

FRENDX

RADIO NORWAY INTERNATIONAL

Radio Norway International broadcasts a half hour programme in English every Sunday. The programme is repeated several times to reach listeners all over the world at convenient hours. The programme - 'Norway Today' - contains a survey of the main news events from the past week in addition to interviews, short features, and music.

Your comments are appreciated. Our postal address is **Radio Norway International, Bj. Bjoernsons pl. 1, 0340 Oslo 3, Norway.**

*Winter
1989*

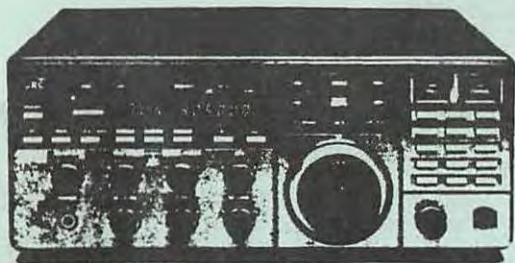
World broadcast schedule Nov. 5th, 1989 - March 3rd, 1990 (Sundays only)

Times UTC	Target sectors	Freqs. MHz
0600	RS Pacific Europe	15.165 5.980
0800	RS Pacific, North America	15.165
0900	CDE India, South Asia, Australia	17.740
1200	SPQ North America	15.165
1300	Europe	9.590
1400	CDE India, South Asia, Australia	21.710
1600	MNO North and Central America NOP North and Central America	21.705 17.840
1700	HRJ Africa PQR North America	21.705 15.305
1800	FGH Middle East, Africa	15.265
1900	Europe	15.220
2200	LJK West Africa, South America	15.225
2300	MNO North and Central America	9.605
2400	JKL South America	9.595

UTENLANDSENDINGEN
Radio Norway International

UNIVERSAL SHORTWAVE

Japan Radio Company NRD-525



The Japan Radio NRD-525 combines the high-performance JRC is known for, with a full complement of advanced features. Larry Magne in his *White Paper Report* says, "... the '525 is as close to the optimum shortwave listener's receiver as is in existence... unquestionably the best overall shortwave listener's receiver on the market today." Universal is the leading USA dealer for JRC's shortwave and amateur radio products. Contact us for full details.

Order #0659
Only \$1179.95
(+\$12.00 UPS)

"Japan Radio receivers are for the connoisseur," Larry Magne

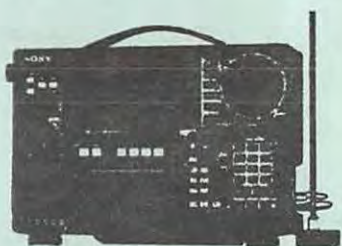
Magnavox D2935



The Magnavox D2935 portable shortwave radio offers a tremendous value in the under \$200 category. It has an upconversion superhet for exceptional selectivity and image rejection. Take a look at these features: LCD digital display, direct keypad entry, two speed high resolution manual tuning, tone and RF gain control, five element LED S-meter, light and LOCAL-ON switch. A switchable variable pitch BFO and AM Gain control are provided for good SSB/CW reception. A nine station memory allows the user to preprogram any combination of AM/FMLW/SW frequencies to be recalled at any time with a single control. External antenna screws and record-out jacks are provided. A large four inch speaker provides good audio. With 1/4" headphone jack. Continuous tuning from 146 to 29999 KHz. Runs on 120/220 VAC, 12 VDC or six D cells (not included). Also requires three AA cells for memory backup. With carrying strap and fold out stand. 12.5"W x 7"H x 3"D.

List price \$289.95. Order #2214 only \$189.95 (+\$5 UPS)

Sony CRF-V21



The Sony CRF-V21 is so much more than a top quality portable radio. This incredible radio also has a built-in radioteletype decoder and FAX decoder. The high resolution, built-in LCD screen serves a multitude of functions. It can display memory and tuning functions plus frequency activity over a portion of frequency (spectrum analysis) or over a period of time. It also serves as your window to the world, to display FAX images and RTTY messages. A built-in printer can produce "hard copies" of your better intercepts. Other features include keypad entry, scan, squelch, AF filter, synchronous tuning, RF gain, attenuator, sophisticated 8-event clock timer, variable dial step, 100 Hz readout and 350 memories. A modular amplified antenna is provided for direct satellite reception of FAX imagery. 120/220 VAC or supplied ni-cad pack. 16 1/4"W x 11 1/4"D x 6 3/4"H (21 lbs.). Write to us for more information on this, the ultimate portable radio!

Price & specs. subject to change.

List price \$6500.00. Order #0819 only \$4795.00 (+\$15 UPS)

Coming October 15th The annual *Universal Book Bonanza*. Special once-a-year sale prices on the best radio books and publications. Write or call to receive your free *Book Bonanza* sale flyer.

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

STORE HOURS

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

Serving Listeners Since 1942!

Universal Shortwave Radio

1280 Aida Drive Dept. FREN
Reynoldsburg, Ohio 43068 U.S.A.
Toll Free: 800 431-3939 Ohio: 614 866-4267



From the Executive Director

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

Thank you to everyone who has responded to the NASWA membership survey. According to Bob Brown, quite a number of them have been received to date.

Some have asked me to comment on the number of members in NASWA. In a past column, I mentioned that NASWA membership is at an all time high. I was trying to convey the idea that our ability to attract and retain members continues to remain at an all time high. NASWA is not a commercial publication which is driven by circulation figures. In the early 1980's membership was around 1,800. Membership is currently around 1,300 which we feel reflects the general level of interest in the hobby today. We hope that our high level of new and renewing members is a positive indication of the health of the hobby not only for NASWA but for all clubs and enthusiasts.

Along these lines, I would like to offer an enthusiastic welcome to the 66 new members who have joined NASWA this month.

In the survey, the members also seem to be requesting a return of the Loudenboomer Report. Charlie, if you are out there, how 'bout dropping me a line to discuss a possible comeback?

Due to a heavy work load, Executive Council Member John Herkimer is resigning his position. I wish to thank John on behalf of myself and the membership for the efforts he invested into NASWA and *FRENDX* over the years.

On a more positive note, I have appointed long time NASWA supporter, DX'pert, and writer, Gerry Dexter to assume John Herkimer's place on the Executive Council. Please join me in welcoming Gerry!

The following information concerning "Euro DX" came in the mail with no contributor information. Thank you to the contributor, who ever you are.

The August 89 issue of "Euro DX", the European DX Council's quarterly, has a wealth of information about new publications. These pointers, written by EDXC's Secretary General, are quoted with permission:

The Danish Shortwave Clubs International have issued the 17th Edition of the well-known *Tropical Bands Survey*. The 36 page booklet covers all broadcasting stations in the frequency range of 2000-5900 kHz and costs surface mail 7 IRC's or 25 Danish Kroner or airmail 9 IRC's or 30 Danish Kroner [from DSWCI, Tavleager 31, DK-2670 Greve Strand, Denmark].

European FM Handbook 1989 2nd edition, compiled by Timo Leponiemi has 170 pages and is printed country by country. The listing is in frequency order and covers Europe, the Middle East and North Africa. Each entry shows the frequency, transmitter power, station location, type of programme and station address. The cost of this book is 100 Finnish Marks in Europe and 120 Marks outside of Europe. Orders to Timo Leponiemi, Box 95, SF-04301 Hyryla, Finland.

A British DX Club specializing in Medium Wave listening has a new 20-page booklet entitled *Eleven Years of Trans-Atlantic Medium Wave DX*. The booklet lists every station heard in the UK and Ireland since 1978 and contains details of some 750 stations, with information on the date last heard, call signs and frequencies - including changes. The cost of the booklet is L1.75 in the UK, with the remittance made payable to *Medium Wave Circle*. Overseas including postage is L2.00 or 7 IRC's (payable by International Money Order or Giro cheque). Orders to MWN Reprints, 43 Atwood Drive, Lawrence Weston, Bristol, BS11 0SR, England."

NASWA has quite a history. To look through old issues of *FRENDX* is to see the Shortwave Broadcast Listening hobby develop and mature. During some of the various gatherings and meetings I have attended, NASWA members have asked questions and expressed an interest in our clubs history. On a trial basis I would like to offer an additional segment to this column:

NASWA, 15 Years Ago This Month.

At that time, *FRENDX* was 40 pages long and organized along about the same page format as the present Journal. The bulletin was ahead of its time by being offset printed; some club bulletins were still mimeographed. Of course, there was no laser printing and all columns had to be done on typewriters. Headquarters was in So. Charleston, W.VA and Dan Ferguson served as both Executive Director and Publisher. Dues were \$10 per year. *NASWA/FRENDX* was considered THE source for SWBC information, hobby news and high quality articles.

From the November, 1974 *FRENDX*:

The Loudboomer Report, a monthly column taking a cynical look at the hobby noted that American equipment manufacturers have elected to save on "precious glass, semiconductors and metal by not making communications rigs anymore." Charlie Loudboomer cheerfully celebrated the "tons of Chairman Mao posters" he had received in the mail from Radio Peking. Loudboomer also congratulated the DX'er who managed to hear the special test transmission from Cook Island Radio—even though it wasn't audible a block from the station.

The November issue saw Charles Wootten take over the column Shortwave Center from Ed Shaw that month. Shortwave Center was a feature that was the equivalent of "DX'ers Forum, Easy Listening, Technical Topics and *FRENDX* Portraits" all rolled into a single 12 page column. Dr. Wootten took advantage of his close proximity to the F.C.C. offices in Washington, D.C. to examine the construction permits of several domestic shortwave broadcasters to-be. Profiles from the construction permits of WINB, WYFR and TWR, Guam were written.

In the next pages of Shortwave Center, pictures and short bio's of two DX'ers appeared. Featured were former QSL Report editor Larry Yamron, complete with a picture of him with his Allied SX-190 and Hammarlund HQ-180, and David Ball along with his Realistic DX-150A. David was noted as looking for other Toronto, Canada area DX'ers.

The column also contained a report on GLADXA, the Great Lakes DX Association formed by Kalamazoo, MI member, Andy Robbins.

A very comprehensive, 9 page article on Broadcasting in the Peoples Republic of China was also featured. Radio Peking, the China News Broadcasting Station and the Peoples Liberation Army stations were featured. There was also a very complete by frequency listing of Chinese regional broadcasting stations. The known Chinese Clandestine stations were summarized, all of which primarily operated from within the Yunan Province of China. These included The Voice of the Malayan Revolution, The Voice of the Burmese People and The Voice of the Thai People. Short paragraphs about The Chinese Fishing Fleet station and time station, BPV were also part of the article.

Many of today's *NASWA* members know Larry Magne as the Editor in Chief of the popular Passport To World Band Radio. In this issue of *FRENDX*, Larry was the editor of another regular *FRENDX* column, Clandestine Bulletin. Part I of a series, What Can I Hear, featured two regularly heard clandestine stations, Radio Independent Spain and Radio Euzkadi, the voice of the Basque Underground.

The Headquarters page in *FRENDX* was written by Executive Director Dan Ferguson. Although there were no club announcements this month, member ads much like the ones that appear today were present. Items such as AL Niblack's Hallicrafters HQ-200 receiver were featured in the "Helping Hand" section of the column. *NASWA* Country List Committee chairman Don Jensen announced the addition of three new countries, Antarctica, Bhutan and Scotland.

FRENDX had a QSL Report column much like the one featured in today's Journal. The November QSL report was 3 pages long and had none of the interesting pictures we enjoy today. Some of the interesting QSL's received were: ETLF in Ethiopia, Laos, Malta (direct), Rhodesia and Syria.

Listeners Notebook had the same format as it does today. Editor Dan Jamison wrote a 3 page column listing mainly schedule changes by the major broadcasters.

FRENDX in 1974 was a very DX'er oriented publication. The four Log Report sections in the November issue occupied 14 full pages and averaged 100 contributors. Log Report "A", edited at that time by Bob Hill was eight pages alone! The format of the Log Reports was the same as it is today, in order by frequency.

That pretty much sums up the November 1974 *FRENDX*. If you are interested in seeing more *FRENDX* history on a regular basis, let me know. I would also appreciate a member lending me a few issues. I am missing the December, 1974 issue and have a lot of gaps in 1975.

DX'ers Forum

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

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

October, 1989

Ernst Behr checks in this month with a tip on Lighthouse Publications, a supplier of high-quality stamp albums. Ernst tells us that they have two items of special interest to SWL's:

First Day Cover Albums with 50 clear plastic pockets and black dividers holding up to 100 postal covers or QSL-cards; padded leather-like covers in red, blue, green, black, brown; overall size 9.5" x 5.75"; order no. FDC2 + color. Price \$23.95 Canadian.

The Orbis Philatelic Atlas lists every stamp issuing territory, past and present; 100 maps in color, plus currencies and historical data; many interesting details for SWLs, map showing borders of all 7 Gulf Emirates, etc; 355 pages, hardcover pocketbook size. Price \$13.65 Canadian. Add \$2 service charge to total order, and order from: Lighthouse Publications, 210 Victoria Ave., Westmount, Montreal, Quebec, H3Z 2M4.

This month's feature article is by John Bryant, who, in addition to getting frustrated by attempts to QSL Greenland (hi!), has made innumerable contributions to our hobby, such as the labor of love called "Fine Tuning's Proceedings." John has a special knack for showing us how to organize information in ways that helps make us better DXers; on many occasions John has caused me to smile and ask myself, "Why didn't I think of that?!" I hope you enjoy his article and decide to keep your own 27-day propagation predictor.

THE 27 DAY RECURRENCE TENDENCY: A DXer's Practical Propagation Predictor

By John H. Bryant with John Tuchsherer

Over the years as my DXing skills grew and I had logged and verified reasonably easy countries, I began to hone my operating procedures and refine my understanding of antenna theory and propagation. I almost memorized George Jacobs' book, and it was there that I first became aware of "the 27 day recurrence tendency." His Figures, 5-9 and 5-10, (reproduced here as Figures 1 and 2), were quite revealing. I must confess though, I did not then transfer my new-found understanding to my DXing habit.

Over the years, I read more and more about propagation and discovered three other books which I found invaluable. (See End Notes). The more I read, the more I realized just how little we know about the things that we care the most about:

- a) weak signal propagation in general,
- b) the physics/mechanics of dawn enhancement,

- c) the physics/mechanics of graylining, and
- d) the 27 day recurrence tendency.

A great deal is known about the "normal" propagation that occurs 95% of the time. Very little seems to be known about the abnormal 5% of the time that we as DXers find crucial. To make it worse, every author I read kept saying that "the ionosphere (or a particular layer) is NOT a homogeneous medium," and kept referring to "irregularities in the reflecting layer." That generated my favorite propagation quote from Kristen Folkestad's *Ionospheric Radio Communications*, pp. 239:

"The present evidence shows that HF signal statistics can be nonstationary over periods of 8-12 min. due to the effects of ionospheric irregularities of various scale sizes. These irregularities are sufficiently small to result in

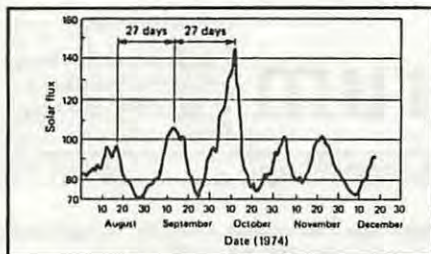


Figure 1 - Solar flux as a function of time (Aug. 1 through Dec. 17, 1974). Note tendency towards approximate 27-day recurrence. (from Jacobs)

significant signal level differences on paths separated by 32 km or less, but are still sufficiently large that most diversity antenna separations can not reduce their effects on the fading of signals.

"Furthermore, most ionospheric paths are non-reciprocal, with the results that there can be large instantaneous differences in the level of signals travelling in opposite directions."

What that means to me is that the bumps, holes and clouds on ions moving about in the solar wind above our heads are chaotic enough that NO body of theory or mathematical model is ever likely to be an accurate predictor of DX success. The real world is just too irregular. After that realization, I stayed in a propagation pout for over a year!

I kept sneaking back to those two charts from Mr. Jacobs' book though, because I kept seeing similar charts in DX magazines. There just had to be something there that I could use as a practical DXers tool. I went back and reread my propagation library, starting with Jacobs, concentrating on what they said about the 27 day recurrence tendency. I gleaned three points. I believe that they represent the current understanding of the 27 day recurrence tendency.

1. There is a recurrence tendency in solar activity as it relates to radio propagation.
2. The period between similar recurrent conditions seems to vary somewhat from year to year and may be as short as 27 days or as long as 31 days.
3. The recurrence tendency is most prominent during sunspot minima, when the sun is quite stable and when individual sunspots may last as long as six solar cycles. However, the most exhaustive statistical study of the 27 day recurrence tendency (*The Effect of Disturbances*, pp. 242) states clearly that, "The degree of the recurrence

tendency varies irregularly. It is not clearly coupled with the phase of the sunspot cycle."

Well, at about the same time I finished my homework, John Tuschcherer, the dean of North American SWBC DXers, sent Mitch Sams a simple 27 day perpetual calendar. John kept notes of the DX conditions he observed over time, and using this calendar, he was able to transfer those tendencies 27-30 days ahead. John's generosity spurred Mitch and I to develop **Fine Tuning's Perpetual Propagation Predictor** (available from FT's Special Publications for \$2.50). The Predictor is two 11" X 17" sheets, each covering a bit more than six months. The days are arranged in columns which are 27 days long. Each day is provided a space 1/2" X 1" in which to note specific conditions. Using the Predictor is very simple. Fill it out each day and after the first 27 days, you can look to the immediate left of your date to learn

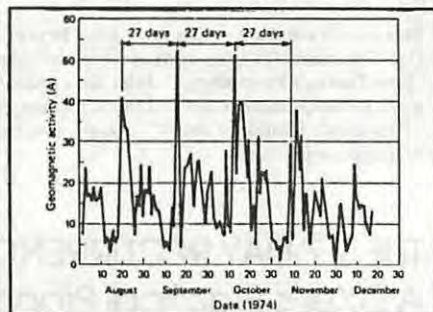


Figure 2- Geomagnetic activity (A Index) as a function of time (Aug. 1 through Dec. 17, 1974). Note approximate 27-day recurrence tendency of values. (from Jacobs)

the conditions 27 days ago. If you wish to look at conditions 30 days ago, look at the box to your left and count up three boxes.

Figure 3 is a cleaned up copy of my predictor and shows June 6, 1988, through January 9, 1989. Everyone has their own code for these things. Mine was ONLY filled out for dawn conditions to East Asia and especially for reception of Indonesian stations. I developed a "five dots" system. One dot means that I DXed but that conditions were not especially good. Two dots means the "regular" dawn Indos were stronger than usual. From three to five dots meant that some of the very weakest 150 watt RPDT2 Indos were in with clear audio.

To see how the Predictor helped me last season, cover all but the first three columns. You can see that I started record keeping in mid-June. I was

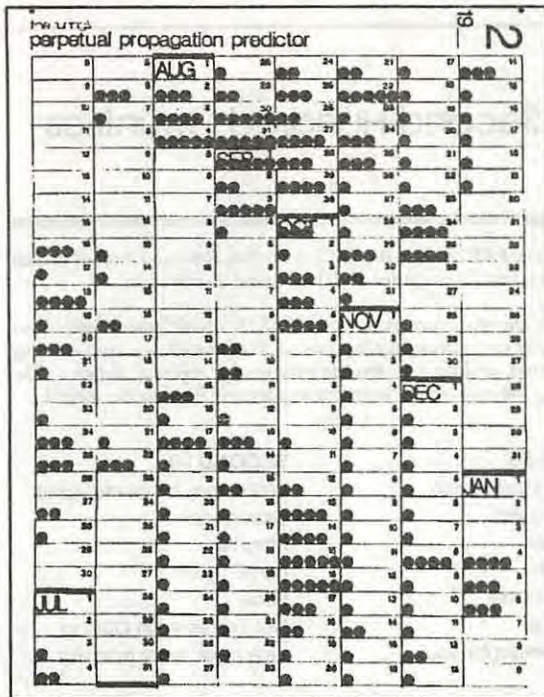


Figure 3 - Fine Tuning's 27-day Perpetual Propagation

not very serious about it in July. You can see that August 2, 3, and 4, were super and then I went on vacation. When I got back, there were a couple of good mornings and then, nothing! By the 27th of August, I thought I had two possible DX "nodes" for the next 27 days, the first few days at the top of the chart and something around mid-September. I got all geared up for the top of the chart and EUREKA! THERE IT WAS! From there on, it was gravy. There was a little burst at mid-month, but not much, so I got geared up again for late September at the top of the chart. Sure enough, I got another burst.

There was one very unexpected period of excellent reception during 12-18 October. It is quite isolated on the Predictor. I suspect that this must have been an occasion of "ducting" since both Mitch Sams (120 miles north) and Kirk Allen (60 miles north) reported either average or sub-par conditions during that time period.

The other conclusion which I draw from this chart is that "openings" or "good conditions" generally come in bursts of between 3-7 days' duration. Now that I'm hooked on the Predictor, I don't follow it slavishly, but I do pay attention to it! Now

more than ever, if I hit one good morning, you can bet I'll be at the dials the next morning, too!

Since all my experience using the "27 day recurrence tendency" as a DXer's tool has been on northerly routes to Asia, I wrote and asked John Tuchscherer, as a long-time Latin DXer (started in 1922!!), to relate his experiences with the 27 day solar cycle. He said rather bluntly that he attributed almost half his genuine DX catches in recent years to using a 27 day perpetual propagation predictor. That's good enough for me... my bet is that the calendar will work about equally well for DX targets in every direction.

That's about it. The 27 day calendar is far from perfect, thank goodness, and will work better for you in some years than in others... However, if you want to tilt the odds some in your favor, set up a 27 day calendar like the one here, or order the two 11x17 photocopyable masters from FT Special Publications for \$2.50 + \$1.00 S&H. (FT Special Pubs, Rt. 5, Box 14, Stillwater, OK, 74074).

AUTHOR'S END NOTES

Basic References

Jacobs, George, ed. and T.J. Cohen. *The Shortwave Propagation Handbook*. Cowan Publishing, Port Washington, NY, 1979.

(This is the basic 'hobby' propagation text and a must for us all).

Davies, Kenneth. *Ionospheric Radio Propagation*. N.B.S. Monograph 80, U.S. Government Printing Office, 1965.

(This is THE basic professional text. Although somewhat dated, it is still very helpful).

Gassmann, G.J. *The Effect of Disturbances of Solar Origin on Communication*. MacMillan, NY, 1963.

(Collection of scholarly papers supported by NATO. Excellent).

Folkestad, Kristen. *Ionospheric Radio Communication*. Plenum Press, NY, 1968.

(Collection of scholarly papers from NATO Institute on Ionospheric Radio Communications in the Arctic. Excellent).

• • •

On Hearing Your Second Hundred Countries

by Vern Hyson

Back in the September, 1987 issue of FRENEX in the DX'ers Forum, Rowland Archer had an excellent article about getting the first 50 countries and the second 50 countries.

[Ed. Note: For those of you who have joined us since September, 1987, the article's theme was about how the nature of DX'ing changes after you successfully log around 50 countries; you start running out of major international broadcasters, and have to struggle with weaker regional stations. The original article included a table giving the attributes of your first and second 50 countries logged.]

ATTRIBUTE	FIRST 50	SECOND 50
Quality of Signal	Like a local station	Weak, may be unintelligible
Availability	Year round	Occasional
Schedule	Regular	Irregular
Language	English	non-English
Intended Audience	International	Local
Verification Policy	Reliable	Not interested in QSLing
Time of Broadcast	Convenient for you	Late night, early morning

[Vern now adds his comments on what it's like to hear the NEXT 100 countries.. - Ed.]

I would like to expand on a portion of that article, namely the attributes of each step heard.

ATTRIBUTE	THIRD 50	FOURTH 50
Quality of Signal	Weak, most unintelligible	A lot of junk
Availability	With luck & timing	What's availability?
Schedule	Most rumors are true	Whenever they want
Language	Occasional English words	Foul (yours), mumbled
Intended Audience	Local 200 mile radius	Studio
Verification Policy	Sporadic at best	Policy cancelled
Time of Broadcast	Within 2 hrs of schedule	If tubes come in

I don't want to sound too sour on the second 100 countries, but I could not help getting a bit of frustration out. Most of all, I don't want to discourage anyone from going for the MAX! One of the attributes not listed above is satisfaction. This attribute grows more and more as each level is attained. A sense of pride in your accomplishment also grows. Yes, the wallet normally suffers, as you get more sophisticated equipment and accessories, but so does your skill at identifying a station with the use of club bulletins, DX news sources and schedules and most important of all, your ears and your brain.

You can get a small kick out of having a visitor to your shack as you identify a station that is noise to his untrained ears, tell him or her to listen for the ID or IS, have it fill the room, then look at their face!

We have the greatest hobby in the world - let's not keep it a secret! With any sort of luck, your visitor will be hooked and you will have to keep your skills up from some new competition.

• • •

AN OPEN LETTER TO SONY ICF-2001D/2010 OWNERS

by Gordon Darling (via John Bryant)

Recently, comments have appeared in both the NASWA and DSWCI bulletins about the Sony ICF-2001D/2010. These were respectively, the vulnerability of the front end MOSFET (Rowland Archer, NASWA) and filter modifications (Finn Ritz Joregesen, DSWCI).

Despite its shortcomings, this receiver is the portable of choice for a serious DXer or SWLer to take on a trip. There are many thousands of these units in the hands of DXers.

I am prepared to act as a clearing house for information, hints, tips, modifications, etc. for this receiver. I will undertake to collate all information submitted and ensure publication of the collated/condensed material, probably in **Fine Tuning's Proceedings 1990**.

So, I would ask all DXers who are able to provide ANY hints, tips, mods, etc. to write to me with the details including, where appropriate, circuit component references, etc. I will set a cut-off date of January 31, 1990. If you include return postage (2 IRCs surface, 3 IRCs airmail) I will ensure that each contributor receives copies of ALL the submissions. I will then collate/condense the information for publication in mid-1990 for the benefit of all DXers who use this popular receiver. 73's,

Gordon Darling
PO Box 3474
Boroko, N.C.D.
PAPUA NEW GUINEA

* * *

So, there you go all you Sony 2010/2001D owners. You have a deadline of 31 January, so there is plenty of time to get that information to Gordon.

US Amateur Radio Group Announces 1990 DXpedition to Bouvet

Will Chase All-Time QSO Record

from Chuck Mitchell (via John Bryant)

An Indiana amateur radio group today revealed plans for what could be the greatest DXpedition of all time: a 12- to 20-man, fully funded operation on the rarely heard South Atlantic island of Bouvet (the most remote parcel of land on Earth).

The effort by the **Legion of Indianapolis DXers** — the same group behind the highly successful special event station W87PAX — has been in the works for two years and has attracted several major sponsorships. Yaesu-Musen Corp. of Japan has agreed to provide all the transmitting equipment, while the Saturday Evening Post magazine will provide some of the funding. Since the project will also include scientific research on

the Norwegian island, a two-man film/photography team representing National Geographic Society will participate in the initiative.

According to plans, the landing team will depart Indianapolis on Jan. 19, 1990, arrive in Capetown, South Africa on Jan. 21 and sail for Bouvet on Jan. 25 aboard the S.A. Deep Salvage I. The anticipated arrival date is Jan. 31; amateur radio operations will commence Feb. 1 and continue through Feb. 12. Using the callsign 3Y0B, the expedition will activate seven transmitters (3 SSB, 3 CW and 1 satellite) that will be manned around the clock for the duration of the effort.

PLANNED FREQUENCIES

METER BAND	SSB		CW	
	XMIT	RECEIVE	XMIT	RECEIVE
160	Prohibited by Norway		1.825	1.835-up
75 SSB/80 CW	3.695	3.800-up	3.505	3.525-up
40	7.055	7.055/7.200-up	7.005	7.025-up
30	—	—	10.105	10.125-up
20	14.145	14.200-up	14.005	14.025-up
17	Prohibited by Norway		18.070	18.080-up
15	21.195	21.300-up	21.005	21.025-up
12	Prohibited		24.905	24.925-up
10	28.295	28.450-up	28.005	28.025-up

Figure 1 - These are the frequencies that the Bouvet DXpedition intends to use. The "Receive" frequency is as shown or as announced during the QSO.

The group will attempt to break the all-time QSO record for a DXpedition — about 39,000, set earlier this year by 4J1FS. The Legion of Indianapolis DXers already holds the record for special event QSOs: 23,270, established by W87PAX during the 1987 Pan American Games in Indianapolis.

Total cost of the DXpedition is about \$120,000, and funding is complete. The effort originally was scheduled for early 1989 — landing permission and a radio license were obtained from the Norwegian government in February — but the trip was postponed a year at the request of the National Geographic and others.

This initiative is in no way connected with a newer effort by a Norwegian group, Club Bouvet, which is currently attempting to raise money for a smaller operation on the island.

For more information on the Legion of Indianapolis DXers' expedition to Bouvet, call Mike Koss at 317-547-1398 (FAX: 317-634-1791) or write Koss at P.O. Box 18495, Indianapolis, IN 46218, USA.

POWER

All stations will be equipped for 600 watt level, but to conserve generator fuel will transmit at 120 watts if conditions are deemed sufficiently good.

QSL

Available a few weeks after the group returns to Indianapolis at the end of February. Cards will be a double fold-out full color photographic confirmation with many interior black and white photos of the island, operators, etc.

Requests received with postage or donations will be answered in order received direct. Cards received with postage will be forwarded via the ARRL outgoing bureau in the mid-summer. All cards should be addressed to:

Joseph T. Pinella, WA9VGY
6316 Greenleaves Road
Indianapolis, IN 46220
U.S.A.

AWARDS

"The Bouvet Island Award"

A full color 8" x 10" photo type award suitable for framing will be made available to any station/SWL making contact on three or more frequency bands, any mode or combination of 2-way QSL or SWL. Enclose cards for the contacts or a note with a list via the regular QSL address as shown above. Cost of the award is US\$ 5.00 which includes return postage. Awards will be mailed prepaid, flat, with cardboard protectors.

* * *

Although NASWA's coverage is SWBC, not ham radio, I decided to share this item with you because they will honor correct SWL reception reports, there is a nice award available, and it's a good DX challenge and a chance to hear a rare country. Please remember that ham QSL's are not eligible for NASWA awards or country counting purposes.

See you next month for the last column of the 80's!



Easy Listening

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

SUNDAY

- 1545-1600 Stamp Corner (Radio Sweden International). A run-down of the latest issues of Swedish and other Nordic stamps, giving a brief description of the stamps themselves and some information about the background. (17.880/21.610. First Sunday of the month).
- 0015-0025 Calling All Listeners (Kol Israel). A letterbag program in which Yishael Dar responds to listeners questions about Israel, their comments about the programs, and their complaints. (15.615/12.077/11.605. Repeated at 0215 on the same frequencies).

MONDAY

- 1345-1400 Book Readings (Radio Australia). Each week the program presents a reading from an Australian novel. For the longest time, it seemed, they read from Here's Luck. The current offering (as of this writing—Sept. 26, 1989) is Button Up. (9.580).
- 0110-0130 Newsline Cologne (Deutsche Welle). A current affairs program devoted largely to events in West Germany (but also in Europe in general). Standard features include commentary, press review, and on Monday nights, a wrap-up of the weekend's sporting events. There is also an occasional feature entitled "Ah, Yes, I Remember It Well" which reviews important events that occurred on that date in history. (6.040/6.145/9.565. Repeated at 0310 on 15.205 and at 0510 on 6.120). Monday through Friday.

TUESDAY

- 0105-0130 One Norway Street (W.C.S.N.). Christian Science Monitor's magazine program, usually, but not always, including two or three segments per program. Past programs have included a feature on the dancers at the Boston Ballet, how to prevent damage to one's garden while on vacation, and an interview with the manager of Pier 39 at Fisherman's Wharf in San Francisco. (9.850. Repeated at 0305 on the same frequency). Mondays through Saturdays.
- 0215-0230 Health Matters (BBC). A program devoted to health-care issues, usually including two or three short segments per program. Past programs have included features on a guide to general health, the interview with an author of a book detailing the importance of touch in medical care, a self-destructing syringe, and a visit to a school for first aid. (5.975/9.915).

WEDNESDAY

- 0125-0155 Scrapbook (Radio Prague). Actually one of Radio Prague's better programs. A hodge-podge of features, including "Domestic News Highlights", "Observations on Life in Czechoslovakia", "Cooking Page", and quick-hitting little bits of information on Czechoslovakia (which become the subject of "Quiz Question" at the end of the program) all interspersed with numerous Czechoslovakian rock songs. About once a month, the program is devoted exclusively to rock music, and listeners are asked to select their five favorite songs from about 15 or so. If you're selection meets with the

general consensus of all other listeners, there is a prize (but I don't know what). (5.930.7.345/9.540/11.990. Repeated at 0325 on the same frequencies).

- 0335-0345v Economic Issues (Radio France International). A program devoted to, as the title suggests, economic issues, including preparations for the integrated market in 1993 and also economic issues which affect third world countries. This summer, near the time of the bi-centennial of the French Revolution, one program was devoted to the economic causes of the revolution and another devoted to the economic consequences. (11.670/7.280). Every other week.

THURSDAY

- 1230-1254 Spotlight on Science (Radio Canada International). Part of the larger program "North Country," each week "Spotlight on Sciences" looks at a number of current scientific issues and discoveries. Past programs have featured Canada's first astronaut's comments about Bush's renewed impulse for the American space program, genetic research, the photos Voyager II sent back from Neptune and what they revealed, etc. (17.820/11.855/9.635).
- 2045-2055 Reflections (Radio Damascus). Unfortunately my schedule has prevented me from hearing this program in the past month, but when I listened this summer, it generally included features about life in Syria, including pigeon raising, Syrian wedding customs, and the shops of the Damascus marketplace. (17.710/15.095).

FRIDAY

- 1215-1230 Science Horizon (Radio Finland International). A program about the sciences, particularly as they apply to Finland. Past programs have featured the increase in the Finnish budget earmarked for scientific research, recent findings debunking the idea of "vitamin poisoning", a sociological survey showing that the upper and middle classes get a disproportionate number of seats in Finnish universities, and a survey which shows that despite recent efforts Finnish women are still paid less than men doing the same job and also wind-up doing the lion's share of the housework and child-rearing. (21.550/15.400. Repeated at 1315 on the same frequencies).
- 0230v-0235v Letter from Capetown (Radio RSA). Observations on life in South Africa in general and in Capetown in particular. One peculiar note about this program is its defensiveness. I can't seem to remember one week going by that the presenter has not tried to castigate the media for its portrayal of South Africa. But then I suppose that's to be expected. A good number of Radio RSA's programs have that defensive quality about them. (9.580/9.615).

SATURDAY

- 2210-2220 Current Affairs (Radio Yugoslavia). This is not actually a standard program so much as a collection of Radio Yugoslavia's commentaries and editorials. Past editorials have been about economic reform in Yugoslavia, the split in the Warsaw Pact, arms negotiations between NATO and the Warsaw Pact and student unrest in China. (15.105/11.735/9.660. Repeated on 0010 on the same frequencies).
- 0120-0135 To the Top (Deutsche Welle). Once a month Peggy Graham discusses the current trends in the West German pop scene, usually discussing one or two performers in some detail and playing one of their songs. September's program, for example, was devoted exclusively to Katarina Frank and the Rainbirds, one of West Germany's hottest new groups. Most programs, however, focus on three or four performers or groups instead of just one. (6.040/6.145/9.565. Repeated at 0320 on 15.205 and at 0520 on 6.120). Fourth Saturday of the month.

FRENDX PORTRAITS

a look at the members of NASWA

edited by Tom McElvy - P.O. Box 9645 - Norfolk, VA 23505-0645
E-Mail on ANARC BBS - ODDX BBS - CompuServe 73677,2351

Greetings to the wonderful season of Autumn! This is such a wonderful time of year, when the trees begin to display beautifully vivid colors, the weather again becomes tolerable, and the DX starts to roll in...(especially that last part!). Sorry I missed you folks last month, but my duties with the *East Coast SWL Conference* kept me from doing everything I need to do in August. The Conference was a great success, owing largely in part to the work of Dr. DX, Chuck Rippel and of course, our guests **Kaz Matsuda of NHK**, **Trevor Morgan of the ILA in England**, **Bob Brown, KW3F**, and **Robert Horvitz of ANARC**. The show will be held again next year, the same weekend. But on to other things...

This month we hear from *Edward Stroh of Thornton, Illinois*.

"My DXing career began about 22 years ago when I was 15 years old. My first receiver was a Knight-Kit 'Star-Roamer' which cost around \$39.95 and I assembled it myself. It was my first real electronics project. I remember how proud I was when I turned it on for the first time and it actually worked! That is when the DX bug bit me. I was amazed at how many stations from every corner of the globe that I was able to hear and how good their signals sounded on my modest equipment. A couple of years later I traded my Star-Roamer (for sentimental reasons I am sorry now that I did) to a friend for a Hallicrafters SX-110. The Hallicrafters was quite a step up from the Star-Roamer; it had much better selectivity and sensitivity than the Star-Roamer. In 1976 I purchased the receiver that I use

not plane to upgrade to any of the fancy new receivers with digital display and all those other goodies.

