhydt-OR). Radio Impacto 5030 n/d ltr. in 7 mo. w/ pennant for a SP rpt. and 1 IRC. v/s Hector Reguena. (Connor-PA). 5030 and 6150 f/d prepared cds. w/ 3 stickers and 3 pennants. (Huniwell-NJ).

CUBA: Radio Rebelde 5025 f/d ltr. w/ pennant and sticker in 3 mo. for a SP rpt. and 2 IRCS. v/s Noemi-Cairo, Relaciones Publicas. (Kohlbrener-PA). f/d ltr. in 97 ds. w/ sticker and pennant. (Barhydt). Radio Habana Cuba 11835, 11760, 5965, 9710 and 11820 p/d "Government House" and "Coffee Plantation" cds. in 202 ds. Rcvd. FDCs and other stamps. (Peake-IA).

CYPRUS: HBC 15140 f/d cd. w/ sticker and BBC data in 5 wks. for \$1.00. (Klinck-NY).

CZECHOSLOVAKIA: Radio Praha 7345 and 21505 f/d "Orlik Chateau" cd. in 45 ds. (Humenykv-ONT). 5930 f/d "Svihov Castle" cd. in 31 ds. (Levison-PA).

DUBAI: UAE Radio 21700 f/d "Great Circle Map" cd. in 26 ds. w/ pennant. (Hart-FL).

21605 same in 23 ds. (Levison-PA). same in 25 ds. v/s K.F. Fenner. (McDavitt-NC).

ECUADOR: Radio Antena Libre 3240 f/d prepared cd. w/ ltr. and studio photo in 46 ds.

for a SP rpt. and ms. v/s Julia Medina, Secretaria. (D'Angelo-PA). La Voz del Upano 5040 f/d personal ltr. w/ 3 wallet calendars and poster in 4 mo. for a SP rpt. v/s



Delores M. Palaceos C., Director. (Field-MI). Radio Baha'i 4990 n/d cd. of "Mt. Cayambe" in 21 mo. after 3 f/w rpts. in SP w/ ms. v/s Nooshin Burwell, Coordinadora. (Sgrulletta-NY). Radio Centro 3290 n/d personal ltr. in 5 wks. for a SP rpt. Station literature rcvd. (Field-MI). HCTB 11740.3, 15115, 17889.9 and 23480.7 (2x) p/d "Ecuadorian Stamps" cd. in 7 wks. (Barto-CT). f/d "Mt. Antisana" cd. in 40 ds. (McHarg-IN).

EGYPT: Radio Cairo 9620, 9455 and 9940 p/d ltr. w/ schedule in 3½ mo. (Barto-CT). 11665 and 12050 via Abu Zaabal and 11785 via Mokattam p/d cd. in 4 mo. (Barto-CT).

EQUATORIAL GUINEA (Fernando Poo): Radio Malabo f/d prepared cd. in 2½ mo. for a SP rpt., ms. and a taped rpt. (Huniwell-NJ).

EUROPEAN RUSSIA: Radio Moscow 15220 and 17660 via Moscow f/d cd. in 53 ds. (Hart-FL). 15345 f/d cd. in 88 ds. (Watts-KY). 9795 via Serpukhov f/d cd. in 2 mo. (Lare-MI). 15280 via Zhigulevsk f/d "Kremlin" cd. in 2 mo. (Lare-MI). RZA23 Radio Moscow 10870 via Moscow f/d cd. in 2 mo. for reception in USB of EG Service to NA. (Barto-CT).

EURO PIRATE: Pirate Freaks Broadcasting Service 15050 f/d yellow cd. in 43 ds. QSL # 683 notes "Special 19 meter test transmission. First report from Canada." Personal ltr. stated 10 watts into a dipole antenna. Stickers and info. sheet rcvd. QSL was mailed from Hanover, FRG although station uses mailing address in Holland. (Sellers-ONT).

FRANCE: Radio France International 21645 and 21635 f/d cd. in 24 ds. (Zobro-MI).

RICHARD A. D'ANGELO  
3716 HURLEY DRIVE  
WYOMISSING, PA 19010  
CE, WU, DE, A, U.S.A.



Estimado Señor:

Le agradezco su reporte de recepción de nuestra emisora RADIO HUASTACOCOTLA "LA VOZ DE LOS CAPEÑINOS", del pasado 12 de Diciembre de 1989. El reporte es correcto.

Nuestro equipo de transmisión es Gates BC 1g en 2,390 KHz. banda de 121.12 metros, con 500 Watts de potencia. Transmisión de lunes a sábado de las 6:00 a 9:00 y 15:00 a 20:00 horas (hora de México).

Radio Huastacocotla es emisora Cultural y Educativa, situada en el Finca Huerta del Estado de Veracruz a 200 Km al NE de la Ciudad de México. Se encuentra en medio de un paisaje de bosques de pino y grandes terraceras, cubiertas de neblina una gran parte del año.

Nuestra emisora despreciosamente no cuenta con honorarios ni otra explotación ya que no cuenta con medios económicos fuertes, pero tener muchas comodidades. Nuestra misión es sustituir los divertidos que don algunas terraceras y esto es esencial para el entendimiento de los aparatos.

Los mayores del trabajo que hacemos los locutores es voluntario cosa que se da en otras emisoras, o al se da un muy pocas realmente.

Si está en sus manos algún día poder contactarnos con alguna fundación de su País, pues nos gustaría y se lo agradeceríamos infinitamente.

Por otra parte nos gustaría seguir en contacto con Usted y su familia Susan, Adam y Jennifer. A propósito fijase que tenemos un programa de los niños que se llama "Niños Justos" en este programa se habla de lo que pasa en Nuestra Región, además se escuchó música propia para los "Niños Justos" la conductora de este programa es Ileana Patricia Silvia a quién le gustaría mucho recibir correspondencia de sus hijos, un poco platicaciones de como es su País, de lo que más les gusta hacer, de lo que no les gusta hacer etc.

Quiero esperar seguir en contacto con cada uno y agradecer de nuevo su carta y su despliegue.

Respetuosamente,

ELVIA RAMÍREZ ALVAREZ  
COORDINADORA DEL HUTICIERO DEL CAMPO

**VERIFICATION SIGNERS: Radio Australia**



21525 via Darwin H.L. Murray.  
Radio Panamerica 6105 Daniel Sanchez Rocha, Director. Radio Alvorada de Parintins 4965 Malmunda Ribeiro da Silva. Radio Nacional de Amazonia 6180 Mrs. Lucia Emilia Fernandez, Gerente. Radio Venceremos 6853 Anita Ocampo. La Voz del Upano 5040 Sor. Dolores M. Palacios C. Radio Popular Independiente 4800 Manena de Villavicencio, Secretary. Sani Radio 4755 Jacinto Molina G., Director. RRR Banjarmasin 3250 Soedarsono, Technical Section. RRR Bandung 3204 Eem Suhaem. RRR Padang 4003 Nur Darwis....via PLAY-DX...Sam.

**FEDERAL RADIO CORPORATION OF NIGERIA - ENUGU**  
 BROADCASTING HOUSE, P.M.B. 191 ENUGU

ENUGU/EN/10/1

23rd November, 1959.

Richard A. D'Angelo  
 2716 Buckley Drive  
 Wyomissing, PA 19610  
 U. S. A.

Dear Richard,


VERIFICATION OF RECEPTION REPORT

We acknowledge with thanks your reception report of 6th July, 1959.

Your report on our 6025 KHz transmitter from 22LH, to 2310 UTC has been verified and hereby certified correct.

We wish you pleasurable listening to our programmes.

Yours faithfully,

  
 Engr. L. Enanuchi  
 Asst. Chief Engineer.

FRANCE: Radio France International 17650 and 11660 f/d "Skyline" cd. in 24 ds. w/ schedule. (Zobro).

FRENCH GUIANA: Radio Japan 15325 via Montsiner n/d cd. w/ schedule in 4 mo. after a f/up rpt. (Klinck). n/d cd. in 45 ds. (Palmerheim-MN). 9685 n/d cd. in 2 mo. w/ schedule. (Barto-CT).

GABON: Radio Japan 9645 via Moyabi p/d cd. in 2 mo. (Barto-CT). Radio France International 4890 via Moyabi f/d cd. w/ schedule in 24 ds. (Zobro-MI). (Kohlbrener-PA).

GEORGIAN SSR: Radio Moscow 21725 via Tbilisi f/d "Peoples Fountain" cd. in 2 mo. GERMAN DEMOCRATIC REPUBLIC: Radio Berlin International 11785 and 15125 f/d "Karl-Marx Stadt" cd. in 21 ds. for 1 IRC. (Carson). 13610 f/d cd. in 103 ds. (Levison). 11785 f/d cds. in 25 ds. for 1 IRC. (Carson). 11890 via Nauen f/d cd. in 3 mo. (Butcher-MA). YIS 4525 n/d folder cd. in 74 ds. (Hart-FL).

GHANA: GBC Radio One 4915 f/d cd. w/ schedule and personal ltr. in 2 mo. (Barto-CT).

GREECE: RTT - Macedonia 9935 via Thessaloniki f/d "Meteora Monasteries" cd. w/ station stamp in 25 ds. for 1 IRC. v/s A. Giannakuras. (Butcher-MA). Voice of Greece 11645 f/d "Halkidiki" cd. in 96 ds.

GUAM: KTWR 11805 f/d "Studio" cd. in 33 ds. w/ schedule. (Peake-IA).

GUIYANA: GBC 5950 f/d ltr. for an BI reception. v/s Roy Marshall, Studio Technician who desires stickers to decorate studios. (Mann-NE).

HAWAII: WWVH 5000, 10000 and 15000 p/d cd. in 11 ds. (Hart-FL).

HOLLAND: Radio Nederland 13700 and 11720 p/d cd. w/ sticker in 23 ds. (Carson).

HONDURAS: HIRVC 4820 p/d "Antenna" cd. in 31 ds. w/ pennant. v/s Orfa Esther Duren Mendoza, Secretaria. (Peake-IA). p/d "Cross and Map" cd. w/ personal ltr. and station pennant in 290 ds. for \$1.00. (Washburn-ME).

HUNGARY: Radio Budapest 9835 f/d cd. in 48 ds. (Kacir-MI). f/d "National Costume" cd. in 70 ds. (Hart-FL). 9520 f/d cd. in 9 ds. (Kacir-MI).

ICELAND: INBS 15767 f/d cd. in 46 ds. for \$1.00. (Hart-FL).

INDIA: All India Radio 11620 f/d "Lingaraj Temple" cd. in 43 ds. w/ sticker (Kremer-IN). f/d cd. in 38 ds. (MacHarg-IN). 9565 f/d cd. in 45 ds. (Swedberg). f/d cd. in 44 ds. w/ sticker. (Barhydt). 15415, 7280 and 15250 p/d cd. in 3 mo. (Barto-CT). 11620 and 11855 f/d cd. in 5 wks. (Barto). 17805, 9615 and 9675 f/d cd. in 4 mo. (Barto).

IRAN: IRIB 11895 p/d cd. w/ schedule in 133 ds. for 1 IRC. (Connor-PA).

STATE OF SAHARA  
 MINISTRY OF INFORMATION  
 BROADCASTING AND TELEVISION  
 SAHARA BROADCASTING



دولة الصحراء  
 وزارة الاعلام والتلفزيون  
 لخدمة الصحراويين

No. :  
Date :

Richard A. D'Angelo  
 2716 Buckley Drive  
 Wyomissing PA 19610  
 U.S.A.

SUBJECT : RECEPTION REPORT

Dear Sir,

This is to acknowledge receipt of your reception report and enclosure.

The programme details mentioned by you confirm to our Co-Sharets. We thank you very much for your interest and co-operation.

Your report provides us with necessary feed-back and is of great value to us.

Shown below are our Broadcast channels and frequencies for your information

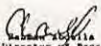
ARABIC	1.	801 KHz	MEDIUM-WAVE
	2.	612 KHz	MEDIUM-WAVE
	3.	90.9 KHz	FM STEREO
ENGLISH	1.	90.5 KHz	FM STEREO
	2.	101 KHz	FM STEREO
	3.	1084 KHz	MEDIUM-WAVE

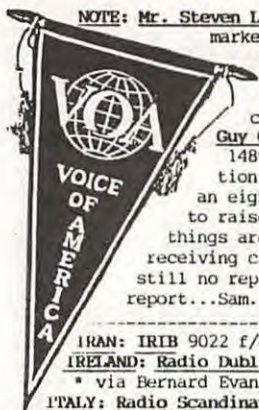
We use the facilities of Radio Kuwait for our Short-wave broadcasting at present on 15000 KHz.

Thanking you once again for your co-operation

Yours sincerely

also via **Bill Matthews** and others

  
 Abdul Wahab  
 Actg. Director of Broadcasting



**NOTE: Mr. Steven Lare** of 824 West 25th Street, Holland, MI 49423 is presently marketing dipole cut antennas for 60, 90 and 120 meters along w/ various accessories for the antenna buffs. They look very interesting and I am considering the LSD-90 model myself.

If you are at all interested, I strongly recommend that you contact Steve at the above address...Sam.

**Guy Connor** says that WYMN use the P.O. Box 452, Wellsville, NY 14895 as their mail drop. Hope this answers **Dave Turnick's** question...Sam. **Bill McDavitt** of Durham, NC has rejoined NASWA after an eight year absence. Welcome back...it couldn't of taken that long to raise the dues or did it. Hi:...Sam. **Tim Davisson** says that strange things are going on at Radio Australia. He has no problems in receiving calendars, schedules, etc. in only 7 days, but still no reply to reception reports even after a f/up report...Sam.



**IRAN: IRIB 9022 f/d "Ayatollah" cd. in 61 ds. (Blight-MD).**

**IRELAND: Radio Dublin International 6910 f/d cd. in 3 wks.**

\* via Bernard Evans, 46 Walkinstown Drive, Dublin 12, Eire.

**ITALY: Radio Scadinava 9860 via IRRS f/d cd. in (Eckert-PA).**

\* 1 yr. and 6 mo. after a f/up rpt. (Sgrulletta-NY). **Adventist**

**World Radio 7125 via Forli f/d "World Map" cd. in 52 ds. w/ info.**

\* sheets and schedule. (Peake-IA). **European Christian Radio 6205 f/d**

"Map" cd. in 6 wks. for a taped rpt. and 3 IRCs. v/s John Adams, Dir-

ector. Station in **Bavenna** but studios are located in Austria. Addr:

ECR, Postfach 500, A-2345 Brunn, Austria. (Matthews-OH).

**JAPAN: JJJ 8000 f/d cd. in 14 ds. (Forest-OH). f/d cd. in 2 mo. (Barto-CT).**

**Radio Japan 17890, 17825, 11870, 17765 and 17810 p/d cds. in 1 mo. (Barto).**

11815, 11840 and 9505 n/d cd. in 6 wks. (Barto). **Radio Tanpa 9595 and 6055**

\* via **Chiba** and 3925 via **Sapporo f/d "35th Anniversary" cd. in 23 ds. (D'Angelo).**

15195, 11815 and 17810 n/d cds. in 7 wks. (Barto-CT).

**JAVA: RRI Surabaya 3976.2 f/d prepared cd. w/ personal ltr. in 20 ds. for ms. v/s**

Drs. Agus Wiojoja. (Palmerheim-MN). **Voice of Indonesia 11784 p/d cd. w/ schedule**

in 189 ds. (Forest-OH).

**JORDAN: Radio Jordan 9560 "Map" cd. in 4 mo. for 1 IRC. w/ schedule. (Butcher-MA). f/d**

cd. in 110 ds. w/ schedule. (Hart). n/d cd. in 107 ds. for ms. (Turnick-PA).

**KENYA: Voice of Kenya 4934 p/d ltr. in 72 ds. for \$1.00. v/s Waweru Mwea, Engineer-in-**

Charge. (Washburn-ME). (Lare-MI).

**NATIONAL KIRGHIZ SSR: Radio Moscow 15420 via Prunze f/d cd. in 2 mo.**

**BROADCASTING KOREA, PEOPLES REP. OF: Radio Pyongyang 11735 f/d "Flower"**

cd. in 78 ds. via China. Pennant rcvd. (Swedberg).

It only took 17 yrs!!!

**KOREA, REPUBLIC OF: Radio Korea 15575 f/d cd. in 43 ds.**

w/ schedule. (Carson-OK).

**KUWAIT: Radio Kuwait 13610 f/d**

folder cd. in 42 ds. after

10 yrs. of trying!! (Swed-

berg)...Why so long?..Sam.

**LATVIAN SSR: Radio Riga 5935**

f/d "St. Jacob's Church" cd.

in 13 wks. for 2 IRCs. (Kohl-

brenner-PA).

**LIBERIA: ELWA 11830 f/d cd. w/**

schedule in 110 ds. for 3

IRCs. v/s J. Tokeh. (Connor).

**LIBYA: Radio Meho II 6205 n/d**

\* Radio Jamahiriya cd. in 2 mo.

for a 79 reception. Station

was on board a ship in the

Mediterranean. (Field-MI).

**LUXEMBOURG: Radio Luxembourg**

6090 f/d cd. w/ schedule and

stickers in 4 mo. for ms.

(Klinck-MD).

**MALI: Radio Beijing 15110 via**

**Bamako cd. in 109 ds. (Coupal)**



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cd. in 78 ds. via China. Pennant rcvd. (Swedberg).

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(Klinck-MD).

**MALI: Radio Beijing 15110 via**

**Bamako cd. in 109 ds. (Coupal)**

Phone 409146

Cable:

Telex N140809

Radio Manua, Hoi 40-7-9

505,

P.O. Box

LOINIGAU,

Manua Province,

Papua New Guinea.