"I joined NASWA in 1977 and then dropped out in 1986. I just became so busy with raising a family and working a lot of overtime on my job and fixing up my house that I sort of lost interest in SWLing. Then, a little over a year ago, I moved. The DX bug bit again. I rejoined NASWA and set up my 'radio shack' in a room that I built in the basement. I also set up my Color Computer 3 there, and keep a computerized log with it and use it to generate reception report forms. I installed an end fed 65' long wire antenna from the house roof to the garage roof about 15 feet above ground level. Other accessories include a Gilfer M-1 Multi-tuner and a cassette recorder. My current totals are HIC-86 VIC-69. I am having a difficult time raising my totals higher because I am running out of countries to QSL that broadcast in English. I hope to get much more involved in the hobby now and to become a regular contributor to the FRENDX magazine. I am also working on becoming a novice amateur operator. All I have to do is get the mmorse code down pat and then try to come up with the money for a transmitter. Even after I get my ham license, I plan to be active in SWLing because that is where my roots are. 73 and good DX to everyone!"

Ed also noted in his letter that he is interested in hearing from any readers in the southern Chicago area about getting together. His address is 53 Arrowhead Drive, Thornton IL 60476.

Technical Topics

Edited by Ted Benson, WA6BEJ

General Delivery

Morgan Hill, Ca. 95037

(408) 970-4325

I must apologize for the appearance of this month's column, but it is literally out of the ashes - somewhat like the Phoenix. I am writing from a motel room, as my house is not safe to re-enter. I must also apologize in advance for the content of the following topic: it is not precisely about technical subjects. What it is instead is a story about what happened to me and to my community these last two weeks, and how radio - both broadcast and amateur - literally made a difference.

LIVING ON THE FAULT LINE

Until October 17th of this year, there was an often repeated commercial on local television. It began by showing scenes of the "Bay Area," a region which encompasses San Francisco, San Jose, the "Silicon Valley," and a myriad of other cities. After showing people enjoying the diverse pleasures these areas had to offer, the ad went on to say: "6 million people are living on the fault line - and nobody's leaving. It must be something special..." I always thought that this ad tempted fate.

I was right. At 5:04 PM on October 17, parts of Northern California were devastated by a magnitude 7.0 earthquake.

I had just come down from my roof, where I was changing some coax, when I heard what I thought was a sonic boom - except that it didn't stop. An entire squadron of jets couldn't cause this, I thought.

We live with the constant presence of earthquakes here in California. Major cracks in the earth - fault lines - run the length of the state. Along these lines two parts of the continent are trying to move in opposite directions. It is a tenuous stalemate, and sometimes the pressure gets too great. When it does, huge amounts of force are released suddenly. The shock wave is an earthquake. Unlike the yearly threat of tornadoes and

hurricanes faced by folks in other parts of the U.S., Californians have grown complacent to the hundreds of minor quakes that occur every month. Many tremors are not noticed at all. A major quake is a rare occurrence. So when the shaking began on October 17th, most of us stood still, waiting for the shaking to subside. It didn't. It grew stronger and stronger, until houses - and the ground - were shaking hard enough to make standing up difficult. The quake lasted only 15 seconds, but like an auto accident it seemed to go in slow motion.

I could see the local damage from where I stood in my front yard. Power poles were tilted and broken glass was everywhere, but the houses were still standing. Not so bad, I thought.

As soon as the quake was over I went into my radio room. Because aftershocks can occur I grabbed all the battery operated radios I had and went back outside. On my way, I noticed that the main ceiling beam was cracked in half, and the floors tilted noticeably.

In the safety of my front yard, I tuned the AM radio up and down the dial. The first thing I noticed was that *all* the San Francisco stations were off the air! My God, I thought, did the quake start in San Francisco? If the quake was this big here in Morgan Hill (80 miles south) and it started in San Francisco, was San Francisco still there? Of course, none of our local stations were on the air, but we had no power - the single electrical feeder station for our power was undoubtedly damaged.

I turned on the scanner. The State Office of Emergency Services (OES) was already passing traffic relating to calling-up essential personnel. The Morgan Hill Police and Fire Departments were recalling all personnel, and the California Highway Patrol was ordering officers to patrol the freeways slowly and report damage. The Red Cross repeater, on which I had never before heard traffic, was coordinating the inventory and distribution of supplies.

I turned on my two meter rig, and got ready to check in to the Amateur Radio Emergency Service (ARES) repeater. The ARES is a nation-wide group of volunteer amateur radio operators, who form the official communications branch of the American Red Cross in an emergency.

The first thing that slows in a disaster is communications, so information on the ARES repeater was slow to appear. Initial assignments of volunteers were made to local hospitals, city halls, and Red Cross Centers. We practice for this all the time, but in an emergency you are lucky if 20% of your resources are actually available. I guess our 20% was enough. People controlled their fear, as well as their desperate need for information, while they passed traffic on a calm and even courteous manner. I suddenly felt a little pride in how my community was behaving.

As San Francisco broadcast stations began returning to the air, we learned the horrible details of the quake. Its epicenter (starting point) was actually less than twenty miles from my location! But San Francisco, although some 100 miles from the epicenter, had suffered some of the worst damage. Entire apartment buildings collapsed. Good timing, I thought, since most people would be stuck in the rush hour traffic, away from home. But that was the problem... Freeway overpasses had fallen, crushing cars beneath them. One freeway, the I-880, is a double-deck affair - like one freeway stacked above another. At 5:03 PM, both levels were packed with cars sitting in bumper-to-bumper traffic. At 5:04 PM, every car in the lower deck of the bridge was crushed, as the upper deck fell onto the lower deck, making what one reporter called a concrete sandwich. It was estimated that the bodies of several hundred people still lay in the ruins of the freeway.

Within a few hours of the quake, several 2 meter amateur radio repeaters were back on the air, and were assigned special designations. Emergency traffic was on one repeater, health and welfare information on another, and a separate hospital net on still another. This arrangement offered the smoothest flow of information possible. Amateur radio operators were working side-by-side with professional dispatchers at the county's communications center, and radio monitoring enthusiasts were enlisted to monitor radio reports, and then repeat what they had heard to those who had no radios. A special net, for inquiries relating to the health and welfare of those within the disaster area, was established in the amateur radio 20 meter band, at 14.292 MHz, upper sideband. This provided a vital link to the outside world at a time when phone service was all but non-existent, and proved what we SWL's have known for a long time: shortwave means distance.

I sure was glad that I had taken the FEMA home study courses. They prepared me not only for what I had to do, but through them I knew what to expect from the local, state, and federal governments in the time to come. [Sorry, I don't have the address - it's under what is left of my house. But I urge you to write to FEMA in Washington, D.C. for a list of these excellent, free courses. You

even get a certificate of completion when you pass the final exam.]

As with many disasters, many people learned too late the need to prepare. Such simple things as flashlights, bottled water (*in plastic bottles*), and portable radios with fresh batteries were in short supply, yet were so critical to life just after the emergency. In Morgan Hill, many unprepared people were lucky - merchants like the Safeway Grocery Store were outside, handing-out necessities at little or no charge - even while their own stores inside lay in shambles.

It is now a week after the quake. San Francisco has its electricity back, and communities further south, like mine, have cleaned up the glass, and put things back on the shelves. We are only now taking the time to talk about what has happened, and I am

beginning to understand the "post traumatic stress syndrome" first described after Viet Nam. One other thing has emerged from the ruins: the discovery of how we can come together in a disaster. People put aside their own feelings and manned radios at emergency center. Non-hams found that they, too, were critically needed to relay information and respond to broadcasts requesting volunteers. SWLs put to use their skills at listening, as well as their portable and battery powered equipment - maintained so well as proof of devotion to their hobby - in rebuilding, and in helping their neighbors to rebuild.

They say that not knowing is the worst part of a disaster. In this case, the men and women who work with radio as a profession or a hobby used their talents as they most needed - for the public good.

I knew we were on our way to recovery this morning, when I heard the DJ. for station KOFY - in San Francisco - say: "hold on, were about to go back to 50KW." And with that, their flea-powered emergency transmitter was shut down, and the usual full-powered signal returned.

NO COLLECT CALLS ON THESE ADS UNLESS INDICATED.

FOR SALE: Signal Corps receiver BC1068-A from WWII tank. Make offer. I will deliver 150 miles from Springfield, OH. Harry L. Smith, 3740 Bosart Road, Springfield, OH 45503.

FOR SALE: Entire set of Popular Communications, 9/82 to 11/89. Most in excellent condition. Best offer. ALSO: Sangean SG-702 new in box, \$20.00. Terry Palmersheim, 402 21st Street S.E. #63, Auburn, WA 98002. Phone (206) 833-3112.

FOR SALE: Datong FI-3 Multi-Mode Filter, \$135.00 plus shipping. Autek QFIA SSB/CW/AM filter, \$50.00. Both in mint condition. Steve Leite, 190 Healy Street, Fall River, MA 02723. Phone (508) 675-2830 between 2100 and 0100 UTC.

WANTED: A used Kenwood 5000 or NRD 515 in good or excellent shape with possibly a narrow band voice filter. Price must be reasonable. I will accept collect calls. Anthony Giszack, 7-08 Essex Place, Fairlawn, NJ 07410. Phone (201) 796-5312.

FOR SALE: NRD-525 receiver with CLF 218 1.9 filter and Collins 2.9 filter. Also has chip installed for tuning in 10 kHz steps. Mint condition. \$800.00. Stan Cabral, 2254 62nd Avenue, Oakland, CA 94605.

FOR SALE: Customized Beam Headings (from/to) and Distances (MI/KM) to over 435 WRTH-89 transmitter sites. Useful in selecting alternate transmissions and choosing listening times based on distances. ITU Country Codes included. Send your location/coordinates. \$6.25. "Passport to World Band Radio" '89, \$9.75. WRTH '87, \$8.50. Gilfer Confidential Frequency List and Guide to RTTY Frequencies #6, \$4.00. All items include postage. Cashiers check or money order, please. Al Drehmann, Route 2, Box 3-B, Tryon, NC 28782. Phone (704) 894-3398.

A Review of Fine Tuning's PROCEEDINGS 1989

By

Richard A. D'Angelo

In the Introduction, Senior Editor John Bryant notes that "it appears that PROCEEDINGS is filling a need for indepth articles that neither radio club bulletins nor the commercial hobby press can meet". Simply put, Bryant's remarks are an understatement. Last years highly acclaimed premier edition was a complete sell out. This years PROCEEDINGS follows in the footsteps of its very brave older sibling by offering the hobby community a very complete and invaluable resource that truly is a must for every equipment or accessory fanatic, antenna enthusiast, or DXer.

PROCEEDINGS 1989 builds upon the structural conerstones that John Bryant and company laid down last year. The process starts with a dedicated editorial review board featuring Senior Editors Bryant, Dave Clark, Guy Atkins and Fritz Mellberg. Other panel members include some of the more prominent names in the hobby community such as Don Jensen, Gerry Dexter, Chuck Rippel, Mitch Sams, Mark Connelly, Nick Hall-Patch, Dallas Lankford and Chuck Bolland. What all this means is that the PROCEEDINGS reader will enjoy a book that has been put through a rigorous screening process that makes it both accurate and readable.

Fine Tuning's PROCEEDINGS series is quickly becoming the technical reference work for the shortwave hobbyist. Plans are being developed for a 1990 edition. This is one item that should be sitting on every hobbyists bookshelf. What follows is an individual look at each of PROCEEDINGS five main sections.

PROPAGATION (15 pages)

PROCEEDINGS continues its indepth handling of propagation matters. In this years feature, "The Auroral Factor", propagation expert Dave Clark studies auroral conditions to enable the tropical band DXer to recognize and anticipate when unusual openings allow for extraordinary opportunities to log domestic Asians. This extensive article features numerous azimuthal equidistance maps which significantly aid the discussion. Dave spends much of his DX time concentrating on Indonesia, Papua New Guinea and the Asian continent so he speaks with a good experience base about DXing these areas. Definately well worth reading.

ANTENNAS (40 Pages)

This section consists of five superb articles designed to improve a DXers ability to hear that rare or weak station. This section enlightens the DXer on delta loops; construction of a remotely tuned, amplified loop antenna suitable for DXing the tropical bands; directional shortwave antennas; phasing units for shortwave antennas; and a practical guide to putting up and taking down beverage antennas.

RECEIVERS (31 pages)

Once again PROCEEDINGS offers a wide variety of extensive receiver reviews in six articles that should please the receiver junkie. Some old favorites of the tube era such as the Collins 51J-4 and the Drake R4B and R4C are featured. In addition, some of the better known gear from the 1980's like the Yaesu FRG-8800, Kenwood R-2000, and the Japan Radio Corporation's NRD-525 are featured. However, my pick from this group is "The Icom IC-R70" article written by Kevin Atkins, John Tow and Jerry Strawman because I am an R-70 owner. The article provides a comprehensive review of the receiver that has one of the most complicated tuning schemes devised and provides a summary and brief description of eleven different modifications.

PERIPHERAL EQUIPMENT (19 pages)

Radio enthusiasts are always looking into the latest toys and gadgets to improve receiver performance. This year PROCEEDINGS offers another selection of goodies for the DXer to consider. Among the gear reviewed is the very impressive Multiband AM Pickup (MAP) Unit. This gismo provides synchronous detection and improved audio fidelity and selectivity in an effort to enhance a receiver's audio output. Once again, the Fine Tuning gang is on top of the latest developments.

FEATURES (92 pages)

This section is a DXers dream. If you have absolutely no interest in the technical aspects of the hobby, i.e. propagation, antennas, receivers or peripheral equipment, this section makes PROCEEDINGS a worthwhile investment by itself. This is by far the biggest section of the book and in my opinion the best. Many of the features would take months to run in serial form in any DX club bulletin. PROCEEDINGS puts it all in one place. For those with an interest in Indonesia the "A Javan Fantasy" by Bill Sparks is must reading. The fifteen page article includes maps, illustrations and station lists that really pull the entire package together. Just as impressive are the articles "DXing the Arab World" by Hans Johnson and "DXing Brazil" by John Fisher. The former provides a very descriptive account of shortwave broadcasting in twenty-two countries of the Arab World. The latter provides a wealth of information about Brazil and DXing that areas many targets which are contained in the very up to date station list. Like "The Javan Fantasy" these articles are must reading. Why are these articles must reading? The detail, care and approach of the subject matter can never be attained in a restricted club bulletin format. These are very serious pieces of DX perspective.

There is much more. "QSLing the Latins" by Don Moore and "Caring For Your QSL's" by Jerry Berg cover the getting and perserving aspects of verifications. Don Jensen put together a very interesting article on "Counting Countries" which provides the philosophical, political, geographic and traditional aspects used in developing and maintaining the NASWA country list. For many the subject of radio countries is a very serious subject and this article puts the best known, and highly regarded, country list in the spotlight. Rounding out this section are features on international medium wave DXing, and various tip/reference/reprint resources.

Is PROCEEDINGS Worth The Higher Price?

Definately - YES! PROCEEDINGS 1989 provides over 300 pages of relevant hobby information in 220 pages of print thanks to the photo-reduced format used this year. The specialized nature of PROCEEDINGS results in small, low-volume print runs that are expensive. Last year, the PROCEEDINGS effort lost almost US\$1,000.00. This years price reflects the lessons learned from last year. Hopefully, PROCEEDINGS 1989 will recoup those prior losses and this extraordinary hobby enterprise can continue.

PROCEEDINGS 1989 costs US\$19.50 plus US\$2.00 postal costs in North America. Outside North America surface book rate postage is US\$3.00 and small packet airmail is US\$15.00. Make checks or money orders (US funds on a US bank only) payable to:

Fine Tuning Special Publications
c/o John H. Bryant
RRT #5, Box 14
Stillwater, OK 74074 U.S.A.

Enjoy the finest hobby reference work that DXers can develop for DXers.

the page

COMMITTEE TO PRESERVE RADIO VERIFICATIONS

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

With all the new commercial SWBC stations that have started up from the U.S. in recent years, you might think this is the first time the U.S. has been so amply represented by private interests on SW. But not so. Before WW II all international SW broadcasting from the U.S. was done by private companies, including some of the biggest names in the broadcasting industry. These stations were eventually closed down or absorbed by the VOA. Most of us have little knowledge of them, or of our country's considerable SW history. +++ GE started SWBCing in 1924 with Schenectady stations W2XAF and W2XAD. At the outset they relayed MW station WGY, but they eventually commenced foreign language programming to Europe and South America in 1931. In 1937 GE opened a station in Belmont, CA--W6XBE, which eventually became KGEI. W2XAD became WGEA, and W2XAF became WGEO, both eventually being absorbed by the VOA. A 1944 card from the GE stations is shown at the top right.



Schenectady, New York
February 1944
Ma Paul Kay

General Electric's Around-the-World Broadcasting Service acknowledges with thanks your communication regarding reception of station WGEO.

WGEO is operating on a frequency of 6657 K.C.S. Schenectady, N.Y.

WGEO operates on the following frequencies:

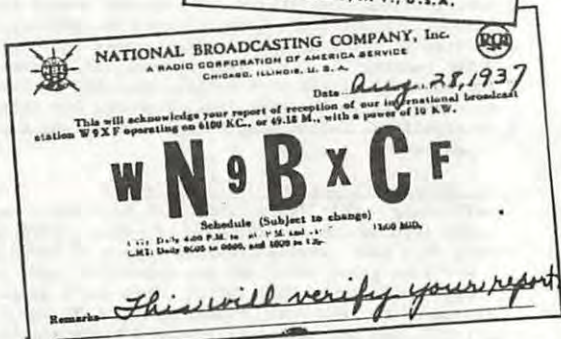
1,524 Kc.	3,333 Kc.	4,500 Kc.	5,400 Kc.
6,657 Kc.	7,500 Kc.	8,100 Kc.	9,000 Kc.
10,800 Kc.	11,700 Kc.	12,600 Kc.	13,500 Kc.
14,400 Kc.	15,300 Kc.	16,200 Kc.	17,100 Kc.
18,000 Kc.	19,800 Kc.	21,600 Kc.	23,400 Kc.

WGEO operates on the following frequencies:

6,150 Kc.	11,145 Kc.	13,125 Kc.	14,175 Kc.
15,150 Kc.	16,125 Kc.	17,100 Kc.	18,075 Kc.
19,050 Kc.	20,025 Kc.	21,000 Kc.	22,000 Kc.
23,000 Kc.	24,000 Kc.	25,000 Kc.	26,000 Kc.
27,000 Kc.	28,000 Kc.	29,000 Kc.	30,000 Kc.

GENERAL ELECTRIC
 SCHENECTADY, N. Y., U. S. A.

Chicago station W9XF eventually carried NBC programming, as this 1937 card shows, but it started out as a SW frequency of the Great Lakes Broadcasting Co.'s MW station, WENR, putting out 5 kw. on 6020 kHz. W9XF was intended to transmit WENR programming to foreign countries for rebroadcast by local stations. This, rather than direct broadcasting to overseas listeners, was the purpose behind much of the early SWBCing. +++ CBS was in the SWBC game long before 1944, the date of this card. W2XE, as it was first known, opened in 1928, carrying the MW programming of WABC. Power went from 250 watts to 10 kw in 1937. The station was "a good station to test on because of its consistent operation." By May 1942, CBS had an international broadcasting staff of 89 people.



NATIONAL BROADCASTING COMPANY, Inc.
 A RADIO CORPORATION OF AMERICA SERVICE
 CHICAGO, ILLINOIS, U. S. A.

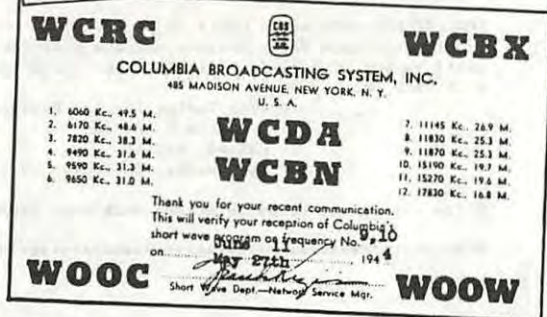
Date: *Aug 28, 1937*


This will acknowledge your report of reception of our international broadcast station W9XF operating on 6150 Kc., or 69.12 Mc., with a power of 10 K.W.

W N 9 B x C F

Schedule (Subject to change) 1360 MID.
 1:15 P.M. - 4:00 P.M. on 61.5 Mc. and 1.2-
 4:30 P.M. - 6:00 P.M. and 1800 on 1.2-

Remarks: *This will verify your report*




WCRC  **WCBX**

COLUMBIA BROADCASTING SYSTEM, INC.
 485 MADISON AVENUE, NEW YORK, N. Y.
 U. S. A.

1. 4040 Kc. 47.5 Mc.	7. 11145 Kc. 26.9 Mc.
2. 6170 Kc. 48.8 Mc.	8. 11830 Kc. 25.3 Mc.
3. 7820 Kc. 38.3 Mc.	9. 11870 Kc. 25.3 Mc.
4. 9490 Kc. 31.6 Mc.	10. 15100 Kc. 19.7 Mc.
5. 9590 Kc. 31.3 Mc.	11. 15270 Kc. 19.6 Mc.
6. 9650 Kc. 31.0 Mc.	12. 17820 Kc. 16.8 Mc.

Thank you for your recent communication. This will verify your reception of Columbia short wave program on frequency No. *11* on *May 27th* 194*4*

WOOC  **WOOW**

Short Wave Dept.—National Service Mgr.

A Committee of the Association of North American Radio Clubs



Listeners Notebook

Editor: Bruce MacGibbon, 2295 NE Juniper Ave., Gresham, Ore. 97030

NOTE: BBC Monitoring Service Items (designated WBI for World Broadcasting Information) are copyright and may not be reproduced without BBCM permission)

ANGOLA - (Tentative) - Radio Nacional de Angola, Luanda - On 5324.5v, an Angolan drifting (5324.1-5324.7) around this frequency audible from 2115 or so with jazz-pop vocals and Portuguese announcements; RNA vibraphone IS on the hour, then news. Rather weak and hard to read amid QRM and other miscellaneous band noise on 10/1. This is probably Luanda's 60-meter outlet, which was on 4953 for quite some time, then drifted around 4926-27 for a while in late summer before disappearing entirely. No doubt they're experiencing the same kinds of transmitter problems that caused them to wind up near this spot about five years ago. (Bob Hill, MA)

ARGENTINA - Ref LN Oct 4th pgm time for RAE EG is 22-23. The transmitter Harris, 100 kW, actually is inactive, and 15345 khz uses the General Electric alternatively with 9690. DXers Special programme, broadcasted Wed, and Thu only between 04-05. (Gabriel Ivan Barrera via "DX'ers Calling", The Monthly Magazine of DX Australia 9/89).

From July 1989, the new General Director in LRA Radio Nacional, is Mr. Julio Marbiz. Sked of LRA Radio Nacional Buenos Aires on SW, all transmissions in SS languages in// to 870 khz MW: 6060 Sun-Mon 01-15, Tue-Sat 01-11 (A). 9690 Mon-Sun 05-11. (B). A = The transmitter is a old Standard Electric with 50 kW power; B = The transmitter is a old General Electric w/20/25 kW power. (Gabriel Ivan Barrera, ibid)

BELGIUM - RTBF Radio Four International. RTBF is the broadcasting organization of the French-speaking community in Belgium. This service mainly consists of relays/rebroadcasts of domestic service programmes. External-service programme output is restricted to feature programmes amounting to about 17 hours a week. During summer time in Belgium, all transmissions will be heard one hour earlier than shown in this schedule. 0430-05 Mon-Fri FF Af 13740, 11660; 05-0530 Mon-Sat FF Af 13740, 11660 including Mon-Fri News (from RTBF-Radio-1); 05-0530 Sat Programme for seamen; 05-0530 Mon-Fri Overseas service messages; 0530 News (from RTBF-Radio-1); 0530-0615 Daily FF Af 13740, 11660 including 06 Mon-Fri News (from RTBF-Radio 1); 0630-0735 Daily FF Eur, Af 17675, 5980 including News at 0630 Mon-Fri (from RTBF-Radio 1); 07-0712 Mon-Fri News (from RTBF-Radio 1); 0735-1055 Sat & Sun FF Eur, Af 25645, 9925; 11-1130 Daily FF Eur, Af 25645, 9925 including News 11-1115, 1115-1130 Mon-Fri Press Review (from Radio 1); 1130-1145 GG Eur, Af 25645, 9925 including 1130-1145 News (from BRE-1); 1145-1305 FF Eur, Af 25645, 9925 including 12-1230 Sat & Sun RTBF Radio-1 (News), 12-13 Mon-Fri RTBF-1 (News & features), 1230-13 Sat Programme for Seamen, 1230-13 Sun DX pgm; 1305-16 Sun FF Eur, Af 25645, 9925; 16-1645 FF Eur, Af 21460, 9925 including 16-1645 Mon-Sat Service for Belgians abroad; 17-1905 FF Af including 17-18 Mon-Fri Relay of Radio 1 (17-1710 News), 18-1830 Mon-Fri Relay of Radio 21, 1830-1930 Sun "The Week in Belgium", 1830-19 Tue,Thu Programme for Missionaries, 1830-19 Fri DX Pgm; 19-1905 Mon-Fri News (from RTBF Radio-1); 1905-2115 Sun,Wed,Sat FF Af 17675, 15540 including 2030-21 Sat Programme for Seamen, 21-2105 Sun,Wed,Sat News (from RTBF Radio-1) (WBI 10/13)

BRAZIL - The correct address of Radio Nova Esperanza is: Rua Jose de Alencar, 1296; 90640-Porto Alegre, RS, Brasil. (Gabriel Ivan Barrera via "DX'ers Calling", The Monthly Magazine of DX Australia 9/89) 17755, 1742, R. Surinam Int'l, EE just ending into Dutch w/M w/ID and sked on 10/9 (bmm)

CANADA - John Carson, OK received this letter from 'RC1' and asks all

NASWA Members to write to CBC in support of RCI! and he received this letter: Dear Listener: Thank you for your most recent letter. We assure you that Radio Canada International appreciates all the letters and cards received from our many listeners in support of RCI at this time. Their correspondence is the single most important form of listener feedback for an international shortwave broadcaster such as RCI. Not only does audience mail let us know how our programming rates, but it also gives us the opportunity to know something of the listener--whether a novice to shortwave or an old fan of RCI. Thank you again for writing, and we hope you will continue to enjoy our broadcasts. Yours sincerely, Judith Sauve, Audience Relations, Radio Canada International, P.O. Box 6000, Montreal, Quebec, Canada H3C 3A8. 15325, 2200, RCI, SWL Digest at 2210 but only light music during the news. Strike? on 9/30 (Hans Johnson, GA)

CHINA - Radio Beijing EE Sked t/ NA from 11/6: ECNA: 0000-01 9770, 11715, 9665; 03-04 9690, 11715; 04-05 11695; 05-06 11840; 11-12 & 12-13 9665. WCNA: 03-04 9770, 17855; 04-05 11695; 05-06 11840; 14-16 7405. (Lifang, Audience Relations EE Language Dept, Radio Beijing)

Via 'Asia Watch' 10/15: "Wu Xiaoyong, the producer of an unauthorized radio program which announced on 6/4 that thousands had been killed in the military crackdown, was arrested at the end of August according to 'Asia Week'. Wu is the son of the former Foreign Minister Wu Xueqian." And via a reliable source that wrote me a letter: "Some Day Wu Xiaoyong will be a hero in China."

Updating Announcer list: Audience Relation People as announced on 10/2, Radio Beijing's 40th Anniversary Special: Yan Aisen, Zhang Yanling, Yue Silei, Cui Wong, Gui Lin (all Women) Wei Hua(W)-Music Album on 10/9 ex Xiao Shan(W)), Morris Mathews(M) - Business Show (Fortnightly program) 10/14; Liu Hui(W) - Listeners' Letterbox on 10/23 replacing Wei Hua. On Radio Beijing, I heard a person by the name of "Li Dan" announce "Current Affairs" on 10/10 around 1926 and then on 10/11 to NAM on the EE programs, "Current Affairs" is a Mon-Fri Program and didn't hear Li Dan again till 10/19, so he does not announce "Current Affairs" every day, rechecking tapes of Radio Beijing, I found this same announcer on 10/2 Radio Beijing 40th Anniversary Special. Also same announcer that made June 4th Statement on Radio Beijing. Xiao Du w/News About China on 10/21. Yu Xinglu(W) w/News About China on 10/22. Li Jianhua(M) also shows up sometimes doing "News About China". Rong Jie(W) w/"Travel Talk" on 10/22(bmm) Wei Liang(M) heard doing different jobs on Radio Beijing but on 10/2 was a reporter from a park in Beijing.

Preferred spelling of Chinese Names: According to my friend from Mongolia, Pinyin spelling is preferred spelling of Chinese names. This was researched after Bob Hill, MA advised me the proper spelling for Nei Menggu PBS (Pinyin Spelling) should be Nei Mongol. I then checked 'Passport to World Band Radio' and they show 'Inner Mongolia' as Nei Monggol. Should be Nei Menggu & I should point out that not all Chinese Students are familiar with Pinyin spellings, so you have to be careful who you ask as has been pointed out to me by numerous Chinese students. They always refer me to my Mongolian friend. The other spelling is Wade-Giles. For example Peking is Wade Giles & Beijing is Pinyin. If you are interested in China, I suggest you obtain "The China Guidebook" (640 Pages, Paperback) by Fredric M. Kaplan & Arne J. de Keijzer, Houghton, Mifflin Company, Eurasia Press. (bmm)

China off summertime since 9/17. Before the "National Hookup News" (12-1230 CPBS-1, 14-1430 CPBS-2) on China People's Broadcasting is heard "Every Heart is to The Motherland". This was also sung by a choir at the end of the 40th Anniversary Festivities at Tiananmen Square which I heard on CPBS-2. Also on that broadcast, I heard "Chairman Mao declare that Peoples' Republic of China is built now and Chinese are up forever." This was a movie being shown as part of the Tiananmen Square Festivities. (Thanks to a Beijing University Student who arrived in Portland, OR around 10/1 and had to watch this movie before he left China. He will be here for a couple of years and has actually been asked by "The Director of the Northwest Regional China Council" to help me with what I am hearing on the Chinese Domestic Services.)

From what appears to be a fairly new Radio Beijing brochure, some interesting observations: On the 40th anniversary of Radio Beijing's inauguration Chinese leader Zhao Ziyang remarked... (Well

now Zhao Ziyang's name has a blue ink line through it. Also telephone #s are listed for Radio Beijing's English Department: Director's Office: 868581-2274; Audience Relations: 868581-2760; Current Affairs: 8013134; Newsroom: 862691. Note: Except for 'Director's Office', these numbers differ from what was in Glenn Hauser's 'DX Listening Digest' Issue 26 w/closing date of 9/5/89 & last but not least, there is a picture of Lifang, Audience Relations of Radio Beijing, who incidentally mentioned me and my family on the "Listeners' Letterbox" special on 10/2. The Audience Relations People were introduced and they talked about some people that have written to them. If you were listening to that program, Lifang, in a letter, lets me know that she was the one who suggested to sing a song for our friends: "The More We Get together, the Happier We'll Be". She was sitting in the front row in front of the microphone.

Radio Beijing Highlights of Features for November:

Music from China: The Zhuang nationality boasts the largest population among China's ethnic minorities. The Zhuang people are renowned for their singing ability. On the first Saturday of November, you'll be able to enjoy the beautiful Zhuang folk songs, lullaby and unique ethnic music played with the traditional Zhuang instrument---the horse-bone-fiddle. Join us if you don't want to miss this opportunity.

Listeners' Letterbox: Ecological and conservational matters may sound academic or heavy. Yet, they are problems we face everyday. What measures has China taken in these respects? Find the answer in our Listeners' Letterbox program on Sunday.

The Lotus Flower Lantern Festival held in Beijing's Beihai Park from July to September attracted thousands of visitors. This fascinating flower has aroused a great interest among our listeners, too. In our Letterbox program on November 19th, we'll tell you more about this flower.

Culture in China: People of minority nationalities have colorful and distinctive courting and marriage customs. Culture in China on November the 9th will feature music and stories about these events in Yunnan province.

Travel Talk: Hebei Province in northern China boasts many historical sites and scenic spots. In November, Travel Talk will take you to some of these beautiful places: Handan, a 2,500-year-old city---on November 4th; Shannaiguan, the First Pass on the east end of the Great Wall---on November 11th; and Chengce, China's largest imperial garden---on November 18th.

China Anthology: Zheng Banqiao was both a painter and writer who lived in the Qing dynasty between the 17th and 18th centuries. He is known as one of the "Strange Painters of Yangzhou" because his works never followed the tradition. And it's because of this, Zheng Banqiao held a very important position in the history of Chinese painting. People feel very proud to include Zheng Banqiao in their collections. On Sunday November 19th, Zheng will be the topic of our China Anthology program.

Nei Mongol PBS, Huhhot - On 7108v (varies to 7107.6), presumed this one from 1010 w/W & M in CC; occasional interludes of music, notably the first several bars of Beethoven's "Moonlight" Sonata on 9/18. (Bob Hill, MA) ID from Bruce MacGibbon in DX Spread. (Note: My Mongolian Friend tells me that the preferred spelling is Nei Menggu, Hohhot. He tells me to use the Pinyin spellings for Chinese names (bmm))

Further observations on Yunnan PBS: Monitoring research 19-21 Sep 89: Observations on the Yunnan PBS, Kunming, on 6035 kHz between 19th and 21st September have revealed the following broadcasts, all in Vietnamese:

gmt	programme
0000-01	Rebroadcast of 14-15 Radio Beijing Vietnamese pgm
0100-0130	Yunnan PBS programme of news and features
09-0930	Yunnan PBS programme of news and features
0930-1030	Rebroadcast of earlier Radio Beijing Vietnamese pgm
1030-11	Repeat of 09-0930 Yunnan PBS pgm
2230-23	Yunnan PBS programme of news and features
23-24	Rebroadcast of 11-12 Radio Beijing Vietnamese pgm

10015NF, 1524, CPBS-1, CH Opera music ex 10010 on 10/7 (bmm) 11960-11972, 1645, CPBS-1, Distorted signal jamming VOA on 11965, and CPBS-1 on 5955 at 1651 jamming VOA on 10/14 (bmm)

COSTA RICA - Via Radio For Peace Int'l Mailbag Pgm on 10/17: Changes to broadcast sked: 0430-0730 Mon-Fri (Weekend broadcasts remain the same) generally a repeat broadcast of earlier program on 7375USB beamed to WCNA and Pacific Area. Weekend Broadcasts on 7375USB at 0600. Repeat 3 hours of programs, 3 times, so will run up into the early morning hours. No changes on that, they've been continuing that schedule. Note: Once in a while some of these broadcasts will be off the air due to work being done on equipment at station and need maintenance hours. In the morning there will be cutbacks because of old problems of interference with being in combined facility with television and video production studios here and therefore will broadcast only two hours in the morning 14-16 only Spanish programs on 7375AM t/Central America & 13660 t/US and as well possibly heard in Europe. Interested if heard in Europe. For the immediate future the 14-16 mostly in SS. Will be back on to longer hours possibly in December when they are hoping for some expansion. They have plenty of land at the university to expand. Up the hill from the present studio about 300 or 400 meters hope to have a new transmitter site and maybe a new transmitter to go along with it a few months down the line. (bmm)

CZECHOSLOVAKIA - 9505, 0715, R. Prague, Inter program, M w/ID in EG & giving address then W in language. At 0731-0732 M w/news in EG into music. At 0736 W GM t/0742 into FR. At 0747 M in language into music at 0749. RR at 08 on 10/14 (bmm)

ECUADOR - Press Release dated 10/5/89: Excerpts of: Saturday Edition of "DX Partyline" Suspended. Because of the recent appointment of Brent Allred as director of HCJB's English Language Service, the program "DX Partyline" has been temporarily cut back to one edition a week. The program will now be heard on Mondays only. The present format of "DX Partyline" will remain unchanged. Features that are scheduled for specific Monday broadcasts will continue to play on those days.

Replacing "DX Partyline" on Saturdays will be two 15-minute programs: "Get Set" and Whistlestop. "Get Set" is a British-produced program which features interviews with sports personalities and covers various sporting activities, while "Whistlestop" is a Scottish-produced program which discusses contemporary issues.