12th December, 1989.

Mr. Richard A. D'Angelo,  
2216 Burley Drive,  
Wynessing, PA 19640  
U.S.A.

Dear Sir,

Thank you for your letter telling us about the programs broadcast over Radio Manua on October 15th, and the quality of reception.

According to our programs schedule the programs that you heard were verified to be correct.

We sincerely regret that we do not have GEL reply cards so my acknowledgement is by letter to you.

Thank you once again for your interest.

Yours faithfully,

ELVEN SEIDMAN,  
ACTING STATION MANAGER,  
RADIO MANUA.



- MALTA:** Voice of the Mediterranean 9765 f/d cd. in 5½ mo. for 2 IRCs. (Coupal-NH).
- MEXICO:** XEPPM Radio Educacion 6185 f/d ltr. w/ personal note in 33 ds. for a SP rpt. and \$1.00. v/s Ing. Gustavo Carreno, Subdirector Technico. (Zobro-MI). same in 203 ds. for a SP rpt. and \$1.00. (Kremer-IN). f/d ltr. w/ photo in 92 ds. for \$1.00. (Mann-NE). XEQ 9680 f/d cd. in 3 wks. on my 7th try for a SP rpt. v/s Sra. Marla Aguilar S. (Field-MI). Radio Huayacocotita 2390 n/d personal ltr. w/ calendar in 5 wks. for a SP rpt. v/s Elvira Sanchez Alvarez. (Field-MI).
- MONACO:** Trans World Radio 9485 f/d cd. w/ schedule in 14 ds. for ms. (Turnick-PA).
- MOROCCO:** RIVM 17815 f/d "Tower/Map" cd. in 190 ds. for \$1.00. (Mann-NE).
- NEW BRITAIN:** Radio East New Britain 3385 f/d "Map/Logo" cd. w/ schedule in 6½ mo. for \$2.00. (Eck-NEWFOUNDLAND: CKZN 6160 f/d folder w/ ert). form ltr. (Swedberg). p/d cd. in 25 ds. (Hart-FL).
- NEW ZEALAND:** Radio New Zealand International 17680 new style f/d pennant cd. in 2 wks. (Field-MI). same in 17 ds. for 3 IRCs. (Levison-PA). 17680 and 9850 f/d cd. in 35 ds. for 4 IRCs. (Carson-OK).
- NIGER:** La Voix du Sahel 5020 f/d form ltr. in 52 ds. for a FR rpt. and \$1.00. (Hart-FL). f/d form ltr. in 43 ds. for a FR rpt. and \$1.00.
- NIGERIA:** Radio Nigeria 4770 via Kaduna f/d ltr. in 5 mo. (Klinck-NY). (Mann-NE).
- NORWAY:** Radio Norway International 25730 schedule rcvd. in 22 ds. w/ notice that not every rpt. will get a QSL. They now need 20 minutes of detailed data. (Rugg-QUE).
- OMAN:** Radio Oman 17735 f/d ltr. in 39 ds. for a taped rpt. and ms. v/s Hamed Yahya Al Kindy. (Turnick-PA). 11890 via Muscat f/d folder cd. in 228 ds. (Hart-FL).
- PAPUA NEW GUINEA:** Radio Western Highlands 3375 p/d ltr. in 37 ds. for ms. This after 4 f/up rpts. v/s Esau Okole. (Palmerheim-MN). Radio West Sepik 3205 (renamed Radio Sandaun on letter) p/d ltr. in 49 ds. for 1 IRC. (Swedberg). Radio Morobe 3220 f/d ltr. in 20 ds. for 1 IRC. v/s A.R. Nase, Station Manager. (Swedberg).
- PERU:** Radio Allantida 4790 f/d "Certificado de Sintonia" cd. in 14 mo. for a SP rpt. and \$1.00. Personal ltr. rcvd. v/s Julio Reategui Taigoso, Director. (Kohlbrenner).  
 \* Radio Grau 9645 f/d ltr. in 3 mo. on my 12th try for a 68 reception. (Field-MI).  
 \* Radio Onda Popular 5273 n/d ltr. in 6 mo. for a SP rpt. (Field-MI).
- PHILIPPINES:** VOA 15290 f/d cd. via Poro in 17 ds. (Turnick-PA). Radio Veritas Asia 15445 f/d cd. in 65 ds. for \$1.00. Pennant and schedule rcvd. (Hart-FL). f/d cd. w/ calendar in 3 mo. (Field-MI).
- PORTUGAL:** Radio Canada International 15325 via Radio Trans Europa "DIY" cd. in 20 ds. (Blight-MD). Radio Portugal 11840 f/d "Map/Ship" cd. in 28 ds. w/ key chain. (Butcher-MA). Radio Free Afghanistan 11895 via RFE/RL f/d cd. in 15 ds. v/s David Walcutt. (Paszkiwicz). Radio Renascenca 9600 f/d cd. in 72 ds. for 1 IRC. (Watts-KY).
- POLAND:** Radio Polonia 7270 f/d cd. w/ ltr. and schedule in 5 wks. for 2 IRCs. (Klinck-MD)...Out of order. Sorry.
- RIO MUNI:** Radio Africa 7190 f/d cd. in 36 ds. via the CA address. (Kremer-IN). 7189 f/d cd. in 45 ds. (Mann-NE).
- ROMANIA:** Radio Bucharest 11830 and 11940 f/d cd. in 131 ds. (Hart-FL).
- SATPAN:** KPIS 15305 f/d cd. in 42 ds. w/ personal ltr. from Doug Campbell, Station Manager. (Macharg). KIBI f/d ltr. in 94 ds. v/s Domino F. Villar, Manager. (Mann-NE).



**VERIFICATION SIGNERS:** Radio Clube Marilia 3235 Jose Marques Beato, Gerente. Voice of Greece 9935 Prof. A. Dermanis, General Director. VPS Hong Kong Time Signal Station K.C. Choi, Director of the Royal Observatory. Radio El Espectador 11835 Carlos Maria Berro Collado, Jefe del Personal... via PLAY DX and Dario Monferini...Sam.



**SCOTLAND:** Weekend Music Radio 6310 f/d cd. in 56 ds. for 2 IRCs. v/s Jack Russel (Turnick). f/d cd. in 53 ds. for \$1.00. (Rugg). cds. in 7 wks. for a taped rpt. and \$2.00. (Huniwell-NJ). 6312 f/d cd. in 6 wks. (Field-MI). 15043, 13630 and 6310 3 cds. in 45 ds. w/ sticker for \$1.00 and 1 IRC. (Butcher-MA).

**SEYCHELLES:** BBC 15420 p/d ltr. in 40 ds. for 1 IRC. v/s Peter J. Loveday, Senior Transmitter Engineer. (Butcher). p/d ltr. in 42 ds. for \$1.00. (Connor-PA). 17880 p/d ltr. in 29 ds. for 2 IRCs. (Coupal-NH). FEBA 15325 f/d cd. in 34 ds. for 1 IRC. (Swedberg).

**SINGAPORE:** BBC 11955 f/d "Transmitter Site" cd. in 33 ds. for \$1.00. (Connor-PA).

**SOUTH AFRICA:** Radio RSA 21535 and 25790 f/d "Flame Lily" cd. in 32 ds. for 1 IRC. (Carson). 9615 f/d "Blyde River Canyon" cd. in 1 mo. (Zobro). 11935 f/d "Table Mountain" cd. in 45 ds. v/s M. Vorster. (Kacir). f/d "Johannesburg" cd. in 39 ds. (Kacir). 9585, 6010, 21535 and 21590 f/d "Drakensberg Basotho Hunters" cd. in 1 mo. (Zobro). 25790, 21535, 21590 and 9615 f/d "Interior of the Karoo" cd. in 1 mo. (Zobro). 25790 f/d cd. in 32 ds. (Levison). 21535 f/d "Lioness" cd. in 29 ds. (Kacir). Radio Oranje 3215 f/d "SABC" cd. in 60 ds. (Butcher). same in 77 ds. w/ sticker for 1 IRC. (Connor). Radio Five 4880 f/d cd. in 7 mo. (Zobro). f/d cd. w/ stickers in 42 ds. for 2 IRCs. (Hunt). Radio Suid Afrika 4810 p/d ltr. in 50 ds. for 2 IRCs. v/s A.L. Terblanche. (Estes-AL).

**SPAIN:** Radio Exterior de Espana 9630 p/d cd. w/ pennant and sticker in 77 ds. (Peake-IA). 11880 f/d cd. w/ sticker and pennant in 68 ds. (Zobro-MI). 15110 f/d cd. w/ schedule and pennant (ugliest I've ever seen!) in 2 mo. (Moore-MI).

**SRI LANKA:** Deutsche Welle 17800 n/d cd. w/ pennant in 3 mo. Schedule rcvd. (Field-MI).

**SWEDEN:** Radio Sweden 11705 f/d cd. in 28 ds. (Swedberg). same in 3 mo. for a taped rpt. and \$1.00. (Huniwell). 21610 f/d "Coastal Boat" cd. w/ schedule and sticker in 16 ds. for \$1.00. (Kacir).

**SWITZERLAND:** Swiss Radio International 6095 via Beromunster, 6135 via Schwarzenburg and 9735, 9885 via Sottens f/d cd. in 16 ds. w/ schedule. (D'Angelo).

ICRC 9885 f/d cd. in 53 ds. for 1 IRC. Schedule & sticker rcvd. (Barhydt-OR).



إذاعة الامارات العربية المتحدة من ابوظبي  
U.A.E. BROADCASTING FROM ABU DHABI.

**SYRIA:** Radio Damascus 9950 f/d "Globe" cd. in 985 ds. by registered mail. This doubled my old record of 32 mo. (name?).

**TADZHIK SSR:** Radio Moscow 11800 via Dushanbe f/d cd. in 6 wks. (Kohlbreuner). f/d cd. in 64 ds. v/s Mrs. Stepanova. (Weber-OH). f/d cd. w/ pin in 2 mo. v/s Tanya Lavrova. (Eckert). 21585 and 17600 f/d cd. in 78 ds. (Hart). 15140 and 15295 cd. in 2 mo. (Lare-MI).

**TAHITI:** RFO Noumea 15170.7 f/d cd. in 5 mo. for a FR rpt. and 2 IRCs. (Klinck). f/d cd. in 4½ mo. for a taped rpt. and ms. (Huniwell-NJ).

**TAIWAN:** Voice of Free China 11745 p/d ltr. w/ schedule, stickers and CH music tape in 11 wks. for a taped rpt. and ms. (Klinck). 11805 and 15370 (Pa-Li site) f/d "Pottery" cd. in 1 mo. (Barto). Voice of Asia 7445 f/d "Singapore City Hall" cd. in 40 ds. (Mann)

**TANGIER:** VOA 15205 f/d "Space Shuttle" cd. in 15 ds. (Washburn-ME).

**TURKEY:** Voice of Turkey 9445 f/d "Tapestry" cd. w/ pennant and sticker in 94 ds. (Swedberg). same in 66 ds. (Hart-FL).

**UKRAINIAN SSR:** Radio Kiev 9610 f/d "Daily Chores" cd. in 63 ds. (Carson). Radio Moscow 17840 and 17810 via Simferopol f/d cd. in 2 mo. (Lare-MI). 15475 and 17810 f/d cd. in 88 ds. (Watts). 9860 via Ivano-Frankovsk f/d cd. in 88 ds. (Watts-KY).

**USA:** WOCR 15690 "Globe" cd. in 13 ds. v/s Joseph Brashier. (Peake).

RADIO MALAYSIA KOTA KINABALU, SABAH

Kota Kinabalu, 27 December 1987

Dear Sir,

Your reception report on our transmission on 4970 ..... KHZ/MHZ on 21 September 1987 is hereby acknowledged and confirmed.

Yours faithfully,  
for (Signature)  
Director of Broadcasting,  
Radio Malaysia Kota Kinabalu,  
Sabah, Malaysia.

Mr. Steven R. Lare,  
824 W. 25th St.,  
Holland, MI 49423  
U.S.A.

**USA: WACR** 15690 f/d "Globe" cd. in 191 ds. (Mann). n/d cd. in 1 mo. for ms. (Huniwell). 15690 and 7520 f/d cd. w/ schedule in 10 wks. (Field-MI). **Voice of Free China** 5950 and 9680 via **WYFR** f/d "Vase" cd. w/ sticker in 27 ds. (Levison). 5985 f/d cd. in 69 ds. w/ sticker. (Levison). **Radio Marti** 11930 f/d cd. in 20 ds. (McDavitt). **KOSW** 15580 f/d cd. in 72 ds. (Hart). 11695 f/d "Utah Scenes" cd. in 43 ds. v/s Sheryl Sheaffer. (Palmerheim). 9815 same cd. in 2 wks. (Grenier-CA). 6135 cd. w/ schedule in 12 wks. for ms. (Klinck). **KVOH** 17775 f/d cd. in 114 ds. (Hart). **Voice of the OAS** 15160, 11830 and 9565 p/d cd. in 132 ds. (Hart). 11830 cd. in 16 mo! I actually gave up. (Sellers-ONT). f/d cd. in 1 mo. (Macharg). 9565 f/d cd. in 112 ds. for a SP rpt. and SASE. (Turnick). **WBRJ** 9495 f/d cd. in 10 wks. for \$1.00. v/s Loren Holycross. (Kohlbrenner) **VOA** 9585 via **Pathany** f/d cd. in 105 ds. for the last transmission of the Crosley transmitters. Also rcvd. 3 iron-on patches. (Palmerheim). same special (U) QSL cd. in 112 ds. w/ patch. (Sellers). 9575, 9840 and 9775 f/d cd. in 25 ds. (Humenyk). 11930, 15410 and 15580 f/d cd. in 25 ds. (Humenyk). 11930 via **Greenville** f/d cd. in 22 ds. (Humenyk). 15410 cd. in 39 ds. (Humenyk). 15580 f/d cd. in 18 ds. (Peake). **WSTB** 7400, 13760 and 9455 f/d prepared cd. in 6 mo. v/s Tom Nickell, Manager. (Field-MI).

**USA (Pirate): Pirate Radio Network** f/d "PRN/Clandestine" sheet in 220 ds. (Zeller-OH). **WJAR** f/d cd. in 25 ds. (Zeller). **WRNJ** 7415 f/d cd. in 1 mo. for a phone rpt. (Paszkwicz). **Radio Garbanzo** 7412 f/d ltr. in 5 wks. 30 watts. (Field-MI). **KNBS** 7411 and 7527 f/d cds. in 14 ds. w/ pennant for ms. (Connor). **Radio Clandestine** 7414 f/d cd. in 212 ds. for ms. (Blight). 7355 and 7415 f/d form ltr. in 7 mo. for ms. (Connor). **East Coast Pirate** **Radio** 15063 f/d cd. in 18 ds. for ms. (Hart). **Hope Radio International** n/d info. sheet in 40 ds. (Zeller). **Secret Mountain Laboratory** 7412 f/d ltr. in 590 ds. for 3 ms. (Blight). **WRNR** f/d "Hudson River" cd. in 114 ds. (Zeller). **Voice of Tomorrow** 6240 f/d "Mountain Lake" cd. in 4 mo. for \$1.00. (Connor-PA). **Radio USA** 7407 f/d "Flag" cd. in 24 ds. for 3 ms. (Blight-MD). **Secret Society Radio** 6850 f/d "Crossed Swords" cd. in 60 ds. for ms. (Connor). 6850 and 7410 same cd. in 9 ds. for 3 ms. (Blight). **Pirate Radio UK** cd. in 51 ds. for relay via **ECPR**

**UZBEK SSR: Radio Tashkent** 9715 f/d cd. in 79 ds. w/ (Zeller). schedule and postcards. (Swedberg).

**VATICAN: Radio Vatican** 11780 p/d "Towers" cd. in 98 ds. (Peake-IA).

**VENEZUELA: Radio Nacional de Venezuela** 9540 n/d cd. in 3 yrs! for a SP rpt. Sticker and postcards rcvd. (Field-MI). **Radio Los Andes** 6010 f/d prepared cd. in 46 ds. for a SP rpt. and ms. Sticker rcvd. (D'Angelo).

**VIETNAM: Voice of Vietnam** 15010 f/d cd. in 184 ds. after several f/up rpts. (Blight). f/d cd. w/ schedule in 152 ds. (Hart). same in 103 ds. w/ pennant, schedule and New Years cd. (Swedberg).

**WEST BERLIN: RIAS** 6005 p/d cd. in 31 ds. for \$1.00. (Hart-FL).

**ZAIRE: Voice of Zaire** 15245 f/d ltr. in 1174 ds. for a FR rpt. and 1 IRC. Great government efficiency! (Swedberg).



via Terrence



**NOTE:** I even used the small print and I have a couple of reports left over - next month. I'm going to ask a small favor....Please list the country from which the signal is actually emanating from, i.e. VOFC on 5985 via WYFR is USA not Taiwan; Moscow on 4765 is Cuba not USSR; Moscow on other freq's is European Russia not USSR and try to list your Soviet sites under the correct Republic heading not as USSR....It would help...Sam. I'll cut your reports apart - you do

not have to do this. Also don't try to squeeze all your reports on one page...you can mail 5 pages for the same quarter.

Till next time best of QSLing...Sam.

*Sam*



Radio Japan

# Contributors' Page

**Kris Field**  
431 Babylon Road  
Ambler, PA 19002-2302



## LOGGINGS CONTRIBUTORS — APRIL 1990 — DEADLINE 12th of MONTH

The following members submitted the loggings this month:

Brian ALEXANDER, Mechanicsburg, PA	Kenwood R 5000
Adrienne BARHYDT, Milwaukie, OR	Drake SPR4, NC183D, ATS 803A
John CARSON, Norman, OK	FRG 8800
Edward CICHOREK, Somerset, NJ	R71A, Uniden 2021, etc. !
Ken COBB, Portland, ME	Allied SX 190
Kurt COX, Leeburg, OR	R70, Alpha Delta DX Sloper
Richard D'ANGELO, Wyomissing, PA	DX 440
David DUNN, Columbus, OH	R71A, R388
Gary EMERSON, Golden, CO	Uniden 2021
Karl FORTH, Dxing from Singapore !	R71A + Trap dipole
Harold FRODGE, Midland, MI	DX 150A, Sangean SG789
Harold FRODGE, Island Lake, MI	
Pete GRENIER, Covina, CA	
Joe HANLON, From the WINTERFEST !	
Joe HOWELL, Escondido, CA	R71A, Multiband AM Pickup
Hans JOHNSON, Savannah, GA	NRD 525
Jerry JOHNSTON, Lexington, KY	DX 302, Zenith Transoceanic
Rufus JORDAN, Pittsburgh, PA	
W. KARCHESKI, Holden, MA	Kenwood R 5000
Jerry KLINCK, West Seneca, NY	NRD 525, Sony 2010
Fred KOHLBRENNER, Philadelphia, PA	
John LACKMAN, Lexington, VA	R 5000
Dave LEIBOWITZ, Scarsdale, NY	Sony 2010
Harold LEVISON, Philadelphia, PA	Kenwood TS-440, Mosley dipole
Tom LOTTI, Alexandria, VA	NRD 525, R71A
Bill MCDAVITT, Durham, NC	DX 440
John PRATH, Ft. Lauderdale, FL	R 390A, R71A
Larry ROYSTON, Pahoia, HI	FRG 7700, Kenwood R 1000
Andrew RUGG, Nuns Island, Quebec	R70, FRG 7700
Daniel SAMPSON, Independence, WI	R-4B, HQ-180, SX-62
John TUCHSCHERER, Neenah, WI	
Steve WALLACE, Fleetwood, PA	

Good reporting again this month ! It's nice to see some new names on the list and as always nice to hear from those who contribute every month ! I enjoyed seeing and meeting some of you at the SWL FEST. It seems that everyone had a good time once again.

Please note: Because the English language broadcast schedules will be printed in full next month, there will be no Contributors Page. I'll report May and June's contributors together in the June column. Sheryl and Wally will still report your loggings, so keep those loggings coming in.

Thanks for all the notes with the loggings. Sorry if I don't have time to write back to everyone, but I do appreciate the notes !

# Tropical Band Loggings

Sheryl Paszkiewicz  
1015 Green Street  
Maritowoc, WI 54220



- 1629t AUSTRALIA, 3RPH/2RPH, 1150-1158 fade w/fair audio, YL accented DJ, also hrd weaker sig w/mx, same format as hrd Xmas 1988. This hrd 3/3. (Clark-ON)
- 2390 GUATEMALA, LV de Atitlan, 8/2, \*1132-1205 w/ID, anmts, rustic vcls, tlk, SIO=252. (D'Angelo-PA)
- 2390 JAVA, RRI Cirebon, 21/2, 1445-1518 w/lagu pops, fast lcl ID 1459, end of SCI, Jak relay, steady & weak (Bryant-WA)
- 2390 MEXICO, R. Huayacocotla, 8/2, 0105 w/Mex style mx, Tlk, anthem to Ollin\* (Howell-CA)
- 2465.7t JAVA, R. STI di Bogor, 1505-1510 w/lagu pops, M tlk in IN, This only one listed in Indo survey. Help? (Bryant-WA)
- 2475 CHINA, Zhejiang PBS, 8/2, 1350 in CH w/mx & tlk (Emerson-CO)
- 3142.9 SUMATRA, RPKD2T Belitung, 22/2, 1455 w/modern instrs. (Bryant-WA)
- 3169.5 CZECHOSLOVAKIA, CLB5, 5/2, 0354 w/TPs (Johnston-IY)
- 3204.4 JAVA, RRI Bandung, good level at 1510 UTC w/Jakarta nx relay (Bryant-WA)
- 3205 NEW GUINEA, R. West Sepik, 3/3, 1205 in PD w/poss lcl nx, ment. Vanimo, R. Sandaun IDs. This & West New Britain best PNGs today, 90m stations absent. (Clark-ON)
- 3210.5t MOZAMBIQUE, R. Mozambique, 8/2, 0323-0353 w/regional mx, YL tlk, poss. ID, ment. Maputo 0347. (Field-PA)
- 3215 SOUTH AFRICA, R. Granje, 17/2, 0300-0355 in EG w/exc sig, oldies/pops, record stuck on "Pied Piper" by Crispian St. Peter! (Dunn-OH)
- 3224.9t SUMATRA, RRI Tanjung Pinang, 17/2, 2258 w/prob lcl ID, SCI, Jak jingle & nx, almost fade 2304 but //3231.9 (Clark-ON)
- 3230 LIBERIA, ELWA, 27/2, 1954-2000 in vern w/ID, M tlk, Afr. Folk mx, ID 2000. (Schulze-FRG)
- 3230.1 NEPAL, R. Nepal, 15/2, 1515 w/ID, subcont mx //5005 which had better sig. Start of good subcont opening (Bryant-WA)
- 3235 INDIA, AIR Gauhati, 15/2, 1510 at good level (Bryant-WA)
- 3245 VENEZUELA, unid, 6/3, 0355 w/s/off anmts, TC, YV NA, ID but couldn't make out. (Wallace-PA) This has been rptd as R. Libertador--sp.
- 3250 HONDURAS, R. Luz y Vida, 7/3, 0205 w/monotonous tlks, lcl mx, ID 0330 (Wallace-PA) 3/2, 0305-0401\* w/inspirational mx spot IDs, reverb ID 0332, NA. (Jordan-PA) 5/2, 0333 w/"Unshackled" pgm. (Johnston-KY) 9/2, 1146 w/tlk over backgd mx, SIO=252 (Taylor-PA) 3/2, 1135 w/tlk, mx, ID (Prath-FL)
- 3255 LESOTHO, BBC Relay, 10/2, 0352 in EG w/tlk abt cholera, mx, fair to poor sig (Royston-HI) 17/2, 0355-0400 w/tlks, fair sig (Dunn-OH)
- 3264.8 SUMATRA, RRI Bengkulu, 15/2, 1515 w/exc sig (Bryant-WA)
- 3276.8 JAVA, RRI Jakarta, 15/2, 1520 //4774.6, good to exc sig on both freq but 3276 slightly better (Bryant-WA) Last month John rptd this station was giving Bhutan "fits" and of course we meant Kashmir, not Bhutan. Kashmir is on 3277.0 and Bhutan on 5023.1--sp. 19/2, 1005 in IN w/tlk & mx (Klinck-NY)
- 3280 ECUADOR, LV del Napo, 18/2, 1003 w/poss nx, flutes btwn items rel spot 1027. SIO=242+ (Frodge-MI) 6/2, 1105 w/ID & ment R. del Punto. SIO=353. (Taylor-PA)
- 3282y MOZAMBIQUE, EP de Sofala, 6/2, 0350 in vern w/tlk, Afr. mx IS before 0400 (Howell-CA) 17/2, 0350 w/chants & drums, QRM. SIO=222 (Frodge-MI)
- 3285 BRAZIL, ZYG366, 26/2, 0155 in EG/PT w/lively vcls, no anmts till 0223, "You have been listening to ZYG366." (Wallace-PA) This is prob R. Sentinelu de Amazonia which is being rptd elsewhere--sp.
- 3290 NAMIBIA, kSWA, 27/2, 0215 in EG w/mixed mx pgm, ID (Klinck-NY)
- 3290 PERU, R. Tayabamba, 10/2, 1115 w/Latin mx & chatter (Klinck)
- 3295 INDIA, AIR Delhi, 15/2, 1510-1545 w/fair level (Bryant-WA)

- 3304.4 INDIA, AIR Ranchi, 15/2, 1510 w/poor sig. (Bryant-WA)
- 3306.1 TIMUR, RRI Dili, 21/2, 1530 w/exc sig & modulation, good mod 50% of time, now is the time for East Coast listeners to hear this one (Bryant-WA) 8/2, 1400 w/mx (Emerson-CO)
- 3315 INDIA, AIR Bhopal, 15/2, 1510 w/good level (Bryant-WA)
- 3320 NORTH KOREA, R. Pyongyang, 12/2, 1115 in KK w/tlk, lots of QRM, fair to poor sig. (Royston-HI)
- 3320 SOUTH AFRICA, R. Orion, 18/2, 0128 w/EG pop mx, jingle, SIO=252 (Frodge-MI) 2/2, 0139 in AK w/mx pgm (Klinck-NY)
- 3345 MOLUCCAS, RRI Ternate, 15/2, sudden off the air at 1359 w/o Love Ambon. Exc level (Bryant-WA)
- 3350 NORTH KOREA, KCBS Pyongyang, 12/2, 1110 in KK w/tlk by W, mx & poor sig (Royston-HI)
- 3360t GUATEMALA, LV de Nahuala, 14/2, 1154 w/tlk & marimbas. (Johnston-KY)
- 3375 BRAZIL, RN Sao Gabriel Cachoeira, 13/2, 0932 w/R. Nacional ID, bad QRM, LA mx (Taylor-PA)
- 3375.7 ANGOLA, RN, 4/2, 2205 in PT w/tlk, martial mx, pop mx, ID 2230, more mx (Karcheski-MA) 13/2, 2233 w/ID, nx items. (Taylor-PA)
- 3380t GUATEMALA, R. Chortis, 14/2, 1157 w/tlks & marimbas, CW QRM (Johnston-KY)
- 3380.5p JAVA, RRI Malang, 15/2, 1540 Gamelan mx, M tlc for a minute, YL vcls //4931.6 //Surakarta outlets, clx sing to Surakarta ID 1558, SCI, Jak nx, then Surakarta pgm again relayed by Malang (Bryant-WA)
- 3383.7 CUBA, R. Reelde, 3/2, 0001 //5025 (Johnson-GA) 13/2, 0715 ID 0725, fair sig (Royston-HI) 7/3, 0530-0603 (Schulze-FRG) 25/2, 0452. 5025 s/off 0500 but 3383 continued (Frodge-MI) 14/2, 0412 w/sports (Johnston-KY) 25/2, 0516-0606 w/mx pgm (Tuschcherer-WI) 4/2, 0455-0505 (Alexander-PA) Doesn't appear to be a harmonic but unsure why they are on this freq sometimes //5025 and other times not--sp.
- 3385 NEW BRITAIN, R. East New Britain, 1/2, 1230 UTC. SIO=151. (Taylor-PA)
- 3394.8 ECUADOR, R. Zaracay, 28/2, 1012-1031 w/mx, TCs, ID 1030, poor sig. (Kohlbrenner-PA)
- 3394.8 SUMATRA, RRI Tanjungkarang, 15/2, 1446 w/tribal mx, gang-busters sig. FAR OUT. Also 1600 w/Jakarta nx relay, exc sig (Bryant-WA)
- 3395 ECUADOR, R. Zaracay, 6/2, 1128 w/ID, tlks, mx, SIO=252. (Taylor-PA)
- 3447.2 BORNEO, RRI Pontianek, 15/2, 1440 moderate level. Sked of this freq & 3345 appear correct in DSWCI Trop Bands Survey (Bryant-WA)
- 3475t BOLIVIA, R. Padilla, 8/2, 0120 w/romantic ballads, soft voiced YL annrc, covered by QRM & utes by 0145 (Howell-CA)
- 3585.0 UHID, 15/2, 1550 warbly carrier, weird modulation. Sounded South or SE Asian or Indo pop mx, 1 TP 1600, nx to 1605, then believe SF. Help out there! (Bryant-WA) John, what's SF--sp.
- 3985.1 CLANDESTINE, Echo of Hope, 14/2, 1006 in KK w/ment KES, tlks ment Gorbachev, ID, ment Romania, QRM & jammed (Park-HI)
- 4000.2 SULAWESI, RRI Kendari, 15/2, annrc over Love Ambon to 1551\* Exc sig (Bryant-WA)
- 4080 MONGOLIA, R. Ulan Bator, 12/2, 2159-2227 w/6 TP, bells, ID, NA, nx, best SIO=322 (Schulze-FRG)
- 4119 NORTH KOREA, Vo National Saving, 8/2, 1405 in KK w/tlks being jammed (Emerson-CO)
- 4440 UHID, 18/2, 1152 hrd same time as Vientiane on G130 but w/diff pgm, not hrd after 1230. (Forth-SINGAPORE)
- 4485 ASIATIC RSFSR, Kamchatka R., 12/2, 1037 in R3 w/piano mx, seemed live concert, M annrc, good sig. (Royston-HI)
- 4557 NORTH KOREA, Vo National Saving, 8/2, 1405 in KK w/tlks being jammed (Emerson-CO)
- 4607.3 IRIAN JAYA, RRI Serui, 14/2, 1333 in IN w/tlks, island mx, this & 4752 only Indos audible today (Howell-CA)

- 4607.3 IRIAN JAYA, RRI Serui, 14/2, 1525 in IN w/song, tlk over light mx, some white noise & ute QRM (Park-HI)
- 4610 ASIATIC RSPSR, Khabarovsk Radio, 12/2, 1020 in RS w/instds, ID 1030 by YL, more mx, good sig (Royston-HI)
- 4635 TADZHIK SSR, Dushanbe 1st Channel, 12/2, \*0000 w/Kremlin bells, anthem, IS (Johnson-GA) 24/2, 2348-0005 in RS w/test tones, IS, bells, NA, clx mx //4050, 5015 (Alexander)
- 4679 ECUADOR, RN Espejo, 9/2, 0140-0228 w/tlks, TC, ID 0200, promos but vy weak & noisy (Jordan-PA)
- 4699.9 JAVA, RKIP Surabaya, 15/2, 1535 good level w/lagu pops. (Bryant-WA)
- 4735.1 CHINA, Xinjiang PBS, 16/2, 2345-0035 w/ME type mx, W anncr but little tlk, no break at 0000 //5800. (Alexander-PA)
- 4753.5 SULAWESI, RRI Ujung Pandang, 8/2, 1420 w/SB sig (Emerson-CO) 14/2, 1548 w/Hindu like song backed by Gamelan, loud but overmod (Park-HI)
- 4760p ANDAMAN, AIR Port Blair, 16/2, \*1200 w/Hindi sounding anncr vcl mx, behind Kunming station, then even with them. Also hrd 1500 recheck w/subcont mx & 1558 EG econ pgm, instl theme, 1601 lang tlk, mx. (Forth-SINGAPORE) unid on 3/3 at 1220 w/subcont vcls, lost by 1230 to Kunming. Seasonality favors Port Blair to Leh. Also hrd 11/2 at 1210 w/vcls over Kunming but horrendous ute carrier. (Clark-ON) Anyone chasing this be very careful of AIR Leh also on this freq. The EG Karl Forth hrd would favor Port Blair as Leh doesn't list EG in their sked--sp.
- 4760 LIBERIA, ELWA, 10/2, 0559 w/s/on IS, ID, deep fades. SIO=251. (Taylor-PA) 24/2, 2215-2230\* in EG w/rel pgm, ID, anmnts, NA. (Cobb-ME)
- 4770t NIIGERIA, PRON Kaduna, 14/2, 0450 in EG w/low audio, drums 0500, mx (Johnston-KY) 9/3, 0600 EG ID, mx, mx (Klinck-NY) 10/2, 2151 w/rel, choir singing Joy to the World (in Feb?) (Field-PA) 8/2, 2300 presumed w/some EG, jazz mx (Taylor)
- 4774.7 JAVA, RRI Jakarta, 14/2, 1603 w/nx //4753.4, RPTV QRM from 4775. (Park-HI)
- 4780 DJIBOUTI, R. Djibouti, 0510-0345 in Somali w/Qur'an, rel tlk mx, 0330 ID "Radio Djibouti" which confirms what Sheryl & poss. Hans Johnson hrd here. SIO=333. (Schulze-FRG) 10/2, 0404 w/Qur'an, instls 0406, lang tlk to 0425 fade (Royston)
- 4785 CHINA, Zhejiang PBS, 10/2, 2310-2327 w/prob ID, mx, tlks, fading. (Schulze-FRG)
- 4789.7 PERU, R. Atlantida, 12/2, 0924 w/SP tlk, ID. (Klinck-NY)
- 4790 SWAZILAND, TWR, 12/2, \*1758 w/EG ID, mx, Chichewa pgm. (Schulze-FRG)
- 4795 CAMEROON, R. Douala, 10/2, 0602 in FR w/"Ici Douala" ID, HiLife mx. (Taylor-PA) 4/2, 2117 w/lcl mx, FR anmnts. (Klinck)
- 4795 USSR, R. St. Peace & Progress, 10/2, 2258 w/ID, s/off, SIO=353. (Taylor-PA)
- 4799.8 GUATEMALA, R. Buenas Nuevas, 14/2, 0225-0240 w/ID, marimbas, rel pgm (Schulze-FRG)
- 4800 INDIA, AIR Hyderabad, 8/1, 1559 in EG w/ID, interview, poor to fair (Cox-OR)
- 4800 LESOTHO, R. Lesotho, 8/3, 0355 in Sesotho w/tlk, ID & mx. (Klinck-NY) 3/2, 2154-2208 w/Bible pgm, tlk in vern but EG rel records (Rugg-Pq)
- 4815 BRAZIL, Rdf. Londrina, 8/2, 0055 in PT w/tlk abt Paraguay, Uruguay, ID & jingle, rel mx (Howell-CA)
- 4815 BURKINA FASO, RTV Burkina, 3/2, 2130 in FR w/a play (Karcheski-MA) 15/2, 2300 w/nx & mx. (Emerson-CO)
- 4819.7 ECUADOR, R. Faz y Bien, 5/3, 0958 w/mx, NA, ID, poss rel sce or prayers (Kohlbreuner-PA)
- 4830 BOTSWANA, RB, 5/2, 0356 w/IS //7255, ment freqs. SIO=353. (Taylor-PA)
- 4835 MALI, RTVM, 8/2, 0559 w/"Ici Bamako" ID, drums & chants in FR (Taylor-PA)
- 4840 MANCHURIA, Heilongjiang PBS, 12/2, 1002 in CH w/tlk btwn NEW, good sig. (Royston-HI)