Any listeners who would like to comment on the cutback of "DX Partyline" are welcome to do so. Write "DX Partyline," HCJB, Box 691, Quito, Ecuador, South America. (Direct)

FINLAND - EG 0000 on 9645NF ex 15185//11755 on 10/5. (bmm)

FRANCE - RFI observed to broadcast two separate services in French. Radio France International, Paris in French 1230 gmt 25 Sep 89. Text of announcement: In a moment it will be 1330 hours in Paris, 1230 hours Universal Time. On the second network in a moment you will hear out usual news, and on the first network the news programme "Afrique Midi"... (Editorial note: Since the introduction of RFI's winter schedules on 24th September a separate service in French for listeners in Africa has been observed at 1230 gmt.) (WBI 9/29) 12015NF EG at 16 (bmm)

GREECE - Voice of Greece noted on 12105 w/EG at 1840//15630 & 11645 (Joe Hanlon, PA)

GUAM - KHBN, Piti, Guam, Final Operating Sked 01 11/5-01 3/25: 9830* 10-16 China; 9840* 20-24 China. (George Jacobs & Associates Inc., MD)

KSDA Final Operating Sked D-89 01 11/5-01 3/25: 9495 20-22; 9650 13-14; 11980* 09-17, 20-21; 13720* 02-13, 14-17; 15125 22-02; 15225 22-09; 15310 21-22. * = Out-of-band operation on a non-interference basis. (George Jacobs & Associates Inc., MD)

KTWR Announced EG Sked Effective 10/1: 0930-11 11805 Australia, New Zealand, PNG & South Pacific; 15-1705 11650 India; 08-0930 15210 Far East; 16-17 11910 Africa (Note: This is a new broadcast). Pacific DX Magazine: Sat 1000 11805 Australia, New Zealand; 1515 11650 India; 0845 15210 Far East. (bmm)

15225, 0451, Voice of Hope using KSDA facilities, EG, M w/relig talk & ID at 0453 "This is High Adventures Voice of Hope" & another ID at 0501 mentioning KSDA. Weak signal but picked up after 06 w/Christian music and "High Adventures Voice of Hope for All of Asia" 10/17 (bmm)

GUATEMALA - Over four million of the eight million people living in this country speak one of the twenty-two related Mayan languages. These language groups range in size from 25,000 to over half a million. Since 1973 they have been able to hear Gospel broadcasts in their own languages, from CAM International's station, Radio Maya, and more recently over a second station of the same missionary organization, Radio Buenas Nuevas. (Marlin Field, MI)

INDIA - Note: This Information is not Copyright; But only those radio clubs which provide reciprocal access to their bulletins by Southern Asian Radio Club may reprint it! The External and Internal All India Radio Schedules are now available from Bob Palmer and Manosij Guha. The schedules are courtesy of All India Radio w/Monitoring updates by Kanwarjit Sanhu, Jose Jacob, Manosij Guha, and Vineet Dixit, all of whom live in India. Compilation, word processing, design, and graphics are done by Robert R. Palmer. All times are in UTC. Cost for each is \$2.00 (USA & Canada only) in mint United States postage stamps for each copy ordered to Mr. Robert R. Palmer, E. 2707 - 15th Ave, Spokane, WA 99223-5101 USA. Tel: +1 509-536-7641 (14-04 UTC). Listeners in the rest of the world may order from Manosij Guha for US \$3.00 cash or 3 IRCs. His address (Note: It is a new one as he as moved) Manosij Guha, 101 S.R.K. Hostel, Jamia Nagar, New Delhi - 110 025 India. Telex: + 81 31 75210 mcre in (24 hours); Tel: + 91 11 632263 and: +91 11 637571 (04-12 Mon-Fri). Note: The Internal Sked is too large to print here (6 Pages) but here is some interesting items from it: 4760 is used by both Port Blair and Leh on a non-interference basis pending new allocations. Additional channels allocated for Port Blair are 6085 and 9600. 3255 Shillong is likely to be replaced by 4790. Srinagar, Jammu, and Leh (all J & K State) ID as "Radio Kashmir". Future Plans: New 10kW HF stations at Itanagar (Arunachal Pradesh) and Gangtok (Sikkim). Upgradation to 50 kW is in progress at Guwahati A, Hyderabad, and Kohima. A new 50kW HF station will be set up at Tiruvananthapuram (Kerala). Under Preparation: A List of all AIR stations' detailed addresses with telephone and telex numbers and telegraphic addresses will be made available shortly.

AIR External Sked: All Programs are produced at AIR's studios in Delhi with the following exceptions: Some of the Tamil programs (1130-1230 on shortwave and 2345-0030, 07-0930, and 1115-17 on MW) are produced by Madras. The Gujarati news (0415-0430 and 1705-1715) is produced in Bombay. Radio Networking: Transmitters are fed at various sites through PTT speech-grade landlines, and via INSAT-1B Radio Networking (RN) channels (subject to availability, as priority is given to HS feeds) A total of 6 transponders, designated RN-1 to 6, are available for use by AIR. All ESD transmitters are connected to Delhi via landlines.

3295D 1430-1930 Urdu to Pak; 3905D 0130-0215 Nepali, 1615-1730 Farsi t/W.Asia; 4920M 12-1230 Tamil t/Sri Lanka; 4990M 0000-0045 Tamil t/SE Asia; 6045D 0215-03 Pashto, 03-0345 Dari t/Afghan; 6110A 0130-0230 Nepali t/Nepal; 6140D 14-15 Nepali t/Nepal; 6155D 0130-0430 Urdu t/Pak; 6170D 12-13 Sindhi, 13-1330 Baluchi t/Pak; 7110D 07-08 Nepali t/Nepal; 7120D 2145-2230 Cantonese, 2230-2245 Kuoyu; 7140D 12-13 Sindhi, 13-1330 Baluchi t/Pak; 7145D, 0215-03 Pashto, 03-0345 Dari t/Afghan; 7160M 08-0830 Tamil t/Sri Lanka; 7210D 0130-0228 Nepali t/Nepal; 7215D 2245-0000 EG t/E & SE Asia; 7225A 0215-03 Pashto, 03-0345 Dari t/Afghan; 7230K 07-0730 Nepali t/Nepal; 7255D 1230-1315 Tibetan t/Tibet; 7265A 23-24 Hindi, 0000-0045 Tamil, 0045-0115 Burmese t/SE Asia/Burma; 1615-1730 Farsi, 1730-1945 AA t/W. Asia; 20-2230 EG t/Australia; 7340M 2345-0330 & 07-0930 Tamil t/Sri Lanka; 7412D 1745-1830 Hindi t/W. Asia; 1845-1945 EG, 1945-2045 Hindi, 2045-2230 EG t/W.Eur; 9525D 1330-15 EG (Test Transmission), 1515-1615 Swahili, 1615-17 Hindi, 17-1745 Gujarati (Test Transmission); 9535A 2245-0115 EE t/E & SE Asia; 9550A 0215-0229 Tibetan t/Tibet, 2045-2230 EG t/Australia 1845-1945 EG, 1945-2015 Hindi, 2045-2230 EG t/W. Eur; 9565A 1330-15 EE t/SE Asia; 9575A 1230-1315 Tibetan; 9610B 07-08 Nepali t/Nepal; 9620A 1615-1755 RR; 9630D 0130-0228 Nepali t/Nepal; 9675D 0830-1130 Urdu t/Pak; 9705D 13-15 Sinhala t/Sri Lanka; 9910D

2245-0115 EG, 20-2045 Hindi, 2045-2230 EG t/W. Eur; 9910A 03-0345 Dari t/Afghan, 1615-1730 Farsi, 1730-1945 AR t/W. Asia; 9910M 07-0930 Tamil t/Sri Lanka; 9950D 1845-1930 FR, 1945-2045 EG, 2145-2230 Cantonese, 2230-2245 Kuoyu t/China; 11620A 13-15 Sinhala t/Sri Lanka, 1745-1830 Hindi t/W. Asia, 1845-1945 EG, 1945-2045 Hindi, 2045-2230 EG t/W. Eur; 11715D 2245-0115 EG t/NE Asia, 2045-2230 EG t/Australia; 11735D 07-08 Nepali t/Nepal; 11745D 2245-0115 EG t/E & SE Asia; 11760D 1330-15 t/SE Asia; 11810A 1215-13 Cantonese, 13-1315 Kuoyu t/China; 11830D 1515-1615 Swahili, 1615-17 Hindi, 17-1745 Gujarati t/Eaf; 11850D 1330-15 (Test Transmission) EG t/SE Asia; 11855A 0315-0415 Hindi, 0415-0430 Gujarati, 0430-0530 Swahili t/Eaf; 11860A 1845-1930 FF, 1945-2045 EG t/W&NW Af; 11860D 10-11 EG t/Australia; 11870D 0215-0229 Tibetan t/Tibet; 11880D 23-24 Hindi, 0000-0045 Tibetan, 0045-01 Burma t/SE Asia/Burma; 11935A 1615-1715 RR t/USSR; 11935D 18-20 EG t/Eaf; 15020A 13-15 Sinhala t/Sri Lanka; 15050A 10-11 EG t/NE Asia; 15110D 2245-0115 EE t/E & SE Asia; 15110D 1215-13 Cantonese, 13-1315 Kuoyu (Test Transmission); 15110B 2145-2230 Cantonese, 2230-2245 Kuyou t/China, 0315-0415 Hindi, 0415-0530 Swahili t/Eaf; 15165D 23-24 Hindi, 0045-0115 Burmese t/Burma, 1115-1215 Burmese t/Burma, 1615-1715 RR t/USSR; 15175A 0845-0945 Indo t/Indonesia; 15275A 1130-1230 Tamil t/SE Asia; 15280B 1515-16 Swahili, 1615-17 Hindi, 17-1745 Gujarati t/Eaf; 15335A 10-11 EG t/Australia; 15335M 1130-1230 Tamil t/S & SE Asia; 15335D 1330-1445 EG t/SE Asia' 15360B 18-20 EG t/Eaf; 15360D 1545-1615 Swahili, 1615-17 Hindi, 17-1745 Gujarati (Test Transmission); 15365A 04-0430 Farsi, 0430-0530 AR 0530-06 Urdu t/W. Asia, 1115-12 Thai t/Thailand; 15365D 1215-13 Cantonese, 13-1315 Kuoyu t/China; 17387D 10-11 EG, 1130-1230 Tamil t/SE Asia; 17725D 0000-0115 EG t/E & SE Asia; 17740A 0845-0945 Indo t/Indonesia; 17785A 04-0430 Farsi, 0430-0530 AA t/W. Asia; 17785D 1115-1215 Burmese t/Burma, 1215-13 Cantonese, 13-1315 Kuoyu t/China; 17805A 0315-0415 Hindi, 0415-0430 Gujarati, 0430-0530 Swahili t/Eaf; 17830D 115-12 Thai t/Thailand; 17890A 10-11 EE t/NE Asia; 21555D 1215-13 Cantonese, 13-1315 Kuoyu t/China (Test Transmission) & irregular: 21mhz antenna not up yet; 21735D 10-11 EE t/NE Asia).

audible 12/3 GMT

Sites: A = Aligarh 4 X 250kW HF 28:00 deg N 78:06 deg E
 B = Bombay 1 X 100kW HF 19:11 deg N 72:49 deg E
 D = Delhi 2 X 250kW HF 28:43 deg N 77:12 deg E
 5 X 100kW HF
 2 X 10kW HF on standby
 6 X 50kW HF
 2 X 20kW HF
 1 X 10kW HF
 M = Madras 2 X 100kW HF 13:04 deg N 80:17 deg E
 1 X 10kW HF

Interesting Tidbits of Information:

During the transmitter pause at each of the sites the transmitters are tested on any of the following frequencies before regular transmission commences.

Bombay: (0545-0815) on 6035, 9550, 11830,, 15270, 17855, 21695
 Madras: (04-0545) on 6120, 7205, 9705
 Delhi: (0445-0645) on 6115, 7110, 9730, 11810, 15250, 17835, 21895
 (Data above for the KINGSWAY xmt site at Delhi)
 Delhi: (04-0645) on 6050, 7195, 9705, 11850, 15250, 17835, 21695
 (Data above for the KHAMPUR xmt site at Delhi)

Aligarh: (0530-0815) on 5980, 9630, 11790, 15450, 17750, 21660.

The 2 X 500kW HF xmters installed near Bangalore may begin testing soon with reduced power during the Indian working hours (0430-1230 UTC) on the following frequencies allocated: 6180, 7265, 9705, 11895, 15295, 17850. (Manosij Guha, India & Bob Palmer, WA)

audible 12/3 GMT

AIR Home News Service(1): 0030-0040 Hindi/EG 9610, 4860, 3925; 0130-0135 Hindi 15305, 15200, 11870, 11830, 9665, 9610, 9550, 4860; 0230-0250 Hindi/EG 15305, 15200, 11870, 11830, 9665, 9630, 9610, 9550, 9535, 7260, 7210, 4860, 3905; 0330-0345 Hindi/EG including Newsletter from the States, 15305, 15200, 11870, 9665, 9630, 9610, 7210, 4860; 0355-04 Sunday Hindi 15305, 15200, 11870, 9665, 9630, 9610, 7210, 4860; 0730-0740 EG/Hindi 17850, 15250, 15125, 11935, 9675; 0830-0850 EG/Hindi 17850, 17705, 15250, 15230, 11935, 11850, 11735, 9610, 9565, 7110; 0850-0930 EG/Hindi (Dictation speed) 17850, 17705, 15250, 15230, 11935, 11850, 11735, 9610, 9535, 7110; 0930-0940 EG/Hindi 17850, 17705, 15250, 15230, 11935, 11850, 11735, 9610, 9635, 7110; 1130-1140 Hindi/EG News from the States 15320, 15250, 11850, 11620, 9675, 9610,

744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL
744-5511	WJL	744-5511	WJL

**English Language SW Broadcast
Schedule
and
English Language DX Show
Schedule**

**Compiled by
Thomas R. Sundstrom**

```

-----
Thomas R. Sundstrom      :           Telex: 6502446376MCI UW
PO Box 2275              :           MCI Mail: 244-6376
Vincentown              :           Prodigy: DRVB19A
NJ 08088-2275           :           CompuServe: (send via MCI Mail)
Voice: 609-859-2447     :           Packet Radio: W2XQ @ WB2MNF
  Fax: 609-859-3226    :           Pinelands RBBS: 609-859-1910
-----

```

Schedules were received from John Carson (Norman, OK), and Kris Field (Ambler, PA). Thank you both very much. Also a note was received from Charles Broyles (Pittsboro, NC) on a follow-up to last month. Charles, I am sure more than a few readers will be interested in your comments on the Lowe 225 once you get it.

The third annual Winter SWL Festival will be held February 23-24-25, 1990, in Kulpsville, PA, northwest of Philadelphia, at the Kulpsville/Lansdale Holiday Inn, exit 31 of the northeast extension of the PA turnpike. For more information and a registration form, send a #10 SASE to Winter SWL Festival, PO Box 591, Colmar, PA 18915-0591. In addition to the club bulletins, details will be announced on the ANARC SWL Net (Sunday, 10 a.m. Eastern, 7240 kHz) and will be posted on the BBSs.

Lots of new times and frequencies what with S89 and D89 changes in here. I know there will be more next month as some broadcasters don't adequately publicize changes, and the D89 schedule begins November 5. 17855 is a cluttered frequency at 12 UT. R Beijing to ENA and the VOA in Russian both use the frequency, and reception is difficult. R Beijing at 04 is dropping 11840, moving it to 05 UT. Brent Allred's assignments at HCJB have been expanded and, as a result, effective October 1 DX Party Line is now aired only once a week. Given the multitude of competing and sometimes time-conflicting SWL/DX programs aired by other stations on the weekends, Brent has opted to drop the Sat-Sun release and retain the Mon-Tue edition. Glenn Hauser reports that ORF's Sunday SW Panorama is now aired only twice at 1130 and 1430, dropping 1030 UT. KTWR's signal at 10 UT on 11805 is fairly good here (Pacific DX Magazine airs Saturday) but DW's Antiqua relay on 11810 can cause interference. Greece noted on new 12105. Kuwait at 18-21 UT appeared briefly on 21675, but within a week settled on 13610. Sennitt passed along information that there were major programming changes, primarily involving Arabic. On the 26th, Kuwait was still announcing the original English schedules on 15345 and 11665. Albania on new 6120 (ex-6085) at 2330; new 9760 at 0230 and 0330. A solar flare, major geomagnetic storm and polar cap absorption event well wiped up the bands on the 19th and 20th but it afforded the opportunity to hear Argentina and its retimed releases to the Americas for several evenings in a row. Steve Forrest (Cincinnati, OH) tells me of Moscow at 11 on new 15155 and 15110; 15585 is gone. This carries through at least 14.

```

=====
PC Software for PC/XT/AT/PS2 and compatibles: English Language
SWBC Schedules, with a new feature of loading frequencies into the
memories of the JRC NRD-525 and the Kenwood R-5000 from the
computer. ASCII text file subscriptions for those without a PC
compatible. Receiver computer control programs for the NRD-525
and R-5000. Utility Logbook for logging utility stations. For
more information send a business-sized SASE to TRS Consultants
(address above) or download information from the Pinelands RBBS.

```

ENGLISH LANGUAGE SW BROADCAST SCHEDULES: By Start Time
Compiled by Thomas R. Sundstrom, W210

Start Time (UTC)	End Time (UTC)	Country	Station	Freq 01	Freq 02	Freq 03	Freq 04	Freq 05	Freq 06	Freq 07	Freq 08	Target Area	Notes	Record Last Updated
0000	0100	Australia	R Australia	21740	17795	17715	15320	15240	15160	15140	As/Pac/PabNG	NA		06/02/89
0000	0100	Bulgaria	R Sofia	15330	11680							USA	Su-Mo	09/24/89
0000	0200	Canada	R Canada Int 1	9755	5960							ENA	0243 v Mail	10/21/89
0000	0100	China	R Beijing	17855	17715	15130						Americas		04/29/89
0000	0200	Cuba	R Havana	11820								NA/SA		03/26/89
0000	0027	Finland	R Finland	11755	9645							SBS/As		10/26/85
0000	0115	India	AIR	17725	15110	11745	11715	9910	9535			NA		05/24/89
0000	0030	Israel	Kol Israel	15615	12077	11605						regional		06/27/89
0000	0200	Luxembourg	R Luxembourg	6090								Phil/Indon/PabNG	270 deg	09/24/89
0000	0200	N Mariana Is	KHBI	15445								Ab		10/21/89
0000	0050	North Korea	R Pyongyang	15160	15115							SA	Eng Mon only	11/13/87
0000	0030	Norway	R Norway	9595								NA		10/21/89
0000	0100	Spain	Spanish Nat'l R	15110	9630							NA		03/06/89
0000	0100	USA	VOK	15205	11740	11695	11740	11580	9815	9775	5995	Caribbean/Americas		05/24/89
0000	0200	USA	WCSN	9850								W Afr	90 deg	08/13/88
0000	0200	USA	WHR:	9495	7315							Eu/Ch/SA		10/21/89
0000	0400	USA	WRNO	7355								NA/CA	20 deg	10/26/89
0000	0200	USA	WSEB	13760	7400							CA/SR/NE Canada	167/25 deg	06/22/89
0000	0100	USA	WYFR	13695	5950							NA	Network	03/25/89
0000	0100	USSR	R Moscow	11750	9865	9765	9720	9600	7150			ENA	and 6 other freq's	09/24/89
0030	0055	Belgium	BRT	9925								NA/SA		09/16/89
0030	0430	Costa Rica	R for Peace Int'l	21565	13660							Americas	Tu-Sa	05/13/89
0030	0130	Ecuador	HCBJ	15250								MS: NA/Ch/Carib		02/18/89
0030	0230	England	BBC	12095	9915	9590	7325	6175	5975			NA	43 Bethany exc Mo	04/06/89
0030	0100	Hungary	R Budapest	15160	11910	9835	9585	9520	6110			ENA	0112 v Bonaire	05/24/89
0030	0125	Netherlands	R Netherlands	15315	6185	6020						NA		03/17/89
0030	0100	USSR	R Kiev	17690	15455	15180	9765	7400				NA		10/26/89
0035	0300	Ecuador	HCBJ	15155	11775	9745						NA		07/17/89

0045	0130	German Dem Rep	11890	6080	ENH	09/21/89
0045	0100	South Korea	15575		60S	11/03/88
0050	0110	Vatican Radio	15180	11780	MA	06/05/89
0100	0200	Argentina	11710		Americas	10/20/89
0100	0200	Australia	21740	21525	As/Pac/Pap16	10/17/89
0100	0200	Canada	11940	11845	LA	10/21/89
0100	0157	Czechoslovakia	15540	13715	MA	05/30/89
0100	0150	Fed Rep Germany	11865	9735	ENH	10/27/89
0100	0130	Israel	15615	12077	MA	08/27/89
0100	0120	Italy	11800	9575	MA	03/19/88
0100	0200	Japan	17845	17835	60S/Asi/MA	10/26/89
0100	0200	Spain	15110	9630	MA	03/06/89
0100	0130	Sweden	9640	7225	As/Pac	09/20/89
0100	0300	USA	11695		Canada	08/28/89
0100	0400	USA	13695		CA/Carib	10/30/88
0100	0200	USA	15205	11740	59P5 Caribbean/Americas	09/24/89
0100	0500	USA	9505	5950	MA	03/25/89
0100	0300	USSR	21470	17840	7165 ENH	09/24/89
0100	0145	Yugoslavia	11735	6005	W Eu/MA	09/25/89
0130	0200	Austria	13730	9875	MA/SA	10/13/89
0130	0138	Breece	11645	9420	MA/Sweden	08/15/89
0130	0200	Hungary	15160	11910	MA	09/24/89
0130	0200	Philippines	15360	15220	As	09/12/89
0145	0330	New Zealand	17705	15485	Pac/Aus/Melanesia	09/09/89
0200	0300	Australia	21740	21525	As/Pac/Pap16	10/17/89
0200	0250	Brazil	11745		MA/CR	02/28/88
0200	0300	Canada	11940	11845	LA	10/21/89
0200	0400	Cuba	11820	9710	Americas	05/20/89
0200	0330	Egypt	9675	9475	MA	07/20/86
0200	0250	Fed Rep Germany	15235	11945	As	03/07/89
0200	0245	German Dem Rep	11890	6080	ENH	09/21/89
0200	0900	Guam	15225	13720	As	10/21/89
0200	0230	Israel	15615	12077	MA	08/27/89
0200	0600	Mariana Is	17865	17780	SE As/Indon/Phil/Jap	10/14/89
0200	0255	Romania	15380	11940	MA	06/03/89
0200	0256	South Africa	11935	9615	MA	08/27/89
0200	0230	Switzerland	17730	12035	MA	11/12/88
0200	0300	Taiwan	15345	11860	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	
0200	0300	Taiwan	15205	11580	SE As/Indon/Phil/Jap	27/0/340 deg
0200	0300	Taiwan	15205	11580	MA	06/03/89
0200	0300	Taiwan	15205	11580	MA	08/27/89
0200	0300	Taiwan	15205	11580	MA	11/12/88
0200	0300	Taiwan	15205	11580	MA	06/05/89
0200	0300	Taiwan	15205	11580	MA/Jap/As/CA/Aus/NZ	06/05/89
0200	0300	Taiwan	15205	11580	Caribbean/Americas	09/24/89
0200	0300	Taiwan	15205	11580	Tu-Sa	
0200	0300	Taiwan	15205	11580	Eng 02-03	

0200	0400	USA	MCSN	9850		E Afr	08/13/88
0200	0400	USA	WHR1	9495	7315	Eu/Cs/SA	10/08/89
0200	0400	USA	MSH6	13760	9455	CA/Canada	03/08/89
0200	0215	Vatican State	Vatican Radio	11750	9650 7125	As/Aus/NZ	06/05/89
0230	0300	Albania	R Tirana	9760		NA	10/27/89
0230	0330	England	BBC	12095	9915 9660 7325 6175 5975	MS: NA/Cs/Carib LA	04/06/89
0230	0315	German Bee Rec	R Berlin Int'l	15240	13610 9730	NA	05/25/89
0230	0245	Hungary	R Budapest	15160	11910 9835 9585 9520 6110	NA	09/24/89
0230	0430	Iraq	R Baghdad	11810	9515	NA/SA/Ind/Pakis	10/08/89
0230	0300	Portugal	R Portugal	11840	9705 9680 9600	SA/NA	11/17/88
0230	0300	Sweden	R Sweden	11705	9695	NA	09/20/89
0245	0330	German Bee Rep	R Berlin Int'l	15125	11890 11785 6080	ENR/WNA	09/21/89
0255	0430	Netherland Antilles	Trans World Radio	11930	9535	NA/Carib	05/31/89
0300	0400	Argentina	RAE	11710		Americas	10/20/89
0300	0400	Australia	R Australia	21740	21525 17795 17750 15395 15320 15240 15160	As/Pac/PadMG	10/17/89
0300	0330	Austria	R Canada Int'l	11925		ME	10/21/89
0300	0400	China	R Beijing	17855	15130 11715 9690	WNA	04/29/89
0300	0557	Czechoslovakia	R Prague	15540	13715 11990 11685 9540 7345 5930	#1 Spain#2L3	05/30/89
0300	0300	Ecuador	HCEJ	15155	11775	NA	07/17/89
0300	0350	Fed Rep Germany	R Deutsche Welle	9700	9670 6120 5960	NA	10/28/89
0300	0425	Guatemala	TGNC	3300			12/23/87
0300	0330	Japan	R Japan	21610	17835 17825 17810 17765 15325 15195	60S/Asia/NA	10/26/89
0300	0520	South Africa	Radio 5	4880			09/08/89
0300	0505	South Africa	Radio Drance	3215			09/08/89
0300	0400	Taiwan	V of Free China	15345	11745 9765 9680 7445 5950	NA/Jap/As/AusNZ	08/05/89
0300	0300	USA	KUSW	9615		Canada	08/28/89
0300	0430	USA	VOA	11835	9575 925 7280 6035	Africa	09/24/89
0300	0330	USSR	R Kiev	17690	15455 15180 9765 7400	NA	10/26/89
0300	0400	USSR	R Moscow	21470	17840 17700 9665 9720 7290 7165	ENA	and 6 other freq's 09/24/89
0310	0327	Switzerland	Int'l Red Cross	12035	9885 9725 6135	NA/CA	03/18/89
0310	0330	Vatican State	Vatican Radio	11725		NA	06/05/89
0315	0345	France	R France Int'l	15300	15135 11995 11700 11670 9790 9745 9550	Am/Afr/Ind/As/Eu	07/17/89
0330	0400	Albania	R Tirana	9760		NA	10/27/89
0330	0430	England	BBC	9915	6175 5975	MS: NA/Cs/Carib	09/23/89
0330	0400	Japan	P Japan	17835	17810 17765 5960	60S/Asia	10/26/89
0330	0425	Netherlands	R Nederland	11720	9590	WNA	09/02/89
0330	0730	New Zealand	R New Zealand Int'l	17700	15485	NA	09/05/89
0330	0400	United Arab Emirates	R Dubai	17890	15555 15435 11940	Pac/Aus/Melanesia	06/11/89
0340	0346	Greece	V of Greece	9420	9395 7430	NA/Sweden	08/15/89
075 dep							
188/315 dep							
#3 Bethany							
Tu/W/F/Sa							
Tue-Sat							
Su/Mo -0530 : #1 03*							
Sa/Su-04							
#1 Spain#2L3							
#1 Sa-Su 0400-							
and 6 other freq's							
Tue/Fr after last Su							
news/features in Eng							
#4 v Canada							
v Bonaire							
News/Eng ex Su							

0345	0430	German Dem Rep	R Berlin Int'l	15125 11785	MNA	05/14/89
0356	0410	Italy	RAI	17795 15330 11905	S AS	10/17/89
0356	0400	05SF	R Yerevan	17490 15455 15180 9745 7400	MNA	10/26/89
0400	0500	Australia	R Australia	21740 21525 17795 17750 15395 15320 15240 15160	As/Pac/PapNG	10/17/89
0400	0430	Austria	R Canada Int'l	11925	NE	10/21/89
0400	0500	Bulgaria	R Sofia	15140 17645 11735 11720	AF/NA	09/24/89
0400	0600	China	R Beijing	15195 11685	MNA/ENA	10/28/89
0400	0600	Cuba	R Havana	11820 11760 9710 5965	Americas	10/28/89
0400	0450	Fed Rep Germany	R Deutsche Welle	11765 9765 9565 7225 7150	SACAE Afr	09/30/88
0400	0445	German Dem Rep	R Berlin Int'l	15125 11785	MNA	09/21/89
0400	0450	North Korea	R Pyongyang	17765 15180 15160	SE AS	11/25/88
0400	0455	Koanania	R Bucharest	15380 11940 11830 9570 9510 5990	NA	06/03/89
0400	0430	Switzerland	Swiss R Int'l	12035 9885 9725 6135	NA	05/24/86
0400	0450	Turkey	V of Turkey	17760 9445	SE As/NA	09/24/89
0400	0500	USA	VOK	7200 7170 9740 6140 5995	NE/N Af/Eu	09/24/89
0400	0600	USA	MCSK	9870	S Afr	03/08/89
0400	0600	USA	MHR	9495 7315	Eu/CA/SA	10/08/89
0400	0700	USA	MKL	9465	Mo-Sa	08/30/89
0400	0600	USA	MRF	6185	20 deg	10/21/89
0400	0600	USA	MSHF	13760 9455	245/315 deg	03/08/89
0400	0430	USSR	R Moscow	17840 17665 17605 15425 15180 12050	MNA	09/24/89
0400	0410	Zambia	R Zambia	4910	news/English M-F	01/14/89
0425	0440	Italy	RAI	7275 5990	Mediterranean	10/17/89
0430	0500	Albania	R Tirana	11835 9480	Afr	12/24/86
0430	0500	England	BBC	9915 5975	MS: NA/CA/Carib	09/23/89
0430	0455	Netherlands	R Nederland	13700 9895	ME/E Afr	03/02/89
0430	0500	Swaziland	Trans World Radio	9760 9610 9550 7285 7200 5055 4760 S AF	only 1 freq/bnd used	06/05/89
0430	0600	USA	VOA	9575 9540 9525 7280 6035	Africa	09/24/89
0430	0500	USSR	R Moscow	17840 17665 17605 15455 15425 15180 12050 12010	MNA	09/24/89
0432	0530	Seychelles	FEBA	17820 15325	SE AS	03/11/89
0500	0600	Australia	R Australia	21740 21525 17795 17750 15395 15320 15240 15160	As/Pac/PapNG	10/17/89
0500	0600	China	R Beijing	11840	MNA	10/28/89
0500	0630	Ecuador	HCFE	11775 9745 6230	NA	04/15/89
0500	0530	England	BBC	9915 9640 5975	MS: NA/CA/Carib	09/23/89
0500	1200	Equatorial Guinea	R East Africa	9585	Af	04/15/89
0500	0550	Fed Rep Germany	R Deutsche Welle	11810 11705 9700 9670 6130 5960	Sa & Su i Sa -1500	10/06/89
0500	0515	Israel	Kol Israel	17685 17630 17575 15485 11605 11588	Aus/As/NA/W Eu	03/07/89
0500	0600	Japan	R Japan	17825 17890 17810 17765 11870	60S/As/NA/Oceania	08/27/89
0500	0800	Kuwait	R Kuwait	15345	Far E/SAE As/Aus/NZ	10/26/89
						04/18/87

0500	0600	Spain	9630	MA	07/05/89
0500	0700	Swaziland	11835	only 1 freq/bnd used	06/05/89
0500	0700	USA	6175	70 deg	08/13/88
0500	0530	USA	15205	Canada	09/24/89
0500	0600	USA	17640	ME/N Af/Eu	08/06/89
0500	0530	USSR	15455	Af/Eu/NA	09/24/89
0500	0515	Vatican State	17730	MHA	09/16/89
0510	1640	South Africa	7285	E Afr	09/08/89
0525	1630	South Africa	11885	v Canada	09/08/89
0530	0600	Austria	6015	v Antiqua	09/23/89
0530	0730	England	9640	WS: MA/CA/Carib	06/04/89
0530	0555	Romania	21665	Afr	09/30/88
0530	0630	Seychelles	17824	Fr	06/04/89
0530	0600	United Arab Emirates	21700	Far E/Aus/As	09/24/89
0530	0600	USA	15205	ME/N Af/Eu	09/24/89
0530	0630	USSR	15455	MHA	05/14/89
0555	0802	Liberia	4760	3 more 49a outlets	09/24/89
0555	0825	Malaysia	15295	N-Sa:IF-0817,5a-0832	04/30/89
0600	0630	Australia	21740	Aus/NZ/Indonesia	10/17/89
0600	0800	Cuba	11835	As/Pac/PapNB	04/08/89
0600	0650	Fed Rep Germany	17875	Americas	09/30/88
0600	0645	German Dem Rep	13610	W Afr	09/21/89
0600	0700	Malta	9765	Af/NE/Eu	09/24/88
0600	0800	Mariana Is	17855	SE As/Phil/Japan	10/14/89
0600	0650	North Korea	15180	SE As	11/25/88
0600	0630	Norway	15165	Pac/Eu	10/21/89
0600	0700	South Korea	11830	Am/BD5	05/13/89
0600	0700	USA	15195	ME/N Af/Eu	09/24/89
0600	0800	USA	9840	Eu	10/26/89
0600	0800	USA	9495	Eu/CA/SA	08/28/89
0600	1200	USA	6185	NA/CA	02/15/88
0600	0800	USA	11980	CA/Canada	04/24/89
0600	0800	USA	17640	Eu/NA/NA	08/06/89
0600	0700	USA	9645	Eu	09/16/89
0600	0620	Vatican State	11915	20 deg (Su only)	09/24/89
0601	0700	USA	11840	245/315 deg	04/24/89
0615	0630	Canada	17860	#5 Network	08/06/89
0615	0700	German Dem Rep	17860	Eu	09/16/89
0615	0630	Vatican State	17730	M-F:81,3,4,6 v UR	09/23/89
0625	0840	Monaco	9485	As	09/21/89
		Trans World Radio		CA5 Af	06/05/89
				UK	06/05/89
				Su -1000	

0630	0700	Albania	R Tirana	9500	7065	Eu	12/24/86
0630	0700	Australia	R Australia	21525	17750	As/Pac/PapMG/Afr	10/17/85
0630	0700	Italy	AMR Europe	7125		Eu	10/14/89
0630	1415	Jordan	R Jordan	13655			03/13/89
0630	1000	Liberia	ELWA	11830		C&W Afr	05/14/89
0630	0700	Poland	R Polonia	9675	7270	Eu	08/15/89
0630	0700	Switzerland	Swiss R Int'l	21520	17570	Afr	10/14/85
0630	0800	USSR	R Moscow	13645	13605	MNA	09/24/89
0645	0700	Canada	R Canada Int'l	11840	9740	W Eu/Afr	09/23/89
0645	0830	Ecuador	HCJB	11835	9610	Eu	02/18/89
0645	0715	Romania	R Bucharest	21665	17805	Pac	06/04/89
0655	0832	Liberia	ELWA	4760		Su	05/14/89
0700	0730	Australia	R Australia	21525	17750	As/Pac/PapMG	10/17/85
0700	0800	Japan	R Japan	21690	21500	60S/As/As/Oc/Eu/NE	10/26/89
0700	0835	Swaziland	Trans World Radio	11835	11760	S Afr	06/05/89
0700	0800	Taiwan	V of Free China	5950		MA	08/05/89
0700	1100	USA	KUSM	6135		Canada	02/15/88
0700	0800	USA	WYFR	15566	13760	Af/Eu	03/25/89
0710	0800	Ecuador	HCJB	11925	9745	S Pac	07/17/89
0715	0730	Vatican State	Vatican Radio	17730	15190	C&S&M Afr	06/05/89
0727	0835	Sevcheilles	FEDR	17780	15275	SE As	03/11/89
0730	0800	Australia	R Australia	21525	17750	As/Pac/PapMG	10/17/89
0730	0800	Bulgaria	R Sofia	17825	15160	W Eu	09/24/89
0730	0800	Czechoslovakia	R Prague	21705	17840	S&E As/Pac	04/14/89
0730	0815	England	BBC	9640		SE As/Pac	04/06/89
0730	0755	Finland	R Finland	11755	9560	Eu/NE/Afr	09/20/89
0730	0825	Netherlands	R Netherland	15560	9630	NZ/Aus	09/02/89
0730	0800	Switzerland	Swiss R Int'l	9535	6165	Eu	10/14/89
0740	0757	Switzerland	Int'l Red Cross	21695	17670	Australasia	03/18/89
0800	0830	Albania	R Tirana	11835	9500	As/Aus	12/24/86
0800	0815	Australia	R Australia	21525	17795	As/Pac/PapMG	10/17/89
0800	0830	Bangladesh	R Bangladesh	17710	15195	Eu	03/04/89
0800	0825	Belgium	BRT	21815	11695	SE As/Aus/Eu	09/16/89
0800	1130	Ecuador	HCJB	11925	6130	S Pac	07/17/89
0800	1000	Mariana Is	KHBI	17855	9530	Aus/NZ/Japan	10/14/89
0800	0830	North Korea	R P'yongyang	15180	15160	SE As	11/25/86
0800	0830	Norway	R Norway	15165		Pac/NA	10/21/89
0800	0900	South Korea	R Korea	13670	7550	Eu	10/03/87
0800	0900	USA	KNLS	7365		As	10/21/89