- 4845 MAURITANIA, ORTM, 15/2, mx in AR, ment Nouakchott, SIO=352 (Taylor-PA) Time? 4/2, 2334 w/singing in lang not AR. 2350 Qur'an, ID 0001, anthem & s/off. (Johnson-GA)
- 4845.3 MOLUCCAS, RRI Ambon, 8/2, 1235-1300 w/good sig, lagu pops, stronger than Ujung Pandang. lcl ID 1259, SCI, TPs, Jak mx. (Pearson-OH) 8/2, 1240 w/best ever sig, over ute, pops, lcl ID, theme mx, ID, SCI, nx. Sorong also good (Clark)
- 4850 CAMEROON, Yaounde, 17/2, 2320 in FR w/mx & ID (Klinck-NY) 11/2, 2350-0000\* w/pop vcls, ID, s/off annmts in EG & FR, choral anthem. SIO=252 (D'Angelo-PA)
- 4850 UZBEK SSR, Tashkent 2nd Channel, 12/2, 0205 lcl mx, RS ID, clx mx. Working on this awhile so pleased to get ID. (Johnson-GA) Congrats!--sp.
- 4859.8 PERU, R. La Hora, 5/3, 1014-1032 w/OA mx, ID 1018, poor. (Kohlbrenner-PA)
- 4860 USSR? Chita R., 24/2, 2203 in CH? Tlk, mandolins, vcls. SIO=222. (Leibowitz) This should be tentative.--sp.
- 4865 COLOMBIA, LV del Cinaruco, 3/2, 0532 w/Caracol ID, nx, ment Bogota sev times (Frodge-MI) 22/2, 0545 w/salsa mx, vcls, IDs, FC 0556, abrupt close down 0558. (Carson-OK) 4/2, 0555-0622 w/nx, LA mx, ID 0622, SIO=555. (Streitmatter-IN) Also 11/2, 1122 w/ballads, TC, ID, ranchera mx (Park-HI)
- 4869.9 ECUADOR, R. Rio Amazonas, 24/2, 1015-1025 w/NA, primitive flutes, barking dogs, strings, flutes, annmts 1021 in Indian lang. Not yr standard HC mx. (Alexander-PA)
- 4870 BENIN, ORTB, 6/2, 2259 in FR w/ID, pop mx. (Taylor-PA)
- 4875 BRAZIL, RN Boa Vista, 16/2, 0200-0345 w/lots of mx, ad, jingle, ID, tlks, ballads, promos. (Jordan-PA)
- 4875 GEORGIAN SSR, Tbilisi, 2/3, 0332 //4930 w/Mayak pgm. (Johnson)
- 4875.6 BOLIVIA, R. La Cruz del Sur, 24/2, 0940-1045 w/flutes, ID 1020, echo annmts, rel pgm. HIC 145 (Ross-IL) Congratulations, Tom & tax for calling this in--sp. 28/2, 1039+ w/mx, flutes, ads, ID 1043, children singing, poor. (Kohlbrenner)
- 4880 SOUTH AFRICA, Radio 5, 5/2, 0327 in EG w/pop mx, tlk, ment Johannesburg. SIO=151. (Taylor-PA) 7/2, 0353 in EG w/mx, Chesterfield ads, tlk abt Mandela. (Levison-PA) 2/2, 0407 w/"Saturday Morning" pop mx pgm (Carson-OK) 15/2, 2330-2400\* w/great sig & Van Morrison songs (Dunn-OH)
- 4885 COLOMBIA, Ondas del Meta, 15/2, 0703 w/ID, tlks (Taylor-PA) 10/2, 0815 w/LA mx, IDs, poor. (Royston-HI) 11/2, lively mx, enthusiastic annmts, IDs (Park-HI)
- 4885 PERU, R. Huancavelica, 2/2, 0305-0325 w/pops, ballads, ID, FC, off the air. Fair sig. (Jordan-PA)
- 4889.7 ECUADOR, R. Centinela del Sur, 2/3, 0119 w/long tlks, ID 0121. (Kohlbrenner-PA) This station seems to be famous for those long tlks--sp.
- 4890 PAU A TERR., NBC Port Moresby, 14/2, 0833 in PD w/nx, interview, mx w/synth drums (Park-HI)
- 4895 USSR, R. Moscow, 15/2, 0204-0225 in EG w/current affairs For North American Sec. (Rugg-PQ)
- 4900 GUINEA, RTV Guineenne, 17/2, 2300 in FR w/ID, tlk & mx. (Klinck-NY) 26/2, 2347-0000\* w/long tlk, instl bridges, ID, drum mx, orch NA (D'Angelo-PA) Tnx for all your contributions, Rich--sp.
- 4901.9 SRI LANKA, SLBC, 11/2, 1253 w/tlk in pres. Sinhala, sub-cont vcls, 5 TP 1300, anmt, vcl, fading. This station rarely hrd here (Clark-CN)
- 4904.5 CHAD, RN Tchadienne, 10/2, 2218 in FR w/nx & hilife mx, ment. Tchadienne. SIO=353. (Taylor-PA)
- 4905 BRAZIL, R. Anhanguera, 12/2, 0237-0300 w/pops, chatter, s/off anmt 0259, "boa noite." (Rugg-PQ) 13/2, 2345 w/mx, FC but no ID. Poss. R. Relogio Federal (Wallace-PA)
- 4910 ZAMBIA, ZNBC, 5/2, 0345 w/lcl mx, tlk in vern, ID in EG. (Johnson-GA) 27/2, 1758-1900 w/IS, EG nx, Afr. folk mx, ment. Radio One & ZNBC. (Schulze-FRG)
- 4915 BRAZIL, R. Anhanguera, 4/2, 0000 w/nx & ID. (Rugg-PQ)

- 4915 BRAZIL, R. Anhanguera, 13/2, 2350-0001 w/ID & mx bridges (Schulze-FRG)
- 4915 GHANA, GBC-1, 4/2, 2257 w/EG mx, tlc, ID. (Taylor-PA)
- 4920 RICHARD Wood reports that the station reported here last month from USSR probably uses "Dom Radio" as part of its address but not the actual ID since "Dom" means house in Russian. A city name is required in the ID and every Soviet station is req'd in its town's Dom Radio or Radio House. Tnx for the info, Dr. Wood--sp.
- 4920 AUSTRALIA, VNG, 4/2, 0c37 w/EG mx, ID, very good sig. (Cox-OR)
- 4920 UNTD, 13/2, after R. Quito s/off here, American rock mx played by Steve Perry, Grand Funk, etc. SP annts of "Radio Popular," "Marti," "Sandino" etc. ?? (Taylor-PA)
- 4925 BRAZIL, Rdf. Taubate, 15/2, 2309 w/ID, samba mx, ads, muddy copy. (Taylor-PA)
- 4926.5 RIO MUNI, RN Bata, 27/2, 2036-2100 in vern w/Afr. folk mx, 2100 SP pgm, ID, drums, mx. (Schulze-FRG)
- 4927 SUMATRA, RRI Jambi, 17/2, 1145 w/HF sounding mx, YL anncr, strong w/loud ute RM, 1200 nx, RRI ID 1206 (Forth-SINGAPORE) 15/2, 1359 s/off and excellent sig. (Bryant-WA)
- 4930 GEORGIAN SSR, Tbilisi, 5/2, 0230 w/RM IS, tlc in lang, Mayak pgm (Taylor-PA) How do we know if this isn't ash-khabad?--sp.
- 4932 JAVA, RRI Surakarta, 1/2, 1430 w/mx (Emerson-CO)
- 4934 KENYA, Vo Kenya, 10/2, 0422 in EG w/call & response song, ID & lcl TC (Park-HI) 4/2, 2050 in EG w/Western mx, ID & TC on hour, Afr. nx, 2110 s/off. (Klink-MY)
- 4934.8 PERU, R. Tropical, 4/2, 1103 w/mx, TC, ID (Taylor-PA)
- 4935.3 BRAZIL, R. Capixaba, 4/2, 0645-0715 w/rel pgm w/screaming preacher, annts, ID 0656 (Alexander-PA)
- 4940 CHINA, Hunan PBS I, 14/2, 1520 in CH w/organ mx, "Hunan renmin guangbo diantai. Yenchin. ." and off (Park-HI)
- 4940 UKRAINE, Kiev, 11/2, 0444-0515 in RS w/mx incl "Great gates of Kiev," ID, IS //6020. (Cobb-ME) Good to have you back--SI
- 4940 VENEZUELA, R. Continental, 19/2, 0319-0343 w/tlc, 0330 ID, LA mx. (Tuchscherer-WI) 3/3, 0320-0359\* w/lively mx, commercial sounding format, ID, ads (Jordan-PA)
- 4955 BRAZIL, R. Marajoara, 12/2, 0327-0334 w/tlc & requested phone calls, rel pgm, abrupt s/off (Rugg-FG)
- 4970 SABAH, RTM Kota Kinabalu, 3/3, 1225 alone here weak-fair w/tlc in Bahasa Malaysia, ment. Malaysia & Sabah, nx w/ref to Malaysia to 1240 fade. Rare here. (Clark-ON) 1/2, 1412 w/mx (Emerson-CO) Any ID?--sp. 14/2, 2300 w/mx, ID, on 15/2 w/Qur'an, 2 TP 1130 & RTM ID (Forth-SINGAPORE) Tnx for taking the time to take some loggings on your trip, Karl-sp. Anyone chasing this one beware of the Chinese station here which is //5440.
- 4976 UGANDA, R. Uganda, 10/2, 0415 in EG w/nx abt Uganda, mx, sudden fade 0430. (Royston-HI)
- 4990 CHINA, Hunan PBS, 3/2, 1330 w/mx. (Emerson-CO) ID?--sp
- 4990 NIGERIA, 8/2, 2230 w/EG pgm from Lagos, Count Basie mx, ID. SIO-252. (Taylor-PA) 17/2, 2238 w/cntry on politics in southern Afr., vcls (Frodge-MI)
- 4990.9 PERU, R. Ancash, 12/2, 2330 w/ID, addr., nx items. (Schulze)
- 4995 PERU, R. Andina, 6/2, 0050 w/Andean mx, ment. luancayo sev. Times. (Cox-OR) 4/2, 1012 w/shouting ad, ment. call ltrs, lcl nx. SIO-353. (Taylor-PA) Bill sent in his entire entry form packet for the NU DX contest!--sp.
- 5000 AUSTRALIA, VNG, 12/2, 1644 in EG w/"This is a temporary bx from VNG Llandalo, New South Wales, Australia on 5, 10 or 15 MHz." (Park-HI)
- 5000 VENEZUELA, YVTO, 25/2, 0551-0601 w/time sigs, poor, just barely hrd btwn WWV & WWVH annts. (Barhydt-OR)

- 5005 SARAWAK, RTM Sibu, 16/2, 1017 in lang w/melodic mx, inter-views, drum mx, 2 TP 1030 //6050 (Forth-SINGAPORE)
- 5011.2 MADAGASCAR, RTV Malagasy, 13/2, 0240 w/tlk in lang, ID, mx, maybe Radiofonicas underneath, drums, fading 0330 (Madagascar sunrise) (Taylor-PA)
- 5014.6 BRAZIL, R. Pioneira, 3/2, 0800-0830 w/tlk, jingles, ID, Brasopops. (Alexander-PA)
- 5020 CHINA, Jiangxi PBS, 21/2, 1420 in CH w/tlk by M&W & CH opera mx (Howell-CA)
- 5020 COLOMBIA, Ecos del Atrato, 10/2, 0239 w/tlk, ment. Colombia, ID. (Taylor-PA)
- 5020 HIGER, ORTN, 17/2, 0540-0612 in FR w/tribal vcls, 4 TP, ID 0600, nx, ID 0608, promos. (D'Angelo-PA)
- 5023.2 BHUTAN, BBS, 26/2, 1400 w/nx & mx (Emerson-CO) Too bad the 1415 EG nx segment comes too late for reception here--sp.
- 5024.9 PERU, R. Quillabamba, 24/2, 1038 w/NA, EZL mx, anmts, ID, CA mx, YL anncr (Alexander-PA)
- 5030 ECUADOR, R. Catolica Nac., 3/2, 0157 w/IS, rel pgm, ID, NA. SIO=353. (Taylor-PA)
- 5030 TONGA, Radio Tonga, 23/1, 0713 in EG w/nx abt Pacific, 0719 RA nx, 0727 drum IS, wx rpt, mx, list of job openings in Tonga, fair sig. (Royston-HI) Great logging!!
- 5034 CENTRAL AFRICAN REPUBLIC, RTV Centafricaine, 6/2, 2127 w/ID & hlife mx in FR (Taylor-PA)
- 5035 KAZAKH SSR, R. Alma Ata II, 12/2, 1647 in poss. Kazakh w/light pops, CH like song, Turkish song, 1700 piano IS, ID, nx. (Park-HI)
- 5040 ECUADOR, LV del Upano, 18/2, 0157 w/ID, FCs, long NA to 0213\* (Johnston-KY) 24/2, \*1056-1105 w/NA, ID, rel pgm, no sign of 49mb freq. (Alexander-PA)
- 5046.7 TOGO, R. Togo, 5/2, 1940 w/EG nx (Schulze-FRG)
- 5050 ECUADOR, R. Jesus del Gran Poder, 14/2 w/rel pgm, bells, anmt, hymn (Park-HI)
- 5055 COSTA RICA, Faro del Caribe, 10/2, 0330 w/Voice of Salvation pgm (Taylor-PA)
- 5055 FRENCH GUIANA, RFO Cayenne, 2/2, 0529 w/mx & FR tlk, "Ici Cayenne" ID. (Taylor-PA) 13/2, 0530 w/ID. QRM from Faro del Caribe (Park-HI) 12/2, 0930 w/ID, tlk (Klinck-NY)
- 5058.8 ECUADOR, RN Progreso, 24/2, 1025 w/HC mx, ID 1028, FCs, anmts, rooster crows. (Alexander-PA)
- 5060 CHINA, Xinjiang PBS, 17/2, 2345-0005 w/lcl mx, TP 0000, "The East is Red" IS, tlks. (Alexander-PA)
- 5075 COLOMBIA, Caracol Bogota, 2/2, 0412-0445 w/nx, ads, IDs, lcl nx 0440, fair. (Jordan-PA) 4/2, 0930 w/ID & mx (Taylor)
- 5097.1 PERU, R. Eco, 24/2, 1048 w/pops & ballads, ID, tlk, tough copy w/CW QRM (Alexander-PA)
- 5257t SUMATRA, RRI Sibolga, 23/2, 1350 w/exotic & hypnotic mx, IN tlk, awful QRM (Howell-CA)
- 5275 TAIWAN, WYFR Relay, 12/2, 1147 in CH w/rel mx, tlk in CH, fair sig. (Royston-HI)
- 5286 CHAD, R. Moundou, 18/2, 0545 in FR w/hilife mx, tlk, weak. (Johnston-KY) 17/2, 0547-0602 w/tlk, tribal vcls, long tlk, ment. Moundou (D'Angelo-PA) 3/2, \*0555 w/xylophone IS, NA, tlk, Afr. mx, sig better 0630 (Howell-CA)
- 5290 ASIATIC RSEFSR, Krasnoyarsk Radio, 12/2, 1155 in RS w/pop mx, ID 1158, fair to poor. (Royston-HI)
- 5440 CHINA, Xinjiang PBS, 14/2, 1515 in Kazakh poor w/Turk mx, accordions //4330, not 4970 (Park-HI)
- 5660 PERU, LV de Cutervo, 5/2, 0310 w/ID, mx, fading. SIO=231 w/ute QRM. (Taylor-PA)

and with that, I will end just saying thank you for the material and everyone have a Happy Easter.

# International Band Loggings

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



- 5920 USSR R. Rodina in RS 2300, IS, ID, nx, //4765 (Prath FL 2/25)  
5925 USSR R. Tallinn in Estonian 2126-2200\*, instrum mx mixing w/R, Moscow IS on same channel, partial ID, nx, mx, difficult copy (D'Angelo PA 2/4)
- 5935 USSR R. Riga in Latvian \*0356, 5 note IS, ID "Runa Riga", NA (Johnston KY 2/15)  
5990 MALAYSIA VO Myanmar in EG 1540, mx, ID, off 1600 w/NA (Forth SINGAPORE 2/18)  
5995 MALI RTV Malyenne in FR 0615, mx, ID (Royston HI) in FR 2235 w/drama (Leibowitz)  
6002v NICARAGUA LV de Nicaragua in SP 2350, ballads, pops, ID's (Alexander PA 2/25)  
In SP 0305, tlks, ID's, lively mx mixed w/spot tlk (Jordan PA, Kohlbrenner PA)  
6050 NIGERIA RN Ibadan in Vern/EG 0520, tlk, Afr vocals, ID in EG (Howell CA 2/28)  
6080 CANADA CKFX Vancouver in EG 0000, ID, nx, ads, wx, vg (Cox OR 1/30) 10 watts!  
60946 BOLIVIA R. Cosmos(t) in SP 1024, mx, flutes, ID? 1029 (Kohlbrenner PA 3/8)  
6130 LAOS Vientaine NS in lang 1151, children singing, 7 bells 1200, nx and tlk, NA 1229, piano mx 1232, ID? and mention of Vientaine at 1300 (Forth SINGAPORE 2/18)
- 6150 COLOMBIA Caracol Neiva in SP 0702, ID 0705, Lat Amer mx, f-g (Royston HI)  
6160 CANADA CKZU Vancouver in EG 0732, jazz, "Vancouver" ID, CBC nx (Johnston KY 3/4)  
6175 COSTA RICA Faro del Caribe in SP 1220, relig mx, sermon, ID (Prath FL 2/10)  
6185 MEXICO R. Educacion in SP 1205, MX folk mx, chatter, mailbag (Lackmann VA 2/7)  
6185 VATICAN STATE VR in EBG 0600, SCRIPTURES, nx of the world, g (Lotti 2/17)  
6188 PERU R. Oriente in SP 1039, Peruvian vocals, TC's, ads, ID 1100, tlks, jingles (Alexander PA 2/17, D'Angelo PA 2/3)
- 6305 COSTA RICA? Clandestine Voz del Cid in SP 1219, rock mx, ID, tlks (Karcheski MA)  
7110 ETHIOPIA V of Ethiopia in Amharic 0330, nx, ID (Klinck NY 2/24)  
7145 MALAYSIA RIM Kuching in Malay 0915, interview, tlks (Forth SINGAPORE 2/18)  
7160 INDIA AIR Aligarh in EG 1446, Republic Day ceremonies, f (Cox OR 1/26)  
7250 SINGAPORE SBC in Malay 0905, pop mx, "Radio Dua" IDs, ads (Forth SINGAPORE 2/18)  
7290 IRAQ R. Baghdad in EG 2245, mailbag pgm, into Iraqi mx (Prath FL 2/11)  
7295 MALAYSIA RIM Kajang in EG 0850, pop mx, pips 0900, into Malay (Forth SINGAPORE)  
7310 ALBANIA R. Tirana in GM \*2200, ID "Hier ist R. Tirana", nx (Prath FL 2/25)  
7345 CZECHOSLOVAKIA R. Prague in EG 0312, editorials, mailbag, exc (Carson OK 3/2)  
7370 TURKEY Turkish Police R in TK 0454, IS, NA, ID, into TK Mx (Johnston MD 3/2)  
75566 ITALY V of Europe in EG 0550, W annor w/very little tlk, ID 0601 (Alexander PA)  
9385 ISRAEL VO Israel in HB 2140, ID, lovely mx, pips, nx (Schulze FRG 3/1)  
9460 TURKEY VOT in TK 2200, ID, nx, into Turkish mx (Prath FL 2/11)  
9465 NO. MARIANAS KFBS Saipan in RS 1655, relig tlks, ID (Schulze FRG 2/25)  
9480 MONTE CARLO TWR Monte Carlo in EG 0827, "Hour of Freedom", exc (Carson OK 2/11)  
9500 CLANDESTINE VO Libyan People in AR 2235, anti-Qaddafi tlks, sig usually jammed, ID "Itha" Sout Ah-Shab, Sout Al-Haraka al-Watani al-Libi", mx (Johnson GA 2/10)
- 9505 AUSTRALIA RA in IN \*2058, IS, ID, pips, QRM from co-channel RFE (Schulze FRG)  
9535 QATAR QBS in AR 2122, AR mx, ID (Wolfson OH 2/12)  
9540nf SUDAN R. Qndurman in AR 1445-1459\*, songs, tlks, ID at close (Tuchscherer WI)  
In AR 1420, hrd every morning w/tlks, QRM from R Veritas, Koran (Howell CA 2/28)
- 9540 VENEZUELA RN in SP 0021, ballads, ID (Howell CA) in SP/EG 1150, Lat Amer pop mx, tlks, promos, ID in EG, freqs, //5020, 9500, 11695, 11860 (Jordan PA 2/9)
- 9545 SOLOMON IS. SIBC in Pidgin EG 0715, mx w/DJ, nx, ID, ship info (McDavitt 2/25)  
9555 PHILIPPINE IS R. Veritas Asia in EG 1324, ID, IS, mx, skeds, p (Leibowitz 2/26)  
In KR 1320, tlk, ID in EG 1325, into Hindi (Johnston KY 2/7)
- 9555 MEXICO La Hora Exacta in SP 1250, continuous tlks & pips (Prath FL 3/3)  
9560nf7 SWAZILAND TWR in EG \*0257, IS, ID, relig pgm in vernaculars (Schulze FRG 3/3)  
9565 NORWAY R. Denmark relay in DN \*0232, nx & rpts, test xmsn (Hanlon PA 2/6)  
9565 BRAZIL R. Universo in PT 2110, ID, romantic mx, relig tlks (Schulze FRG 2/19)  
9570 ROMANIA R. Bucharest in EG 0210, nx, tlk on democracy (Wolfson OH 3/3) in EG 0244, geology museum being set-up, mx, ID's w/new name of station (Carson OK)
- 9600nf UNITED ARAB EMIRATES Abu Dhabi in EG 2335, "Faith in Islam" (Jordan PA 2/14)  
9605 NORWAY R. Denmark relay in DN 2230, IS, IJ, tlks, nx, childrens chorus, features //11850, 15165, 21705, g (Jordan PA 2/14)
- 9615 PHILIPPINE IS R. Veritas Asia in EG 1458, IS, ID, into CH pgm (Schulze FRG 3/5)  
9615 SOUTH AFRICA RSA in EG 0246, "Africa South", exc (Carson OK 2/8)  
96397v NO. KOREA R. Pyongyang in EG 2010, nx, local mx, ID, polit tlk (Schulze FRG 3/4)

- 9645 PAKISTAN RP in Urdu 0205, Home Service, ID, nx, QRM Vatican (Schulze FRG 3/3)
- 9655 AUSTRALIA RA in EG 0834, cricket results, Pakistan vs Australia (Carson OK 2/11)
- 9660 AUSTRALIA ABC Brisbane in EG 1212, phone-in show re elections (Cichorek NJ 3/4)
- 9670 ANTIGUA D. Welle relay in EG 0510, pgm re women in Germany (Carson OK 3/5)
- 9675nf POLAND R. Scandanavia relay in SW 1004, test xmsn, ID in SW/EG (Schulze FRG 2/24)
- 9730 EAST GERMANY R. Berlin in EG 2208, disc of reunification, pop mx (Carson OK 2/23)
- 9735 RWANDA D. Welle relay in EG \*1459, "Newsline Koln", QRM Moscow (Carson OK 2/8)
- 9765 MALTA VO Mediterranean in EG/AR 0600, ID, freqs, mx, "Nice and Easy", into pgm in AR 0700 (Royston HI 2/7, Carson OK 3/5)
- 9770 SEYCHELLES FEBA in Urdu? 0159, IS, mixing with R. Beijing (Schulze FRG 2/15)
- 97798 YEMEN R. Sana in AR 0303, chants to 0317, AR mx, ID 0331 (Tuchscherer WI 2/17)
- 9790 FRANCE RFI in FR 2038, FR & US songs, ID at 2057 (Tuchscherer WI 2/20)
- 9835 HUNGARY R. Budapest in EG 0219, tlk re music festival (Wolfson OH 3/3)
- 9845 PHILIPPINE IS. FEBC in RS 1730, tlk, relig mx, jamming on freq (Howell CA 2/3)
- 9875 SPAIN RNE in SP 1905, nx re Soviet politics & Gorbachev, //12035 (Hanlon PA 2/4)
- 11000 CHINA CPBS Taiwan 1 in CH 1100, nx?, ID's, vocals, tlks, f-g (Jordan PA 2/23)
- 11040 CHINA CPBS Beijing in CH 1110, orch & organ mx, tlks, ID, off 1130 (Jordan PA 2/23)
- 11490 EGYPT Clandestine VO Unity(p) in langs 0113, flute IS, chants, mx, //12230, 15685 (Alexander PA 2/24) in langs 0127, polit tlk or nx, mx, ID? (Karcheski MA 2/6)
- 11588v ISRAEL Kol Israel in langs \*0500, ID, pips, nx?, interviews, f (Jordan PA 3/8)
- 11590nf CHINA Haixia 1 VO the Strait Fuzhou in CH 1650, pips 1700, CH mx, //7285 faint, f-g; 11590 channel listed as inactive in WRTH 90 (Treibel WA 3/18)
- 11705 BANGLADESH RB in Bengali 1920, ID, poor modulation, //15257 (Schulze FRG 2/25)
- 11715 MALI R. Beijing relay in EG 0300, world newscast & nx re China (Rugg QUE 2/19) in EG 0302, tlk re pollution control in China & exports, exc (Levison PA 2/19)
- 11735 URUGUAY R. Oriental in SP 0005, futbol, bulletins, ID (Tuchscherer WI 2/12)
- 11735 URUGUAY RAI via R. Oriental(t) in SP 2140, lively orch mx, tlks, ID's tough to copy, futbol game, vp (Jordan PA 2/18) ED: Anyone else hrd this one yet?
- 11745 BRAZIL R. Bras in EG 0201, nx, tlk re letter from Pres Bush, ID (Wolfson OH 3/9)
- 11760nf? INDONESIA RRI Jakarta in IN 0757, tlks, ID 0800, f (Royston HI 2/10)
- 11815 JAPAN RJ in EG 1810, nx, tlk re "de-population" (Grenier 3/4)
- 11827 TAHITI RFO Papeete in FR 1050, book review, songs, no local ID (Lackmann VA 2/5)
- 11840 CANADA R. Beijing relay in EG 0550-0557\*, song, ID, anncts (Cobb ME 2/11)
- 11865 JAPAN RJ in EG \*1400, xmsn to NA replaces 9505 (Zilmer NM 3/6)
- 11885 SOUTH AFRICA Radio 5 in EG 0540, pop mx, ID, TC, nx, f (Kohlbrener PA 2/12) in EG 0614, mx, ads for life ins, jeans, cigarettes, //4880 (Carson OK 2/14)
- 11880 ZAMBIA RZI in EG 0500, cntry re Mandela & Afr Nat Congress, ID (McDavitt 2/25)
- 11905 ITALY RAI in EG 0357, film festival featuring IT films, mx, exc (Carson OK 2/8)
- 11905 TAIWAN CBS Taipei in CH 1542-1628\*, ID, CH songs (Tuchscherer WI 2/20)
- 11960 INDIA Bangalore in Pashto? 1531-1546\*, local songs & mx, nx (Tuchscherer 2/13)
- 13605 UNITED ARAB EMIRATES Abu Dhabi in EG 2325, tlk on gulf cooperation council, ID (Grenier 2/25) in EG 2201, ID, TC, freqs, Koran in EG/AR (Cichorek NJ 3/3)
- 13690 EAST GERMANY R. Berlin in EG 2320, tlk re religion in the GDR (Prath FL 2/10)
- 150095 VIETNAM VOV in EG 1240, interview, stories of the VT people (Lackmann VA) in EG 1820, piano mx, "Our Country", ID (Leibowitz 2/26) in EG 1356\*, many ID's (Dunn 2/16) in EG 1602, nx, mx (Barhydt OR) in EG/JP 1400, nx, ID (Klinck NY 3/4)
- 15050 INDIA AIR in EG 1031, "Women's World", HD folk mx, cntry, ID (Royston HI)
- 15084 IRAN VOIRI in SP 0130 & 0534, chanting, nx, f (Barhydt OR 3/3)
- 15100 EGYPT Clandestine Flag of Freedom R in Farsi? \*0644-0740, s/on w/ID & multi-lang ID's incl EG, tlk, ME mx, weak but clear (Alexander PA 2/24)
- 15115 NO. KOREA R. Pyongyang in EG 0003, ID, sked, nx, discussion (Cichorek NJ 3/4)
- 15120 SOUTH AFRICA RSA in EG 0200, pgm beamed to NA, //9615, 9580, 11935 (Zilmer NM)
- 15125 EAST GERMANY R. Berlin in EG 0444, nx, cntry re teaching EG, exc (Carson OK)
- 15130 MALI R. Beijing relay in EG 1600, nx, cntry, beam to NA, //15110 (Zilmer NM) in EG 1629, CH history lesson, mailbag, children's choir, vg (Cox OR)
- 15140 CHILE RN de Chile in SP 0317 & 1032, mx awards, ID, tlk (Barhydt OR, Klinck NY)
- 15160 AUSTRALIA RA in EG 0645, interview w/Australian pop mx group (Grenier 2/24)
- 15185 INDIA Bangalore in AR 1850-1945\*, ME mx, nx 1912, ID (Tuchscherer WI 2/15)
- 15195 JAPAN RJ in EG 0300, pgm beam to NA repl 11870, //17825, 21610 (Zilmer NM 3/5)
- 15240 AUSTRALIA RA in EG 2305, nx, review of Commonwealth Games (Prath FL 2/10) in EG 0630, "Australia Country Style", g (Carson OK 2/25)
- 15245 AUSTRALIA RA in EG 1533, scientific forum in Pac area, ID's (Cichorek NJ 3/3)
- 15250 PORTUGAL RP in PT/EG/FR 2100-2200\*, local & pop mx, EG 2100, ID, nx, "Welcome to Portugal", into FR 2130, NA at 2200 s/off (Jordan PA 3/5)
- 15250 SRI LANKA VOA relay in EG 0117, nx, ID at 0130 (Tuchscherer WI 2/20)
- 15250 INDIA AIR in lang/EG 1128, IS, pips 1130, nx in lang, ID, nx in EG (Lackmann VA)
- 15290 PHILIPPINE IS. VOA relay in EG 2245, pgm re Peace Corps, mx, ID (Cobb ME 2/24)