0800	1000	USA	WC5N	9840					Eu	60 deg	10/26/89
0800	1100	USA	MHR1	7355					Eu/CA/SA		06/13/88
0800	1000	USA	WSH6	13760	11770	9455			Canada/SA	260/152 deg	10/21/89
0805	0930	Guam	KTKW	15210					Far East		05/08/89
0815	0830	Australia	F Australia	21525	17750	15395	11720	9655	5980	As/Pac/PapNG	10/17/89
0828	0855	Netherlands	R Nederland	9770					As	weekdays	09/16/88
0830	0900	Australia	R Australia	21525	17750	15395	11720	9655	5980	As/Pac/PapNG	10/17/89
0830	0900	Australia	R Australia	21490	15490	13730	6155		Eu/NE/AT		09/26/89
0830	0900	Australia	DRF	17710	15440	11755			S Pacific		04/29/89
0830	0930	China	R Beijing	21705	17840	11685			S&E As/Pac	Sat & Sun to 0930	04/14/89
0830	0900	Czechoslovakia	R Praha	21485	17575				Asia	09/19/86	10/14/89
0830	0925	Netherlands	R Nederland	21695	17670	13685	9560		Aus/NZ		08/15/89
0830	0900	Switzerland	Swiss R Int'l	17550	15625				Far E/Eu	#1,3,4,6 Sa-Su only	09/21/89
0845	0848	Greece	V of Greece	21465	21540	9730	7185	6115	6040	v USSR	04/09/89
0845	0930	Serbian Dem Rep	R Berlin Int'l	17800	15245				ME	SU -1000	09/20/89
0900	1000	Afghanistan	R Afghanistan	21600	17720				As		08/28/89
0900	0915	Australia	R Australia	21525	15415	11720	9760	9655	5980	60S/As/Oc	09/08/89
0900	0950	Fed Rep Germany	R Deutsche Welle	21680	21650	21600	17785	17780	11945	Aus/Melanesia	09/09/89
0900	0955	Finland	R Finland	17800	15245				Ind/S As/Aus	Eng Sun only	10/21/89
0900	1000	Guam	KSDK	11980	13720				Eu	Sunday only	10/14/89
0900	1000	Japan	R Japan	17890	17810	15270			Aus		09/04/89
0900	1205	New Zealand	R New Zealand Int'l	11780	9850				As/Pac/PapNG		10/17/89
0900	0930	Norway	R Norway	17740					S Pacific		04/29/89
0900	1000	Portugal	AMR Europe	9670					Aus/NZ		08/31/87
0910	0940	Mongolia	R Ulan Bator	12015					As/Pac/PapNG		10/17/89
0915	0945	Australia	R Australia	21525	15415	11720	9760	9655	5980	5995	10/17/89
0930	1030	China	R Beijing	17710	15440	11755					04/29/89
0930	1100	Guam	KTKW	11805					As/NZ		08/31/87
0945	1000	Australia	R Australia	21525	15415	9760	9655	9580	5995		10/17/89
1000	1030	Australia	R Australia	21525	15415	9770	9655	9580	5995		10/17/89
1000	1025	Belgium	BRT	26050	21810						09/16/89
1000	1045	Serbian Dem Rep	R Berlin Int'l	21465	21540	11890			Afr	M-F	09/21/89
1000	1600	Guam	KIKB	9630					Far E/ENH	#1 Sa-Su only	10/21/89
1000	1100	Guam	KSDA	13720	11980				China		10/21/89
1000	1100	India	AIR	17740	17387	15335	15155	15050	11860	Eng 1000-1030	01/29/89
1000	1200	Mariana Is	KIBI	15115	9530				60S/NE As/Aus/NZ		07/08/89
1000	1030	Switzerland	Swiss R Int'l	21695	17670	13685	9560		Phil/Indon/China	240/310 deg	10/14/89
1000	1200	USA	VDA	11915	9590				Aus/NZ		04/17/89
1000	1200	USA	WSH6	9455	6150				Caribbean/Americas		09/24/89
1000	1100	USA	WYFJ	5985					Canada	152/25 deg	10/21/89
									NH		06/06/89

1000	1030	Vietnam	15010	12030	9840				09/25/88
1030	1100	Australia	21525	15415	9770	9580	5995	As/Pac/PapNG	10/17/89
1030	1100	Italy	7257					Eu	10/14/89
1030	1125	Netherlands	11890	6020				Aus/Carib	10/26/89
1030	1110	United Arab Emirates	21605	17775	15435	15320		Eu/Afr	06/22/89
1040	1057	Switzerland	21550	17830	15570	13635		Far East	03/18/89
1045	1130	German Dem Rep	6115					Eu	09/21/89
1045	1100	Hungary	15160	11910	9835	9585	7220	6110	09/24/89
1055	1257	Netherlands Antilles	15345	11815				ENM/Carib	05/31/89
1100	1130	Australia	21525	11800	11705	9770	9710	9645	10/17/89
1100	1200	China	17855					ENM	04/29/89
1100	1200	England	11775	9515	6195	5965		MS: MA/CA/Carib	09/23/89
1100	1150	Fed Rep Germany	21600	17800	17765	15410		W Afr	17800,15410 v Kigali
1100	1300	Guam	13720	11980				As/Indonesia	09/30/88
1100	1130	Israel	21760	17685	15630	15485		W Eu/Aus/As	10/21/89
1100	1200	Japan	11840	11815	6120			605/Asia/Nk	06/27/89
1100	1150	North Korea	11735	9977	9600			As	09/08/89
1100	1156	South Africa	25790	11900	11805			Afr/NE/UK/Ireland	01/14/89
1100	1200	South Korea	15575					NE/Afr	09/08/89
1100	1130	Switzerland	7210					Eu	10/03/87
1100	1130	Switzerland	21770	17830	15570	13635		SE As/Aus/NI	03/18/89
1100	1200	Taiwan	9845	7445	5980			SE As	07/29/89
1100	1500	USA	9850					Canada	05/13/89
1100	1300	USA	11790	7520				Eu/CA/SA	07/30/89
1100	1300	USA	11580	5985				NA	10/21/89
1100	1200	USSR	21800	17890	17830	17660	15535	15220	08/06/89
1100	1130	Vietnam	15010	12030	9840			World Service	10/28/89
1115	1130	Vatican State	21485	17840				C&SE AF	09/25/88
1130	1200	Albania	11855	9480				As/Aus	06/05/89
1130	1200	Australia	11800	11705	9770	9710	9645	9580	12/24/86
1130	1200	Austria	21475	15430	13730	6155		ENM/As/Aus	05/21/88
1130	1200	Ecuador	11740					Americas	09/26/89
1130	1145	Hungary	15160	11910	9835	9585	7220	6110	02/18/89
1130	1225	Iran	11790	11715	9575	7215		SE As	09/24/89
1130	1225	Netherlands	21615	21480	17575	9715	5955	SE As/NE/India	08/15/89
1130	1200	Sevchelles	15325					India	09/02/89
1130	1230	Thailand	11905	9655				SE As	09/30/88
1200	1230	Australia	21525	9770	9710	9580	7215	7205	07/29/89
1200	1300	China	17855	15450	15400	11660	11600	ENM/SE As/S Pac	10/17/89
									04/29/89

1200	1600	Ecuador	HCJB	17890	15115	11740	Americas	83-1500	07/17/89
1200	1345	England	BBC	11775	9515	6195	MS: NA/CA/Caribb	4113 Ant:182 Sect	09/23/89
1200	1225	Finland	R Finland	21550	15400		NA	M-F	09/20/89
1200	1245	German Dea Rep	R Berlin Int'l	17775	13690	9665	Eu/NE	Su only	09/21/89
1200	1300	Ivory Coast	AMR Africa	17890			AF		02/28/88
1200	1230	Mongolia	R Ulan Bator	12015	9615		Japan	09/04/89	09/04/89
1200	1400	M Marzana Is	KH81	15285	9465		Aus/PapNB/SE As	198/270 dec	10/14/89
1200	1230	Norway	R Norway	15165	6095		NA/CA	End Sun only	08/17/89
1200	1225	Poland	R Poland	11815	6095		Eu		08/15/89
1200	1230	Romania	R Bucharest	17720	15280		As	06/05/88	06/05/88
1200	1255	South Africa	Radio RSA	21590	11900	11805	NA/CA	83 to Namibia	10/26/89
1200	1400	USA	WRNO	9715			NA/CA	20 dec (Su only)	10/21/89
1200	1400	USA	WSBH	11930	6150		Ch/NE Canada	186/25 dec	10/21/89
1200	1300	USSR	R Moscow	21800	21725	17660	World Service	40 v Cuba	10/26/89
1200	1225	USSR	R Tashkent	15460	11785	9715	As	4113 F-1220	09/05/89
1200	1215	Vatican State	Vatican Radio	21515	21485	17865	Aus/NA/CA/SE As		09/16/89
1215	1330	Egypt	R Cairo	17595			As		06/18/88
1230	1300	Australia	R Australia	21525	9770	9710	As/Pac/PapNB		10/17/89
1230	1300	Bangladesh	R Bangladesh	17710	15195		Eu		10/05/89
1230	1255	France	R France Int'l	21645	21635	17650	Ar/Afr/Ind/As/Eu	News & feat/English	10/14/89
1230	1315	German Dea Rep	R Berlin Int'l	21540	21465	17880	As		09/21/89
1230	1300	Poland	R Poland	15120	11840	9325	AF		08/15/89
1230	1300	Sweden	R Sweden	21570	17740	15190	As/Pac		09/20/89
1235	1248	Greece	V of Greece	17550	15630	11615	NA/Sweden	News/Ent	08/15/89
1240	2205	Liberia	ELWA	11830			CAW Afr	SL	05/14/89
1300	1330	Australia	R Australia	21525	9710	9580	As/Pac/PapNB		10/17/89
1300	1400	Canada	R Canada Int'l	17820	11855	9635	Caribb/USA	M-F	10/21/89
1300	1400	China	R Beijing	15400	11855	11660	SE As/MNA/S Pac		04/29/89
1300	1330	China	R Canada Int'l	15210	11955		SE As & India	Via China	09/23/89
1300	1325	Finland	R Finland	21550	15400		NA	M-F	09/20/89
1300	1400	Guam	KSDA	11980	9650		As		10/21/89
1300	1350	North Korea	R Pyongyang	11735	11335	9600	SE As/Am/Eu	End Sun only	11/25/88
1300	1230	Norway	R Norway	9590			Eu		03/30/89
1300	1355	Romania	R Bucharest	17850	15365	11940	Eu		06/04/89
1300	1356	South Africa	Radio RSA	21590	17730	11805	Ind/Pal/FE	83 to Namibia	09/08/89
1300	1330	Switzerland	Swiss R Int'l	12030	9535	6165	Eu		10/14/89
1300	1500	Taiwan	WFF	15055			India	Via WFF	03/26/89
1300	1400	USA	WHRI	13790	9465		Eu/CA/SA		08/26/89
1300	1500	USA	WFFR	17995	13695	11830	NA	41,2,3,5 Network	08/06/89

1300	1400	USSR	R Moscow	21725 17665 17660 15655 17645 17570 15540 15220	World Service	09 v Cuba	10/28/89
1300	1400	USSR	R Stn Peace & Progress	17870 17635 17610 15560	As/Am/Aus		08/13/89
1300	1330	Yugoslavia	R Yugoslavia	15325 15165 11735	NA/Aus/Far E		10/14/89
1310	1327	China	Int'l Red Cross	11695 9620	S&SE As/Far East	MoTh after last Su	03/18/89
1315	1400	Geraan Dea Rep	R Berlin Int'l	15240 11705	ME		09/21/89
1330	1400	Australia	R Australia	21525 9580 7205 6080 6060 5995	As/Pac/PapMG		10/17/89
1330	1355	Belgium	BR	21815 21810	SE As/NA	#1 M-F/02 M-Sa	09/16/89
1330	1400	Switzerland	AI	15335 11850 11810 11760 9565 9525	60S/SE As	# 1,4,5 maybe tests	07/27/89
1330	1400	Switzerland	Swiss R Int'l	21695 17830 15570 13635 11695 9620	E Afr/India/Aus/NZ	#586 v China	10/14/89
1330	1400	Turkey	V of Turkey	17785	SW As		09/24/89
1330	1400	United Arab Emirates	R Dubai	21605 17775 15435 15320	Eu/Afr		06/04/89
1330	1355	USSR	R Tashkent	15460 11785 9715 9600 7325	As		09/09/89
1330	1400	Vietnam	V of Vietnam	15010 12030 9840	As		09/25/88
1345	1430	Geraan Dea Rep	R Berlin Int'l	21540 21465 17880 15440	As		09/21/89
1400	1430	Albania	R Tirana	11985 9500	As/Aus		11/12/88
1400	1500	Australia	R Australia	21525 9508 7205 6080 6060 5995	As/Pac/PapMG	#1 -1430	10/26/89
1400	1700	Canada	R Canada Int'l	17820 11955	Carib/NA	Su	10/21/89
1400	1500	China	R Beijing	15165 11855 11795	S As/MNH		04/29/89
1400	1425	Finland	R Finland	21550 15400	MA	S&Su -1500	09/20/89
1400	1425	France	R France Int'l	21770	SE As	news/English	07/17/89
1400	1445	Geraan Dea Rep	R Berlin Int'l	6115	Eu	Eng 16-17	09/21/89
1400	1700	Guam	KSDR	13720 11980	As/India		03/18/89
1400	1500	Japan	R Japan	11815 9505	60S/As/Aa		10/26/89
1400	1500	Malta	R Mediterranean	11925			09/24/88
1400	1600	M Mariana Is	K8BI	15385 9530			10/14/85
1400	1430	Norway	R Norway	21710	SE As/India/China	285/310 deg	08/17/89
1400	1556	South Africa	Radio RSA	25790 21590 21535 11925	Ind/S As/Aus	Eng Sun only	06/07/89
1400	1500	South Korea	R Korea	15575 9750 9570	UK/Eu/At/NA/ME		11/05/88
1400	1430	Sweden	R Sweden	17740 11905	Am/SE As		09/20/89
1400	1600	USA	MCSN	21780	As/Pac	45 deg	04/24/89
1400	1500	USA	MRI	15105 9495	Eu/CA/SA		04/24/89
1400	1500	USA	M6NO	11965	NA/CA	20 deg (Su only)	10/21/89
1400	1600	USA	M5HB	17555 13760	CA/Canada	245/315 deg	03/08/89
1400	1500	USSR	R Moscow	21725 17830 17660 17655 17645 15540 11840	World Service	#7 v Cuba	10/28/89
1415	2055	Jordan	R Jordan	9560			09/25/89
1420	1430	Sudan	National Unity Radio	9435		nx/EE some days	12/19/88
1430	1500	Austria	ORF	21490 13730 11780 6155	M Afr/SE As/Eu		04/01/89
1430	1457	Czechoslovakia	R Prague	21505 17705 15155 15110 13715 11685 9605	Afr/S As		04/14/89
1430	1525	Netherlands	R Nederland	17605 17575 15150 13770 5955	S&E As/Eu		01/22/89

1430	Poland	R Polonia	11815	9540	6135	Eu	08/15/89
1445	German Dem Rep	R Berlin Int'l	9730			Eu	09/21/89
1445	1515 Mongolia	R Ulan Bator	15305	9575	9645	India	09/04/89
1445	1500 Vatican State	Vatican Radio	11740	9645	7250 6248	Eu	09/16/89
1458	1610 Seychelles	FEBA	11870	15325		India	03/11/89
1500	1530 Australia	R Australia	9580	7215	7205 6080 6060 5995	As/Pac/PapNG	12/10/88
1500	1600 China	R Beijing	15165	11855	11795	S As/WNA	04/29/89
1500	1700 Costa Rica	R for Peace Int'l	25945	7375		M-F	05/13/89
1500	1745 England	BBC	15260	11775		01 Sach:02 Antiqua	04/06/89
1500	1550 Fed Rep Germany	R Deutsche Welle	21600	17810	11965 9735	S&C&E Afr	05/01/88
1500	1635 Guam	KTR	11650			M-1705	05/08/89
1500	1600 Japan	R Japan	21700	11815	9505	01 v Gabon	10/26/89
1500	1530 Philippines	R Veritas Asia	15445	9525		As	09/12/89
1500	1530 Romania	R Bucharest	17745	17720	15250 11940 11775	As	06/04/89
1500	1515 Taiwan	WFR	11550			India	03/26/89
1500	1600 USA	KHLS	7355			As	10/05/89
1500	2200 USA	KJSM	15650			Canada	07/30/89
1500	1700 USA	VOR	15205	9700		ME/N Afr/Eu	09/24/89
1500	1600 USA	WHR1	21840	15105		Eu/CA/SA	07/04/89
1500	1600 USA	WCK	15690			MA	06/17/89
1500	1515 USA	WFR	17895	13695	11580 5985	01.2 Network	08/06/89
1500	1600 USSR	R Moscow	21725	17660	15135 11840	04 v Cuba	10/28/89
1500	1515 Vatican State	Vatican Radio	17870	15090	11955	As/Aus/NI	06/05/89
1505	1530 Finland	R Finland	15185	11850	9640	Eu/ME/Afr	09/23/89
1515	1600 USA	WFR	17895	13695	11580 5985	MA	08/06/89
1530	1600 Albania	R Tirana	11835	9480		Afr	12/24/86
1530	1900 Australia	R Australia	9580	7215	7205 6080 6060 5995	As/Pac/PapNG	12/10/88
1530	1630 Bulgaria	R Sofia	17825	15310	11735	Afr	09/24/89
1530	1625 Czechoslovakia	R Prague	21505	17705	15155 15110 13715 11990 11685	9005 Afr/S As/Eu	04/14/89
1530	1538 Greece	V of Greece	17535	15630	11645	MA/Sweden	10/15/89
1530	1600 Sweden	R Sweden	21655	21610	17880	E Afr/WA	09/20/89
1530	1600 Switzerland	Swiss R Int'l	21630	17830	15430 13685	ME/E Afr	04/25/88
1545	1600 Canada	R Canada Int'l	21545	17820	15325 15315 13650 11935 11915	9555 C&E Eu	09/23/89
1545	1630 German Dem Rep	R Berlin Int'l	17880	15240		As	09/21/89
1545	1630 Pakistan	R Pakistan	21740	21480	17895 17565 15605 13665	ME/ES Afr	09/14/89
1545	1600 Vatican State	Vatican Radio	21650	17730	15120	E Afr	05/29/89
1555	2205 Liberia	ELWA	11830			C&W Afr	05/14/89
1600	1700 China	R Beijing	15110	11715	9570	E&S Afr	04/29/89
1600	1650 Fed Rep Germany	R Deutsche Welle	21680	17825	15595 15105 7225 6170	Aus/As	03/07/89

1600	1655	France	R France Int '1	17795 17620 15360 12015 11705 6175	Af/NE/As/W Eu	11705 v Gabon	09/06/89
1600	1800	Mariana Is	KIBI	15385 9530	SE As/India	285/270 deg	10/21/89
1600	1650	North Korea	R Pyongyang	11760 9325	Eu		10/28/89
1600	1630	Norway	R Norway	21705 17840	NA/CA	Eng Sun only	08/17/89
1600	1630	Poland	R Poland	9540 6135	Eu		08/15/89
1600	1630	Portugal	R Portugal	21530	NE	M-F	10/06/89
1600	2100	Saudi Arabia	BC Serv of Kingdom of SA	9720		best later in case	07/20/86
1600	1700	South Korea	R Korea	9870 5975	NE/Afr/BS		11/05/88
1600	1630	Swaziland	Trans World Radio	11835 11760 11740 5055 4760	EAS Af	only 1 freq/bnd used	06/05/89
1600	1640	United Arab Emirates	R Dubai	21605 15320 15300 11790	Eu/Afr		05/31/89
1600	1700	USA	KHLS	9815	As		10/21/89
1600	1800	USA	VQA	17870 17800 17785 15600 15580 15445 15410 11920	Africa		09/24/89
1600	1800	USA	WCSN	21640	E Afr	75 deg	08/28/89
1600	1700	USA	WHR1	21840 15105 13760	Eu/CA/SA	02 Su 1 03 M-Sa	10/21/89
1600	2400	USA	WRN0	15420	NA/CA/Eu	20 deg	10/21/89
1600	1700	USA	WFR	21615 21525 17895 17612 15440 15215 13695	Af/Eu/NA	03.7 Network	03/25/89
1600	1700	USSR	R Moscow	17810 17660 15540 15135 11840	World Service	05 v Cuba	10/15/89
1600	1630	Vietnam	V of Vietnam	15010 12030 9840			09/25/88
1610	1625	Seychelles	FEBA	15325	SE As	M-Sa	03/11/89
1615	1630	Hungary	R Budapest	15160 11910 9835 9585 7220 6110	Eu	M/Th	09/24/89
1630	1730	Argentina	RAE	15345	Eu/Afr		10/27/89
1630	1655	Belgium	BRT	21810 17580	Afr	M-Sa	09/16/89
1630	1830	Egypt	R Cairo	15255	S Afr	08/17/87	09/02/89
1630	1725	Netherlands	R Nederland	15570 15375	EAS Afr		08/15/89
1630	1700	Poland	R Polonia	15120 11840 9525	Af		10/15/89
1630	1700	USSR	R Sin Peace & Progress	17615 17595 15545 12955 11910 11775 11695 11670	Af/As		09/08/89
1635	2400	South Africa	Radio 5	4880			09/21/89
1645	1730	German Dem Rep	R Berlin Int '1	17775 15340 9730 7295	Af/Eu		04/17/89
1645	1930	South Africa	Radio Granite	3215	Eu		10/27/89
1700	1750	Brazil	R Bras	15265	EAS Afr		04/29/89
1700	1800	China	R Beijing	15145 11575 9570	60S/As/Am		10/26/89
1700	1800	Japan	R Japan	11815 9535 9505 7140	Eu		10/28/89
1700	1750	North Korea	R Pyongyang	11760 9325	Af/NA		10/21/89
1700	1730	Norway	R Norway	21705 15305	Eu	Eng Sun only	03/18/89
1700	1730	Switzerland	Int '1 Red Cross	7210	NE/W Af/Eu	No after last Su/mo	09/24/89
1700	1800	USA	VQA	15205 11760 9760 6040 3980	Eu/CA/SA	05 -1730	01/02/89
1700	1800	USA	WHR1	15105 13760	NA/Eu		08/30/89
1700	2000	USA	WHLX	9465			03/25/89
1700	1900	USA	WFR	17895 15215 13695 11580		01.3 Network	

1700	1800	USSR	R Moscow	17810 17770 17595 15545 15135 11840	WS i 02.3.4 Afr Serv 86 v Cuba	10/28/89
1710	1727	Switzerland	Int'l Red Cross	17830 15525 15430 11955 9885	Africa	03/18/89
1715	1730	Canada	R Canada Int'l	21545 17820 15325 7235 5995	MoKth after last Su	09/23/89
1715	1800	Pakistan	R Pakistan	15200 11570	0445 v Eu relays	09/14/89
1725	2230	Liberia	ELM#	4760		05/14/89
1730	1800	Austria	DKF	13730 12010 6155 5945	W AF/SE As/Eu	09/26/89
1730	1825	Czechoslovakia	R Prague	21505 15110 13715 11990 11685 9605	Afr/S As	04/14/89
1730	1800	Romania	R Bucharest	17860 17805 15365 15340 11810	Afr	10/26/89
1731	1804	Seychelles	FEB#	11810	FL&A -1824	03/11/89
1800	1830	Canada	R Canada Int'l	17820 15260		10/21/89
1800	2330	Costa Rica	R for Peace Int'l	25945 21565	Sa-Su	07/17/89
1800	1827	Czechoslovakia	R Prague	11855 7345 5930	Eu	05/21/89
1800	2000	India	AIF	15360 11935	505/E Afr	05/24/89
1800	1815	Israel	Kol Israel	11585	W Eu	08/27/89
1800	1900	Ivory Coast	R Cote-d'Ivoire	7215	exc Sundays	12/05/87
1800	2100	Kuwait	R Kuwait	13610	Eu/Af/MR/Aus/NZ	10/20/89
1800	2000	M. Marjana Is	KHEJ	17770 9455	S Pac/Japan	10/21/89
1800	1830	Norway	R Norway	15265	ME/Af	10/21/89
1800	1856	South Africa	Radio RSA	21535	UK/Ireland	09/02/89
1800	1900	South Korea	R Korea	15575	Eu	11/05/88
1800	1830	Sweden	R Sweden	7265 6065	Eu/Af	09/20/89
1800	1900	USA	KKLS	7355	As	10/21/89
1800	2200	USA	VD#	15205 11760 9760 6040	ME/N Af/Eu	09/24/89
1800	2000	USA	WCSN	21640	S Afr	08/28/89
1800	2100	USA	WRI	17830 13760	Eu/CA/SA	02/15/88
1800	1900	USSR	R Moscow	17810 15135 13625 11840	World Service	10/15/89
1800	1830	Vietnam	V of Vietnam	15010 12030 9840	04 v Cuba	09/25/88
1801	1900	USA	VD#	21485 17870 17800 17785 15600 15580 15445 15410	Africa	06/05/89
1805	1845	Swaziland	Trans World Radio	11825 11760 11740	E Afr	03/13/89
1815	1900	Bangladesh	R Bangladesh	11510 7520	Eu/NE	09/21/89
1815	1900	German Dem Rep	R Berlin Int'l	9730 7295 7260	Eu	10/27/89
1830	1900	Albania	R Tirana	9480 7155	Eu	09/16/89
1830	1855	Belgium	BRT	11695 5910	Eu	09/24/89
1830	1930	Bulgaria	R Sofia	17825 15310 11735	Afr	09/24/89
1830	1900	Ethiopia	V of Ethiopia	9660	W Eu	01/22/89
1830	1915	German Dem Rep	R Berlin Int'l	15340 15145 13610 9665	Af	09/21/89
1830	1925	Netherlands	R Nederland	21685 17605 15560	Afr	04/08/89
1830	2105	New Zealand	R New Zealand Int'l	17705 15485	Pac	09/09/89
1830	1855	Poland	R Polonia	11840 9525 7285 7125 6135 5995	Af/Eu	06/15/89

1830	1900	Switzerland	Swiss R. Int'l	11955	9885	9535	6165	3985	Afr/Eu	10/14/89
1840	2300	USA	WBCK	15690						06/17/89
1840	1848	Greece	V of Greece	15630	12105	11645			S Afr GOS/W Eu	10/14/89
1845	1945	India	AIR	11620	7412				Eu	07/04/88
1900	1930	Afghanistan	R Afghanistan	15510	11755					06/05/89
1900	2000	Algeria	R Algeria	17745	15215	9640	9509		As/Pac/PanMG	01/30/88
1900	2000	Australia	R Australia	9580	7215	7205	6080	6060	Afr	12/10/88
1900	1930	Canada	R Canada Int'l	17820	15260					10/21/89
1900	2000	China	R Beijing	11515	9440				MAN Afr	04/29/89
1900	2100	Cuba	R Havana	11800					Eu/Af	10/15/88
1900	1957	Czechoslovakia	R Prague	11855	7345	5930			Eu	05/21/89
1900	2000	Ecuador	HCJB	21470	17790	15270			Eu	02/18/89
1900	1950	Fed Rep Germany	R Deutsche Welle	21600	17810	15390	13790	11785	W Afr	03/07/89
1900	1930	Japan	R Japan	15270	11850	9505			GOS/Am/OC	10/26/89
1900	1930	Norway	R Norway	15220					Eu	10/21/89
1900	1930	Portugal	R Portugal	15250	11740				Afr/Eu	05/08/89
1900	1958	South Africa	Radio RSA	21535	15125	7295	5940		Afr/NE	10/26/89
1900	2000	Spain	Spanish Nat'l R	15395	15375	15280	11790		Afr/NE/Eu	03/06/89
1900	2015	Swaziland	Trans World Radio	5055	4760				S Afr	06/05/89
1900	2200	USA	WBK	21485	17800	17785	15600	15445	15410	09/24/89
1900	2000	USA	WYFR	21615	17895	15565	15215	13695	Eu/NA	03/25/89
1900	1930	USSR	R Kiev	9600	7240	7205	7150		Eu	09/24/89
1900	2100	USSR	R Moscow	15135	13625	11840	9865		World Service	09/24/89
1900	1930	Vietnam	V of Vietnam	15010	12030	9840			Eu	09/25/88
1920	1930	Greece	V of Greece	11645	9395				S Afr/NE/Eu	09/26/89
1930	2000	Austria	DRF	13730	12010	6155	5945		W Eu	09/26/89
1930	2000	Bulgaria	R Sofia	15110	11720	11660			W Eu	09/24/89
1930	2000	Canada	R Canada Int'l	17875	15325	11945	7235	5995	W Eu	09/23/89
1930	1945	Finland	R Finland	15185	11755	9530			Eu/NE/Afr	09/23/89
1930	2000	Hungary	R Budapest	15160	11910	9835	9585	7220	Eu	09/24/89
1930	2030	Iran	R Tehran	11895	9022				NE/W Afr/Eu/ENA	10/06/89
1930	2025	Romania	R Bucharest	11940	11810	9690	9750		Eu	06/04/89
1930	0300	South Africa	Radio Orson	4810	3320				Af/Eu	04/17/89
1930	2000	Yugoslavia	R Yugoslavia	11735	7215	5980			Great Britain	04/08/89
1935	1955	Italy	RAI	11800	9710	7275			W Eu	09/04/85
1940	2010	Mongolia	R Ulan Bator	12050	9985				GOS/NE/Afr	05/24/89
1945	2045	India	AIR	11860	9755				As/Pac/PanMG	12/10/88
2000	2030	Australia	R Australia	9620	9580	7215	7205	6060	6035	
2000	2100	China	R Beijing	15110	11715	11500	9820	9440	MAN Afr/Eu	04/29/89

2100	212F	Romania		15250	11940	9690	9750	Eu		06/04/89
2100	220Q	Spain	R Bucharest	15280	11790			Eu		03/06/89
2100	213Q	Sweden	Spanish Nat'l R	11705	9655			Eu/Af		09/20/89
2100	213Q	Switzerland	R Sweden	21705	15525	13635	9885	Afr	#1 SSB	10/14/89
2100	215Q	Turkey	Swiss R Int'l	9795				Eu		09/24/89
2100	240Q	USA	V of Turkey	17830	13760			Eu/CA/SA		03/08/89
2100	000Q	USA	WHR1	13720				NA/CA/Eu	20 deg alt freq	08/28/89
2100	220Q	USSR	R Moscow	11840	11695	9865	7380	World Service	#1 v Cuba	09/24/89
2105	2205	Syria	R Damascus	17710	15095			NA/Aus/NZ		09/24/89
2115	2245	Egypt	R Cairo	9900				Eu		04/02/88
2130	220Q	Australia	R Australia	17795	15240	15160		As/Pac/PapNG		06/02/89
2130	220Q	Bulgaria	R Sofia	15330	15290	11720	11660	Eu		09/24/89
2130	220Q	Canada	R Canada Int'l	17820	15150	11880		Afr		10/21/89
2130	220Q	Ecuador	HCJB	17790	15270			Eu		07/17/89
2130	220Q	England	BBC	5975				WS: NA/CA/Carib	v Antigua	09/23/89
2200	240Q	Australia	R Australia	21740	17795	15320	15240	As/Pac/PapNG		12/10/88
2200	2225	Belgium	BRT	9925	5910			NA/Eu		09/16/89
2200	230Q	Canada	R Canada Int'l	11945	9760			W Eu		10/21/89
2200	240Q	Costa Rica	AMR Costa Rica	11670				Eu		06/17/89
2200	230Q	Cuba	R Havana	9685				Eu	v USSR	09/09/89
2200	225Q	Czechoslovakia	R Prague	6055				Eu		05/14/87
2200	003Q	England	BBC	12095	9915	9590	7325	WS: NA/CA/Carib	#345 Sack #6 Antigua	04/06/89
2200	2225	Finland	R Finland	11795	6120		5975	Eu/WE/AF/Aus/S&SE As		09/20/89
2200	2245	German Dem Rep	R Berlin Int'l	9730				ENA		09/21/89
2200	020Q	Guam	KSDA	15225	15125			As/SE As	Eng 23-01	03/18/89
2200	2225	Italy	RAI	11800	9710	5990		Japan		10/17/89
2200	223Q	Japan	R Canada Int'l	15440	11705			SE As	v Japan	09/23/89
2200	223Q	Liberia	ELWA	4760					BBC & local news -15	10/11/89
2200	240Q	Marrana Is	KHB1	15405	15355			China/Jap/Phil/Indon	310/240 deg	10/14/89
2200	2205	Nigeria	R Nigeria	4990					News in Eng	10/11/89
2200	223Q	Norway	R Norway	15225				W AF/SA	Eng Sun only	10/27/89
2200	223Q	Switzerland	R Beijing	3985				Eu		10/27/89
2200	230Q	Taiwan	V of Free China	17612	15370	15345	9955	Eu/Aus/NZ	#1K3 v MYFR	05/27/89
2200	240Q	United Arab Emirates	V of UAE	13605	11985	9595		NA	Su	04/17/88
2200	223Q	USA	KGE1	15280				Canada	70 deg	04/20/88
2200	010Q	USA	KUM	15580				Caribbean/Americas	M-F	09/24/89
2200	2215	USA	VDA	15225	11880	9640		W Afr	90 deg	03/08/89
2200	240Q	USA	WCSN	15300				SA/NE Canada	152/25 deg	09/25/89
2200	000Q	USA	WHR	17555	9465					

2200	2300	USA	WFR	21525	17612	11580	AR/NA	03/25/89
2200	2300	USSR	R Moscow	9865	9765	9665	World Service	09/24/89
2200	2300	USSR	R Stn Peace & Progress	11980	9775	7440	Eu	09/24/89
2200	2245	Yugoslavia	R Yugoslavia	11735	9660	9620	AR/NA/Aus/Eu	10/14/89
2205	2225	Vatican State	Vatican Radio	15105	11830	9615	As/Aus/NA	06/05/89
2230	2300	Albania	R Tirana	9480	7215		Eu	10/27/89
2230	2330	Bulgaria	R Sofia	15330	11660		M/Eu	09/24/89
2230	2300	Israel	Kol Israel	17630	15640	11605	LA/NA/M/Eu	08/27/89
2230	2300	Poland	R Poland	7270	7125	6135	Eu	08/15/89
2230	2300	Switzerland	Swiss R Int'l	6190			Eu	10/14/89
2230	2300	USSR	R Vilnius	6100			Eu	09/24/89
2230	2300	Vietnam	V of Vietnam	15010	12030	9840	EMR/Eu	09/25/86
2245	2330	German Dem Rep	R Berlin Int'l	9730	5965			09/21/85
2245	2255	Ghana	Ghana BC Corp	4915	3360			12/23/87
2245	0000	India	AIR	15110	11745	11715	605/As	05/24/89
2300	2330	Canada	R Canada Int'l	11730	9735		Carib	09/23/89
2300	2400	Japan	R Japan	21610	17810	15195	605/As/Eu/NE	10/26/89
2300	2350	North Korea	R Pyongyang	13650	11735		As	12/28/87
2300	2330	Norway	R Norway	9605			NA/CA	10/21/89
2300	2310	Sierra Leone	SLBS	3316				09/05/89
2300	2350	Turkey	V of Turkey	17760	9795	9665	SE As/Eu/NE/NA	09/24/89
2300	0000	USA	WRND	7355			NA/CA/Eu	08/28/89
2300	0000	USA	WYFR	11580			NA	03/25/89
2300	0600	USSR	R Moscow	11750	9865	9765	EMR	09/24/89
2300	2330	USSR	R Vilnius	17690	15455	15180	NA/Eu	10/26/89
2305	2355	Poland	R Poland	7270	7125	6135	Eu	08/15/89
2330	0000	Albania	R Tirana	11825	9760	6120	NA	10/15/89
2330	0030	Canada	R Canada Int'l	9755	5960		USR	09/23/89
2330	0030	South Korea	R Korea	15575			As	11/05/88
2330	2400	Vietnam	V of Vietnam	15010	12030	9840		09/25/88
2335	2345	Greece	V of Greece	11645	9395		Sr/CA	08/15/89
2345	0145	New Zealand	R New Zealand Int'l	17705	15485		Pac/Aus/Melanesia	09/09/89