- 15320 AUSTRALIA RA in EG 0520, agri-news re fruit flies, mx (Carson OK 2/8, Grenier)
- 15325 FRENCH GUIANA R. Japan relay in EG 0310, lang lesson, ID, into SP 0330, exc (Cobb ME 3/5) in EG 0300 w/nx & cntry on US-Japan summit meeting (Grenier 3/4)
- 15335 INDIA AIR Aliqarh in EG 1035, local nx, mx, ID's (Klinck NY 2/19)
- 15345 ARGENTINA RAE in PT 1045, DX pgm, IS 1055, QRM from Bonaire, f (Lackmann VA 2/6)
- 15345 KUWAIT R. Kuwait in EG 0504, nx, pop & rock mx, "Kuwait 1989", g (Carson OK 3/4)
- 15360 NORWAY R. Denmark relay in DN/EG 0245, tlk, ID in DN 0246/in EG 0253, IS 0259 (Cichorek NJ 3/4) in EG/DN 0135, interview, //9615, ID's (Johnson MD 3/4)
- 15400 UNITED ARAB EMIRATES R. Dubai in EG 0335, nx, ID, addr, rpt (Cobb ME 3/5)
- 15400 IRAQ R. Baghdad in AR 1820, AR mx, chit chat, pips 1830, nx, f (Jordan PA 3/4)
- 15420 SEYCHELLES BBC relay in EG 0330, ID, xmsn to Africa, nx (Liebowitz 3/1)
- 15425 PHILIPPINE IS. VOA relay in EG 1237, tlk on blue collar mx (Cichorek NJ 3/4)
- 15435 JORDAN R. Jordan in AR 2008, nx, ID "Huna Amnan", mx, tlk (Hanlon PA 2/4)
- 15460 FRANCE RFI in FR 1644, M & F chatter, ID, freqs, g (Cobb ME 2/4)
- 15465nf AUSTRALIA RA in EG 2312, sports pgm, freqs, ID (Karcheski MA) in EG 2125, mx, nx rpts, //15160 (Schulze FkG) \*0700 in EG, Billboard, pips, nx, freqs (Jordan PA)
- 15470 USSR R. Tashkent in EG 1200, ID, nx, improved relations w/China (Prath FL 2/24)
- 15560 NETHERLANDS RN in EG 0745, "Happy Station" pgm, birthday calls (Royston HI 2/11)
- 15595 WEST GERMANY D. Welle in EG 1620, "Newsline Köln", f (Carson OK 2/15)
- 15880 CHINA CPBS Taiwan 2 in CH 0555, tlks, ID's 0600, mx, g (Royston HI 2/19)
- 17535 GREECE VOG in EG/GK 1540, cntry on Turkey vs. Cyprus, g (Levison PA 2/10)
- 17595 EGYPT R. Cairo in EG 1228, ME vocals, pips, ID, nx, g (Cichorek NJ 3/4)
- 17605 NETHERLANDS RN in EG 1830, "Happy Station" pgm, mx, tlk, g (Lotti 2/18)
- 17620 FRANCE RFI in EG 1640, "Letterbox" pgm, ID (Grenier 3/4)
- 17655 USSR R. Afghanistan relay in multi-langs 1300-1450, xmsn to Asia, tlks, heroic vocals, refs to Afghan & Kabul, ID, nx items, local mx (Jordan PA 2/8-10)
- 17675 BELGIUM RTBF in FR 0616, IS drums, s/on Radio 4 Intl, nx, f-p (Carson OK 2/22)
- 17730 BRAZIL Swiss Radio Intl relay in EG 0220, tlk re receivers (Grenier 3/4)
- 17765 NORWAY RNI in EG 1600, "Norway Today", EG to NAM Sun only (Zilmer NM 3/11)
- 17765 JAPAN RJ in EG 0530, mailbag, "Let's Learn Japanese" (Grenier 2/26)
- 17795 AUSTRALIA RA in EG 0520, pop mx w/Rosemary Clooney oldies (Grenier 2/21)
- 17800 FINLAND RF in EG 0945, "Finnish Press Review", ID, "Timeline" (Royston HI 2/13)
- 17810 SRI LANKA D.Welle relay in EG 1925, rpt on regional conflicts in Afr (Prath FL)
- 17830 SWITZERLAND SRI in IT 1515, EG s/on, into relig pgm in IT (Prath FL 2/25)
- 17855 CHINA R. Beijing in EG 0306, nx, ID 0313, //9690, 9770, 11715 (Cichorek NJ 3/4)
- 17890 UNITED ARAB EMIRATES Dubai in EG 0339-0354\*, "Muslims & Society" (Carson OK 3/1)
- 21460 USSR Radiostaniya Atlantika in RS 1312, Beatles mx, ID "Murmansk" (Johnson MD)
- 21485 LIBERIA VOA relay Monrovia in SH 1701-1727\*, nx, tlk, ID (Tuchscherer WI 2/23)
- 21550 ITALY IRIS Milano in tests at \*1245 using several languages (Johnson GA 2/11)
- 21515 ITALY RAI in IT 1505-1655\*, sports coverage?, crowd noises, ID (Jordan PA 2/18)
- 21530 PORTUGAL R. Liberty in Dari 1410-1429\*, mx, tlks, //15445 (Johnston KY 2/12)
- 21610 JAPAN RJ in EG 2305, nx, cntry re Glasnost in USSR, mailbag, f (Prath FL 2/11)
- 21635 FRANCE RFI in EG \*1230-1255\*, jazzed-up version of NA, nx re pro-democracy developments, South Africa, Vietnam, So. Korea, f (Jordan PA 2/8)
- 21650 WEST GERMANY D. Welle in IN \*1330-1420, IS, ID, exotic vocals (Jordan PA 2/28)
- 21655 SWEDEN R. Sweden in FR 1500, IS, ID, tlks, //17880 (Prath FL 2/25)
- 21675 KUWAIT R. Kuwait in AR 1603, chants, AR songs, interviews, ID's (Tuchscherer WI) in AR 2300, nx, mx, //15495, 15505 (Hanlon PA 2/4)
- 21685 NETHERLANDS RN in EG 1905, "Media Network", g (Carson OK 2/19)
- 21690 ITALY RAI in Sonali 1648-1655\*, mx from 1653, ID, IS (Tuchscherer WI 2/23)
- 21735 UNITED KINGDOM BBC London in EG 1247, "BBC English", into RS pgm (Hanlon PA)
- 21740 AUSTRALIA RA in EG 0227, instrumentals, ID, promos, vocals (Cichorek NJ 3/4)
- 21810 BELGIUM BRT in EG 1330, pgm beam to N Am repl 21820 eff 3/12 (Zilmer NM 3/12)
- 21840nf? CLANDESTINE R. Libertas via WHRI in Croatian 1601, after WHRI ID came on: "This is the Christian Radio Program Radio Libertas sponsored by the Croatian National Congress and the Croatian Committee for Human Rights", anti-Yugoslavia tlks and speeches w/applause, instrumental bridges, skeds, //11790 (D'Angelo PA 3/3)
- 25645 BELGIUM RTBF Brussels in FR 1301, nx, mx, phone interview (Hanlon PA 2/25)

\*\*\*\*\*  
 Your editor has been called to task by the manager of "The Voice of Laryngitis" for suggesting that his station may be run by "amateur pranksters". They characterize their on and off operation as "alternative radio programming" run by professional communicators. Since I have little background information about pirate stations, perhaps my characterization was erroneous. If so, I retract the reference. So as to enlighten my ignorance on the subject, I wonder if someone can advise me as to how the FCC depicts these so-called pirate stations. Also, I wonder how many members would feel a loss if the International Report omitted such loggings in the future? Let me know if you have an opinion on this.

# English Schedules

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prepared 03/28/90 at 8:07 AM

Thanks to John Carson (OK), Kris Field (PA) and Gordon Darling (Papua New Guinea), David Alpert (NY) and Andy Sennitt of the WRTH for the many schedules and press clippings received. Also special thanks to Bob German of WSHB, Ian McFarland of Radio Canada International, Phillip Synnott of Radio Australia, and Chuck Roswell of Trans World Radio Bonaire for forwarding the schedules of their stations and to Anna Case of George Jacobs & Associates for schedules of their nine clients. And thanks to Paul Costello (WA) for a Deutsche Welle's engineering schedule and Joe Hanlon (PA) for his telephone calls and fills on changes and other news. Apologies to Mike Fern (CA) who faxed information on NHK and India late last month. The material was mixed in with my income tax papers and other mail in the inbasket.

Hopefully most of the standard-to-summer time changes are incorporated this time around.

## Clarification

Last month's bulletin may have suggested to some people that the English language schedules were missing from the 1990 World Radio TV Handbook. This is not the case. What was omitted, due to constraints on the page count, were the schedules arrayed by time. Broadcast schedules for all languages are included in the

main section (stations within country) of the WRTH.

## Winter SWL Fest

All I can say is that if you weren't there, you missed a good time by all. I had a good time and managed to connect faces with voices from the SWL net and with names on the BBS. Put it on your calendar for next year.

## Notes

Iraq moved frequency and perhaps time somewhere around March 10, and neither the BBC MS or I were able to find it. I mentioned it on the SWL Net on the 18th, and Lou Josephs (MA) called later in the day to say he found it on 11720 kHz at 21-23 UT. Bulgaria causes interference for the last hour. Iraq may shift transmission times due to summer time in early April. I believe the V of Greece at 12 also has changed one or more frequencies, as I only hear it on 15630. Spanish National Radio is announcing at 19 UT 15375 for the ME, but it is still heard on 15395 kHz. If you wish to listen to this station during the daylight hours, 15375 kHz to Africa is excellent here at 19 UT. Radio Bangladesh at 1230 UT to Europe is on 17850 and 15040, but 15195 continues to be announced. The tuning signal is absolutely marvelous. Radio Australia is using a host of new and/or out-of-band frequencies. The M90 schedule arrived on March 3, but by mid-month changes re 15160 and

13700 were made. The printed schedule from Algeria shows only 15215 used for English at 19-20 UT, but WYFR occupies the spot here at this time. HCJB isn't running a full complement of frequencies. On February 19 bandits made off with equipment and feedline, demanded a ransom for the return of the equipment and have threatened the lives of station personnel if any of the bandits were captured. The 500 kw unit is out of service, and announcements at the start of transmissions inform listeners that some frequencies may not be available. ORF Austria has added a third airing of SW Panorama Sundays at 1030, adding to those at 1130 and 1430.

#### R Canada International

Lots of changes at RCI, according to the material I sent, and the frequency and time shift changes are in the listing. The time shifts accommodate listeners in the target areas and facilitate picking up CBC domestic programming. Other changes (in no particular order) include the following:

SWL Digest and Listener's Corner are moved around. SWLD is dropped from the LA beam and moves to Sunday in the 19 UT European release. LC swaps with SWLD and moves to Saturdays in the same time slot. SWLD is removed from the Tuesday 19 UT to Africa release, but it isn't clear if SWLD remains in the Tuesday 12 UT to USA release. As of April 8 LC will be reduced to 21 (from 50) minutes. LC will appear Sundays on the 13 and 22 UT Asian relays.

The alternating French and English broadcasts at 06-07 UT to Africa are now combined and

retimed to 05 UT, with English commencing at 0515. The programming will be CBC network news and a features program.

#### R Moscow

Time for an M90 World Service early morning bandscan:

1100:	21800, 21785, 21890, 17810, 17700, 17665, 15530, 15500, 15475, 15460, 15435, 15175, 15150, 9875.
1200:	21785, 21690, 17810, 17790, 17700, 17765, 15560, 15480, 15475, 15460, 15150, 9875.
1300:	21785, 21690, 17860, 17840, 17810, 17780, 17700, 17665, 17660, 15560, 15480, 15475, 15460, 11840 (from 1330), 9875.
1400:	21785, 21690, 17810, 17660, 17585, 15560, 15480, 15475, 15305, 11840, 9875.

From my perspective in NJ, those outlets heard with the better signals are included in the listings. The 6000 Cuban outlet was not heard. The Cuban 11840 relay starts up at 1330 UT. See the listings for the mid-day frequencies.

#### Icom R-71A For Sale

The R-71A with pass-band tuning has all accessories: high-stability oscillator, SSB and 500 Hz CW filters, FM, remote control, voice module, UX-14/CX-17 computer interface, and a service manual. Aligned and tweaked by authorized factory service in December 1989. \$995 plus UPS shipping and insurance. Call evenings or weekends 609-859-2447 or use the fax, BBS or MCI Mail.

Changes entered between 02/24/90 and 03/28/90.

ENGLISH LANGUAGE SW BROADCAST SCHEDULES: By Start Time  
Compiled by Thomas R. Sundstrom, W2XQ

Start Time (UTC)	End Time (UTC)	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Freq #8	Target Area	Notes	Record Last Updated
0000	0030	Australia	R Australia	21740	17795	17750	17630	15465	15240	15160	15130	As/Pac/PaoNG		03/03/90
0000	0100	China	R Beijing	17855	17705	15100						ENA	#2&3 v Mali	03/27/90
0000	0030	Israel	Kol Israel	15640	11605	9435						NA		03/18/90
0000	0200	N Mariana Is	KHBI	15435								Phil/Indon/PapNG	270 deg	03/19/90
0000	0200	New Zealand	R New Zealand Int'l	17680								General Svc		03/27/90
0000	0100	South Korea	R Korea	15575								As		03/15/90
0000	0200	USA	WHRI	9495	7315							Eu/CA/SA	157/42 deg	03/19/90
0000	0300	USA	WRNO	7355								NA/CA	20 deg	03/19/90
0000	0200	USA	WSHB	13760	9410							CA/SA/NE Canada	167/25 deg	02/25/90
0000	0100	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	9720	ENA	6000 & 6045 v Cuba	03/15/90
0000	0045	Yugoslavia	R Yugoslavia	11735	6005	5980						W Eu/NA		03/15/90
0030	0100	Australia	R Australia	21740	17795	17750	17630	15465	15320	15240	15160	As/Pac/PaoNG		03/03/90
0030	0230	England	BBC	12095	9915	9590	7325	6175	5975			WS: NA/CA/Carib	#3 Bethany	03/16/90
0030	0100	Hungary	R Budapest	15160	11910	9835	9585	9520	6110			NA		03/15/90
0030	0125	Netherlands	R Nederland	11740	6165	6020						ENA	#1&2 v Bonaire	03/15/90
0100	0130	Australia	R Australia	21740	21525	17795	17750	17715	17630	15465	15320	As/Pac/PaoNG	& 15130, 11880	03/03/90
0100	0200	Canada	R Canada Int'l	13720	11940	11845	9755	9535				LA	Su-Mo	03/16/90
0100	0150	Fed Rep Germany	R Deutsche Welle	15105	11865	9565	6145	6040				NA		03/15/90
0100	0145	German Dem Rep	R Berlin Int'l	13690	11890	6080						ENA		03/26/90
0100	0130	Israel	Kol Israel	15640	11605	9435						NA		03/18/90
0100	0300	USA	KUSW	11695								Canada	70 deg/ex Molocc use	03/19/90
0100	0300	USA	WYFR	11720	9505	5985						NA	#2&3 Network M-Sa	03/15/90
0100	0200	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	9720	ENA	6000 & 6045 v Cuba	03/15/90
0130	0200	Australia	R Australia	21740	21525	17795	17750	17715	17630	15465	15320	As/Pac/PaoNG	& 11880	03/03/90
0130	0145	Hungary	R Budapest	15160	11910	9835	9585	9520	6110			NA	Tu/W/F/Sa	03/15/90
0145	0230	German Dem Rep	R Berlin Int'l	15125	11890	11785	6080					ENA/WNA		03/26/90
0145	0200	Vatican State	Vatican Radio	15180	11750	9650						As/Aus/NZ		03/22/90
0200	0400	Australia	R Australia	21740	21525	17795	17750	17715	17630	15560	15465	As/Pac/PaoNG	& 15160, 11880	03/03/90
0200	0300	Canada	R Canada Int'l	13720	11940	11845	9755	9535				LA	Tu-Sa	03/16/90

0200	0250	Fed Rep Germany	R Deutsche Welle	15265	11945	11835	7670	9615	7285	S As		03/15/90		
0200	0300	Guam	KSDA	13720						As	Sa-Su : 300 deg	03/19/90		
0200	0400	USA	WCSN	13775						E Afr	75 deg	02/25/90		
0200	0400	USA	WHRI	9475	7315					Eu/CA/SA	157/42 deg	03/19/90		
0200	0400	USA	WSHB	13760	9455					CA/Canada	167/315 deg	03/19/90		
0200	0600	USA	WPCR	7520								03/27/90		
0200	0230	USSR	R Kiev	17690	17665	15180	12060	12005	11770	NA		03/15/90		
0200	0300	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	9720	ENA	6000 & 6045 v Cuba	03/15/90
0230	0330	England	BBC	12095	9915	9590	7325	6175	5975	WS: NA/CA/Carib	#2 Bethany	03/16/90		
0230	0315	German Dem Rep	R Berlin Int'l	15240	13610	9730				Caribbean		03/26/90		
0230	0430	Iraq	R Baghdad	11810	9515					Ind/Pakis/NA/SA	often delayed start	03/19/90		
0250	0300	USSR	R Yerevan	17690	17665	15180	12060	12005	11770	WNA	News/Eng	03/15/90		
0300	0400	Bulgaria	R Sofia	15310	15160	11765	11735	11720		Afr/NA		03/15/90		
0300	0400	China	R Beijing	17855	15100	11715	9690			WNA	#4 Spain:#2&3 Mali	03/26/90		
0300	0350	Fed Rep Germany	R Deutsche Welle	15205	11810	9545	6085			NA		03/15/90		
0300	0345	German Dem Rep	R Berlin Int'l	15125	13690	11785				WNA/ENA		03/26/90		
0300	0350	Turkey	V of Turkey	17880	9445					Aus/NA		03/15/90		
0300	0600	USA	WRNO	6185						NA/CA	20 deg	03/19/90		
0300	0500	USA	WYFR	9505	6065	5985				NA	#1&2 Network M-Sa	03/15/90		
0300	0330	USSR	R Moscow	15180	12050	12010	11710	9890		WNA		03/15/90		
0330	0430	England	BBC	9915	5975					WS: NA/CA/Carib		03/16/90		
0330	0425	Netherlands	R Nederland	9590	6165					WNA	v Sonaire	03/15/90		
0330	0430	USSR	R Moscow	15180	12050	12010	11790	11710	9890	9500	7230	WNA	03/15/90	
0345	0430	German Dem Rep	R Berlin Int'l	15125	11785					WNA		03/26/90		
0400	0500	Australia	R Australia	21740	21525	17795	17750	17715	17630	15560	15465	As/Pac/PaoNG	415160, 11880, 446SaSu	03/03/90
0400	0500	Austria	R Canada Int'l	15275						ME		03/16/90		
0400	0500	China	R Beijing	11940	11685					WNA	#2 v Fr Guinea	03/26/90		
0400	0415	Israel	Kol Israel	17630	15640	12077	11655	11605	7415	Aus/As/NA/E Eu/W Eu		03/18/90		
0400	0600	N Mariana Is	KHBI	17780						China	740 deg	03/19/90		
0400	0700	New Zealand	R New Zealand Int'l	17680						E Pac		03/27/90		
0400	0600	USA	WHRI	9495	7315					Eu/CA/SA	157/42 deg	03/19/90		
0400	0600	USA	WSHB	13760	9455					CA/Canada	130/315 deg	03/19/90		
0430	0500	England	BBC	9915	5975					WS: NA/CA/Carib	#2 v Antigua	03/16/90		
0430	0530	USSR	R Moscow	15180	12050	9890	7340	7230	7210	7180	7170	WNA	03/15/90	
0500	0600	Australia	R Australia	21740	21525	17795	17750	17715	17630	15560	15465	As/Pac/PaoNG	4 15160, 11880	03/03/90
0500	0530	England	BBC	9915	9640	6195	5965			WS: NA/CA/Carib	v Antigua	03/16/90		
0500	0550	Fed Rep Germany	R Deutsche Welle	11845	9700	9670	6120	5960		NA		03/15/90		
0500	0545	German Dem Rep	R Berlin Int'l	15440	13690	13610	9760	6115	5965	Af/ME/Eu		03/26/90		
0500	0600	USA	WYFR	17640	15566	11580	9505	6065	5985	Eu/Af/NA	#4-b Network M-Sa	03/15/90		
0500	0530	Vatican State	Vatican Radio	21650	17730	17710	9645	6185		E&S Afr/Eu	4465 -0520	03/22/90		