All Records Included

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

Shortwave DX Program	Show Date Start Time	Country	Station	Freq					Target Area	Notes re DX Show	Record Last Updated
				#1	#2	#3	#4	#5			
** DAY OF THE WEEK: Sunday											
World of Radio	0030	USA	WRMD	7355						NA/CA	10/26/89
SHL Digest	0035	Canada	R Canada Int'l	9755	5960					USA	10/21/89
Dyers Unlimited	0035	Cuba	R Havana	11820						Americas	09/25/88
Radio World	0040	Belgium	BRT	9925						NA/SA	09/16/89
SHL Digest	0105	Canada	R Canada Int'l	11940	11845	9535				LA	09/24/89
Communications World	0110	USA	YOA	15205	11740	11580	9815	9775	9455	6130 Caribbean/Americas	06/11/89
SW Merry-Go-Round	0220	Switzerland	Swiss R Int'l	17730	12035	9885	9725	6135	6095	NA	05/16/86
Communicator	0230	Australia	R Australia	21740	21525	17795	17750	15395	15240	15160 As/Pac/PapNG	05/21/88
DX Asiawaves	0230	Guam	K5DA	15225	13720					As	02/05/89
Dyers Unlimited	0235	Cuba	R Havana	11820	9710					Americas	09/25/88
Astour Radio Spectr	0240	South Africa	Radio RSA	11935	9615	9580				NA	03/18/89
SHL Digest	0330	Austria	R Canada Int'l	11925						ME	10/05/89
Bonaire Wavelength	0330	Netherlands	Trans World Radio	11930	9535					NA/Carib	05/31/89
SW Merry-Go-Round	0420	Switzerland	Swiss R Int'l	12035	9885	9725	6135			NA	05/16/86
Dyers Unlimited	0435	Cuba	R Havana	11820	11760	9710	5965			Americas	09/25/88
Dyers Unlimited	0635	Cuba	R Havana	11835						Americas	09/25/88
SW Feedback	0635	South Korea	R Korea	11830	9570	7275				Am/60S	11/05/88
Communicator	0730	Australia	R Australia	21525	17750	15395	15320	15160	9655	As/Pac/PapNG	12/27/87
SW Feedback	0835	South Korea	R Korea	13670	7550					Eu	02/26/89
Pacific DX Magazine	0845	Guam	K1MR	15210						Far East	04/22/88
AMR DX Program	0915	Portugal	AMR Europe	9670						Eu	10/14/89
DX Corner	0925	Japan	R Japan	17890	17810	15270				60S/As/Oc	04/03/88
SW Club	1045	Hungary	R Budapest	15160	11910	9835	9585	7220	6110	Eu	09/24/89
Shortwave Panorama	1130	Austria	ORF	21475	15430	13730	6155			EM/As/Rus	04/01/89
SW Feedback	1135	South Korea	R Korea	15575						ME/AFR	02/26/89
DX Programme	1200	USSR	R Tashtent	15460	11785	9715	9600	7325		As	02/26/89
											11/05/88

Communicator	1230	1230	Australia	R Australia	21525	9770	9710	9580	7215	7205	6080	As/Pac/PapNB	12/25/87
Shortwave Panorama	1430	1430	Austria	ORF	21490	13730	11780	6155			W Afr/SE As/Eu	04/01/89	
SW Feedback	1435	1400	South Korea	R Korea	15575	9750	9570				Afr/SE Hs	11/05/88	
DX Corner	1525	1500	Japan	R Japan	21700	11815	9505				60S/As/Aw/Eu/NE	04/03/88	
DX Show	1545	1530	Czechoslovakia	R Prague	21505	17705	15155	15110	13715	11990	Afr/JS As/Eu	08/13/89	
SW Feedback	1635	1600	South Korea	R Korea	9870	5975					NE/Afr/60S	11/05/88	
Communicator	1730	1530	Australia	R Australia	9580	7215	7205	6080	6060	6035	5995	As/Pac/PapNB	12/27/87
SW Feedback	1835	1800	South Korea	R Korea	15575						Eu	11/05/88	
DX Corner	1840	1800	South Africa	Radio RSA	21535						UK/Ireland	02/05/88	
DX Show & Mailbag	1915	1900	USSR	R Kiev	9600	7240	7205	7150			Eu	09/24/89	
Message for Diners	1930	1900	Spain	Spanish Mat 1 R	15395	15375	15280	11790			Afr/NE/Eu	01/01/89	
DX Corner	1940	1900	South Africa	Radio RSA	21535	15125	7295	5960			Afr/NE	02/05/88	
DX Corner	2020	2000	Israel	Kol Israel	17630	17575	15640	11605			Af/W Eu/NA	08/27/89	
Communicator	2030	2030	Australia	R Australia	7620	7205					As/Pac/PapNB	12/25/87	
SW Feedback	2105	2030	South Korea	R Korea	15575	5550	9480				Eu/NE/Afr	11/05/88	
Message for Diners	2130	2100	Spain	Spanish Mat 1 R	15280	11790					Eu	01/01/89	
World of Radio	2130	1600	USA	WRMB	15420						NA/CA/Eu	10/26/89	
DX Corner	2250	2230	Israel	R for Peace Int'l	25945	21565					LA/NA/W Eu	07/19/89	
SWL Digest	2305	2300	Canada	Kol Israel	17630	15640	11605				Carib	08/27/89	
R Sofia Calling	2315	2230	Bulgaria	R Canada Int'l	11730	9755					W Eu	03/22/89	
DX Asianaves	2315	2200	Buav	R Sofia	15330	11669					As/SE Hs	09/24/89	
				XSDA	15225	15125						10/26/89	
** DAY OF THE WEEK: Monday													
SW Feedback	0005	2330	South Korea	R Korea	15575						Ae	11/05/88	
DX Corner	0020	0000	Israel	Kol Israel	15615	12077	11605				NA	08/27/89	
Message for Diners	0030	0000	Spain	Spanish Mat 1 R	15110	7630					NA	01/01/89	
R Sofia Calling	0045	0000	Bulgaria	R Sofia	15330	11660					NA	09/24/89	
DX Show & Mailbag	0045	0030	USSR	R Kiev	17690	15455	15180	9765	7400		NA	09/24/89	
DX Corner	0120	0100	Israel	Kol Israel	15615	12077	11605				NA	08/27/89	
DX Corner	0125	0100	Japan	R Japan	17845	17835	17810	17755			60S/Asia/NA	04/03/88	
Message for Diners	0130	0100	Spain	Spanish Mat 1 R	15110	9630					NA	01/01/89	
DX Corner	0220	0200	Israel	Kol Israel	15615	12077	11605				NA	08/27/89	
DX Corner	0245	0200	South Africa	Radio RSA	11935	7615	9580				NA	02/28/88	
DX Show & Mailbag	0315	0300	USSR	R Kiev	17690	15455	15180	9765	7400		NA	09/24/89	
DX Corner	0325	0300	Japan	R Japan	21610	17835	17825	17810	17765	15325	15195	60S/Asia/NA	04/03/88
R Sofia Calling	0445	0400	Bulgaria	R Sofia	15140	11765	11735	11720			Afr/NA	09/24/89	
Message for Diners	0525	0500	Spain	Spanish Mat 1 R	7630						NA	10/14/89	
Waveguide	0530	0530	England	BBC	7640	5975					MS: NA/CA/Carib	09/23/89	

DX Party Line	0600	0800	Ecuador	HCJB	11925	6130	S Pac	07/17/89				
Radio World	0805	0800	Belgium	BRT	21815	11695	SE As/Aus/Eu	09/16/89				
Radio World	1005	1000	Belgium	BRT	26050	21810	Afr	09/16/89				
DX Party Line	1030	0800	Ecuador	HCJB	11925	6130	S Pac	07/17/89				
DX Asiawaves	1030	1000	Buana	KSDA	13720	11980	SE As/NA	02/05/89				
Radio World	1335	1330	Belgium	BRT	21815	21810	SE As/NA	09/16/89				
SM Club	1615	1615	Hungary	R Budapest	15160	11910	Eu	09/24/89				
World of Radio	1700	1500	Costa Rica	R for Peace Int'l	25945	7375	Eu	07/19/89				
DX Party Line	2130	2130	Ecuador	HCJB	17790	15270	Eu	05/03/86				
Others Calling	2130	2045	India	AIR	11715	11620	60S/W Eu/Aus/NZ/Af	10/26/89				
RBI DX Club	2220	2200	Gerran Dea Rep	R Berlin Int'l	9730	5965	EMA	09/21/89				
RBI DX Club	2305	2245	Gerran Dea Rep	R Berlin Int'l	9730	5965	EMA/Eu	09/21/89				
DX Program	2345	2300	USSR	R Moscow	11750	9865	EMA	09/24/89				
** DAY OF THE WEEK: Tuesday												
RBI DX Club	0105	0045	Gerran Dea Rep	R Berlin Int'l	11890	6080	EMA	09/21/89				
DX Program	0145	0100	USSR	R Moscow	21470	17840	7290	EMA	09/24/89			
DX Party Line	0200	0035	Ecuador	HCJB	15155	11775	EMA	02/18/89				
RBI DX Club	0220	0200	Gerran Dea Rep	R Berlin Int'l	11890	6080	EMA	09/21/89				
SM Club	0230	0230	Hungary	R Budapest	15160	11910	EMA	09/24/89				
RBI DX Club	0305	0245	Gerran Dea Rep	R Berlin Int'l	15125	11890	EMA/WNA	09/21/89				
Sweden Calling Others	0305	0200	USA	WRI	7495	7315	Eu/CA/SA	04/24/89				
SM Merry-Go-Round	0320	0200	USA	WRI	7495	7315	Eu/CA/SA	04/24/89				
DX Program	0345	0300	USSR	R Moscow	21470	17840	7700	9865	9720	7165	EMA	09/24/89
RBI DX Club	0405	0345	Gerran Dea Rep	R Berlin Int'l	15125	11785	WNA	03/26/89				
RBI DX Club	0420	0400	Gerran Dea Rep	R Berlin Int'l	15125	11785	WNA	09/21/89				
DX Program	0445	0400	USSR	R Moscow	17840	17665	17605	15425	15180	12050	WNA	09/24/89
DX Party Line	0600	0500	Ecuador	HCJB	11775	9745	6230	WNA	03/29/89			
DX Program	0645	0400	USSR	R Moscow	17840	17665	17605	15425	15180	12050	WNA	09/24/89
Navguide	1115	1100	England	BBC	11775	9515	6195	5965	NS: NA/CA/Carib	12/19/88		
Sweden Calling Others	1240	1230	Sweden	R Sweden	21570	17740	15190	As/Pac	09/21/88			
SNL Digest	1335	1300	Canada	R Canada Int'l	17820	11855	9635	Carib/USA	10/26/89			
Sweden Calling Others	1410	1400	Sweden	R Sweden	17740	11905	As/Pac	09/21/88				
Sweden Calling Others	1540	1530	Sweden	R Sweden	21655	21610	17880	E Afr/NA	09/21/88			
DX Program	1605	1600	Poland	R Polonia	7540	6135	Eu	08/19/89				
Sweden Calling Others	1810	1800	Sweden	R Sweden	7265	6065	Eu/Af	10/26/89				
SNL Digest	1905	1900	Canada	R Canada Int'l	17820	15260	Afr	03/22/89				
Sweden Calling Others	2110	2100	Sweden	R Sweden	11705	9655	Eu/Af	09/21/88				
World of Radio	2230	2000	Costa Rica	R for Peace Int'l	25945	21565	Eu/Af	05/13/89				

DX Program	2235	2230	Poland	R Poland	7270	7125	6135	5995	Eu	08/19/89	
DX Program	2330	2305	Poland	R Poland	7270	7125	6135	5995	Eu	08/22/89	
** DAY OF THE WEEK: Wednesday											
Sweden Calling Diers	0110	0100	Sweden	R Sweden	9640	7225			As/Pac	03/21/89	
SW Club	0230	0230	Hungary	R Budapest	15150	11910	9835	9585	9520	6110	09/24/89
Sweden Calling Diers	0240	0230	Sweden	R Sweden	11705	9695			NA	09/20/89	
World of Radio	0300	0030	Costa Rica	R for Peace Int'l	21565	12660			NA	05/13/89	
SWL Digest	0305	0300	Austria	R Canada Int'l	11925				ME	03/22/89	
DX Program	0635	0630	Poland	R Poland	9675	7270			Eu	08/19/89	
Ham Radio Today	0800	0800	Ecuador	HCJB	11925	6130			S Pac	07/17/89	
Ham Radio Today	1030	0800	Ecuador	HCJB	11925	6130			S Pac	07/17/89	
DX Program	1435	1430	Poland	R Poland	11815	9540	6135		Eu	08/19/89	
Dier's Special	1650	1630	Argentina	RAE	15345				Eu/Afr	10/27/89	
DX Program	1835	1830	Poland	R Poland	11840	9525	7285	7125	6135	5995	08/19/89
Dier's Special	2120	2100	Argentina	RAE	15345				Af/Eu	10/27/89	
Ham Radio Today	2130	2130	Ecuador	HCJB	17790	15270			Eu/Af	01/30/88	

** DAY OF THE WEEK: Thursday											
Waveguide	0130	0030	England	SBC	12095	9915	9590	7325	6175	5975	12/19/88
Ham Radio Today	0200	0035	Ecuador	HCJB	15155	11775	9745		NA	02/18/89	
World of Radio	0200	0000	USA	WRNO	7355				NA/CA	10/26/89	
Ham Radio Today	0600	0500	Ecuador	-CJB	11775	9745	6230		NA	03/29/89	
Media Network	1050	1030	Netherlands	R Nederland	11890	9020			Aus/Carib	04/10/88	
Media Network	1150	1130	Netherlands	R Nederland	21615	21480	17575	9715	5955	08/22/86	
Media Network	1450	1430	Netherlands	R Nederland	17605	17575	15150	13770	5955	09/04/86	
SW Club	1615	1615	Hungary	R Budapest	15160	11910	9835	9585	7220	6110	09/24/89
World of Radio	1630	1600	USA	WRNO	15420				NA/CA/Eu	10/26/89	
Media Network	1650	1630	Netherlands	R Nederland	15570	15375			EAS Afr	09/04/86	
Media Network	1850	1830	Netherlands	R Nederland	21665	17605	15560		Afr	08/22/86	
Media Network	2050	2030	Netherlands	R Nederland	15560	12700	9860		W Afr	08/22/86	
World of Radio	2130	2000	Equatorial Guinea	R Africa	7189				Af	10/05/89	
** DAY OF THE WEEK: Friday											
World of Radio	0000	0000	USA	WRNO	7355				NA/CA	10/26/89	
Media Network	0050	0030	Netherlands	R Nederland	15315	6165	6020		ENA	03/17/89	
World of Radio	0130	0000	USA	WRNO	7355				NA/CA	10/26/89	
SW Club	0230	0230	Hungary	R Budapest	15160	11910	9835	9585	9520	6110	09/24/89
Media Network	0350	0330	Netherlands	R Nederland	11720	9590			MNA	03/17/89	

DI Show	1615	1600	Portugal	21530		ME	05/08/89
DI Show	1915	1900	Portugal	15250	11740	Afr/Eu	11/13/87
World of Radio	2000	2000	Costa Rica	25945	21585		05/13/89
R Sofia Calling	2145	2130	Bulgaria	15330	15290	Eu	1st of wkend series 09/24/89
** DAY OF THE WEEK: Saturday							
R Sofia Calling	0015	0000	Bulgaria	15330	11660	NA	09/24/89
World of Radio	0030	0030	Costa Rica	21565	13660	Americas	05/13/89
Dier's Social	0135	0100	Argentina	11710		NA	10/20/89
SM Club	0230	0230	Hungary	15160	11910	NA	09/24/89
DI Show	0245	0230	Portugal	11840	9705	SA/NA	01/16/88
Dier's Special	0335	0300	Argentina	11710		Americas	10/20/89
World of Radio	0400	0400	USA	6185		NA/CA	10/26/89
R Sofia Calling	0745	0730	Bulgaria	17825	15160	W Eu	09/24/89
Pacific DI Magazine	1000	0930	Guaa	11805		AusNZ	10/28/88
SM Merry-Go-Round	1115	1100	Switzerland	21770	17830	SE As/Aus/NZ	09/08/86
SM Club	1130	1130	Hungary	15160	11910	Eu	09/24/89
Bonaire Wavelength	1130	1055	Netherland Antilles	15345	11815	ENA/Carib	05/10/89
World of Radio	1200	0500	Equatorial Guinea	9585		Af	10/06/89
DI Programme	1330	1330	USSR	15460	11785	As	2nd Sat of month 11/05/88
Radio World	1340	1330	Belgium	21815	21810	SE As/NA	09/16/89
SM Merry-Go-Round	1345	1330	Switzerland	21695	17830	E Afr/India/Aus/NZ	09/04/86
Astour Radio Spectr	1445	1400	South Africa	25790	21590	UK/Eur/Af/NA/ME	07/29/89
Pacific DI Magazine	1515	1500	Guaa	11650		India	02/22/88
SM Merry-Go-Round	1545	1530	Switzerland	21630	17830	ME/E Afr	05/24/86
DI Asianwaves	1630	1400	Guaa	13720	11980	As/India	02/05/89
Radio World	1640	1630	Belgium	21810	17580	Afr	09/16/89
Radio World	1840	1830	Belgium	11695	5910	Eu	09/16/89
Astour Radio Spectr	1840	1800	South Africa	21535		UK/Ireland	10/07/89
World of Radio	1930	1800	Costa Rica	25945	21565	Eu/Af	07/19/89
Diers Unlimited	1935	1900	Cuba	11800		Afr/ME	10/08/88
Astour Radio Spectr	1940	1900	South Africa	21535	15125	Afr/ME	10/07/89
Communications World	2110	1900	USA	21485	17800	Africa	09/24/89
SM Merry-Go-Round	2115	2100	Switzerland	21705	15525	Afr	05/24/86
DI Radio Tips	2120	2100	Turkey	9795		Eu	09/24/89
SM Digest	2135	2130	Canada	17820	15150	Afr	03/22/89
SM Digest	2205	2200	Canada	11945	9760	W Eu	10/21/89
Radio World	2210	2200	Belgium	9925	5910	NA/Eu	09/16/89
DI Radio Tips	2320	2300	Turkey	17760	9795	SE As/Eu/ME/NA	09/24/89

7110, 6050; 1230-1240 EG/Hindi 17900, 15415, 15275, 15250, 11855, 11620, 9615, 7280, 3905; 1330-1335 Hindi 10330, 9950, 9770, 7160, 6045, 4860, 3925, 3905; 1335-1340 Hindi Sports News 7140, 6140, 3925; 1430-1435 EE 9950, 7412, 7160, 7140, 6045, 3925, 3905; 1435-1440 EG Sports News 9950, 4860, 3925; 1515-1530 Hindi 10330, 9950, 9565, 7412, 7160, 7140, 6140, 6115, 6045, 4860, 3925, 3905; 1530-1545 EG 10330, 9950, 9565, 7412, 7160, 7140, 6140, 6045, 4860, 3925, 3905; 1730-1740 EG/Hindi 10330, 9950, 7412, 7140, 4860, 6140, 3925. (WBI 10/13)

AIR Home News Service(2): 0125-0130 Sanskrit 9610, 7145, 4860; 0135-0145 Assamese 15305, 11870, 9550; 0135-0145 Telugu 15200, 11830, 9610; 0145-0155 Oriya 15305, 11870, 9550; 0145-0155 Tamil 15200, 11830, 9610; 0155-0205 Bengali 15305, 11870, 9550; 0155-0205 Malayalam 15200, 11830, 9610; 0205-0215 Kannada 15200, 11830, 9665, 9610; 0215-0225 Gujarati 15200, 11830, 9665, 9610; 0215-0225 Kashmiri 4860; 03-0310 Dogri 7210, 4860; 03-0310 Marathi 11780, 9665, 9610; 03-0310 Punjabi 3905; 0310-0320 Sindhi 9665, 9610, 7210, 4860; 0320-0330 Urdu 15200, 9665, 9630, 9610, 4860; 07-0710 Telugu 15250, 15125, 11935, 9675; 0710-0720 Tamil 15250, 15125, 11935, 9675; 0720-0730 Malayalam 15250, 15125, 11935, 9675; 0740-0750 Kannada 15250, 15125, 11935, 9675; 0750-08 Gujarati 15250, 15125, 11935, 9675; 08-0810 Bengali 17850, 11735, 9565; 08-0810 Marathi 15250, 15125, 11935, 9675, 7110; 0810-0820 Assamese 17850, 11735, 9565; 0810-0820 Punjabi 7110; 0820-0830 Oriya 17850, 11735, 9565; 0820-0830 Urdu 15250, 15125, 9675, 7110; 1115-1130 Arunachal 15320, 11850, 9610; 1240-1245 Sanskrit 17900, 15415, 15275, 15250, 11855, 11620, 9615, 7280, 3905; 1245-1255 Sindhi 7280, 3905; 1245-1325 Hindi/Gurkhali (Armed Forces Programme) 4860; 1255-1310 Kashmiri 7280, 3905; 1335-1345 Assamese 10330, 9770, 6045, 3905; 1335-1345 Telugu 9950, 7160, 4860; 1345-1355 Dogri 4860, 3925, 3295; 1345-1355 Oriya 10330, 9770, 6045, 3905; 1345-1355 Tamil 9950, 7160; 1355-1405 Malayalam 9950, 7160; 1355-1405 Nepalese 9770, 3905; 14-1410 Punjabi 3365; 1405-1415 Bengali 10330, 9770, 6045, 3905; 1405-1415 Kannada 9950, 7160; 1420-1430 Gujarati 7160, 7140, 4860, 3925, 3905; 1435-1445 Marathi 9770, 7160, 7140, 6045, 3905; 1545-16 Urdu 9565, 7412, 3925. Additional Data: Regional Radios: Most services are off the air between 1740 and 0025 gm. Some stations may close down earlier or open later. Most stations will carry news in Hindi and English from Delhi. Transmitter Sites: North Zone: Delhi: 9630, 6190, 4960, 3365; Bhopal 7180, 5990, 3315; Simla 6020, 3223; Lucknow 7250, 4880, 3205; East Zone: Calcutta 7210, 6010, 4820; Gauhati A: 7280, 4940, 3375 & B: 7150, 4775, 3235; Kohima 6065, 4850, 3268; Ranchi 7125, 6140, 3305; Aizawal 7295, 5050; Kurseong 7230, 4895, 3355; West Zone: Bombay 7240, 4840; South Zone: Madras 7160, 4920; Hyderabad 7140, 6120, 4800; Port Blair: 9600, 7180, 4760, 3330; Jammu & Kashmir: Srinagar 7270, 6110, 3277; Jammu 5960, 4950, 3345. Vividh Bharati: 0125-0130 9535; 0130-03 9535, 7260; 03-04 9535; 0630-07 15125; 0830-0945 15125, 11830; 0945-1030 15125; 1030-12 11830, 9750; 13-1330 9615; 1330-1430 9615, 6115; 1430-1630 6115. This service relays bulletins in Hindi from the AIR News Service at 0230, 1515 & 1735 gm. (WBI 10/13)

AIR urges listeners to report on events in Burma. Monitoring research 14 Sep 89. On 14th September, All India Radio's Burmese service announced that the play normally carried on Friday evenings would be dropped temporarily in favour of a new feature called "The Voice of the People" (Burmese: "Pyithu Athan") as "a contribution to help alert the Burmese people to the happenings around them, to enable them to march successfully in unity towards their democratic goals, and to heighten their sense of patriotism and loyalty". The station requested listeners "to write to us giving detailed eyewitness accounts, your personal feelings, factual news and reports of actual incidents which were not reported in the Burmese newspapers or on radio and television". Pointing out that it did not have correspondents or representatives in Burma, the announcer urged "all listeners who wish to make their kinsmen know about unreported true incidents" to write to the station "and make their stories known". (WBI 9/29)

IRAQ - 13660, 2107, Radio Baghdad, EG, M w/news t/2109 then W w/ID "This is Radio Baghdad the Broadcasting Service of the Iraqi Republic" into ME music on 10/7. Note: EG from *21 now. (bmm)

JAPAN Radio Tanpa's 'Sunday Roundup' program is now called 'Weekly

Roundup' since October and is broadcast twice now: 1230 UTC Sat on 9595, 6055, 3925 and repeated on Sunday at 1630. (bmm)

Radio Japan D89 EG Sked 11/5-5/3: Regional Service: NA 01-0130 17755; 03-0330 1870, 17825, 21610, 15325(via French Guiana); 09-10 15270, 17890. General Service: Asia, SE Asia: 01-02, 03-04, 05-06, 07-08, 09-10 17810; 11-12, 14-16, 17-18 11815; 21-2130 15230, 11840; 23-2400 21610, 17810. Asian Continent: 01-02 17835; 03-04 17835, 17765, 07-08 17765; 11-12 1840; 17-18 7140; 21-2130 7140; 23-24 15195, 11815; S.Asia: 01-02 17845; 17-18 9535; NA: 03-04 5960(via Sackville,Canada); 05-06 17825, 11870; 11-12 6120 (via Sackville,Canada); 14-16, 17-18, 19-1930 9505; Oceania: 05-06 & 07-08 17890; 19-1930 15270, 11850; 21-2130 17890, 15270; Eur, ME & Afr: 03-0330 9645(via Gabon); 07-08 21690(via Gabon), 15325; 15-16 21700(via Gabon); 21-2130 11835. (Direct)

KUWAIT - 15505, 0015, Radio Kuwait, Now signing off at 0015. A canned ID and a time check for 3:15 and gone. Nothing to indicate the reason for the change. (Hans Johnson, GA) 21675NF for Radio Kuwait an extensio of use at 18-21 after AR programming but on 10/16 nothing on 21675 so perhaps this was a test. (Joe Hanlon, PA)

LIBERIA - According to SIM NOW, Muslims have purchased a 250,000 watt transmitter to promote Islam. The article does not mention whether station will be SW or MW, and also according to SIM NOW, missionary radio broadcasts now totals 1000 hours daily, not including North America, using 160 languages. The four sponsors of BY 2000 Radio Project--HCJB, ELWA, TWR, and FEBC--carry programs in 115 major languages. By the year 2000 they hope to increase the total to 267.

Within ELWA's listing area 51 language groups have been identified with at least one million persons in them. As part of the cooperative effort ELWA will try to have 42 of the 51 languages used in their broadcasts by the end of this century. At the present ELWA is already broadcasting at least one-half hour daily in 10 of the 42 languages. Plans are being made to increase air time in 9 other languages in which now transmits in for less than 30 minutes per day. Research is also going on to determine the 14 languages of the remaining 23 that will have broadcasts over ELWA. SIM Radio Coordinator, Stan Bruning estimates "the first-year cost of each language at \$30,000. (Marlin Field, MI)

MALAYSIA - Effective 8/31/89 (32nd National Day), the radio channels are now known as follows: Radio 1 (formerly the National Network or White Network) in Bahasa Malaysia; Radio 2 (Formerly known as Radio Malaysia FM Stereo) in Bahasa Malaysia still in Stereo, Radio 3 for all broadcasts from state regional stations, these of which are situated in the capital city of each state; Radio 4 (formerly the Blue Network) in EG; Radio 5 (formerly the Green Network) in CH and Radio 6 (formerly the Red Network) in Tamil. Each of the channels now also have a slogan of their own, the jingle with the slogan of which is heard regularly throughout the respective transmissions and they are for Radio 1 "Sepanjang Waktu" (Around the Clock, Radio 2 "Penghibur Anda" (Your Entertainer), Radio 3 "Ibu Kota" (Capital City), Radio 4 "Your Entertainment Station" (Stesen Hiburan Anda), Radio 5 "Mesra Bersama Anda" (Happy Together) and Radio 6 "Pilihan Anda" (Your Selection).

The change was officially announced at several minutes past midnight of 8/31 by the Information Minister, Datuk Mohamed Rahmat who also went on to launch another historical event called "Radiothon 89" ie non-stop broadcasting for the radio for 4 consecutive days till 9/3. Radiothon 89 involved 3 levels of broadcasting being national (with participation too from members of the RTM Listeners and Viewers Group set up in selected areas-10 existed then while one more just came about last week as well as broadcasts from all the stations in the country, regional (ie within the SEAsia region with link ups from stations in the region) and international (link up from Los Angeles, London, Cologne, Tokyo, Seoul, Hilversum of course with the assistance of their overseas service in this case the Voice of America, BBC World Service, Deutsche Welle, Radio Japan, Radio Korea and Radio Nederland). This enabled a wide link up of broadcasts from across the world. One of the main objectives of the event was to bring the Malaysian people living abroad closer to the country, esp students and

diplomats. RTM had sent several of their staff to the abovementioned international stations to broadcast back to the country from the station concerned. (Lim Kong Jin in his "SE Asia DX News" No. 5 dated 9/89)

MALTA - R. Mediterranean has been fair to good on 9765 from *06-07 in EE then into AR service. On 10/14 Sugar & Spice pgm at 0639 tune-in W announcer talking about a woman who wrote a book "Discrimination in Life" and Protection of the Unborn Child t/0644 then W talking about "How to Stop Smoking" in 5 days on 10/14 (bmm)

MONGOLIA - Ulan Bator R. - On 4081.2v (jumping to 4082 at times) from 2227 with M&W in Mongolian; at 2232 orchestral fanfare, then long talk by M till 2245, when W took over. Dropped rapidly and was virtually gone by 2300, but had been fair at peak, in fact, as strong as I can ever remember this frequency from the East Coast. Signals on 3960 and 7260.4 with same fade pattern were probably UBR as well on 9/18 (Bob Hill, MA)

MOROCCO - RTV Marocaine - On new 7290 since 10/1 from around 1930 w/ME music, talk in what seems strongly accented AR (the Maghreb variant, no doubt) and news on the hour interspersed with several IDs for Rabat; cuts off at 2100 in mid-program. Fair-quality telephone audio; good to excellent signal after co-channel presumed TWR Monaco goes off at 2000. Probably has same 1700-2100 schedule WRTH lists for 15330, which can't be copied through co-channel QRM on 10/1 (Bob Hill, MA)

MYANMAR - The correct spelling is hereby noted with an extra 'R' at the end. This spelling is supported in that at the recent South East Asia Games held 8/20-8/31, the country's sports contingent had participated with items bearing their country's name spelled thus, so guess that is correct. (Lim Kong Jin, Penang, Malaysia)

NORTHERN MARIANAS - KHBI, Saipan, Final Freq Sked D-89 01 11/5-01 3/25: Transmitter #1: 0000-04 Off The Air; 04-08 17780 China; 08-10 9530 CS Japan/Korea; 10-12 9530 China; 12-14* 9465 Philippines; 14-16 9530 China; 16-18 9530 S.Asia/India; 18-22* 9455 Japan/Korea; 22-24* 15405 China. * = Out-of-band on non-interference basis. Transmitter #2: 0000-06 Off The Air; 06-08 17855 Philippines; 08-10 17855 Australia/New Zealand; 10-12 15115 Indonesia; 12-14 15285 DCI C&W Australia; 14-18 15385 India; 18-20 17770 New Zealand; 20-22 17770 Australia; 22-24 Indonesia; 0000-02 Philippines. * = Out-of-band on non interference basis. (George Jacobs & Associates Inc, MD)

PAKISTAN - 11570, 1807-1837, R. Pakistan (to Eur?), Fair level. Fluttery. M w/talk in a language I think was Urdu. Pakistan often mentioned. Another M spoke just before 1815, then a W at 1815. Then M took over w/commentary. Then a W gave what was obviously a political speech. Continued in same vein until 1830, swapping announcers often. At 1830 Pakistani music w/vocal. Breaking up badly by 1837 tune out. on 10/9 (Bob Palmer, WA) 17725, 0335-0345* and around 0410, R. Pakistan, Swahili as scheduled 03-0345. Pakistani music 10340. Anthem 0343 and 0345*. Pakistan mentioned. Am sure it's them. Over-the-pole reception excellent tonight. Later, around 0410 caught 17725 in Gujarati w/M speaking. Pakistan was atop a Moscow broadcast, not Radio Moscow itself, but one of their minor external services. Checked 21575 (from latest sked). It was in there all right, but barely audible on 10/10 (Bob Palmer, WA) 21580, 0433-0439, R. Pakistan, Urdu, Very weak. S-0 but 100% readable in unbelievably quiet band. Koran at tune-in. Then M w/announcements followed by W at 0436. Then a choral selection of Pakistani music. //s 15605 barely discernable under slop from 15600 and 17660 even worse under Moscow on 17665 which was running 35db over S9. Had to use narrow filter and LSB to detect that it was there! on 10/10. (Bob Palmer, WA)

PAPUA NEW GUINEA - Found EG News at 0900 on NBC 4890//3220 R. Morobe, 3325 R. North Solomon Islands, 3235 R. West New Britain, 3385 R. East New Britain, local news, "This is NBC National News." All freqs Poor-Fair on 10/5 (Ralph Famularo, Japan)

PERU - 5660.6, 0200, La Voz de Cutervo, 0200 W announcer chimed in every

couple of songs. Only local music heard including some tunes with drums and flutes. Canned "La Voz de Cutervo" ID's on top of songs at 0307 and 0325 on 9/25 (Hans Johnson, GA) 6724.3, 0155, Radio Satellite, Talk by M w/mention of Cajamarca. R-R-Radio Satellite ID quickly on the hour followed by some sound effects. The beginning of Steve Miller Band Jungle Love - something like that. M kept talking w/a mention of Santa Cruz. Announcements by W at 0206 but she came in at a different level than the M on 9/26. (Hans Johnson, GA) 6895.3, 0059, Radio Sensasion, Casual ID on the hour. Announcer in between every song with about a minute of talk. First 3 songs female vocalists. Ute present but station readable tonight on 9/27. (Hans Johnson, GA)

PHILIPPINES - On 11 April 1989, Radio Veritas celebrated twenty years of broadcasting. Those taking part in the celebration included, among others, Philippine President Corazon Aquino, and Manila Archbishop Jaime Cardinal Sin. Conceived mainly through the help of German Catholics and German agencies, the implementation of the project was the responsibility of the late Rufino J. Cardinal Santos.

Today Radio Veritas broadcasts in 15 Asian languages. English may be heard from 0130 to 0220 on (Freqs since been updated as below) and at 15-1530 on 9525 (updated freq) & 15445.

Evelyn S. Agato, writing in English Focus, the quarterly magazine of the English Service, gave the following information about Radio Veritas: The Quezon City studios are used for the production of programs. Programs of the different languages are recorded, dubbed, mixed and edited in these studios. Two studios with newly installed equipment from Europe, broadcast the programs to the target areas through a link to the Malolos and Palauig Transmitters in Zambales... Palauig, a small coastal yet mountainous town in Zambales now carried on its back the 300 hectares of Radio Veritas Shortwave transmitters. In 1986, the 250 kW transmitter donated by Cardinal Hoeffner of Cologne, West Germany started servicing the silent churches in China, Burma, Korea, and Vietnam.

The installation of the new recording studios in Quezon City this year was completed just in time for the additional 250 kW transmitters also in Palauig to service the Indian and SE Asia audiences.

Different antennas are utilized to broadcast programs to different parts of Asia. A project made possible by its consultant Fr. Hugo Delbaere, the Palauig transmitter will continue to expand to serve Asian audiences to the fullest. (Marlin Field, MI)

Radio Veritas Asia: Change in frequency for the Radio Veritas Bengali, EG, Telugu broadcast at 01-0230 once again: 17795 takes over the use of 15220 w/15360 still in //. The new frequency may not be permanent for its still 'shakey' and tends to go off the air often but 15360 is as strong as ever. Good Reception. (Lim Kong Jin, ibid) 11850, 0900, FEBC, EG, M w/ID announcing 'Studio 10' regular magazine program. Host: Patrick Murphy on 10/14 (bmm)

PORTUGAL - 9600, 0012, R. Renesenca, PT, IS u/RMoscow on 10/15 (bmm)

SIERRA LEONE - 3316, 2300, SLBC, EG News read by M. ID at 2305. "This news is coming to you from the Sierra Leone Broadcasting Corporation". Foot ball scores also given. Some gospel music after the news and sign off at 2316 on 9/30 (Hans Johnson, GA)

SRI LANKA - 17800, 0320-0350*, Deutsche Welle to Afghanistan, Pashto, Fair level but fluttery. Clear channel. Quiet band. 100% copy. M w/commentary on world events. Different M w/more commentary at 0328. Afghan music 0334. More talk at 0337 by M. Music 0345. ID and freqs by M at 0348. Checked //21650 & it was quieter and less fluttery. Just before s/off 0350, M gave ID in EG and mentioned Trincomalle as being the transmitter site and Afghanistan the target on 10/10. (Bob Palmer, WA)

SUDAN - Radio Omdurman observed on 11625 kHz - Monitoring research 5-10 Oct 89. Radio Omdurman has been observed since 5th October with a relay of its general programme on 11625 kHz from 0355-06 and 1055-19 gmt approximately. Programmes are mainly in Arabic except at 1530-16 gmt when a daily English broadcast, consisting of news, a press review and music is carried. (WBI 10/13) Note: EG only heard now on 9540 1530-16 as monitored on 10/18 onwards. (bmm)

SWITZERLAND - Red Cross Broadcasting Service, Geneva Sked; Dates are:
~~Sun: 11/26, 12/31, 1/28, 2/25; Mon: 11/27, 1/1, 29, 2/26; Mon, Thu:
11/2, 27, 30; 1/4, 29; 2/1, 26; 3/1; Tue, Fri: 11/3, 28, 12/1, 1/2, 5, 30,
2/2, 27, 3/2; 0110-0127 Tue, Fri SS Am, 17730-B, 12035, 9885, 9725,
6135, 6095; 0310-0327 Tue, Fri EE Am 12035, 9885, 9725, 6135; 0740-
0757 EG Mon, Thu EG Australia 21695, 17670, 13685, 5960; 1040-1057
Mon, Thu Asia 21770, 17830, 15570, 13635, 9620-C; 11-1240 Sun
EG, FR, GM, SP Eur 7210; 1310-1327 EG Mon, Thu, Asia 21695, 17830, 15570,
13635, 11695-C; 1510-1527 AA Mon, Thu, ME/Af 21630, 17830, 15430,
13685; 17-1840 Mon EG, FR, GM, SP, Eur 7210; 1710-1727 FR, EG Mon, Thu,
AF 117830, 15525, 15430, 11955, 9885; 1840-1857 FR, EG, Mon, Thu, AF
21705, 15525, 15420, 13635; 2210-2227 PT, Mon, Thu, AM 15570, 12035-G,
9885, 9810. C = China; G = Gabon; B = Brazil. (WBI 10/6)~~

TAIWAN - 10/10 (Double 10) was the 40th Anniversary of the Republic of
China. At 1635 on 10/10, I found these CBS stations all in parallel.
11905, 7105, 6180, 6087, and I found these frequencies jammed: 9690,
7250, 6040. 7105 was the best frequency to listen to. (bmm) 7445,
1538, V. of Asia, Indo, "The Human Race" on 10/6. Song written by
American after the Beijing Massacre. It is on the BMI Label if you're
interested in getting that song. (bmm)

TUNISIA - 15450.1, 0255, Radio Tunisia, Announcing freqs followed by
PSA's and gave the following schedule for SW: 03-2230 15450; 05-17
17610; 03-05 & 17-2230 12050(sic) (PWBR 90 shows 12005(bmm) & 03-05 &
18-2230 7475; 05-18 11550. They're not following this too closely as
I have heard both 7475 and 15450 on at 0000. (Hans Johnson, GA)

UNITED KINGDOM - At the end of the BBC World Service Program 'Multitrack
1' on 10/10 at 1215, Paul Barnett announced that Tim Smith will be the
new host of the program as of next week. Mr. Barnett will be back
next week to host "The Vintage Chart Show". (Eric Bopp, CA)

UNITED STATES - VOA takes care of Catch-22: Norman, OK transcript
10/2/89: Washington (AP) - The Voice of America says it's taken care
of a Catch-22 situation in which its broadcasts to Angola were
disturbed by a radio station run by U.S.-backed rebels.

But Rep. Mervyn Dymally, D-Calif., says he wants to know exactly
what happened this summer when "The Voice of Resistance of the Black
Cockerel," a station experts say was set up by the CIA, interrupted
Portuguese-language broadcasts by the VOA, the U.S.-government-
supported station that serves overseas listeners.

Dymally, chairman of the House subcommittee on international
operations, said last week he'll raise the issue in panel hearings
this year. "I wrote a letter of protest about it," he said. "The need
is great for the VOA to have at this time unhindered and unhampered
access to its consumers in Southern Africa," Dymally said. (John
Carson, OK)

The following schedules courtesy of George Jacobs & Associates
Inc, Silver Spring, MD.

KUSW, Salt Lake City, UT - Final Operating Sked D-89 11/5-01 3/25:
(All broadcasts directed to Canada) 6135 07-11; 6175 05-07; 9815* 03-
05; 9850* 11-15; 11695* CS 01-03; 15580* CS 22-01; 15650* 15-22. * =
Out-of-band operation on non-interference basis; CS = Crash Start.

KVOH, Simi Valley, CA - Final Operating Sked D-89 01 11/5-01 3/25:
11960 04-08 Caribbean; 13695* 02-04 Caribbean; 17775 12-02 Caribbean.
* = Out-of-band operation on non-interference basis.

WCSN, Scotts Corner, ME - Final Operating Sked D-89 01 11/5-01
3/25: 14-16 21780* Eur; 16-18 21640 EAF; 18-20 21640 SAFr; 20-22 13770
Eur; 20-22 9465** Eur; 22-24 15300 WAF; 0000-02 9850* WAF; 02-04 9850*
EAF; 04-06 9870* SAF; 06-08 9840* Eur; 06-08 7365** Eur; 08-10 9840*
Eur; 10-14 Off-Air. * = Out-of-band operation on non-interference
basis; ** = Out-of-band occasional use.

WHRI, Noblesville, IN - Final Operating Sked D-89 01 11/5-01 3/25:
6100 06-08; 7355* 08-11 & 0000-06; 7520* 11-13; 9465* 13-15; 9495*
0000-08; 11790 11-14; 13760** 16-17; 13760* DCI 17-24; 15105 14-16;
15105*** 16-17; 15105 17-18; 17830 18-0000; 21840* 15-17. * = Out-of-
band operation on non-interference basis; ** = Monday thru Saturday;
*** Sunday Only; DCI = Drop Carrier Immediately.

WRNO, New Orleans, LA - Operating Sked D-89 01 11/5-01 3/25: 16-24

15420 NA & Eur; 0000-04 7355 NA; 04-06 6185 N&Cam; 06-12* 6185 N&Cam; 12-14* 9715 N&Cam; 14-16* 11965 N&Cam; 23-24** 7355 N&Cam; 21-24** 13720 N&Cam & Eur. * = Sunday Only; ** = Occasional use.

WSHB, Cypress Creek, SC - Final Operating Sked D-89 01 11/5-01 3/25: Transmitter # 1: 0000-02 7400 ENA & Caribbean; 02-04 9455 CNAM & Cam; 04-06 9455 W&CNA; 06-08 9455 WNA; 08-10 113760* Australia & Oceania; 08-10 11770** Australia & Oceania; 10-12 6150 ENA; 12-14 6150 ENA; 14-16 13760 W & CNA; 16-20 Off The Air; 20-22 15610 ENA & Eur; 20-22 13770** ENA & Eur; 22-24 9455 ENA & Caribbean. * = Out-of-band operation on non-interference basis; ** = Occasional use. Transmitter # 2: 0000-04 13760* SAM; 04-06 13760* Mexico; 06-08 11980* W.Mexico; 08-10 9455* Brazil; 10-12 9455* E.SAM; 12-14 11930 CAM; 14-16 17555* Mexico; 16-20 Off Air; 20-22 17555* E.SAM; 22-24 17555* Brazil. * = Out-of-band operation on non-interference basis. 17855NF, 2056, VOA, Site Unknown, CH, W talk and //17765 after 21 (when I checked this freq.) At 2200 17765 QRM'd by CPBS-1 signing on but 17855 in the clear, till 2300 when Radio Beijing signs on in Spanish on 10/13 (bmm)

U.S.S.R. - Additional Broadcasts on Latvian and Belorussian external services: Monitoring research 24 Sep-5 Oct 189: Since the introduction of autumn schedules on 24th September, Radio Minsk has been observed with a new broadcast in Belorussian for listeners in North America from 2330-24 gmt daily on 17690, 15180, 11675 and 9610.

Also since 24th September, Latvian Radio has introduced a new transmission in Latvian for listeners in Western Europe from 1730-18 gmt on 1143 kHz. The broadcast on 5th October was a repeat of the 2030 and 2130 gmt programmes of 4th October.

The 1143 kHz transmitter, which carries Radio Moscow programmes at other times, is listed as being located at Kaliningrad with a power of 500 kW.

Radio Baku, Baku, Azerbaijan SSR External Sked: Freqs Used: 6135, 6110: During summer time in the USSR all programmes will be heard one hour earlier than shown. 0330-0415 Persian ME; 11-1145 Persian; 12-13 Turkish; 13-15 Azeri; 15-16 Turkish; 16-17 AA. (WBI 10/13)

Radio Dushanbe External Sked: Freq: 4975. 02-03 Dari Asia; 1230-13 & 14-15 Dari Asia; 1530-16 & 1730-18 Persian ME; 18-1830 Dari Asia. (WBI 10/13)

Kazakh Radio, Alma-Ata External Sked: Freqs Used: 7255, 5915, 5035. All Bdcsts in Kazakh Language. 0000-0030, 01-0130, 1330-14, 14-1430, 15-1530, 16-1630. (WBI 10/13)

Latvian Radio, Riga, Latvian SSR Sked: Freq: 5935 to Eur. The service in Latvian goes under the title "Amber Coast" radio (Latvian: Dzintarkrasts). During summer time in the Latvian SSR, programmes will be heard one hour earlier than shown. 08-0830 Sunday Swedish Eur; 0930-1030 Sun Latvian Eur; 13-14 except Tue & Fri RR (Radiostantsiya Atlantika Eur; 2020-2050 Tue, Thu, Sat; 2030-21 Wed Latvian; *2050-2130* Tue, Thu, Sat overall in Latvian w/music 2050-21, News (relay of Latvian Radio First Pgm) 21-2110, Entertainment (Relay of Latvian Radio First Pgm 2110-2130; *21-22* Sunday Latvian w/News (relay of Latvian Radio First Pgm) and Repeat of 0930 broadcast 2105-22; 2130-22 Wed Latvian (Repeat of 2030 broadcast); 2130-22 Tue, Thu, Sat Swedish (Repeat of 2020 broadcast) (WBI 10/13)

Radio Moscow's African Service at 2000 in EG noted on 17770 and 17595. (Joe Hanlon, PA)

(Tentative) Yakutskoye R. - On 4920, evidently this from 2145 in seeming discussion or dramatic reading (too weak and choppy to ascertain language); at 2159 RS Rodina IS on 10/1. Seems late to be Yakutsk, which is well past sunrise by 2200 this time of year. (Hill) 12000, 0600, R. Moscow, Armavir(?), EE, ID, World News, "Outlook"; Ridgewood, New Jersey High School Students in Moscow//9635(Fair). Good on 10/5 (Ralph Famularo, Japan) 17655, 0525, R. Afghanistan Relay, Pushto or Dari?, Islamic-style recitations, 0530 time pips; 5-minute M talk, possible news, brief music interlude, more recitations. Moderate-severe QSB. Poor-Fair on 10/12 (Ralph Famularo, Japan)

VIETNAM - 12019NF, 1618, V. of Vietnam, EG, Viet Vocal, W announcer, Strong Het //9840. Ex 15010 & QRM from RFI on 12015NF 10/22. (bmm)

CLANDESTINES - Radio Democracy: No broadcast between Sep 10th and 21st. Came up again on Sep 22nd. It is presumed that RD had serious damage by Typhoon #19 across Taiwan, that was strongest this year. RD has not been observed from 09-10 since Aug 31 and often heard also around 15 to 16. So the recent sked should be anywhere from 1000 to 1600

except Tues and Weds as a rule. Monitored as follows: 9/8: 10, 1140, 1250, 14, 1515. 9/9: 10, 11, 1235, 1330, 15. 9/22: 1020, 1125, 1250, 14, 1515. 9/23: 1335, 1440, 1545 (I missed monitored at 09-13). 9/24: 10, 11, 1235, 1330, 15. 9/25: No broadcast in spite of Mon. 9/28: (I missed at 11-13 and 14-15). 9/29: 1125, 1235, 1330, 15. 9/30: 1020, 1125, 1250, 14, 1515. 10/1: 1045, 1140, 1335, 1440, 1545. 10/2: 10, 11, 1235, 15. 10/3: 1020, 1250, 14, 1515 (This day is Tue!). 10/5: 1125, 1250, 14, 1515. 10/6: 10, 11, 1235, 1330, 15. 10/7: 1045, 1140, 1335, 1440, 1545. 10/8: 1045, 1125, 1250, 14, 1515. 10/9: No broadcast in spite of Mon. 10/12: 1140, 1335, 1440, 1545. The word indistinct in the opening announcement has become clear, this word is 'stream'. The 1st line becomes "The democracy is just the stream which should not be opposed in this world." This station's frequency is recently 7126.1 kHz. (Tetsuya Kondo, Yokohama, Japan)

Voice of Democratic Kampuchea - Since Oct LN's was typed, I have been hearing the freq of 9440//17533 at *2330 w/17533 heard best and 9440 poor. (bmm)

Voice of the Libyan People - I finally heard the station Radio of the National Front for the Salvation of Libya, The Voice of the Libyan People on 10/1 at 0457 on 15700, thanks to your tip. A few impressions. The station had a few minutes of AA music as an interval signal. This was followed by an ID and fanfare. This baby was jammed from the start with what a I call a "video racecar" jammer. A schedule was announced and the parts I heard through the jamming concurred with what was in LN. This was followed by a short Koranic recitation (incidentally this is something you will hear rarely, if ever, on Libyan radio. A speech followed with an appeal for an intifada! and references to students at the university of Benghazi and the armed forces. Rather than blasting Qaddafi, the speeches I heard emphasized the "strength of the Libyan People." Traditional Muslim closes down at the end of the speeches-As-salamu alay-kum, Peace be upon You. I wish I could give you more details, but the racecar kept shifting gears. I'll continue to listen and will eventually provide you with a more accurate impression. I'm rather surprised that their on their own QSL card they call themselves "The National Front". If I had heard this on my own, I would have translated it as Popular Front without any of the second thoughts that happen so often in translation. Oh well, it's their organization. The jammer is obviously Libyan, and the best bet is this is coming from Egypt. Perhaps WBI will provide more information on location in the next few months. (Hans Johnson, GA) Note: Nothing in WBI as of 10/13 and I thank you for the follow up. Very interesting! (bmm).

Voice of Malayan Democracy - This pro-China radio station is hostile to the Malaysian Government and to Soviet/Vietnamese influence in South East Asia. The Voice of Malayan Democracy (Malay: Suara Demokrasi Malaya - Standard Chinese: Ma-lai-ya min-zhu-zhi-sheng) was inaugurated on 1st July 1981. It replaced Voice of the Malayan Revolution which ceased broadcasting on 30th June 1981. Sked: 04-0445 Malay, 0445-0515 Chinese-Std, 1215-13 Malay, 13-1330 Chinese-Std on 6700, 6007. (WBI 9/29)

Vietnamese Resistance Radio - National Unified Front for the Liberation of Vietnam. This radio station was first observed on 22nd February 1984. It announces that it broadcasts from Base Camp No. 15 of the National Unified Front for the Liberation of Vietnam. Its establishment was welcomed by a Vietnamese newspaper published in Paris on 1st February 1984. Sked: All broadcasts daily and in Vietnamese. 02-03, 06-07, 10-11, 14-15, 22-23 on 7300. (WBI 9/29)

7125.8, Radio Democracy - tuned at 1025 just as M was giving "Minzhu guangbo diantai" ID, then I had to leave. This on 10/3; not there next day. Perhaps emanating from USSR? More information about this station in DX Spread #82. (Bob Hill, MA) & Tetsuya Kondo's observations above. (bmm)

UNIDENTIFIED - On 4771.5v (constantly drifting between 4771 and 4772), an Asian station from 2227 with Oriental-style vocals and talk by W in seemingly non-tonal language; very weak and faded below readability by 2245. Constantly drifting between 4771.1 and 4772.2. This on 9/30; only a faint drifting BFO note audible since. Transmitter behavior and musical style suggest Vietnam, but 2245 fadeout would be unusually early for that area. Perhaps Pyongyang? or an Indonesian? Sure sounded exotic! (Bob Hill, MA). 73's, Bruce

QSL Column

Send your Reports to: **Sam Barto**
47 Prospect Place
Bristol, CT 06010 USA



ABU DHABI: Voice of the United Arab Emirates 13605 n/d folder type ltr. in 35 ds. for \$1.00. My first rpt. was sent to P.O. Box 17 and I rcvd. a thank you reply. Second rpt. was sent to P.O. Box 63 for the QSL. (Hoffman-PA). f/d folder ltr. w/ schedule and stickers for 3 IRCs. v/s Ahmed A. Shouly. (Carson-OK).

ALGERIA: RTVA 15215 f/d cd. in 8 mo. after 3 f/up rpts. w/ SASE which was returned. (Gaharan-LA).

ANTARCTICA: LRA36 Radio Nacional 15476 f/d cd. w/ ltr. signed by all station personnel in 8 mo. for 2 IRCs. **ANTIGUA: Deutsche Welle** 15205, 9735 and 19470 (2X) (Renfrew). n/d cd. in 2 mo. w/ schedule. (Barto-CT).

ARMENIAN SSR: Radio Moscow 17570 via **Yerevan** f/d cd. in 2 mo. (Renfrew-NY). **ASIATIC RUSSIA: Radio Moscow** 9875 via **Irkutsk** f/d "Moscow State University" cd. in 2 1/2 mo. (Barto-CT). 17570 via **Komsomolsk-on-Amur** f/d cd. in 72 ds. (Hosmer-MI).

AUSTRALIA: VNG 15000 f/d "Antenna" folder cd. in 17 ds. Addr: VNG, P.O. Box 1090, Canberra, A.C.T., Australia 2601. (Blight-MD).

AUSTRIA: Radio Austria International 21490 f/d "Salzburg Costumes" cd. w/ reception reports in 40 ds. for \$1.00. (Weber-OH).

BELGIUM: BRT 9925 f/d cd. in 32 ds. (Levison-PA). f/d "Free Mason's Temple" cd. w/ schedule in 32 ds.

BONAIRE: Trans World Radio 9535 f/d (Levison). "Map" cd. in 45 ds. v/s Sally Rork. (Reeves-OR).

Radio Nederlands 9590 f/d "Amsterdam" cd. in 1 mo. (Reeves). 6020 f/d "National Monument" cd. in 2 wks. (Levison-PA).

BRAZIL: Radio Suriname International f/d "Map" cd. in 6 mo. for a taped rpt. and \$1.00. (Huniwell-NJ). **Radio Bandeirantes** 11925 p/d ltr. in 37 ds. w/ sticker and stamps for a PT rpt. and \$1.00. This was for a f/up rpt. v/s Salomão Esper, Superintendente. (D'Angelo).

Radio Cultura ZY9961 17815 p/d short personal ltr. in 50 ds. for a PT rpt. and \$1.00. Stickers rcvd. v/s Eng. Jose Munhoz, Coordenador de Engenharia. (D'Angelo-PA). same in 51 ds. for a PT rpt. and \$1.00. Also rcvd. three color photos of the transmitter site. (Hoffman-PA).

Radio Cultura de Campos PRF7 and **ZYG682** f/d ltr. for 85 and 76 receptions. Postcards were rcvd. v/s Salvador Macedo, Gerente. (Barto-CT). **Radio Alvorada de Londrina ZYG641** 3335 f/d "City" cd. in 7 wks. w/ f/d personal ltr. and postcards for a PT rpt. v/s Pe. Jose Guidoreni, Director. (Barto-CT).

Radio Guarani 6050 n/d ltr. in EG in 40 ds. after a f/up rpt. for SASE (not used). Photo of v/s rcvd. v/s Jose Roberto Palhares, Radio Broadcast Supervisor. He collects stamps. Addr: Av. Assis Chateaubriand 499, Floresta, Belo Horizonte, Minas Gerais 30150. (Moore). **Radio Clube Paranaense** 6040 f/d prepared cd. w/ p/d QSL cd. and 2 stickers in 36 ds. for SASE (not used). This after a f/up rpt. This was my 32nd ZY QSL which arrived on my 32nd birthday! v/s Ubiratan Lustosa, Director.

Radio Alvorada de Parintins 4965 f/d prepared cd. w/ promo folder in 37 ds. for SASE and a PT rpt. v/s Raimunda Ribeiro da Silva, Diretora - Gerente. (Moore).

QSL

Certificado de Sintonia

Estação **RADIO NACIONAL DE FORTO VELHO-RONDÔNIA.**
Para **MR. JOHN SCRULIETTA - MAHOPAC, NY - U.S.A.**

Agradecemos o seu relato de recepção. Confirmamos a exatidão dos seus detalhes de nossa emissão no dia **21 NOVEMBRO 1968** entre as **02:10 e 02:31** horas UTC.
na frequência de **4.945** kHz. com **10 KW** watts.

Seu Informe continua com a nossa programação.

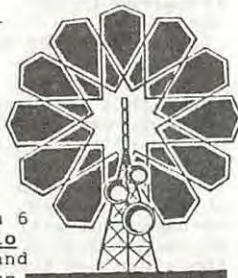
Somos gratos por vossa ajuda e audiência.

Eudson Monteiro Lima.

Mao - 16.03.89

firma e selo

الجمهورية العربية السورية
SYRIAN ARAB REPUBLIC
via John Carson



المديرية العامة لهيئة الإذاعة والتلفزيون
SYRIAN RADIO & TELEVISION

NOTES: George Zeller in Cleveland, OH says the last time he was a member of this fine organization it was called NASA. That was back in the early 60s. Glad to have you back with us...Sam. **Roland Schulze** from West Germany sent along a very nice letter explaining the AWR situation on 17890...which is actually from Gabon and not the Ivory Coast. Thanks for the info Roland....Sam. **Robbie Reeves**, a new member from Troutdale, OR (sounds like a nice place!) says he wants to start contributing to the QSL Column and other sections of the bulletin. Thats fine with me...Sam. **Kirk Allen** in OK was especially pleased with his recent QSLs from Greenland and Somalia. The total cost of the Greenland QSL was about \$18.00 if you consider the letters, IRCs, phone calls to the station, etc... Kirk's C/V total is now 194 and counting...Sam.



Certificación de recepción del
BRASIL, 9. de 1984

ESTACION HORIZA

Horario de Transmision	Frecuencia
00:00 h. — 12:00 h.	3.81 MHz
12:00 h. — 13:00 h.	5.00 MHz
13:00 h. — 14:00 h.	7.02 MHz

En 381 a 780 kHz se emite un tiempo cada minuto, con interrupción de la Estación HORIZA en el momento comprendido entre 50 y 1:15 h. m. 50 s.

En 3 MHz se emite la banda de tiempo cada minuto, para el procedimiento mencionado en el Servicio de Frecuencia Fija, con la siguiente programación:

12:00 h. — 12:15 h.	Tonales 600 Hz
13:15 h. — 13:30 h.	Tonales 400 Hz
13:30 h. — 13:45 h.	Frecuencia 5.4 MHz por modulación

www Julio, 1984

PARA MAQUIL (CHUBAS)

EDUARDO R. RUBIN

Post Caracas, Nov York

USA



BRASIL: Radio Clube Rondonopolis 2480 f/d prepared cd. * w/ a long PT ltr. in 49 ds. for SASE. This was for a f/up rpt. on a 79 reception. Tourist magazine was also rcvd. v/s Canario Silva and Aderaldo Francisco, Departamento Publicitario. Station now on 4955 khz. * (Moore). **Radio Gazeta de Alagoas** 3325 f/d prepared cd., PT ltr. and station stickers in 8 mo. for a PT rpt. and SASE. This was for a f/up rpt. on an 80 reception. v/s Flavio Jatoba. He collects Coca-Cola paraphernalia and flora/fauna postage stamps. Addr: Rua Aristeu de Andrade 355, Farol CEP 57000, Maceio, Alagoas. (Moore)...Don says that current postage from Brazil to the US seems to be 2300 Cruzados or 2.3 Novo Cruzados...Great report Don...Sam.

BYELORUSSIAN SSR: Radio Moscow 7105 via Orsha f/d cd. in 3 mo. (Barto-CT). f/d "Moscow State University" cd. in 2 mo. (Barto). 15320 and 15350 via Minsk f/d cds. in 3 mo. (Barto). 15540 f/d cd. in 47 ds. (Gaharan-LA).

CANADA: Radio Canada International 17875 DIY "Canada Film Year" cd. in 10 ds. for 1 IRC (returned). (Carson-OK). 9755 f/d "1988 Human Rights" cd. in 1 mo. (Reeves-OR). **Radio Austria International** 6015 via RCI f/d "Costume" cd. in 2 mo. for a taped rpt. and \$1.00. (Huniwell-NJ). **CKZU** 6160 f/d "CBC Centre" cd. in 15 ds. (Reeves-OR).

CHILE: Radio Santa Maria 6030 f/d "Map" cd. in 3 wks. after a f/up rpt. in SP for \$1.00. v/s Pedro Andrade Vera. Also rcvd. nice station pennant, sticker and a promo for their DX Mailbag program. (Allen-OK).

CHINA, PEOPLES REP. OF: Radio Beijing 9440f/d "Cloth Ornament" cd. w/ lapel pin in 1 mo. v/s Fan Fuguang. (Eckert-PA). 15130 same cd. in 19 ds. w/ paper cuts. (Levison-PA). same in 27 ds. w/ station pin and schedule. (Reeves-OR). **Beijing Municipal Radio Station** 6290 f/d cd. in 3 mo. for a CH rpt. (Barto-CT).

CLANDESTINE: Voice of Democratic Kampuchea 9440 f/d ltr. in 2 mo. v/s Song Theng, Third Secretary to the UN. (Barto-CT).

REPUBLICA DEMOCRÁTICA DE S. TOMÉ E PRÍNCIPE

MINISTÉRIO DE INFORMAÇÃO

RADIO NACIONAL DE S. TOMÉ E PRÍNCIPE

Cane Postal n.º 41 - 1. IOM

Agradecemos e confirmamos a relação de estufa referente à emissão transmitida pela nossa estação, no dia, horas e frequência abaixo mencionadas:

Nous vous remercions et confirmons le condition de reception concernoat à l'emission transmise par notre Station de Radio, dans le jour, heures et frequene aux deaus:

We thank and confirm the reception condition, concerning the emission of our station in day, hours and frequency down.

Dia 9 Rev. 1984 hora de 22.50 a 23.02 hora IMG
 Le jour 9 Rev. 1984 hora de 22.50 a 23.02 hora GMT
 In the day 9 Rev. 1984 hora de 22.50 a 23.02 hora GMT

frequência de 4307 KHz, banda de 60 metros
 Dans la fréquence de 4307 KHz, bande de 60 metres
 In the frequency of 4307 KHz, band of 60 metres

Responsável,
Antonia Sebastião

CLANDESTINE: Voice of the

* **Arab Fatherland** 11700 finally rcvd. a p/d Radio Jamahiriya QSL cd. in 2 mo. after several f/up rpts. for a 77 reception...Not too sure if this was a clandestine type outlet or one of their programs at the time.(Barto).

COLOMBIA: Radio Macarena 5975 f/d cd. w/ ltr. and sticker in 3 mo. for a SP rpt. and \$1.00. v/s Enrique Zambrano Nieto, Gerente.(Wakisaka).

* **La Voz del Rio Arauca** 4895 p/d ltr. in 29 ds. for a SP rpt. and ms. v/s Gabriel Cucuma Niño, Periodista. Addr: Apartado Aereo 16555, Bogota.(D'Angelo).

RADIO SAN GABRIEL: LA VOZ DEL PUEBLO AYMARA

EMISORA DEL ARZOBISPADO DE LA PAZ - DIRIGIDA POR LOS HERMANOS DE LA BALLE

G. Lanza 2001
Cavilla 4792Telf. 321174 - 335321
La Paz - Bolivia**CERTIFICADO**

El presente certificado de Recepción se confiere al Sr. Ron Howard de Santa Barbara/California, Estados Unidos de América y confirma su recepción los correctos el 21 y 22 de Marzo de 1989 a hrs. 04:25 a 05:12 am. y de 04:25 a 05:00 am. respectivamente; nuestro transmisor de onda corta (6080KHz) transmitía el programa Rosario de la Mañana en lengua aymara.

La Paz 4 de Abril de 1989

COSTA RICA: TIPC 6175 f/d cd. w/ sticker and station pennant in 29 ds. for \$1.00. v/s Juan Jacinto Ochoa F., Manager.(Wakisaka-MD).

CUBA: Radio Rebelde 5025 f/d ltr. in 88 ds. for a SP rpt. Also rcvd. pennant, postcards, stickers and newspaper. v/s Ana M. Castro, Relaciones Publicas.(Hoffman-PA). **Radio Moscow** 11840 via **Habana** f/d "Moscow State University" cd. in 2 mo.(Barto-CT). 11850 f/d cd. in 72 ds.(Hosmer-MI).

CZECHOSLOVAKIA: Radio Praha 7345 f/d "Kozel Chateau" cd. for 2 IRCs.(Car-

DENMARK: Radio Denmark 15165 f/d "Watercolor/Flowers" cd. in 19 son-OK). ds. for \$1.00. v/s Beule Bang, Station Staff.(Kacir-MI).

DOMINICAN REPUBLIC: Radio Amanecer 6025 n/d ltr. w/ postcard in 2 mo. for a SP rpt. and \$1.00. This after a f/up rpt. v/s Ing. Socrates Dominguez.(Wakisaka).

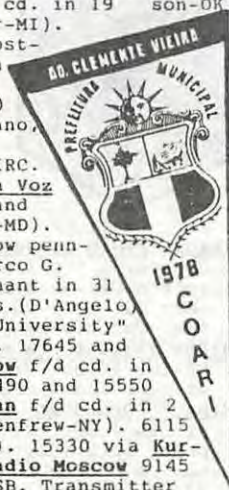
* **Radio Mil** 4930 form ltr. w/ incorrect date after 10 f/up rpts. for a 1980 reception. v/s Pedro Justiniano, Vice Pte. Director General.(Moore).

ECUADOR: HCJB 11775 f/d "Stamps" cd. in 24 ds. for 1 IRC.

* v/s Glens Volksbrandt.(Carson-OK). **Radiodifusora La Voz de los Caras** 4795 n/d ltr. in 2 mo. for a SP rpt. and \$1.00. v/s Ing. Marcelo Nevarez Faggioni.(Wakisaka-MD). **Radio Rio Amazonas** 4870 n/d ltr. w/ green and yellow pennant in 5 mo. for a SP rpt. and \$1.00. v/s Prof. Marco G. Diaz, Gerente.(Wakisaka). p/d personal ltr. w/ pennant in 31 ds. for a SP rpt. and ms. This after several f/up's.(D'Angelo).

EUROPEAN RUSSIA: Radio Moscow 12055 via **Armavir** f/d "University" cd. in 2 mo.(Barto). 15470 f/d cd. in 3 mo.(Barto). 17645 and 21450 f/d cd. in 2 mo.(Renfrew-NY). 15465 via **Moscow** f/d cd. in 3½ mo.(Barto). 17660 f/d cd. in 2 mo.(Renfrew). 15490 and 15550 via **Tula** f/d cd. in 8 wks.(Renfrew). 15540 via **Ryazan** f/d cd. in 2 mo.(Renfrew). 15220 via **Moscow** f/d cd. in 2½ mo.(Renfrew-NY). 6115 via **Kenga** f/d "Lenin Mausoleum" cd. in 3 mo.(Barto). 15330 via **Kursk** f/d cd. in 74 ds. w/ schedule.(Lane-IL). **RCV26 Radio Moscow** 9145 f/d "Lenin" cd. in 3 mo. for EG transmission in USB. Transmitter

* is believed to be located at **Kupanova** (Barto-CT). **ROW27 Radio Moscow** 13960 f/d "Bolshoi Theatre" cd. in 2 mo. for RS transmission in USB. (Barto). **RRG29 Radio Moscow** 18460 same f/d cd. in 3 mo. for RS transmission in USB. (Barto). **RKA72 Radio Moscow** 10740 same f/d cd. in 3 mo. for RS transmission in USB. (Barto-CT). **RWW76 Radio Moscow** 19830 f/d "Moscow State University" cd. in 2½ mo. for RS transmission in USB. (Barto-CT).



Q.S.L.

Washburn
Dear Mr. Washburn

This is to acknowledge your reception report of *11/14/89*I'm glad to confirm that the programs you heard on *3-21-89**February 7* came from our Broadcasting Station in Bolina.

TRANSMISSION PERIODS G.M.T. (Local Time - G.M.T. + hrs.)

150KHZ Medium Wave 50 K.W. 0500
and 1100 hrs to 900 hrs.
225 KHZ Short Wave 1 K.W.

Address of Listener

Mr. Charles Washburn
P.O. Box 266
Wilkes-Barre
PA 18704-0266
USA

Alverson
Chief Broadcasting Officer
Bolina City/Bolina, GA.

FRANCE: Radio France International 9790 f/d "Place des Vosges" cd. in 30 ds. w/ schedule for 2 IRCs. (Carson-OK).

Jordan Radio and
Television Corporation



الإذاعة والتلفزيون
مؤسسة

Ref. _____
Date - 9-6-1989

Dear Mr. Kris Field:

We are pleased to receive your Reception Report. We look forward for your continued cooperation with Radio Jordan.

Your Reception Reports are of help to us, indeed. We do verify them especially if they do include the "SINPO" code evaluation.

Sorry for being late in answering your letters. However we do welcome you as a sincere listener of Radio Jordan.



Best Regards from
Radio Jordan

w/ pennants in 6 mo. for a SP rpt. and \$1.00. v/s Gilberto Sun Xicol, Gerente. (Wakisaka-MD).

HOLLAND: Radio Nederlands 6165 f/d cd. in 52 ds. for 1 IRC. (Carson). 9895 via **Flevo** f/d "25 years of European Space Agency" cd. in 44 ds. This is a new series of 5 cds. (Hoffman-PA).

HONDURAS: Radio Luz y Vida 3250 f/d cd. in 3 mo. for a SP rpt. and \$1.00. (Wakisaka). 3249.6 f/d cd. in 209 ds. for a SP rpt. (Field-PA).

HUNGARY: Radio Budapest 9520 f/d cd. in 87 ds. (Kacir-MI). 9585 f/d "Architecture" cd. in 3 mo. (Kacir-MI).

ICELAND: Icelandic National Broadcasting Service 17558 f/d cd. in 50 ds. for \$1.00. (Weber-OH).

INDIA: All India Radio 11715 via **Bombay**, 7215 and 11745 via **Delhi** and 9910 via **Aligarh** f/d cds. in 4 mo. (Barto). 11620 f/d "Moenakshi Temple, Madurai" cd. w/ schedule in 49 ds. (Blight-MD).

JAPAN: Radio Japan 11815 n/d "Tanabata Festival in Tokyo" cd. in 1 mo. for 1 IRC. (Carson-OK). same cd. in 40 ds. (Levison-PA). 11865 same n/d cd. in 40 ds. (Reeves-OR).

JAVA: RRI Jakarta 11865 p/d cd. w/

schedule in 21 ds. for ms. v/s Nazaruddin Sy., Public Relations. (D'Angelo-JORDAN: **Radio Jordan** 9560 f/d cd. in 9 mo. for a taped rpt. and 2 10-PA). IRCS. (Eckert).

KOREA, REPUBLIC OF: Radio Korea 15575 "36th Anniversary" cd. w/ stamps and stickers for 3 IRCS. (Carson-OK). (Blight-MD).

LIBYA: Radio Jamahiriya 15450 and 15235 f/d cd. in 170 ds. for 3 IRCS.

MALAYSIA: Voice of Malaysia 15295 p/d personal ltr. in 44 ds. for \$1.00 w/ note stating not to send \$ in the future! v/s Fee A/P Lin Chew. (D'Angelo-PA). f/d personal ltr. w/ schedule in 44 ds. for IRCS. (Woloch-QUE). 11885 and 15295 p/d ltr. in 2 1/2 mo. w/ new style station pennant. (Barto-CT).

MALI REPUBLIC: Radio Beijing 9770 via **Bamako** f/d "Temple in Beijing" cd. w/ schedule and paper cuts, pin and pennant in 54 ds. (Kacir-MI).

MEXICO: Radio Educacion 6185 f/d ltr. w/ station photo in 2 mo. for a SP rpt. and \$1.00. v/s Ing. Gustavo Carreno Lopez, Subdirector Tecnico de XEEP. (Wakisaka-MD).

NOTE: QSL Column report forms are available from QSL Editor.

FRENCH GUIANA: Radio France International 11670 f/d cd. in 28 ds. (Lane-IL). **Radio Japan** 15325 n/d cd. in 47 ds. (Lane-IL).

GERMAN DEMOCRATIC REPUBLIC: Radio Berlin International 21465 f/d cd. in 75 ds. (Renfrew). 13610 f/d cd. in 83 ds. w/ schedule. (Levison-PA). 11785 f/d "Q-Code" cd. in 35 ds. for 1 IRC. (Carson). f/d "1924 Bruckner Crystal" cd. in 24 ds. for 1 IRC (Carson). f/d "Lieben Amplifier" cd. in 24 ds. (Carson-OK). 9730 f/d "City of Rostock" cd. in 35 ds. (Carson).

GERMANY, FEDERAL REPUBLIC OF: Sudwestfunk 7265 p/d "Globe" cd. w/ several stickers in 13 ds. for \$1.00 (returned). (Wakisaka-MD).