0515	0700	Canada	R Canada Int'l	17840	11775	9750	7295	6150	6050	M Eu/Afr	M-F:01,2,4,6 v UK	03/16/90		
0515	0600	German Dem Rep	R Berlin Int'l	15240	11970					As		03/26/90		
0530	0600	Canada	ORF	6015						WNA		03/18/90		
0530	0730	England	BBC	9640	5975					WS: NA/CA/Carib	v Antigua	03/16/90		
0530	0600	Italy	AWR Europe	7125						Eu		03/15/90		
0530	0700	USSR	R Moscow	12050	9890	7340	7260	7230	7210	7180	7170	WNA	03/15/90	
0600	0630	Australia	R Australia	21740	21525	17715	17630	15560	15465	15240	11880	As/Pac/PapNG	03/03/90	
0600	0800	N Mariana Is	KHBI	17855	17780					Phil/China	270/310 deg	02/25/90		
0600	0800	USA	WCSM	9840						Eu	60 deg	03/19/90		
0600	0800	USA	WHRI	9620	9495					Eu/CA/SA	42/157 deg	03/19/90		
0600	0700	USA	WYFR	17640	15566	13760	7355	6065	5985	Eu/Af/NA	#6 Network M-Sa	03/15/90		
0630	0700	Australia	R Australia	21775	21740	17715	17630	15560	15465	15240	11880	As/Pac/PapNG	03/03/90	
0630	0700	Belgium	BRT	13675	11695	6035				Eu/Eu		03/15/90		
0630	0700	Bulgaria	R Sofia	17825	15160	11720				M Eu		03/15/90		
0630	0655	Finland	R Finland	11755	9560	6120				Eu/ME/Afr		03/15/90		
0630	0700	Switzerland	Swiss R Int'l	21520	17570	15430	12030	9535	6165	3985		#1 SSB	03/27/90	
0630	0700	Vatican State	Vatican Radio	21650	17730	17710				C&S Af		03/22/90		
0700	0730	Australia	R Australia	21775	21740	17715	17630	15560	15465	15240	11930	As/Pac/PapNG	03/03/90	
0700	0800	USA	WYFR	15566	13760	7355	6065	5985		Eu/Af/NA	#5 Network M-Sa	03/15/90		
0730	0800	Australia	R Australia	21775	17715	17630	15560	15240	11930	11880		As/Pac/PapNG	03/03/90	
0730	0800	Austria	ORF	21490	15410	13730	6155			ME/Eu		03/18/90		
0730	0825	Netherlands	R Nederland	9715	9630					NZ/Aus	via Bonaire	03/15/90		
0745	0830	German Dem Rep	R Berlin Int'l	21465	15240	9730	7185	6115	6040	Far E/ENA/Eu		03/26/90		
0800	0830	Australia	R Australia	21775	17750	17715	17630	15240	15160			As/Pac/PapNG	03/03/90	
0800	0625	Finland	R Finland	21550	17800					Aus		03/15/90		
0800	0850	North Korea	R Pyongyang	15180	13650	11830				SE As		03/27/90		
0800	0900	Portugal	AWR Europe	9670						Eu	Sunday only	03/15/90		
0800	0900	USA	KNLS	11715						As		03/15/90		
0800	1100	USA	WHRI	7355						Eu/CA/SA	42/157 deg	03/19/90		
0800	1000	USA	WSHB	13760	9455					Canada/SA	260/152 deg	03/19/90		
0810	0840	Monqolia	R Ulan Bator	12015						Aus		03/15/90		
0830	0900	Australia	R Australia	21775	17750	17715	17630	15240	15160	9580	5995	As/Pac/PapNG	03/03/90	
0830	0655	Finland	R Finland	17800	15245					E As		03/15/90		
0900	0930	Australia	R Australia	21825	21775	17715	15240	15160	9760	9580	5995	As/Pac/PapNG	03/03/90	
0900	0925	Belgium	BRT	21810	13675	6035				Afr/Eu	M-F	03/18/90		
0900	0950	Fed Rep Germany	R Deutsche Welle	21680	21650	21600	17820	17780	15410	11740	9650	Aus/As/StC&E Afr	03/15/90	
0900	0945	German Dem Rep	R Berlin Int'l	21465	17880	15240	11890			Far E/ENA		03/26/90		
0900	0915	Hungary	R Budapest	15220	15160	11925	11910	9835	9585			Far East	M-F	03/15/90
0930	1000	Australia	R Australia	21825	21775	17715	15240	9760	9580	5995		As/Pac/PapNG	03/03/90	
0930	0945	Hungary	R Budapest	15220	15160	11925	11910	9835	9585			Far East	M-F	03/15/90



1230	1300	Australia	R Australia	21775	21525	11930	9655	9580	7240	7205	6080	As/Pac/PapNG		03/03/90
1230	1300	Banladesh	R Bangladesh	17850	15040							Eu		03/25/90
1230	1255	Belgium	BRT	21815	17555							SE As/NA	#1 M-F/#2 M-Sa	03/15/90
1230	1330	South Korea	R Korea	9750								Am		03/15/90
1230	1300	Turkey	V of Turkey	17785								SW As		03/15/90
1245	1330	German Dem Rep	R Berlin Int'l	21465	17880	15440	11970					As		03/26/90
1300	1400	Australia	R Australia	21775	21525	11930	9655	9580	7240	7205	6080	As/Pac/PapNG		03/03/90
1300	1600	Canada	R Canada Int'l	17820	11955							Carib/NA	Su	03/16/90
1300	1330	China	R Canada Int'l	15385	11955							SE As & India		03/16/90
1300	1325	Finland	R Finland	21550	15400							NA	Sa -1345, Su -1400	03/15/90
1300	1345	German Dem Rep	R Berlin Int'l	6115								Eu		03/26/90
1300	1350	North Korea	R Pyonyang	15180	13650	9640	9345	9325				SE As/Am/Eu		03/27/90
1300	1355	Romania	R Romania Int'l	21665	17850	15365	11940					Eu		03/27/90
1390	1700	USA	KUSW	15590								Canada	70 deg/Su only	03/19/90
1300	0200	USA	WWCR	15690									M-F	03/27/90
1390	1400	USSR	R Moscow	21785	17840	17810	17780	17700	17660	15560	15480	World Service	11840 v Cuba 1330-	03/25/90
1300	1400	USSR	R Stn Peace & Progress	17870	17840	17635	15535	15520	15420	15330	15130	SE As	#2,5,8 from 1330	03/22/90
1315	1730	Jordan	R Jordan	9560								M Eu/NA		03/15/90
1330	1400	Austria	DRF	15430								As		03/18/90
1345	1430	German Dem Rep	R Berlin Int'l	9730								Eu		03/26/90
1345	1415	Monqolia	R Ulan Bator	15305	9575	9645						India		03/15/90
1345	1400	Vatican State	Vatican Radio	11740	9645	7250	6248					Eu		03/15/90
1400	1430	Australia	R Australia	21525	15160	11930	9655	9580	7240	7205	6080	As/Pac/PapNG		03/03/90
1400	1500	England	BBC	9740								WS: NA/CA/Carib	v Sack	03/16/90
1400	1500	South Korea	R Korea	9570								SE As		03/15/90
1400	1500	USA	WHRI	15105	9495							Eu/CA/SA	157/42 deg	03/19/90
1400	1500	USA	WRNO	15420								NA/CA	20 deg (Su only)	03/19/90
1400	1500	USSR	R Moscow	21785	17810	17660	17585	15560	15480	15475	15305	World Service	#9 v Cuba	03/25/90
1405	1430	Finland	R Finland	15185	11850	9640						Eu/NE/Afr		03/15/90
1430	1500	Australia	R Australia	15160	11930	9655	9580	7240	7205	6080	6060	As/Pac/PapNG		03/03/90
1430	1530	Bulgaria	R Sofia	17825	15310	11735						Afr		03/15/90
1445	1500	Canada	R Canada Int'l	21545	17820	17795	15325	15315	15305	11935		C&E Eu	#2,4,5,7 v Eu rlys	03/16/90
1445	1530	German Dem Rep	R Berlin Int'l	17880	11970							As		03/26/90
1500	1530	Australia	R Australia	15160	11930	9655	9580	7240	6080	6060	5995	As/Pac/PapNG		03/03/90
1500	1550	Fed Rep Germany	R Deutsche Welle	21600	17765	11965	9735					S&C&E Afr		03/15/90
1500	1600	South Korea	R Korea	5975								GDS		03/15/90
1500	1600	USA	KNLS	11715								As	exc Mon	03/15/90
1500	1600	USA	WHRI	21840	15105							Eu/CA/SA	42/157 deg	03/19/90
1500	2100	USA	WRNO	15420								NA/CA/Eu	20 deg	03/19/90
1500	0200	USA	WWCR	15690									Sa-Su	03/27/90

1500	1600	USA	WYFR	17750	13695	11850	11830	5950			NA	#1-3 Network M-Sa	03/15/90
1500	1600	USSR	R Moscow	17810	17585	15475	11840				World Service	#4 v Cuba	03/25/90
1515	1530	Hungary	R Budapest	15220	15160	11910	9835	9585	7220		Eu	M&H	03/15/90
1530	1600	Australia	R Australia	15160	13700	11930	9770	9655	9580	7240	6080	As/Pac/PapNG	03/03/90
1530	1555	Belgium	BRT	21810	17580						Afr	M-Sa	03/15/90
1545	1630	German Dem Rep	R Berlin Int'l	17780	15350	9730	7295				Af/Eu		03/26/90
1545	1600	Vatican State	Vatican Radio	17870	15090	11945					As/Aus/NZ		03/22/90
1600	1630	Australia	R Australia	13700	11930	9770	9655	9580	7240	6080	6060	As/Pac/PapNG	03/03/90
1600	1700	Guam	KSDA	11980								India	265 deg
1600	1800	N Mariana Is	KHBI	15385	13745							SE As/India	265/310 deg
1600	1640	United Arab Emirates	R Dubai	21605	15435	15320	11790				Eu/Afr		03/25/90
1600	1700	USA	WHRI	21840	15105	11790					Eu/CA/SA	#2 Su ; #3 M-Sa	03/19/90
1600	1700	USA	WYFR	21615	21525	17885	17612	15566	13695	11580	11830	Eu/Af/NA	#3,6,7 Network M-Sa
1600	1700	USSR	R Moscow	17810	17585	15475	11840	9740			World Service	#4 v Cuba	03/25/90
1615	1630	Canada	R Canada Int'l	21545	17820	15325	15305	11935			C&E Eu	#3&5 v Eu relays	03/16/90
1630	1730	Australia	R Australia	13700	11930	11720	9710	9655	9580	7240	6080	As/Pac/PapNG	03/03/90
1630	1700	Austria	ORF	21490	13730	11760	5945					Af/Eu/As	03/18/90
1630	1725	Netherlands	R Nederland	15570	15375	6020						E&S Afr	03/15/90
1630	1700	USSR	R Sin Peace & Progress	17565	15585	15470	12055	11980	11910	11850	9705	Af/As	03/22/90
1700	1750	Brazil	R Bras	15265								Eu	03/26/90
1700	1715	Israel	Kol Israel	11655	11585							E Eu/W Eu	03/18/90
1700	2200	USA	KUSW	15590								Canada	70 deg
1700	1800	USA	WHRI	15105	13760							Eu/CA/SA	157/42 deg
1700	1900	USA	WYFR	17885	17750	13695	11830	11580				Eu/Af/NA	#1,3,5 Network M-Sa
1700	1800	USSR	R Moscow	17810	17585	15475	11840	9740			World Service	#4 v Cuba	03/25/90
1715	1800	German Dem Rep	R Berlin Int'l	9730	7295	7260					Eu		03/26/90
1715	1800	Pakistan	R Pakistan	15605	11570							W Eu	03/14/90
1725	2230	Liberia	ELWA	4760									980 WS news 2200
1730	1800	Australia	R Australia	13700	11930	11720	9710	9655	9580	7240	6080	As/Pac/PapNG	03/03/90
1730	1755	Belgium	BRT	13675	5910							Eu	03/15/90
1730	1830	Bulgaria	R Sofia	15370	11840	11735						Afr	03/15/90
1730	1815	German Dem Rep	R Berlin Int'l	15350	15145	13610	9665					Af	03/26/90
1730	1800	Vatican State	Vatican Radio	21650	17720	17710						E&S Afr	03/22/90
1800	1900	Argentina	RAE	15345								Eu/Afr	M-F
1800	1830	Australia	R Australia	11930	11855	11720	9710	9655	9580	9505	7240	As/Pac/PapNG	03/03/90
1800	2000	N Mariana Is	KHBI	17555	9455							China/NZ	225/165 deg
1800	2400	USA	WHRI	17830	13760							Eu/CA/SA	157/42 deg
1800	2000	USA	WSHB	21780								Canada	25 deg
1800	1830	USSR	R Kiev	7240	8185	6090	16010					Eu	03/15/90
1800	1900	USSR	R Moscow	17585	15475	11840	9740	9685			World Service	#3 v Cuba	03/25/90

Start	End														
1830	1930	Afghanistan	R Afghanistan	15440	11830	9635	...						Eu	#1&2 v USSR	03/07/90
1830	1900	Australia	R Australia	15320	11930	11855	11720	9710	9655	9580	9505		As/Pac/PapNG		03/03/90
1830	1900	Bulgaria	R Sofia	15330	11660	9700							W Eu		03/15/90
1830	1900	Canada	R Canada Int'l	21675	17875	15325	7235	5995					W Eu	M-F : #4&5 v UK	03/16/90
1830	1845	Finland	R Finland	11755	9530	6120							Eu/ME/Afr		03/15/90
1830	1900	Hungary	R Budapest	15160	11910	9835	9585	7220	6110				Eu		03/15/90
1830	1900	Yugoslavia	R Yugoslavia	11735	7215	5980							Af/Eu		03/15/90
1840	1910	Mongolia	R Ulan Bator	12050	9985								W Eu		03/15/90
1900	2000	Algeria	R Algiers	15215									SA		03/14/90
1900	1930	Australia	R Australia	15320	11930	11855	9710	9655	9580	9505	7240		As/Pac/PapNG		03/03/90
1900	1930	Israel	Kol Israel	17630	17590	15640	15485	12077	11605				Af/W Eu/NA	#4 alt	03/18/90
1900	2200	New Zealand	R New Zealand Int'l	17680									Pacific		03/27/90
1900	2000	Spain	Spanish Nat'l R	15395	15375	12035	11790						ME/Afr/Eu		03/17/90
1900	2000	USA	WYFR	21615	17885	15566	13695	11830	11580				Eu/Af/NA	#2,4,6 Network M-5a	03/15/90
1900	2000	USSR	R Moscow	17585	15520	11840	9740	9685	9450	7240			WS & UK/Ireland	#1-3 WS & #4-7 UK	03/25/90
1915	2000	German Dem Rep	R Berlin Int'l	15350	13610	9665							Af		03/26/90
1930	2000	Australia	R Australia	15320	15160	11930	11855	9710	9580	9505	7240		As/Pac/PapNG		03/03/90
1930	2000	Austria	ORF	13730	12010	6155	5945						Af/ME/Eu		03/18/90
1945	2030	German Dem Rep	R Berlin Int'l	6115									Eu		03/26/90
1950	2010	Vatican State	Vatican Radio	9645	7250	6190							Eu		03/15/90
2000	2100	Angola	R Mac de Angola	9535	7245	3375							Afr	(RNMN)	03/15/90
2000	2030	Australia	R Australia	15320	15160	11930	11910	11855	11800	9710			As/Pac/PapNG		03/03/90
2000	2100	China	R Beijing	15110	11715	11515	11500	9920	9440				WSN Af/E&S Af/Eu	#1&2 v Mali	03/25/90
2000	2030	Hungary	R Budapest	15160	11910	9835	9585	7220	6110				Eu		03/15/90
2000	2200	N Mariana Is	KHBI	15265	9455								Aus/Japan	180/340 deg	03/19/90
2000	2030	Portugal	R Portugal	11740									Eu	M-F	03/03/90
2000	2050	Turkey	V of Turkey	9795									Eu		03/15/90
2000	2200	USA	WCSN	15610									Eu	60 deg	03/19/90
2000	2200	USA	WSHB	17555	13760								CA/Canada	137/25 deg	03/19/90
2000	2300	USA	WYFR	17885	13695	11830	11580						NA	#1,2,4 Network M-5a	03/15/90
2000	2100	USSR	R Moscow	17585	11640	7860	9740	9685	9600	7240			World Service	#2 v Cuba	03/25/90
2005	2105	Syria	R Damascus	15095	12085								Eu/NA		03/25/90
2030	2100	Australia	R Australia	15465	15320	15160	15130	11910	11880	11800	9710		As/Pac/PapNG		03/03/90
2030	2100	Bulgaria	R Sofia	15330	11660	9700							Eu		03/15/90
2100	2130	Australia	R Australia	17795	15465	15320	15160	15130	11910	11880	11800		As/Pac/PapNG		03/03/90
2100	2125	Belgium	BRT	9925	5910								Eu		03/15/90
2100	2100	Canada	R Canada Int'l	17875	15325								W Eu		03/16/90
2100	2200	China	R Beijing	15110	11715	11500	9920						E&S Af/Eu	#1&2 v Mali	03/25/90
2100	2150	Fed Rep Germany	R Deutsche Welle	15435	13780	11910	9765	9670					Aus/As		03/15/90
2100	2125	Finland	R Finland	15400	11755	6120							Aus/S&SE As/Af/ME/Eu		03/24/90