GUAM: KTWR 11805 f/d "Old Spanish Bridge" cd. in 35 ds. w/ personal note and schedule. v/s Sharon Cummings. (Kremer) f/d "Cocos Island" cd. w/ personal ltr. and schedule. (Zobro-MI).

GUATEMALA: Radio K'ekchi 4845 p/d ltr. w/ pennants in 6 mo. for a SP rpt. and \$1.00. v/s Gilberto Sun Xicol, Gerente. (Wakisaka-MD).

WAKND1520

COMMERCIAL-FREE PIRATE RADIO

QSL IN RESPONSE TO THE RECEPTION OF WORD BY: DATE: TIME: POWER: OPERATOR: THE VOICE OF THE UNDERDOGS OF FREE RADIO via Rich D'Angelo



THE VOICE OF THE UNDERDOGS OF FREE RADIO via Rich D'Angelo

DATE 29.3.89.
via John Carman
THANK YOU FOR YOUR REPORT I AM PLEASED TO CONFIRM YOUR RECEPTION OF RADIO NEW ZEALAND INTERNATIONAL ON THE FREQUENCY 15.150. MHz DATE 16 March 1989. TIME 0504. UTC
MANAGING DIRECTOR
RNZ INTERNATIONAL
BOX 2092
WELLINGTON
NEW ZEALAND
726

SILVERA LEONE BROADCASTING SERVICE
(Department of Broadcasting)

via Klink



New England, East Coast,
SOUTH LEONE,
West Africa
2 x 3 1/2 v

The S.L.S. thanks you for your report dated 1-7-84, 1984 and has pleasure in confirming that the signal you heard originated from our Transmitter in Freetown

In answer to your enquiries—

FREQ 3.36 mcs

TRANSMISSION TIMES:

WEEKDAYS 13:15 - 2:30 P.M.T

SUBJECTS 4:00 - 10:15

15:00 - 2:15

POWER TO AERIAL

G.P.O. 7067/81, 500/743

[Signature]
Director of Broadcasting

NEW BRITAIN: Radio West New

Britain 3235 f/d cd. w/ personal ltr. in 40 ds. for ms. v/s S. Muroga. (Field-PA).

NEW ZEALAND: Radio New Zealand

International 17705 paper pennant QSL in 46 ds. for 3 IRCs. v/s Rudi Hill. (Carson-OK).

NIGERIA: Voice of Nigeria

7255 f/d "Stadium" cd. in 8 mo. for a taped rpt. and \$1.00. (Huniwell-NJ). f/d in 73 ds. for 4 IRCs.

"Murtala Muhammed International Airport" cd. in 73 ds. for 4 IRCs. (Carson). **FRM Ibadan** 6050 f/d personal ltr. w/ prepared cd. in 67 ds. for \$1.00. v/s Olabisi Kasumu. (Field-PA).

PAKISTAN: Radio Pakistan 11570.1 and 15270.0 f/d cd. in 3 mo. (Barto-CT).

PAPUA NEW GUINEA: Radio Central 3290 p/d ltr. in 10 wks. for a taped rpt. and ms. v/s Kahi Vila. (Huniwell-NJ). **Radio Milne Bay** 3365 p/d ltr. in 3 mo. w/ cd. v/s Rodney Warren, Acting Assistant Station Manager. (Barto-CT).

PERU: Radio Atlantida 4789 n/d personal ltr. w/ postcards in 2 mo. for a SP rpt. and \$1.00. v/s Julio Reategui Trigoso, Director-Gerente. (Wak-)

PHILIPPINES: FEBC 9845 f/d cd. in 3 mo. for 2 IRCs. (Renfrew). isaka-MD).

PORTUGAL: Radio Renascenca 9600 p/d "Antenna" cd. in 9 mo. for \$1.00.

RIO MUNI: Radio Africa 9851.7 f/d (Wakisaka).

cd. via P.O. Box 851, Malabo in 4 mo. (Barto).

ROMANIA: Radio Bucharest 11940 two different

f/d cds. in 91 ds. w/ schedule. (Levison-PA).

SAO TOME E PRINCIPE: Radio Nacional de Sao Tome

E Principe 4807 f/d PT/FR/Eg form ltr. in 306

ds. for a PT rpt., IRCs and ms. v/s Antonio

Sebastian. This was after several years of

f/up rpts. (D'Andelo-PA).

SCOTLAND: Weekend Music Radio 15043 f/d ltr. in

19 ds. w/ personal note and paper emblems.

Info. sheet was also rcvd. v/s Jack Russel.

(Hoffman-PA). 15042.3 f/d "Map of Scotland"

sheet in 32 ds. for \$1.00. Logo coaster was

rcvd. (Zeller).

SOMALIA: Radio Mogadishu 7200 f/d "Library Index"

* cd. in 6 mo. For ms. v/s Mohammed Hassan Haad,

Reporter. Also rcvd. personal ltr. and sticker.

Very happy with this one! (Eckert).

SOLOMON ISLANDS: SIBC 5020 f/d "Logo" cd. in 26 ds. for 3 IRCs. (Kremer).

SOUTH AFRICA: Radio RSA 6010 f/d "Foothills/Drakensberg Range" cd. in 52

ds. v/s M. Vorster. (Kacir-MI). 9580 f/d "Capetown" cd. in 45 ds. (Kacir).

9615 f/d "Composite Scenes" cd. in 20 ds. v/s Minnie Visser, Frequency Planning Division. (Kacir). 21590 f/d cd. in 23 ds. (Lane-IL).

Radio Five 11885 f/d "SABC Building" cd. w/ stickers and schedule in

32 ds. (Carson-OK). **Radio Orion** f/d cd. in 2 mo. for a taped rpt. and

\$1.00. (Huniwell-NJ).

SPAIN: Radio Exterior de Espana 9630 and 9680 f/d cds. in 8 mo. for 2

IRCs. Also rcvd. a very long ltr. explaining the delay in answering

reports and the reorganization of the DX Dept.

(Carson-OK). 15110 f/d

"1992 Special Events"

cd. w/ ltr. in 6 mo. for

1 IRC. This after a f/up

rpt. (Klink).

SRI LANKA: SLBC 11835 f/d

"Studio/Building" cd. in

13 mo. for \$1.00. (Eckert-PA). **Deutsche Welle**

17810 f/d cd. in 11 wks.

from FRG although rpt.

was sent to Sri Lanka.

(Renfrew-NY).



QSL VERIFICATION CARD.

Mr. JOHN C. ECKERT, PA 19426, U.S.A.

Many thanks for your reception report which.

we are pleased to verify.

STATION. RADIO MOGADISHU

DATE. MAR 7 1987 Please refer to

TIME. 0512 to 0534 GMT. note on last page.

FREQ. 7.200 MHz.

SIGNATURE.

OFFICIAL SEAL.

OMA CZECHOSLOVAKIA



and local newspaper were rcvd. (Carson-OK). **BSP** 15000 f/d "Dr. Sun Yat-sen's Memorial Hall" cd. w/ station data sheet in 1 mo. (Barto-CT).

TURKEY: Voice of Turkey 9445 f/d "Ceramic Vase" cd. w/ pennant, stickers and schedule in 18 ds. for \$1.00. (Kacir-MI).

UKRAINIAN SSR: Radio Moscow 15475 via **Simferopol** f/d cd. in 3 mo. (Barto). 17810 and 9825 f/d "Moscow State University" cd. w/ schedule in 3½ mo.

(Barto-CT). 11730 f/d cd. in 74 ds. (Lane-IL). 17810 f/d cd. in 2 mo. (Renfrew-NY). 15135 and 15225 via **Vinnitsa** f/d cd. in 2 mo. (Renfrew-NY). 9755 via **Petroplavosk** f/d cd. in 2 mo. (Renfrew). 12050 via **Khabarovsk** f/d cd. in 2 mo. (Renfrew) 7115 via **Ivano-Frankovsk** f/d "Lenin Mausoleum" cd. in 2½ mo. (Barto)....Big Boo Boo...some of the above sites "Pet" and "I-F" are in Asiatic Russia. So sue me....Sam.

SWEDEN: Radio Sweden International

9695 f/d "Stockholm" cd. in 15 ds. (Reeves-OR). 17880 same f/d cd. in 1 mo. for 1 IRC. Also rcvd. new schedule and several new types of stickers. (Carson-OK).

SWITZERLAND: Swiss Radio International

9885 f/d "Solothurn" cd. in 13 ds. (Reeves-OR).

TAHITI: RFO 15170 f/d cd. w/ information map in 7 wks. for a FR rpt., tape and 2 IRCS. (Klinck).

TAIWAN: Voice of Free China 15345 f/d "Visitors to VOFC Building" cd. in 44 ds. for 2 IRCS. Several stickers

本報地址：
 哈爾濱市中山路115號
 電話號碼：231461

Station Address:
 No. 115 Zhongshan Road
 Harbin City
 Telephone 231461-231461

親愛的朋友：
 您的收據報告，符合本台節目。歡迎繼續
 來信並告知收聽情況。
 黑龍江人民廣播電台
 via Rich D'Angelo

Dear Friends:
 Your listening report is in accord with the programs of this
 station. Your continuing letters to let the listening condition are welcome.
 Heilongjiang People's Broadcasting Station



USA: KVOH 13695 f/d "Transmitter/Studio Building" cd. w/ sticker in 90 ds. for \$1.00. (Hoffman-PA). **WHCR** 15690 f/d cd. in 7 wks. (Renfrew-NY). **Voice of Free China** 5985 via **WYFR** f/d cd. w/ stickers in 26 ds. (Levison-PA). f/d cd. of "Sunset at Hsi-Yu" in 92 ds. w/ sticker and pennant. (Levison-PA). f/d cd. in 29 ds. (Levison). f/d "Global View" cd. in 39 ds. (Levison).

USA (Pirate):WKZP 7415 f/d "Danger High Voltage" cd. in 53 ds. for SASE. (D'Angelo). **Radio Morania** 7415.3 f/d ltr. on blue Radio Clandestine/Pirate Radio Network stationary in 146 ds. for 3 ms. to the Kingston, NY address. (Zeller-OH).

Free Radio One 7415 p/d certificate w/ form ltr. in 47 ds. for SASE (not used) Postmark was Knoxville, TN. Station apologized for taking so long to QSL and gave me a \$3.00 credit voucher towards the purchase of any promotional items they sell such as T-Shirts and various publications. (D'Angelo-PA). p/d QSL Certificate in 72 ds. for ms. v/s Dr. David Richardson. (Wakisaka-MD). same in 5 wks. for 2 ms. (Renfrew-NY). **Radio Free Mass.** 7415.3 f/d red and black "Skull and Crossbones" cd. in 15 ds. for 3 ms. to the WV address. v/s H.V. Short...Despite the station name I doubt that Kap has anything to do with this station. (Zeller-OH)....I agree...Sam.

USSR: Radio Moscow 12050 f/d "Moscow State University" cd. in 40 ds. w/ schedule. (Reeves-OR). **Radio Magallanes** 15475 p/d ltr. in 99 ds. v/s Manuel Ruiz. Also rcvd. old schedule and a tourist booklet in SP. (Weber-OH).

VANUATU: Radio Vanuatu 7260 f/d "Slit Gong (Tam-Tam) cd. in 35 ds. for ms. (Field-PA).

VENEZUELA: Radio Rumbos 4970 f/d cd. in 6 mo. w/ postcard. v/s YV5AUU. (Terrence-NY). **Radio Continental** 4940 f/d cd. in 5 mo. for a SP rpt. and \$1.00. (Wakisaka-MD).



VENEZUELA: Radio Nacional de Venezuela 5020 p/d cd. w/ ltr. in 3 years (!) for a SP/EG rpt. and 2 IRCs. Also rcvd. post-cards, stickers and station information folder w/ map of Venezuela including Guyana which appears to be a standard national feeling. (Weber-OH).

WEST IRIAN: RRI Palangkaraya 3325 f/d ltr. in 9 wks. for an IN rpt. (Barto-CT).

NOTE: Father John Eckert (St. Eleanor Church, 647 Locust Street, Collegeville, PA 19426-2541) sent along a copy of his QSL ltr. from Radio Mogadisu. I have extracted some information from that ltr. which may help others to obtain a QSL. The v/s is Mr. Mohammed Xassan Haad. Addr: 30th Street, Box 6100 Post Hodan, Mogadishu, Somalia. If possible he would like to receive taped rpt. of the station's signal. Write a nice letter with kind comments about the station. Mohammed's hobby is foreign correspondence. He is single and 27 years old. As he will send you a station sticker with the QSL, he may appreciate any extra station stickers that you may have.....Thanks John. Data such as this is very helpful!

Rev. William A. Peake, (First Reformed Church, P.O. Box 414, Buffalo Center, IA 50424) says he would like to start contributing to the QSL Column. Glad to have you with us...Sam. If John and Bill are wondering about the above, I put in both of your addresses in case you wish to write to one another. If I keep this up I may not have too much trouble getting in good with the big guy!...Sam.

Jerry Klinck in West Seneca, NY says he only got two QSLs this month. Jerry states that if you don't send out reports, you're not gonna get any QSLs....Is that what they call a truism?...Sam.

Kris Field in PA says he has quite a few reports out but they are coming back very slowly. Since the arrival of his second child, he hasn't had too much time to write reports. I bet you get some good DXing in around two in the morning. Hi!...Sam.

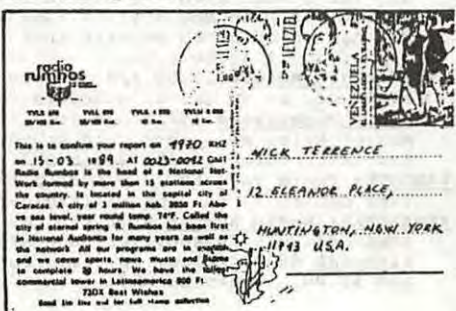
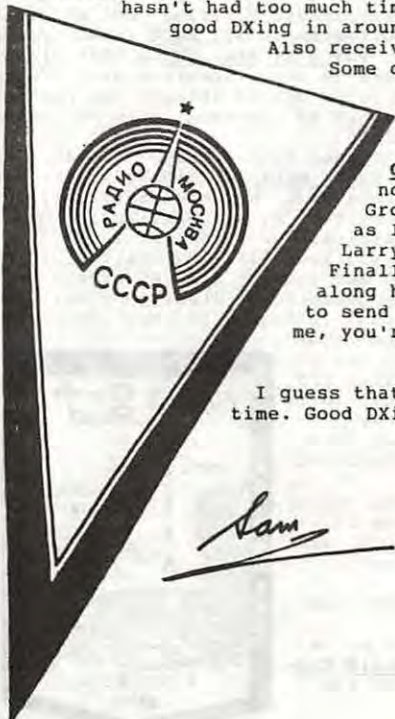
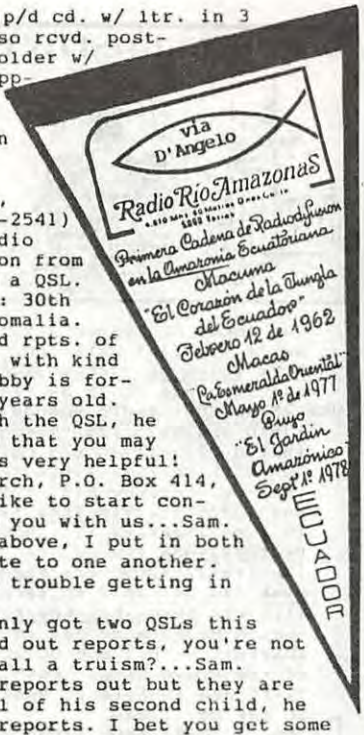
Also received a very nice letter from **John Basta**.

Some of our older members may remember John from the NNRC days. If anyone wishes to write to John, his address is: 327-2B Brook Avenue, Bay Shore, NY 11706. John presently use an IC-R71A receiver.

Charlie Hoffman in PA sent along a nice note regarding the SWL Winterfest in Willow Grove, PA. I am presently planning to attend as I did last year. I hope to see Vlad and Larry along with the rest of the PA gang...Sam. Finally **Kirk Allen** in Ponca City, OK sends along his greetings to everyone. Kirk has started to send follow up reports. If its anything like me, you're probably sending out quite a few...Sam.

I guess that will end another QSL Column. Till next time. Good DXing and QSLing....Sam.

Sam





FRENDX LOG REPORTERS

Distributing Editor: Kris W. Field, 431 Babylon Rd., Ambler, PA 19002-2302

FRENDX CONTRIBUTORS LIST — NOVEMBER 1989 — DEADLINE 12th of MONTH

The following members submitted loggings this month:

Frank ADEN, Jr., Boise, Idaho	HQ180, Uniden CR2021, FRG7
Brian ALEXANDER, Mechanicsburg, PA	
Kevin ATKINS, Pinson, AL	
Norman BOBB, Minneapolis, MN	Grundig Satellit 500
Bob BROWN, Lansdale, PA	NRD525, 80m Vertical, LW
John S. CARSON, Jr., Norman, OK	Drake SPR4, National NC 183D
Richard D'ANGELO, Wyomissing, PA	
Harold FRODGE, Midland, MI	R71A + Trap dipole
Joe HOWELL, Escondido, CA	
Rufus JORDAN, Pittsburgh, PA	DX 302, Zenith Transoceanic
Jerry KLINCK, West Seneca, NY	
Fred KOHLBRENNER, Philadelphia, PA	NRD 525
John LACKMAN, Lexington, VA	
Harold LEVISON, Philadelphia, PA	
Don MOORE, Big Rapids, MI	R 5000, FRG 7, ICF 7600D
Bill NEWCOMER, Woodlyn, PA	
Dale PARK, Honolulu, HI	R 5000 & salvaged rod antenna
Leonard R. PRICE, Annandale, VA	R2000, ATS 803, GE World Monitor
Robbie REEVES, Troutdale, OR	
Bob RYDZEWSKI, Santa Cruz, CA	NRD525
Roland SCHULZE, Stuttgart, W. Germany	Drake R7 & SPR4, Kenwood R-5000
John TUCHSCHERER, Neenah, WI	R70, FRG 7700

Good turnout this month! Thank you one and all for your loggings. I've had the radio on occasionally but I've probably spent more time listening to the GERRY Room Monitor than the NRD.

A couple folks missed the mailing deadline this month so a reminder is in order. I need to receive the loggings by the 12th of the month because I mail them to the editors on the 13th. I hope everyone can appreciate that the editors need time to put their columns together; even this does not give them a lot of time.

It's also a big help if contributors cut their loggings into individual strips. Some of you even go one step further and sort them in frequency order, or even by log report section. I do appreciate it, Thanks! Jerry Klinck mentions that he became a grandfather. Congrats to you and your family, Jerry!!

No further news to report from here so I hope everyone has a good month and good DX!!

Until next month,

73, Kris

Don't forget the ANARC Net on Sunday mornings.



LOG REPORT

section A

2000 to 4899 kHz

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

- 2375 CUBA R. Havana 0323-0330 EG, Tlk and world nx. Fair. (Newcomer-PA 10/7) Could this be a spur? -ed.
- 2694.9f PORTUGUESE TIMOR (TIMUR, INDONESIA) RPKD Ende 1128-1152 fade. Indo ballads w/ C&W flavor, anmnts w/echo bet. songs by YL/OM. Kept mentioning " warta berita" but none had. Fair. (Atkins-AL 10/11)
- 2904.8 PORTUGUESE TIMOR (TIMUR, INDONESIA) RPD2T Ngada 1125-1132 lagu pops, lcl ID 1129 then short gamelan theme & OM tlk. Fair, slightly better than presumed Manggarai on 2962.7 (Atkins-AL 10/8)
- 2960 USA WABB Mobile Ala. 2 x 1480 harmonic noted many eves. w/talknet pgm. Poor-Fair. (Moore-MI)
- 2962.8f PORTUGUESE TIMOR (TIMUR, INDONESIA) RPD2T Manggarai 1212-1235 Mostly yak by YL ancr w/ments of Bali. Brief orch interlude then tlk by OM but almost faded by then. Nothing close to an ID. Hrd both dates w/ indetical pgm'g. (Allen-OK 10/5, 7)
- 3214.9 CELEBES (SULAWESI, INDONESIA) RRI Manado 1147-1200 IN, "Satu Nusa, Satu Bangsa", SCI, ID by OM. Poor (Ryzdewski-CA 10/8)
- 3220 ECUADOR HCJB 0918-0930 Quechua tlk, rel. mx, ID Fair (Bobb-MN 10/1)
- 3220 NEW GUINEA TERRITORY (PAPUA NEW GUINEA) R. Morobe 1001-1031 Pidgin, OM w/ nx that // 3290,3235,3385 till 1018 then separate pgm w/YL/OM tlk. Mix w/HCJB Poor-Fair (Moore-MI 10/9)
- 3222.9 PORTUGUESE TIMOR (TIMUR, INDONESIA) RRI Mataram 1152-1200 YL AR-style vccls, OM ID & SCI @ 1159 Good (Atkins-AL 10/8)
- 3241.4 MOLUCCA IS. (MALUKU, INDONESIA) RRI Ambon 1155-1201 nice Pac. isle mx, YL lcl ID @ 1158, into SCI. Fair-Good (Atkins-AL 10/9)
- 3249.6 HONDURAS R. Luz y Vida 0345 EG, w/"Unshackled". Good (Ryzdewski-CA 10/1)
- 3249.8 BORNEO (KALIMANTAN, INDONESIA) RRI Banjarmasin 1130-1200 Poss. lcl nx to 1138, mellow instr mx, YL lcl ID @ 1148, then AR-style vccls to 1159 generic ID/SCI. Fair (Atkins-AL 10/13)
- 3264.65a CELEBES (SULAWESI, INDONESIA) RRI Gorontalo 1227-1231* Pop vccls. OM ancr w/ mention of Gorontalo then s/off leaving Bengkulu in the clear. (Allen-OK 10/6)
- 3264.9 SUMATARA (SUMATERA, INDONESIA) RRI Bengkulu 1231-1303 YL ancr w/lcl ID during yak @ 1233. Interesting exotic vccls w/flutes. Carried Jakarta economic nx @ 1300 but almost faded by then. (Allen-OK 10/6)
- 3280 ECUADOR La Voz del Napo 0240-0301* SP EZL LAm vccls w/OM anncr, ID, s/off anmnts @ 0300. No NA. SIO353 (D'Angelo-PA 9/28) (Tuchscherer-WI 9/21)
- 3289.8 ECUADOR R. Centro 0919-0940 SP, Andean mx w/anmts between each selection. Several IDs. Strong but QRN. Sig equal to HCJB on 3220. (Alexander-PA 10/1)
- 3290f PERU R. Tayabamba 0931-1004 SP, Andean mx w/flutes, shouting, tlk & poss. ID. (Bobb-MN 10/1)
- 3290 NAMIBIA R. SWA. 0423 EG, OM w/items of lcl interest interspersed w/tribal mx, plug for tourism, nx @ 0430. (Howell-CA 9/10)
- 3290 PAPUA TERRITORY (PAPUA NEW GUINEA) R. Central 1001-1031 Pidgin, OM w/nx that // 3290,3235,3385 till 1018 then separate pgm w/YL/OM anncr, bits of instr "A Time For Us". Poor-Fair. (Moore-MI 10/9)
- 3290 PERU R. Tayabamba 0920-1009 SP, OA vccls to 0929 ID, lng tlk pgm, mx bridge, anmnts, wrld nx @ 1000. SIO343 (D'Angelo-PA 9/9)
- 3300 GUATEMALA TGNA 0300-0330 EG, ID, rel. mx, sermon. Fair (Bobb-MN 10/1)
- 3316 SIERRA LEONE SLBS 2300-2321* EG, Wk in static w/drum fanfare @ 2300. Tlk by OM, chants @ 2315. Short instr NA @ 2321. (Alexander-PA 9/15)
- 3320 SOUTH AFRICA R. Orion 0408 AK, classical mx, OM tlk - sermon?? (Howell-CA 9/10)
- 3325 BOUGAINVILLE ISL. (PAPUA NEW GUINEA) R. North Solomons 1047-1107 Pidgin, mix of vccls (some EG), tlk by OM to 1100 ID, poss. nx by YL. SIO252 (D'Angelo-PA 9/9)
- 3365 PAPUA TERRITORY (PAPUA NEW GUINEA) R. Milne Bay 1028-1050 fade. Pidgin. Mix of tlk and lcl vccls. ID @ 1030 by OM w/piano mx in backgrnd. SIO252 (D'Angelo-PA 9/9)
- 3385 NEW BRITAIN (PAPUA NEW GUINEA) R. East New Britain 1022-1108 Pidgin, Clear w/brief tlks, ID @ 1030, western pop vccls, this one first audible frm PNG and stays the longest. SIO353 (D'Angelo-PA 9/9)

- 3366 GHANA Ghana BC. 2150- EG, tlk by OM, ment of Ghana economy, nx @ 2200. Poor (Kohlbrener-PA 10/8)
- 3450.2 PERU R. Oyon 1015-1045 SP, tlk, ID, mstly continuous OA mx after 1020. Poor in QRN. (Alexander-PA 10/1)
- 3579.8 SUMATARA (SUMATERA, INDONESIA) RPD12 Asahan 1144-1200 fade, non-stop lagu pops to 1158, then OM tlk w/poss. "Pemerintah" @ top of hr. Fair-Poor (Atkins-AL 10/15)
- 3774.9 PORTUGUESE TIMOR (TIMUR, INDONESIA) RPD12 Sumbawa 1134-1142 Lcl nx, patriotic sounding choral mx @ 1139 foll. by OM w/lcl ID. Fair (Atkins-AL 10/8)
- 3904.8 SUMATARA (SUMATERA, INDONESIA) RRI Banda Aceh 1655-1700 Basha Indo, ID, SCI, warta Berita, today stronger as India above at same time! (Schulze-FRG 9/8)
- 4002.7 SUMATARA (SUMATERA, INDONESIA) RRI Padang 2157-2219 fade. SCI, ID, YL w/nx till 2211 then mx, chants. No ute tonight, best yet this season at lcl sunset. Also audio on 3232, 4927. (Brown-PA 10/22)
- 4238 PERU R. Inca del Peru 0930-0941 SP, Very good w/ Lam mx & bulletins. (Tuchscherer-WI 9/28)
- 4679.6 ECUADOR R. Nacional Espejo 0224-0251 SP, Radio Novella w/ several IDs. (Tuchscherer-WI 9/24)
- 4752.2 PERU R. Huanta Dos Mil 1008-1020 SP, l-in to NA. Opening anmnts @ 1009 w/IDs. Into huaynos @ 1010. Fair. (Alexander-PA 10/1)
- 4753 CELEBES (SULAWESI, INDONESIA) RRI Ujung Padang 1415 IN, SE Asian pop mx, OM ancr, SCI, fair for abt hr past lcl sunrise. (Howell-CA 9/10)
- 4755p BRAZIL R. Educacao Rural 0114-0124 Long YL cmty, ballads, mention of Campo Grande. Fair. (Moore-MI 9/26)
- 4760n ANDAMAN AND NICOBAR ISL. AIR Port Blair 1540-1649* Venecular political tlks on Sri Lanka govt., nice lcl mx instr. EG IDs and ask for comments and reports. First log for me - my 221 heard NASWA country!! (Schulze-FRG 10/1) ed. - Very nice catch Rowland!
- 4760 LIBERIA ELWA 0606 EG, Rel. pgm, mx, ID and "Good morning Liberia" @ 0616. (Kohlbrener-PA 9/12)
- 4760 SWAZILAND TWR 1815-1829* PT, ID, rel pgm, prayer tlk, 1x1S s/off. (Schulze-FRG 9/26)
- 4765 USSR R. Moscow 0842 RS, ethnic mx, very enjoyable. SIO434 (Levinson-PA)
- 4770 NIGERIA R. Nigeria-Kaduna 2220 EG, Network nx & commentary on housing followed by ID @ 22:30 then inot mx variety pgm. (Klinck-NY 10/7)
- 4775 UNID - BRAZIL 2337-0007* OM in PT, ads, mix of lively mx. Hrd several days. Poor (Moore-MI 10/2))
- 4785 BRAZIL R. Caiair 0052-0107 OM anmnts, ads, several IDs mentioning "o capital do estado do Rondonia". Ute QRM, Fair. (Moore-MI 9/16)
- 4790 PERU R. Atlantida 0915-0925 SP, IDs, tlk, crowing and mx. Fair. (Bobb-MN 9/18) 1012 (Tuchscherer-WI 9/28)
- 4795 BRAZIL R. Aquidauana 0035-0104 Folk mx, OM ID w/freq. @ 0102 Fair (Moore-MI 10/3)
4800. ECUADOR R. Popular 0453-0516 SP, Lam vcls w/OM anncr w/IDs and TCs between mx selections. SIO343 (D'Angelo-PA 10/1)
- 4800 GUATEMALA R. Buenas Nuevas 0215 SP, long monotonous sermon, lcl mx & full ID @ 0230. (Howell-CA 9/25) (Jordan-PA 10/4) 0055-0105 (Bobb-MN 9/25)
- 4805 BRAZIL R. Difusora do Amazonas 0225-0317* PT, Br pops, ID, tlk, anmts, hyper DJ. Abruptly off @ 0317. (Alexander-PA 9/17) (D'Angelo-PA 9/17)
- 4820 HONDURAS LV Evangelica 1115-1134 SP, Rel mx, tlk, mention of Honduras & Tegucigalpa. Fair (Bobb-MN 9/26)
- 4820 PERU R. Atahualpa 0745-0825 SP, LA pops. None of the traditional OA mx. Little tlk except for IDs. VvGd - booming in. (Alexander-PA 10/1)
- 4820.8 PERU R. Atahualpa 0957 Huayno, ID, "Radio Atahualpa, anticipando el siglo 21" Fair (Moore-MI 10/4)
- 4825 BRAZIL R. Educadora 0854-0915 PT, quiet mx, ID, rel. tlk, BR mx, rooster crows/tlk. Poor-Fair (Bobb-MN 9/28)
- 4830 VENEZUELA R. Tachira 1020-1035 SP, Lam mx, tlk & IDs. Fair-Good (Bobb-MN 9/24)
- 4835 GUATEMALA R. Tezulutlan 0053-0108 Guatemalan tlk & mx, mni IDs. Fair. (Bobb-MN 9/30) 0247 (Rydzewski-CA 8/23)
- 4835 JAVA (INDONESIA) RRI Ambon 1433 Indo, YL w/nx, many anmnts "Nasional" & "Jakarta". (Howell-CA 9/10)
- 4835 MALI Rdiff TV Malienne 0620 FR/AR? Af vocals, tlk by OM (in lang?), chanting, mentions of Bamako. (Kohlbrener-PA 9/12)
- 4840 VENEZUELA R. Valera 0859-0911 SP, NA in progress, ID, regional anthem, IDS, Lam mx & tlk. Poor (Bobb-MN 9/25)
- 4851 ECUADOR R. Luz y Vida 0401-0417* SP, Lam vcls hosted by YL, brief anmnts, ID, S/off anmnts w/orchestral NA. SIO353 (D'Angelo-PA 9/30)

- 4856t SUMATRA (SUMATERA-INDONESIA) RRI Palembang 1415 IN, SE Asian chants/prayers; OM tlk, bad audio hum. (Howell-CA 9/12)
- 4860.3 ANGOLA EP da Lunda-Sul 1905-1935 PT, ID, notices, mx. (Schulze-FRG 9/18)
- 4865 COLOMBIA La Voz de Cinaruco 0400 SP, OM w/cumbias & annc'd Cuban mx, IDs/cl TCs SIO343 (Frodge-MI 9/30) ed - I'll bite Hal, whats a "cumbias"?
- 4870 BENIN ORTB Cotonou 2250 FR, lcl mx pgm w/ID @ 2259 followed by nx. (Klinck-NY 10/7)
- 4870 ECUADOR R. Rio Amazonas 0048-0105 SP, OM w/rapid tlk, ID & anmnts of Ecuador, lcl instr mx/ballads. Poor (Jordan-PA 9/27)
- 4874.6p NETH. NEW GUINEA (IRIAN JAYA, INDONESIA) RRI Sorong 1122-1150 OM anncr w/NA m pops - "La Bamba", poss. ID @ 1133 w/chimes. Cruddy audio. Poor-Fair (Brown-PA 10/13)
- 4875p BRAZIL R. Nac. Boa Vista 0350-0400* PT OM tlk, no discernable ID even at 0400 s/off. (Howell-CA 9/24) (D'Angelo-PA 9/16) 0306 (Tuchscherer-WI 10/1)
- 4880 SOUTH AFRICA SABC 0403 EG, OM DJ w/pop mx. SIO333 (Frodge-MI 9/2)
- 4881.7 PERU R. Nuevo Mundo 0953-1005 SP, LA pops/OA mx. Anmts, ID @ 0959. Good. (Alexander-PA 10/1) (Tuchscherer-WI 9/28)
- 4885 BRAZIL R. Clube do Para 0826-0835 PT mx, tlk, ID. Poor, noisy. (Bobb-MN 9/23)
- 4890 GABON R. France Intl. 0404-0432 FR, YL w/nx, FR songs and more nx. ID by YL @ 0421. (Tuchscherer-WI 9/27)

This is a very nice representation of stations that can be heard in this part of the radio spectrum. There are some toughies here as well as some easier catches, so there should be something for everyone's taste. The best catch this month is Roland Schulze's report of Andaman And Nicobar Isl. I think that is going to be a real tough one for us here in NAM.

Kris Field has made me aware of a technique he uses that may be of some interest to other DX'ers. He has created a target list that he keeps next to his radio which he updates regularly with info that he gets from the various DX publications and DX shows. Kris says that he picked up this tip from Rich D'Angelo and it looks like this:

0100	1200
0200	1300

Picture an 8 1/2 by 11 piece of paper with the lines and times pre-printed as shown here. Kris runs off a bunch on the copier and fills in freq. and station info under the appropriate time. Index cards could be used as well. Thanks Kris for the tip! If you have a DX'ing tip, please send it along. I'll be happy to print it up here as space permits.

Please take a moment and open last months *FRENDX* to Log Report A and compare it to this months. I am experimenting with a different type face in hopes to make the logs a bit easier to read, especially for those of you who may have less than perfect eyesight. Last months type was Times Roman 12 point and this month I am using Optima 11 point. Smaller, but perhaps clearer. A comment that appeared in the surveys I have received indicate that many of you have trouble reading the small print. One person actually thought that the print was too large! Sorry, but for those that have trouble seeing, I am going to try to stick to as large as practical. Let me know which type face you prefer.

Speaking of the surveys, the response has been very good. I haven't counted, but I believe we have well over 200 returned as of 10/27. I am working on organizing the inputs so that we can make a meaningful presentation to the membership. Some of you indicated that you did not receive your *FRENDX* till mid Oct. Publisher Bill Oliver works very hard to get the journal in the mails during the first week of the month. He never misses a beat on this so if yours came late, the US Mail missed the beat.

I hope you and yours have a nice Thanksgiving. Till next month, good DX and 73 -- Bob KW3F



LOG REPORT

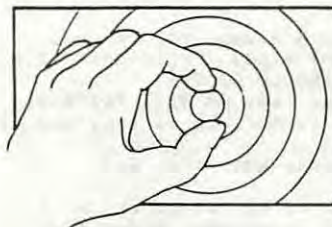
section B

4900 to 6199 kHz

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

- *4900.6 CELEBES, RRI Gorontalo, 10/7, 1253-1300, M w/"Berita Keluarga," poss. family planning pgm, clear lcl ID 1258, SGT. Don't confuse w/Surakarta here. (Allen-OK)
- 4915 BRAZIL, RN Macapa, 9/30, 0047-0109 w/rel pgm to 0101 mx, 0106 ID. (Tuchscherer-WI)
- 4915 GHANA, GBC-1, 10/9, 2230 in EG w/nx, mx, ID as Radio One. (Klinck-NY) 9/16, 2242 w/vcls, ID 2245, nx, rel pgm, SIO=222. (Frodge-MI)
- 4930 TURKMEN SSR, Ashkhabad, 9/16, 0155-0201 in RS w/EZL mx, Mayak IS 0159, time pips, tlk by W. Site presumed. (Alexander-PA)
- 4934 KENYA, Vo Kenya, 10/7, 0257 in EG w/C&W mx, NA, "You are tuned to the Voice of Kenya." FC. (Paszkiewicz-WI)
- 4940 UKRAINE, Kiev, 9/17, *0200-0400 in RS w/clx mx, lite instls, IS 0214, 0244, etc. Weak in QRN //6020 at 0340. (Alexander-PA)
- 4940 VENEZUELA, R. Continental, 9/18, 0927-0945 w/IDs, mx, tlk by M&W. (Bobb-MN)
- 4955 BRAZIL, R. Marajoara, 9/17, 0130-0200 w/lively pop vcls, sev. IDs, ad strings, QRN & CW QRM. (Jordan-PA) 9/17, 0319-0330* w/sermon-like tlk, ID 0327, sev. jingles, vcls cut in mid-song. (D'Angelo-PA) 9/24, 0330 w/ID, sermon w/organ mx, church bells. (Howell-CA) 9/30, 0855-0933 tent., rel pgm, mx, CW QRM. (Bobb-MN)
- 4955 BRAZIL, unid., 10/3, 0105-0110 mixing w/Marajoara. Hrd sev. different days. (Moore-MI)
- 4970p PERU, R. Imagen, 10/8, 0655-0701 w/tropical mx, OM tlk, ment. Tarapoto, poor. (Moore-MI)
- 4975 COLOMBIA, Ondas del Ortegaza, 10/5, 1035-1048+ ID w/TC 1037, "en la . . . internacional del Ortegaza en 22 minutos para la 6." 1041 wiped out by ute. Seems irregular. (Allen)
- 4985 BRAZIL, R. Brasil Central, 9/23, 0155 w/long ballad, full ID 0202, decent sig. (Howell-CA)
- 4990.8 PERU, R. Ancash, 10/1, 0550-0602* w/OA mx, OM DJ, s/off w/NA. (Alexander-PA) 9/22, 0930-0945 w/tlk, mx, ID, poor & noisy. (Bobb-MN)
- 5011.6 ECUADOR, Escuelas Radiofonicas Populares, 9/27, 0910-1050 in SP/Quechua, tlk, Andean mx, drama, ID. (Bobb-MN) 9/23, 1022-1112 w/"Radiofonica" IDs, ment. "desde Riobamba, emisora . . . de la patria . . . radiofonica." Rustic vcls, improved sig. (Allen-OK) 10/14, 1053-1115 w/Andean mx, ment. Riobamba, IDs, ballads. (Paszkiewicz-WI)
- 5012.1 PERU, R. Eco, 9/20, *1022-1108 reactivated w/oldie LA mx, Coca-Cola ads, ID 1053, CA NA 1056, echo IDs. Not hrd recently--inactive again? (Allen-OK)
- 5019.9 COLOMBIA, Ecos del Atrato, 10/4, 1018-1023 w/IDs, TCs, pgm "La Hora Ranchera." Poor. (Moore-MI)
- 5025 CUBA, R. Rebelde, 10/9, 0120 w/ID, mx, sev. ment. Havana. Fair. (Kohlbrener-PA)
- 5030.2 COSTA RICA, R. Impacto, 9/24, 0308-0315 w/IDs, mx, tlk, good sig. (Bobb-MN)
- 5034 CENTRAL AFRICAN REPUBLIC, RTV Centafricaine, 10/9, 2224 w/FR anmts, lcl mx. (Klinck-NY)
- 5044.6t IRIAN JAYA, RRI Jayapura, 10/7, 1300-1315, Jakarta mx, W tlk 1313 but couldn't get lcl ID. Fair but undermod. (Allen)

- 5045 COSTA RICA, R. Impacto, 10/15, 0233 w/mx, ID, more mx, good sig. (Humenyk-ON) Tnx for contributing--sp.
- 5050 ECUADOR, R. Jesus del Gran Poder, 9/29, 0932-0955 in SP/Quechua, varied mx, tlk, IDs, fair & suddenly poor. (Bobb)
- 5055 SWAZILAND, TWR, 9/12, 0325 in EG w/rel pgm, fair sig but lots of noise. (Price-VA)
- 5055.9t FRENCH GUIANA, RFO Cayenne, 9/23, 0845-0940 w/rhythmic mx, Tlk & nx, poor-fair. (Bobb-MN)
- 5068 VENEZUELA, LV de las Canas, 9/9, 2320-2330 w/ID, slow LA mx, can anyone help with exact location of this station? Thanks! (Schulze-FRG)
- 5905 ASIATIC RFSFR, R. Moscow, 9/22, 1023 in JP w/listing new winter sked in JP //5920, 9865, 9895, 10344. Ute QRN from 5907, poor. (Park-HI)
- 5929.2 CLANDESTINE, unid., 10/14, 1117-1148 in SP w/lots of tlk abt Nicaragua, democracy, etc. Helicopter sound effects. Nothing noted on 6100, 6120, 6160. (Paszkwicz-WI)
- 5950 USA, VOFC via WYFR, 9/10, 0700 in EG w/nx, wx, cmtry, ST0=434. (Carson-OK)
- 5955 COLOMBIA, Ondas del Meta, 9/28, 0927-0957 w/LA mx, tlk, many IDs. F-G. (Bobb-MN)
- 5960 CANADA, RCI, 9/23-24, 2358-0029 in EG w/ID, nx, wx rpt, sports, SWL Digest w/amateur rpt. F-G. (Bobb-MN)
- 5965 EAST GERMANY, R. Berlin Int'l, 10/10, 0630-0640 in EG w/DX info. (Newcomer-PA)
- 5975 COLOMBIA, R. Macarena, 9/23, 1005-1025 w/mx, good sig. (Newcomer-PA)
- 5975 SINGAPORE, BBC Relay, 9/20, 1601 in EG w/world nx //9740 (u/R. Korea). (Park-HI)
- 5980 BRAZIL, R. Guaruja, 10/13, 2229-2305 w/anmts, ID, "A Voz do Brasil" pgm //4985, ment. R. Nacional, jingles, drama. (Paszkwicz-WI)
- 5980 YUGOSLAVIA, R. Yugoslavia, 10/7, 0130-0142* in EG w/mx, "Ham Radio Corner" (Kohlbrener-PA)
- 6015 CANADA, R. Austria via RCI, 10/9, 0535 in EG w/"Rpt from Austria," "Postbox 700." (Park-HI) Dale points out that this is from the Canadian relay, not direct from Austria. Tnx Dale--sp.
- 6015 UNID, weak bubble jammer noted but no audio. (Frodge-MI, 2310 on 9/16)
- 6020 BRAZIL, R. Gaucha, 10/14, 2250-2300 w/vcls, ment. Porto Alegre, ID, FC. //11915. (Paszkwicz-WI)
- 6020 NETHERLANDS, R. Nederland, 10/6, 0050 in EG w/Media Network ST0=434. (Carson-OK)
- 6035 LIBERIA, VOA Relay, 9/7, 0444 in EG w/VOA Friday Morning, ST0=222. (Carson-OK)
- 6100 NICARAGUA, LV de Nicaragua, 9/16, 0145-0158 w/LA mx, clr ID, u/Deutsche Welle. (Schulze-FRG)
- 6105 BRAZIL, R. Cancao Nova, 9/16, 2350 w/pops, anmts, //4825, poor. Also Brazilians on 6000, 6010, 6020, 6030, 6060, 6080, 6090, 6135, 6180 same time. (Moore-MI)
- 6135 CHILE, R. Univ. de Concepcion, 9/15, 1047-1105 w/fast-paced nx from R. Minería, R. Univ. ID before top of hour, then back to Minería pgm. (Allen-OK)
- 6151.4 COSTA RICA, R. Impacto, 9/24, 0322-0329 w/mx, ID. (Bobb-MN)
- 6160 COSTA RICA, R. Impacto, 9/9, 0450-0515 last week on 5030 & 6150 but tonite 6160 and 5044 w/tlk, ads, jingles, IDs. (Alexander-PA)
- 6160 NEWFOUNDLAND, CK2N, 9/30, *0825-0840 w/NA, ID, FC, wx, Instls, lcl nx. (Kohlbrener-PA)
- 6165 BONAIRE, R. Nederland, 9/22, 0027-0123 in EG w/FC, nx, cmtry, Media Network, good. (Bobb-MN)
- 6175 CANADA, BBC Relay, 9/16, 2328 w/pop mx, bubble jammer noted. (Frodge-MI)
- 6180 BRAZIL, RN, 9/19, 2245 w/tlk, short mx bridges, ID. (Bobb) Norm, this is prob. R. Araguaia relaying RN pgm. (sp)
- 6185 MEXICO, R. Educacion, 9/24, 1040 w/mx, tlk abt Mexico (Bobb)
- 6185 USA, WRNO, 9/16, 0450 w/ads, contest, rock mx. (Carson-OK)



LOG REPORT

section C

6200 to 11699 kHz

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

- 6215 CLAND R. Guinche de Septiembre 0052 SP OM/cntry w/remotes to Nicaragua patriotic pronos; (FRODGE-MI 8/29)
- 6240v PIRATE Vof Tomorrow 0107-0209: EG wolf-call ID's, mx; GRM R. Venceremos; (KOHLEBRENNER-PA 8/24)/ 0605-0606: tlc, ID, OR addr (ALEXANDER-PA/24)
- 6240v SCOTLAND Weekend Music R. 0032-0039: EG mx, ment of Euro-pirates, ID; p. (KOHLEBRENNER-PA 10/7)
- 6455 CLAND R. Farabundo Marti 0237 SP YL w/cntry, voc mx; (FRODGE)
- 6459.8 CLAND R. Venceremos 0153 SP LA mx, ID, tlc by OM, YL (Alexander)
- 6470 CLAND R. Venceremos 0317 SP OM w/cntry, mx, off & on; (FRODGE)
- 6690 UNID SP 0000-0300 appears to be a com. stn. relay, noted OC lately; (FRODGE-MI 8/1)
- 6712.4 CLAND R. Farabundo Marti 2350-2400 SP LA mx, ID; (ALEXANDER)
- 6780 CLAND, UNID 0041 SP YL/OM nx w/detelines, ment Bogota, mx, ment Rep. Dominicana; (FRODGE-MI 8/1)
- 6780 CLAND R. Patria Libre 0034-0105 SP tlc, bugle fanfares, lcl mx ID; Colombian NA, abrupt off; (ALEXANDER-PA 9/17)
- 6935 CHINA, PR RB 2217 SP YL/tlc, re Colombia, CH mx, cntry; (FRODGE-MI 8/14)
- 7105 ASCENSION IS. BBC 0435-0445 FR tlc, ID; (DILLON-GRE 8/6)
- 7135 FRANCE RFI 0330-0345 EG wld & sport nx; (TUCHSCHERER-WI 8/24)
- 7140 CYPRUS BBC 1611 AR IS, ID 'Huna London' anmts, pres nx, GRM USSR; (PARK-HI 8/29)
- 7170 NEW CALEDONIA RFO de Noumea 1844 FR mx, on tlc, mx; (PARK-HI)
- 7200 UK VOA WOLF 0448 EG tlc, ID, rpt; //7170, 15205. (PARK-HI 9/5)
- 7200 SWAZILAND TWR 0437 EG OM w/Midwest accent hosting 'Day-break', sked offering, gospel mx; GRM VOA. (PARK-HI 8/21)
- 7208v IVORY COAST RTVI 2145-0002 FR ID, press, mx, NA, choir (SCHULZE) /2210-0003 AF pops, tlc, NA. //4940; hrd 9/3 @0615. (ALEXANDER)
- 7215 IVORY COAST RTVI 0820-0840 FR U.S. cntry mx, tlc; (ALEXANDER)
- 7225 SRI LANKA DW 1629 EG nx, ID, [white noise jam] (PARK-HI 8/16)
- 1620-1650 EG ID, rpt, IS, s/off; (SCHULZE-FRG 8/16)
- 7255 NIGERIA VoN 0522-0533 EG 'Morning Flight' mx px, ID, freq, West AF svc noted, drun IS, ID, nx; (KOHLEBRENNER-PA 8/41) also rptd by CARSON-OK, NEWCOMER-PA @ same time, LACKMAN-VA 2159
- 7295 UK RCI Daventry 0523 EG/FR fin. nx, wx, ID; //11775; (PARK)
- 7345 CZECHOSLOVAKIA RP 0328 EG/GM tlc; S10-333 (CARSON-OK 9/26) / 0124-0135 nx; f. (NEWCOMER-PA 8/17)
- 7355 USA-PIRATE R. Clandestine 0340-0400 EG comedy, 444; (D'Angelo)
- 7358 USA-PIRATE Hope R. 2230-0000 EG Bill Cosby Comedyskits, GRM WRNO; g. no addr. (DALTON-VA 10/7)
- 7375usb COSTA RICA R. for Peace Intl. 0110, 0427 EG var. of pxs, comms, 333-544; (CARSON-OK 9/18, 10/7, 10/8) / (ALEXANDER-PA 9/3)
- 7375 CHINA, PR RB 1622 RS OM w/ID, cntry. lcl QRM; (PARK-HI 8/16)
- 7410v USA-PIRATE CHGO 0536 EG soundtrack played w/freq low voice & slow ID's 'C-H-G-O; s/off @0600; 222 (CARSON-OK 9/10/89) / 0340-0407 EG voc mx/ancr repeating 'Poltergeist' during song. more mx, ID repeated; 343 (D'Angelo-PA 9/9)
- 7415 USA-PIRATE Unid 2338-0003: EG rock mx w/OM ancr. pos. ph # S10-454. (D'ANGELO-PA 10/1)
- 7415 USA United World R. 0317 EG OM w/80's ballads; (FRODGE-MI 9/2)
- 7415v USA-PIRATE R. Zodiac 0500-0605 EG tlc show on alien life visiting earth. Wellsville, NY addr. prerecorded IDs & QSL info. S/off and 'Good bye to FCC; (ADEN-ID 9/17)

7415 PIRATE Free R. One 2235-2250 EG radio drama, ID, OR addr., (ALEXANDER-PA 9/4) / 0056 (FRODGE-MI 8/24) / 2210-2224 ID, addr px '1984 w/David Niven', 252; (D'ANGELO-PA 9/4)

7415 USA-PIRATE Pirate R. Net. 0300 EG mx, ad, OM dj. (PRICE-VA)

7415 USA-PIRATE R.Morania 0148 EG 'This is Morania calling' and off (FRODGE-MI 8/1)

7415 USA-PIRATE RFM 0009-0054* EG mx, phony ads, IDs, addr; p. (KOHLEBRENNER-PA 9/3)

7415 PIRATE R.Garabonza 0224 EG rlg bcst of Br. Irvin (no relation) -a fictitious TV preacher, pres. ID 'somewhere North American Coast...' nothing more; (FIELD-MI 7/30)

7475 TUNISIA RTVT 0256-0314 AR s/on, OM w/freq list, ID, AN chants // 12005, 15450; (TUCHSCHERER-WI 9/13)

7520 USA WWCN, Nashville, TN 0240 EG 'Point of View' px, rlg tlc, 'USA R. Net', (FRODGE-MI 8/9) / (PRICE-VA 8/17)

9334ssb ENGLAND AFRTS 0030 EG baseball game; f. (PRICE-VA 7/31)

9345 KOREA DPR RP 1802 SP NA, OM, YL w/ID, sked, nx; 9325/KR.(PARK)

9420 GREECE VoG 0135 EG/GK nx, mx; (KELLY 9/5) / (NEWCOMER-PA 8/17)

9465 USA WMLK 0520 EG rlg px; f. (PRICE-VA 8/23)

9515 BRAZIL R. Novas de Paz 0125 PT vocals, ment Curitiba Parana, ID, addr; (PASZKIEWICZ-WI 8/10) / 0005 rlg px, (FIELD-MI 8/18)

LESOTHO BBC 1107-1115 EG nx, cmtry; (KLINCK-NY 8/10)

9545 SOLOMON IS SIBC 0712-0747* EG mx-US pops, nx, ad 'Magic two minute noodles, Pacific nx, s/off; (KREMER-IN 8/18)

9555 MALTA DW relay *0100 EG IS, site ID, nx; (HOWELL-CA 8/14)

9580 FINLAND RF 0635 EG nx, ltr re. Bob Horvitz//11756; (PARK-HI tlc, ID, IS in FN. s/off, addr given as WRTH; (HYSON-NC 9/2)

9580 JORDAN RJ 1803-1830 EG nx, jazz w/Peter Hazard, ID; (DILLON)

9585 MALTA DW *0058-0150* EG nx, site ID, s/off; (KREMER-IN 8/13)

9585 BRAZIL R.Universo 0200 PT tlc, ID; (PASZKIEWICZ-WI 8/16)

9580 OMAN BBCWS tent 0302 EG nx, // 9600; QRM RN. (PARK-HI 9/1)

9590 NETHERLANDS RN 0405 EG anct that 11720 becomes operational on 9/24/89 at this time slot; (KELLY 9/3)

9595 JAPAN RCI via NSB 0831 JP Y1, OM hosting 'Canada This Week' w/ ment. item from Ian MacFarland. QRM; (PARK-HI 8/26)

9595 CZECHOSLOVAKIA RP 0644-0701 EG orch mx, ID; (HYSON-NC 9/2)

9600 PORTUGAL RP 0230-0245 EG ID, nx, cmtry Mailbag (KOHLEBRENNER)

9605 SINGAPORE BBC 1658 EG/HD end of EG svc, EG by R. w/addr. site ID/HD, nx; (PARK-HI 8/28)

9630 SPAIN REE 0548-0555* EG lang lesson, ID, mx int. nx (PARK)

9645 SRI LANKA VOA 1750-1801 EG mx, s/off, IS. (PARK-HI 8/22)

9655 THAILAND RT 1128 EG IS, OM w/ID; 242. (LACKMAN-VA 8/28) / nx, re stocks by YL, ID by OM; f. (TARP-CA 10/3)

9695 SWEDEN RSI 0325 EG 'SCDX', ID//11705(flutter/polar path)(PARK)

9700 CLAND Voz de Resistencia do Gelo Negra *0455 PT guitar, cock crow, OM/ID, AFR mx, tlc; (HOWELL-CA 8/24)

9735 PARAGUAY R.Nac. 0020-0100 SP phone rpt from R. Caritas, futbol scores, IDs; (KREMER-IN 8/28) / soccer, ID, ads (HOWELL)

9750 KOREA REP RK 1359-1430 EG nx YL w/cmtry; p. (KLINCK-NY 8/13)

9760 AUSTRALIA ("OZ") RA Shep 1045 JP/EG OM w/'DX Time', ID, nx, //11800; g. (PARK-HI 9/3)

9765 CHINA REP VOFC 1133-1145 CH YL ancr; f. (KLINCK-NY 8/10)

9785 MALTA V of the Med. 0607 EG tlc, mx; f. (KOHLEBRENNER-PA 9/4)

9850 USA WCSN 0155 EG rlg px; R.Cairo comes in at s/on (KELLY)

9875 AUSTRIA R.Austria 0131 EG nx on floods in Austria; (HALL-IN)

9825 BELGIUM BRT 2335 EG press rev; g. (KOHLEBRENNER-PA 9/5)

9950 INDIA AIR 1532-1547 EG cmtry by P.M.Gandhi, ID, nx; (DILLON-GR)



LOG REPORT

section D

11700 and above

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

- 11710 ARGENTINA RAE in PT 0100, s/on w/multi-lang ID, into dialogue (Howell CA 9/30)
In EG 0249, nx, pgm of Argentine folk mx (Klinck NY 9/16)
- 11715 ALGERIA RIV Algerienne in AR 0650, non-Islamic chants, monolog (Howell CA 9/10)
- 11715 PHILIPPINE IS. VOA relay in EG 1310, Morning Show for Asia (Klinck NY 10/4)
- 11735 NO. KOREA R. Pyongyang in EG 1134, nx exalting the "Great Leader" (Klinck 9/17)
- 11745 TAIWAN VOFC in JP 1140, nx, exc signal (Klinck NY 9/17)
- 11755 FINLAND RF in FR/EG 0220, ID, "Northern Report" (Tuchscherer WI 9/13)
- 11765nf? JAPAN RJ (relay?) in EG 2108, nx, "Japanese Scene" (Frodge MI 9/3) ED: This is a new one. It is not listed in the extensive RJ skeds for the period 9/3-11/4 as reported in Listener's Notebook (p. 24, Sept 89 FRENCH).
- 11775 ECUADOR HCJB Quito in EG 0519, "Passport", mx of the Andes (Carson OK 9/16)
- 11785 EAST GERMANY RBI in EG 0144, ID, nx, 40th anniv of GDR, exc (Reeves 9/23)
- 11805 BRAZIL R. Globo in PT 0100, ID, crazy sound effects, ads, futbol (Howell CA 9/9)
- 11835 SRI LANKA SLBC in EG 1118-1131*, rock mx, ID, freqs, p (Kohlbrener PA 9/15)
in EG 1144, nx, cmntry, ID on the hr (Klinck NY 9/17)
- 11840 NORWAY RNI in NO 0500, IS, ID in EG, nx in NO, f (Carson OK 10/7)
- 11855 CHINA R. Beijing in EG 1421, ancient CH architecture, visit to Tienamenn Square and Forbidden City, cooking show, f-g (Carson OK 10/7)
- 11865 JAPAN RJ in EG 1525, "DX Corner", tlk on RTTY, g (Reeves 9/17)
- 11900 SOUTH AFRICA RSA in Kavango 1454, ID in EG, nx in lang, pop mx, f (Carson 9/8)
- 11935nf SOUTH AFRICA RSA in EG 0200, nx, g (Carson 9/13) "Africa Today" 0200, //9580, apparently repl 6010, f (Price VA 9/13) tlk re play 0232 (Tuchscherer WI 9/30)
- 11955 SINGAPORE(p) BBC relay in EG 1600, world nx, "Omnibus", g (Price VA 9/12)
- 12000 USSR R. Kiev in EG 0215, "Ukraine Today", mx, biography, g (Price VA 9/12)
- 12005 TUNISIA RIVT in AR 2124, tlk show, relig mx, f (Newcomer PA 8/27)
- 12010nf USSR R. Moscow in EG 1603, nx, "Inside Report" re USSR finances, f (Carson 9/14)
- 12035 SWITZERLAND SRI in EG 0210, "Dateline", "Swiss Merry-Go-Round", g (Carson 10/8)
- 12077 ISRAEL Kol Israel in EG 0110, mailbag pgm, pop song, freqs, exc (Price VA 9/5)
- 12085 SYRIA R. Damascus in EG 2010, nx, AR mx, frequent ID's & TC's (Klinck NY 10/9)
- 13605 UNITED ARAB EMIRATES Abu Dhabi in EG 2214, "Fragrance of Asia" followed by relay of local EG FM station - Capital Radio, g (Moore 10/2)
- 13660 IRAQ R. Baghdad in FR 1954, AR mx, frequent ID's (Klinck NY 10/9) in EG 2255*, s/off w/annants in EG, g (Moore 10/2)
- 13665 PAKISTAN RP in EG 1610-1630*, YL w/nx (Tuchscherer WI 9/18)
- 13855nf ICELAND ISBS in IC 2304-2333*, nx & features, //15767 (Alexander PA 9/15)
- 15010v VIETNAM V of Vietnam in EG 1341, cmntry, f (Moore) in EG 1810, nx, local mx celebrating return of troops from Kampuchea (Klinck 9/23) in FR 2127*, local mx, ID "La Voix du Vietnam", off at 2127 w/o return at 2130, f (Frodge MI 9/3)
- 15067nf? CHINA R. Beijing (relay?) in EG 0333, "In the Third World", nx features, //15130 (Mali relay), 11715, 11960 (Frodge MI 9/2) ED: I've tried to hear this one for the past two nights w/o success. This should be an easy one for the West Coast. Has anyone else hrd this one on this split frequency?
- 15105 MALTA Deut. Welle relay in EG 0130, "Arts on the Air", mx, g (Price VA 9/12)
- 15155 ECUADOR HCJB Quito in EG 0248, pgm re trip planning, exc (Reeves 9/21) in EG 0157 w/world nx, "DX Partyline", exc (Carson OK 9/9)
- 15160 BULGARIA R. Sofia in EG 0648, nx, f (Newcomer PA 9/23)
- 15165 CHINA R. Beijing in PL 2030, ID, ID, nx (Schulze FRG 9/9)
- 15180 USSR R. Vilnius in EG 2224, probable DX show, freq annants, ID, p (Reeves 9/16)
- 15180 USSR R. Kiev in EG 2347, mailbag show, question re language, p (Reeves 9/16)
- 15230 ECUADOR HCJB Quito in RS 2230, into GM 2300, PT 2330, presumably this freq was temp repl for 15250 since latter freq was back as of 9/25 (Lackmann VA 9/18)
- 15235 OMAN BBC relay in SH 0327, IS, into tlk, very weak sig (Howell CA 9/29)
- 15335 MOROCCO RIV Marocaine in AR 2320, long Koran/Islamic devotional mx (Howell 9/9)
- 15375 SPAIN RNE in EG 1904, nx, press review, mx, f (Kohlbrener PA 10/1)
- 15425 USSR R. Moscow in EG 2020, "News & Views", cmntry on ME wars (Reeves 9/16)
- 15435 UNITED ARAB EMIRATES R. Dubai in EG 0335-0352*, "Modern Trends in Asia", pgm on the Muslim legal system, f, //17890 (Kohlbrener PA 10/2)
- 15475 GABON Africa #1 in FR 1935, FR pop mx, interviews, f-g (Frodge MI 9/16)
- 15485 NEW ZEALAND RNZ in EG 0350, rugby match, //17705, 15150 (Frodge MI 9/3)
- 15510 USSR R. Moscow in SP 0155-0235, tlks by M & W, ID's, freqs, nice jazz guitars, tlks, interviews, f, //15475, 15585, 15520 (Jordan PA 9/9)

17440nf ICELAND ISBS in IC *1935-2008*, nx, folk mx, //15767 (Alexander PA 9/17)
 17575 ISRAEL Kol Israel in RS 1627, IS, pips, ID, nx, //15615, p (Park HI 9/20) in EG 2135, mx, Mosaic magazine w/ interview of basketball player, f (Price VA 8/30)
 17595 MOROCCO RTVM in EG, nx, ID 1535, mx, p (Price VA 9/12)
 17620 FRENCH GUIANA RPI relay in PT 2257, ID, freqs, nx, //15200, f (Park HI 10/3)
 17640 UNITED KINGDOM BBC in EG 1725, early days of Paul McCartney, p (Park HI 10/3)
 17660nf USSR R. Moscow in EG 1450, cmntry, ID on the hr (Klinck NY 9/23)
 17660 PAKISTAN R. Pakistan in EG 0230, ID, political cmntry (Klinck NY 10/4)
 17680 CHINA V. of Democratic Kampuchea in Cambodian (p) 0430-0456*, mostly tlk with occasional mx, p-f (Treibel WA 10/14) Note: PWBR locates xmtr in Kunming, China.
 17690 USSR R. Kiev in UK *2200-2300, IS, ID's, nx, tlks, cmntry, f (Jordan PA 9/28)
 17700 USSR R. Moscow in EG 0135, ID, mx, rpt on US hockey tour, f (Price VA 9/21)
 17705 NEW ZEALAND RNZ in EG 0600, nx, wx, TC, Alistar Cooke cmntry, p (Kohlbrener PA) in EG 0539, Pacifica Style into "Story Time" (child story), exc (Carson OK 10/8)
 17715nf CANARY IS REE Spain relay in SP 2200-2254*, xmtr site ID, REE Madrid signs on at 2259 so you have to be careful! (Schulze FRG 9/30)
 17715nf USA BEC relay Greenville in EG 2105-2130*, "Sports Roundup", nx (Jordan PA 10/1)
 17730 SOUTH AFRICA RSA in EG 1333, "Touring RSA", ID, freqs, f //21535 (Park HI 9/15)
 17740nf ASCENSION IS. BBC relay in EG 0650, "Postmark Africa", p (Park HI 9/23)
 17750 AUSTRALIA RA in EG 0005, nx, "International Report", //17795 (Moore 10/2)
 17755nf USSR R. Moscow in RS 0259, lively mx, ID, p-f (Treibel WA 10/14)
 17765 WEST GERMANY Deut. Welle in FR 1656, listing maildrops in Africa, g (Park 10/9)
 17795 AUSTRALIA RA in EG 0233, "Communicator" on subject of TV, g (Carson OK 9/9)
 17800 FINLAND RF in EG 0956, IS, ID in 5 langs, f (Park HI 10/4)
 17835 PORTUGAL R. Free Europe in CZ 1750, lively mx, tlk (Tuchscherer WI 9/18)
 17865 PHILIPPINE IS. VOA relay in RS 1048, jazz mx, //9350, 15325, g (Park HI 10/1)
 17875 WEST GERMANY Deut. Welle in EG 0602, nx, "Morning Magazine", f (Park HI 9/12)
 17885 SEYCHELLES IS. BBC relay in FR 0436, ID, "Presse Britannique", g (Park HI 9/9)
 17890 JAPAN RJ in EG 0950, cmntry by Kyushu professor on computers (Park HI 9/25)
 17895nf USSR R. Moscow in FR 2200, lively mx, ID, freqs, f-g (Treibel WA 10/11)
 21465 EAST GERMANY RFI in EG 1418, pgm re orphans in GDR, f (Carson OK 10/6)
 21470 ASCENSION IS. BBC relay in EG 1733, Paul McCartney interview, f-p (Park 9/5) ED: October issue of "London Calling" lists this time & freq as Cyprus relay but Dale Park cites WRTH Downlink as site source. Maybe they changed on October 1.
 21505 SAUDI ARABIA BSKSA in AR 1600, nx? (Klinck NY 9/17) - tentative ID.
 21515nf SOUTH AFRICA RSA in SP 2025, ID, nx, SP type mx, g (Treibel WA 10/16)
 21525 AUSTRALIA RA in EG 1319, xmtr test from Darwin, sports rpt, f (Carson OK 9/8)
 21530nf PORTUGAL RDB Lisbon in EG 1600 after pgm in PT, nx, ID, f-g (Treibel WA 10/17)
 21560 WEST GERMANY Deut. Welle in GM 1400, IS, nx, cmntry, g (Carson OK 9/8)
 21566 COSTA RICA R. for Peace Intl in EG 0437, cmntry on black women (Carson 9/26) pgm by Maryknoll Order 2007 (Moore) "World of Radio" 2230 (Kohlbrener PA 9/12)
 21590 SOUTH AFRICA RSA in EG 1450, cmntry (Klinck NY 9/23)
 21605 UNITED ARAB EMIRATES R. Dubai in EG 1603, feature, class mx, nx (Carson 10/7)
 21620 SWEDEN RS in EG 1530, Nordic book fair, Icelandic ballet company (Carson 10/8)
 21660 ASCENSION IS. BBC relay in EG 1033, "Vintage Chart Show", p (Park HI 9/25)
 21675 KUWAIT RK in AR 0840, ID, local mx, political rpts, //15505 (Schulze FRG 9/30)
 21705 NORWAY RNI in EG 1603, problems w/1994 Olympics, interview, g (Carson OK 10/8)
 21715nf HONGKONG BBC relay in EG 0415, nx, S-9+ signal (Treibel WA 10/6) ED: Site is per BBC publication "London Calling". Park HI cites Singapore as site for 9/25 log per WRTH Downlink but perhaps the relay site was changed on 10/1.
 21725 NORWAY RNI in NO 0640, pop rock mx, abrupt s/off 0645 in mid-song, f (Park 9/11)
 21735nf INDIA AIR in EG 1027, Hindi folk mx, ID, DX pgm, abrupt off 1045, g (Park 9/11)
 21740 AUSTRALIA RA in EG 0447, rugby match, f (Carson OK 9/16)
 21770 FRANCE RFI in EG 1422, ID, TC, FR pop & rock mx, f-g (Carson OK 9/8)
 25790 SOUTH AFRICA RSA in EG 1055, IS, theme mx, pips, ID, "Africa South" (Park 10/9)
 25895 UNITED ARAB EMIRATES Abu Dhabi in AR 1130-1600, nx, AR instrumentals & vocals, prayer recitations, tlks, flute & percussion mx, ID, g-exc (Jordan PA 10/1-2)
 25900 UNITED ARAB EMIRATES Abu Dhabi in AR 0650, clear ID, AR mx (Schulze FRG 9/26)
 25944v COSTA RICA R. for Peace Intl in EG 2045, tlks on peace, ID, f-p (Jordan PA 10/5) in EG 2138, "Common Ground" & "World of Radio", f (Carson OK 8/28)

 I received about 70 loggings slips from Dale Park 8 days after the deadline. Since I had already completed the first page of Log D, I could not include any of the material prior to 15600. Dale should be commended for his intensive DX'ing but he and a few others did not heed my advice to limit their contributions to their best DX. It is clear that these members put a good deal of effort into preparing the log slips and the unfortunate fact is that it is not practicable to use all of this extensive material.

Havana Moon's Los Numeros

Advertisement Advertisement

"HAVANA MOON'S LOS NUMEROS ONLINE"

Moon Beam Press and Havana Moon are pleased to announce "HAVANA MOON'S LOS NUMEROS ONLINE (HMLNO)."

"LOS NUMEROS ONLINE" is a unique and exciting magazine format "online computer service" devoted entirely to the SWL, scanner monitor and other radio related hobbyists. Topics and features include: Gerry Dexter's CLANDESTINE CONFIDENTIAL, Tiare Publications GREAT RADIO READS, Antique Radios, Harry Helm's UMBRA et LUX and dozens of unique SWL features.

"HMLNO" will provide the radio related hobbyist with immediacy, timely information and SWL topics not covered by any other printed publication. "HMLNO" is not just another BBS! "HMLNO" is available on a major online computer service and reaches over 30 countries! "HMLNO" is TOMORROW'S TECHNOLOGY TODAY! And the price is one that everyone can afford.

For further information on how YOU may become a part of "HMLNO," send a large self addressed stamped envelope to:

Havana Moon
117 W. Harrison Bldg.
6th Floor, Suite H-319
Chicago, IL 60605

Shortwave dealers, publishers, international broadcasters, clubs and SWLs are urged to write the above address for FULL INFORMATION on one of the most exciting SWL concepts of the past 25-years.

"LOS NUMEROS ONLINE" Technical Direction provided by John DeBert with "ONLINE" Promotion/Production assistance provided by Kristin Kays.

Moon Beam Press, Los Numeros, "LOS NUMEROS ONLINE" and the Havana Moon Silhouette are registered trademarks and/or copyrights. Unauthorized use prohibited.

Havana Moon and "HAVANA MOON'S LOS NUMEROS ONLINE"
FULLY SUPPORT SHORTWAVE RADIO WEEK

MANY AREAS OF "HMLNO" REMAIN UNDER "ELECTRONIC CONSTRUCTION"
WITH NEW AND PRESTIGIOUS TENANTS ARRIVING DAILY

(C) 1989. All rights reserved.

*Havana
Moon*

NORTH AMERICAN SHORTWAVE ASSOCIATION

45 Wildflower Road
Levittown, Pennsylvania 19057

FIRST CLASS MAIL
U.S. POSTAGE
PAID
Levittown, PA
Permit No. 319

FIRST CLASS MAIL

NASWA

"UNITY AND FRIENDSHIP"

PUBLISHES **FRENDX** MONTHLY

NASWA MEMBERSHIP FEES:

First Class North America	\$18.00
Overseas - Surface Mail	\$18.00
Airmail to Central America, Caribbean, Venezuela and Colombia	\$25.00
Airmail to South America and Europe	\$27.00
Airmail to Asia, Africa and Pacific	\$30.00

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

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

Besides **FRENDX**, NASWA also publishes **DXtra** ... a mid-month newsletter with the very latest DX news while it's still news. It is available only to NASWA members:

DXtra

DXtra SUBSCRIPTION RATES PER YEAR:

North America (First Class)	\$4.00
Overseas (Airmail)	\$6.00
Sample copies of FRENDX and DXtra are available for:	
North America	\$1.00
Overseas	\$2.00

EXECUTIVE DIRECTOR - R. Charles Rippel, 1272 Parkside Pl., Virginia Beach, VA 23454
PUBLISHER & BUSINESS MANAGER - Bill Oliver, 45 Wildflower Rd., Levittown, PA 19057
EASY LISTENING - Alex Barmann, 300 Hill St., Apt. 6, Boone, NC 28607
DXERS FORUM - Rowland Archer, 5524 Hawthorne Park, Raleigh, NC 27613
TECHNICAL TOPICS - Ted Benson, 14705-B Watsonville Rd., Morgan Hill, CA 95037
LISTENERS NOTEBOOK - Bruce MacGibbon, 2295 Juniper Ave, Gresham, OR 97030
OSL REPORTS - Sam Barto, 47 Prospect Place, Bristol, CT 06010
DXTRA - Bob Hill, 15 Shilling St., Andover, MA 01810
DISTRIBUTING EDITOR - Kif Field, 431 Babylon Rd., Ambler, PA 19002-2302
LOG REPORT A - Bob Brown, P.O. Box 591, Colmar, PA 18915
LOG REPORT B - Sheryl Paszkiewicz, 1015 Green St., Manitowoc, WI 54220
LOG REPORT C - Jerry Ervine, P.O. Box 5204, Hidalgo, TX 78557
LOG REPORT D - Wallace C. Treibel, 357 N.E. 149 St., Seattle, WA 98155
ENGLISH SCHEDULES - Tom Sundstrom, P.O. Box 2275, Vincentown, NJ 08088
SCOREBOARD - Jerry Lineback, 3959 Castle St., Douglasville, GA 30134
AWARDS PROGRAM - John Kapinos, 86 S. Quinsigamond Ave., Shrewsbury, MA 01545
COUNTRY LIST - Don Jensen, 5204 70th St., Kenosha, WI 53142