2100	2145	German Dem Rep	R Berlin Int'l	13690	9730					ENA		03/26/90		
2100	2300	Iraq	R Baghdad	11720						Eu	often delayed start	03/19/90		
2100	2130	Portugal	R Portugal	15250						Afr	M-F	03/03/90		
2100	2200	Spain	Spanish Nat'l R	12035	11790					Eu		03/17/90		
2100	2130	Switzerland	R Beijing	3985						Eu		03/15/90		
2100	2400	USA	WRND	15420	13720					NA/CA/Eu	20 deg; #1 alt freq	03/19/90		
2100	2200	USSR	R Moscow	11950	11850	11840	11745	11630	9740	9685	9600	World Service	#3 v Cuba	03/25/90
2100	2200	USSR	R Stn Peace & Progress	9610	7360	7215	7205	6145	4795			Eu		03/22/90
2100	2115	Vatican State	Vatican Radio	21650	17730	17710						C&S&W Af		03/22/90
2100	2145	Yugoslavia	R Yugoslavia	11735	9660	9620	7215					Af/NA/Aus/Eu		03/15/90
2105	2205	Syria	R Damascus	15095	12085							NA/Aus/NZ		03/25/90
2130	2200	Australia	R Australia	17795	15465	15160	15130	11880	11800			As/Pac/PapNG		03/03/90
2130	2230	Bulgaria	R Sofia	15330	11680							M Eu		03/15/90
2130	2200	Israel	Kol Israel	17630	17575	15640	12077	11605				Af/LA/NA/M Eu		03/18/90
2130	2200	Lithuania	R Vilnius	9765	6100							Eu		03/15/90
2130	2200	Switzerland	Swiss R Int'l	6190								Eu		03/27/90
2145	2230	German Dem Rep	R Berlin int'l	13690	9730	5965						ENA/Eu		03/26/90
2200	2230	Australia	R Australia	21740	17795	15465	15240	15160	15130	11880		As/Pac/PapNG		03/03/90
2200	2230	Canada	R Canada Int'l	11905	9755	5960						USA		03/16/90
2200	0030	England	BBC	12095	9915	9590	7325	6175	5975			WS: NA/CA/Carib	#345 Sacki#6 Antigua	03/16/90
2200	2230	Lithuania	R Vilnius	17690	17665	15180	12060	11770	6190			NA		03/15/90
2200	2400	N Mariana Is	KHBI	15405	15275							China/Jap/Phil/Indon	310/240 deg	02/25/90
2200	2300	Taiwan	V of Free China	17845	15440	15370						Eu/AusNZ	#1&2 v WYFR	03/27/90
2200	2250	Turkey	V of Turkey	17880	9685	9665	9445					Aus/Eu/NE/NA		03/15/90
2200	0300	USA	KUSM	15580								Canada	70 deg	03/19/90
2200	2300	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	9720	ENA		03/15/90
2230	2400	Australia	R Australia	21740	17795	15465	15240	15160	15130	13605	11880	As/Pac/PapNG		03/03/90
2300	0000	Bulgaria	R Sofia	15330	11680							NA		03/15/90
2300	2327	Finland	R Finland	15185	11755							NA/SA		03/24/90
2300	0100	Guam	KSDA	5125								SE As	270 deg	03/27/90
2300	2330	Israel	Kol Israel	15640	11605	9435						NA		03/18/90
2300	0100	Luxembourg	R Luxembourg	6090								regional		03/25/90
2300	0100	USA	WYFR	15170	13695	5985						NA	#2&3 Network M-Sa	03/15/90
2300	2400	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	9720	ENA	6000 & 6045 v Cuba	03/15/90
2330	2355	Belgium	BRT	13675	12010							SA/NA		03/18/90
2330	0100	Canada	R Canada Int'l	11905	9755	5960						USA	Sa-Su	03/16/90
2330	0000	Hungary	R Budapest	15160	11910	9835	9585	9520	6110			NA	exc Su	03/15/90
2330	2400	USSR	R Kiev	17690	17665	15180	12060	12005	11770			NA		03/15/90
2345	0030	German Dem Rep	R Berlin int'l	13690	11690	6080						ENA		03/26/90

Changes entered between 02/24/90 and 03/28/90.

ENGLISH LANGUAGE DX SHOWS: By Day of Week  
Compiled by Thomas R. Sundstrom, W2IQ

Shortwave DX Program	Show Start Time	Xmas Start Time	Country	Station	Freq #1	Freq #2	Freq #3	Freq #4	Freq #5	Freq #6	Freq #7	Target Area	Notes re DX Show	Record Last Updated
** DAY OF THE WEEK: Sunday														
DX Chat	0130	0100	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930		NA		03/15/90
DX Chat	0330	0300	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930		NA		03/15/90
Listeners' Corner	0430	0400	Austria	R Canada Int'l	15275							NE		03/16/90
ANR DX Program	0815	0800	Portugal	AMR Europe	9670							Eu		03/15/90
DX Chat	0845	0830	Czechoslovakia	R Prague	21705	17840	11685					S&E As/Pac		03/15/90
SW Club	0945	0945	Hungary	R Budapest	15220	15160	11910	9835	9585	7220		Eu		03/15/90
Shortwave Panorama	1030	1030	Austria	ORF	21490	15450						Aus/As		03/18/90
Listeners' Corner	1307	1300	China	R Canada Int'l	15385	11955						SE As & India	occ has sked data	03/16/90
DX Chat	1545	1530	Czechoslovakia	R Prague	21505	17840	15155	15110	13715	11990	11685	Afr/S As/Eu		03/15/90
DX Chat	1745	1730	Czechoslovakia	R Prague	21505	17840	15110	13715	11990	11685	9605	Afr/S As		03/15/90
DX Show & Mailbag	1815	1800	USSR	R Kiev	7240	6165	6090	6010				Eu		03/15/90
SWL Digest	1830	1800	Canada	R Canada Int'l	17820	15260	13670					Afr		03/16/90
DX Corner	1920	1900	Israel	Kol Israel	17630	17590	15640	15485	12077	11605		Af/W Eu/NA		03/18/90
World of Radio	2030	1500	USA	WRND	15420							NA/CA/Eu		03/19/90
SWL Digest	2130	2100	Canada	R Canada Int'l	17875	15325						W Eu		03/16/90
Listeners' Corner	2135	2130	Canada	R Canada Int'l	17820	15150	13670	11880				Afr	occ has sked data	03/16/90
DX Corner	2150	2130	Israel	Kol Israel	17630	17575	15640	12077	11605			Af/LA/NA/W Eu		03/18/90
Listeners' Corner	2207	2200	Japan	R Canada Int'l	15440	11705						SE As	occ has sked data	03/16/90
R Sofia Calling	2215	2130	Bulgaria	R Sofia	15330	11680						W Eu		03/15/90
SWL Digest	2307	2300	Canada	R Canada Int'l	11730	9755						Carib		03/16/90
DX Corner	2320	2300	Israel	Kol Israel	15640	11605	9435					NA		03/18/90
R Sofia Calling	2345	2300	Bulgaria	R Sofia	15330	11680						NA		03/15/90
DX Show & Mailbag	2345	2330	USSR	R Kiev	17690	17665	15180	12060	12005	11770		NA		03/15/90

\*\* DAY OF THE WEEK: Monday

DX Corner	0020	0000	Israel	Kol Israel	15640	11605	9435		NA		03/18/90		
Listeners' Corner	0035	2330	Canada	R Canada Int'l	11905	9755	5960		USA	occ has sked data	03/16/90		
DX Corner	0120	0100	Israel	Kol Israel	15640	11605	9435		NA		03/18/90		
DX Show & Mailbag	0215	0200	USSR	R Kiev	17690	17685	15180	12060	12005	11770	03/15/90		
R Sofia Calling	0345	0300	Bulgaria	R Sofia	15310	15160	11765	11735	11720		03/15/90		
Mailbag	0400	0400	New Zealand	R New Zealand Int'l	17680				E Pac	1st & Jrd Mon/w	03/27/90		
Radio World	0635	0630	Belgium	BRT	13675	11695	6035		Eu/Eu		03/15/90		
Radio World	0905	0900	Belgium	BRT	21810	13675	6035		Afr/Eu		03/15/90		
Radio World	1235	1230	Belgium	BRT	21815	17555			SE As/NA		03/15/90		
SM Club	1515	1515	Hungary	R Budapest	15220	15160	11910	9835	9585	7220	03/15/90		
RBI DX Club	2120	2100	German Dem Rep	R Berlin Int'l	13690	9730			ENA	biweekly	03/26/90		
DX Programme	2150	2130	Lithuania	R Vilnius	9765	6100			Eu	bi-weekly	03/15/90		
RBI DX Club	2205	2145	German Dem Rep	R Berlin Int'l	13690	9730	5965		ENA/Eu	biweekly	03/26/90		
DX Program	2245	2200	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	ENA	03/15/90

\*\* DAY OF THE WEEK: Tuesday

RBI DX Club	0005	2345	German Dem Rep	R Berlin Int'l	13690	11890	6080		ENA	biweekly	03/26/90			
DX Program	0045	0000	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	ENA	03/15/90	
RBI DX Club	0120	0100	German Dem Rep	R Berlin Int'l	13690	11890	6080		ENA	biweekly	03/26/90			
SM Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110		NA	03/15/90	
DX Program	0145	0100	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	ENA	03/15/90	
RBI DX Club	0205	0145	German Dem Rep	R Berlin Int'l	15125	11890	11785	6080				ENA/WNA	biweekly	03/26/90
DX Program	0245	0200	USSR	R Moscow	17720	17700	17605	15425	12050	11950	11735	ENA	03/15/90	
RBI DX Club	0250	0230	German Dem Rep	R Berlin Int'l	15240	13610	9730					Caribbean	biweekly	03/26/90
RBI DX Club	0320	0300	German Dem Rep	R Berlin Int'l	15125	13690	11785					WNA/ENA	biweekly	03/26/90
DX Program	0345	0300	USSR	R Moscow	15180	12050	12010	11710	9890			WNA	03/15/90	
DX Program	0545	0530	USSR	R Moscow	12050	9890	7340	7260	7230	7210	7180	WNA	03/15/90	

\*\* DAY OF THE WEEK: Wednesday

SM Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110		NA	03/15/90
DX Chat	1815	1800	Czechoslovakia	R Prague	7345	5930						Eu	03/15/90
DXer's Special	1820	1800	Argentina	RAE	15345							Eu/Afr	03/28/90
DX Chat	2215	2200	Czechoslovakia	R Prague	6055							Eu	03/15/90

\*\* DAY OF THE WEEK: Thursday

World of Radio	0030	0000	USA	WRND	7355							NA/CA	03/19/90
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DX Chat	0130	0100	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930	NA	03/15/90
DX Chat	0330	0300	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930	NA	03/15/90
SW Club	1515	1515	Hungary	R Budapest	15220	15160	11910	9835	9585	7220	Eu	03/15/90
World of Radio	1530	1500	USA	WRNO	15420						NA/CA/Eu	03/19/90
DX Programme	2220	2200	Lithuania	R Vilnius	17690	17665	15180	12060	11770	6100	NA	bi-weekly 03/15/90
World of Radio	2300	2100	USA	WRNO	15420	13720					NA/CA/Eu	#1 alt freq 03/19/90

\*\* DAY OF THE WEEK: Friday

World of Radio	0030	0000	USA	WRNO	7355						NA/CA	03/19/90
DX Chat	0130	0100	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930	NA	03/15/90
SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	NA	03/15/90
DX Chat	0330	0300	Czechoslovakia	R Prague	13715	11990	11680	9540	7345	5930	NA	03/15/90
DX Show	2015	2000	Portugal	R Portugal	11740						Eu	03/03/90
R Sofia Calling	2045	2030	Bulgaria	R Sofia	15330	11660	9700				Eu	1st of wkend series 03/15/90
DX Show	2115	2100	Portugal	R Portugal	15250						Afr	03/03/90
R Sofia Calling	2345	2300	Bulgaria	R Sofia	15330	11680					NA	03/15/90

\*\* DAY OF THE WEEK: Saturday

SW Club	0130	0130	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	NA	03/15/90
World of Radio	0300	0300	USA	WRNO	6185						NA/CA	03/19/90
R Sofia Calling	0645	0630	Bulgaria	R Sofia	17825	15160	11720				W Eu	03/15/90
DX Chat	0845	0830	Czechoslovakia	R Prague	21705	17840	11685				SE As/Pac	03/15/90
SW Club	1030	1030	Hungary	R Budapest	15220	15160	11910	9835	9585	7220	Eu	03/15/90
Radio World	1240	1230	Belgium	BRT	21815	17555					SE As/NA	03/15/90
Radio World	1540	1530	Belgium	BRT	21810	17580					Afr	03/15/90
Radio World	1740	1730	Belgium	BRT	13675	5910					Eu	03/15/90
DX Chat	1945	1900	Czechoslovakia	R Prague	7345	5930					Eu	03/15/90
DX Radio Tips	2020	2000	Turkey	V of Turkey	9795						Eu	Biweekly 03/15/90
Listeners' Corner	2100	2100	Canada	R Canada Int'l	17875	15325					W Eu	occ has sked data 03/16/90
Radio World	2110	2100	Belgium	BRT	9925	5910					Eu	03/15/90
DX Radio Tips	2220	2200	Turkey	V of Turkey	17880	9685	9665	9445			Aus/Eu/NE/NA	Biweekly 03/15/90
World of Radio	2300	2100	USA	WRNO	15420	13720					NA/CA/Eu	#1 alt freq 03/27/90
SWL Digest	2337	2330	Canada	R Canada Int'l	11905	9755	5960				USA	03/16/90
Radio World	2340	2330	Belgium	BRT	13675	12010					SE/NA	03/15/90

# PUBLISHER'S PAGE



NO COLLECT CALLS ON THESE ADS, PLEASE.

WANTED: Crystals for Drake R-4B and an MS4 speaker. I also need a copy of Larry Magne's article about the R4 series from Sept. 1973 FRENDX. Steven R. Lare, 824 West 25th Street, Holland MI 49423.

FOR SALE: Audio Forum German Language Cassette Course. State Department approved. Price \$40.00, I ship. Scott Walker, P.O. Box 464, New Cumberland, PA 17070. Phone (717) 774-2567 evenings.

FOR SALE: Get away from your high noise environment with a portable, transistorized receiver which works on AC or batteries. Several such receivers for sale at \$12.00 and up. All cover LW, MW, FM and one or more SW, VHF and UHF bands. Send SASE for descriptive list. Also for sale, back issues of QST and CQ. Most years from 1950 to 1980. \$3.00 a year plus postage. Tom O'Connor, 1316 Lake Street, Evanston, IL 60201. Phone (708) 475-2788.

WANTED: One copy of tape recording of North Korea with broadcasts of the capture of the USS Pueblo research ship and interviews with the crew from Jan. 23 to Dec. 22, 1968 or takeover of U.S. Embassy by Iran. I would also like to exchange information with those DXers using the Commodore 64 computer/Microlog SWL Converter to do utility DXing. Charles R. Foxx, Jr., 2932 Myrtle Avenue, Norfolk, VA 23504-4117.

WANTED: Collins "651S-1" or Collins "651S-1B" in ufb condition with service manual and options. Can anybody help me find this receiver? Roland Schulze, P.O. Box 800902, Hofmeisterstr. 10, 7000 Stuttgart 80, West Germany.

WANTED: JRC NRD-525 receiver. Must be in excellent condition and appearance. Do not need accessories. FOR SALE: Two JRC NVA-88 speakers for NRD-525, one mint, one excellent condition with original cartons. Price \$67.00 for mint, \$57.00 for excellent. ALSO JRC NRD-525 CMH-530 RTTY Demodulator with CKJ-61 Indicator. Mint condition with instructions. Price \$120.00 firm. ALSO JRC NRD-525 6ZCJD00139 Parallel Printer Cable. See Universal SW catalog. Price \$55.00 firm. ALSO Okidata 180 Printer, 120 volts AC, 50/60 Hz, many features. In mint condition, used ten hours. Compatible with every major PC. Has Centronics/Epson/Commodore interface. I have spec/photo sheet. Price \$360.00 firm. ALSO Toshiba RP-F11 receiver. Excellent condition with 2 hard-cover cases. Price \$65.00 firm. ALSO Sony ICF-2001D receiver. Excellent condition, no air band installed. Antenna connectors, strap, and power supply. Price \$300.00 firm. I pay shipping/certified on all "for sale" items. Walter T. Oliff, Box 8, Naval Station Rota, FPO New York, NY 09540.

FOR SALE: Customized Beam Headings (from/to) and Distances (MI/KM) to over 439 WRTH-90 transmitter sites. Useful in selecting alternate transmissions and choosing listening times based on distance. ITU Country Codes included. Send your location/coordinates, \$6.25. "Passport to World Band Radio" '89, \$9.75. FRENDX '89, \$9.25. WRTH-87, \$8.50, -89, \$9.50. All items include shipping. Cashiers check or Money Order, please. Al Drehmann, Route 2, Box 3-B, Tryon, NC. Phone (704) 894-3398.

FOR SALE: A limited supply of Russian radios available! Ever wonder what a serious Soviet SWL'er is using to catch those "over the border" Western stations? Here's the chance to find out. Current model in stock is the Rossya Shortwave Model RP-303. Covers 3.95 to 7.3 MHz and 9.5 to 12.1 MHz along with MW (AM) and LW. Reception is quite good. Operates at 6 volts using four Russian-manufactured batteries equivalent to AA batteries. Instructions in Russian and original carton included. Translation of manual available on request with purchase. A real novelty for your shack. Price \$110.00 including shipping UPS insured. Saul Berger, 6720 North 11th Street, Philadelphia, PA 19126.

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