

F R E N D S

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RADIO MALDIVES - see SWC

THE LOUDENBOOMER REPORT

Now it can be told! Ye scribe, the world's foremost DX journalist, has just returned from a month-long tour of the most inscrutable of the oriental nations, Kwangpo. This land of some 400 million, you know, has been off-limits to Westerners for two decades. Though often thought of as backwards, the Kwangpoese are avid DXers. Even the most humble peasant has his shortwave receiver and uses it to an extent not equalled in the so-called civilized world.

Kwangpo has been the subject of much curiosity among SWL's. Now, thanks to a visa from the Kwangpo foreign ministry and the reportorial skills of Loudenboomer, that curiosity can be satisfied.

Strange as it may seem for a totalitarian regime, Kwangpo has never discouraged its people from listening to broadcasts from the outside world. For the country's aging and revered leader, Chairman Di Po'l has said, "Radio is like the song of the cuckoo, pleasant to listen to, but lacking in wisdom!"

Having taken this maxim to heart, Kwangpo listeners are fanatic DXers, but rarely do Western propaganda broadcasts make much impression on them. DXing, as a result, is no threat to the regime.

Though not known outside Kwangpo until now, about five years ago, in what must be considered one of his lesser moments, Di Po'l issued a pronouncement which changed the course of his country's history.

"Let onions and leeks also grow in the garlic patch!" he proclaimed. Well, to the experienced and progressive DXers of Kwangpo, this liberal-sounding statement meant that they had official sanction to broaden their listening horizons, to bring scientific thought to bear on DX efforts.

Openly, these elite DXers began expressing doubts concerning some of the Chairman's basic, best known and most respected sayings: "Radio is a magic box whose mysteries remain hidden like the dragon submerged in the rice paddy," and "The road to knowledge is not trod by the true believer." Yes, the era of scientific DXing had dawned. Or had it?

The DXing masses of Kwangpo were shocked and horrified! Clearly these heretics were counter-revolutionaries of the worst sort.

It was very disturbing to ponder the thought that there might be more to DXing than turning on the receiver's switch, spinning the dial and trusting the thoughts of Chairman Di to inspire the radio to produce rare and distant signals!

So, among the inexperienced listeners a neo-revolutionary movement cropped up to stifle the new thoughts.

It's slogan: "Do not confuse us with knowledge, do not bother us to learn!"

Leading the way was a cadre of militants known as the "Dead-head Guard". They plunged into the fray, seeking to restore the blissful ignorance of the past.

A leader of the Guard, one Go Bac Wurds issued an order, instructing the progressive minority to cease investigating the mystical subject of propagation, to expunge articles of a technical nature from publications, and return to their former lethargic state.

When I interviewed Go, he told me, "We knew we must halt the cancer, silence the running dogs of imperialism who cleverly prattle that knowledge is progress. Persuasion caused some to recant their false philosophies. Others were sent to re-education communes, where, even today, they must daily face the people and chant, "Tristan at noon, oh my, oh my, thanks to the thoughts of Chairman Di!"

And so, today, things in Kwangpo are as they were be for Di's "Garlic Patch" speech. The people--or at least most of them--again are happy.

That's my report, except for a postscript. As I was boarding my plane for home, a little man approached me, furtively slipped a scrap of paper in my hand, and scurried away unnoticed. Safely aboard the aircraft, I read what was obviously a message from one of the unfortunates exiled in a commune somewhere in Kwangpo's interior. At great personal risk, he managed to slip this message to the foreign DX journalist. On it were scrawled just five words.

"Oh what might have been!"

Shortwave Center



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RADIO MALDIVES

EXPORTS

EDITOR'S NOTE: All the information for this article was obtained exclusively for FRENEX by former editor Ralph Perry and assembled by the present editor

Maldive Fish
Faru Fish
Muri Fish
Rim Fish
Kari Fish
Chips No. 1
Chips No. 2
Faru Fish Chips
Bone Dust
Shark Fins
Tortoise Shells
Ambergris
Cowries
Ball Copra
Cut Copra

If the DX fraternity were to adopt a "10 Most Wanted" list, like the FBI, Radio Maldives would certainly be on the roster. Only a handful of DXers from the continental U.S.A. have logged this rare one and even fewer have verified it. If you don't believe us, run through your back copies of FRENEX for a couple of years.

A catch to treasure indeed! An exotic prize from an exotic area of the world---a coral archipelago of nearly 2,000 islands grouped into 19 atolls covering some 475 miles north to south and some 80 miles east to west, none of the islands over eight feet above sea level. The Maldives, situated in the Indian Ocean, have been a republic since 1968 with their capital at Male, almost equidistant from Ceylon to the east and India to the northeast.

To visitors, Maldives present one of the



RADIO MALDIVES BUILDING

most beautiful pictures of blue, tropical sea, studded with islands surrounded by white, sandy beaches with green coconut palm trees forming the most common variety of plantations throughout the archipelago. A total of 110,077 people inhabit the area. The climate is like Ceylon's, hot and humid. Maldivians embrace the Islamic religion, speak a language called "Divehi", although English is taught in the schools as offering the widest scope for Maldivian youth to proceed to higher studies or training. Fishing is the main industry although coconuts and copra, coir yarn weaving and collecting cowries and other sea shells occupy some of the islanders.

The history of the Maldives is shrouded in somewhat of a mystery although it is theorized the original inhabitants were of Aryan stock who migrated from northern India in the B.C. area. The Maldives have fiercely resisted foreign occupation during centuries when they were ruled by sultans and sultanas but in 1887 felt compelled to sign an agreement to become a protectorate of Great Britain.

This came to an end with an independence treaty in 1965 and eventually the Maldives gained full sovereignty and political independence in 1968. Now they are a republic with a president, a majlis (parliament), an Atoll Committee composed of representatives from every atoll and a "Katheeb" (supervisor) on every inhabited isle.

Broadcasting in the Maldives was initiated by the Ministry of Home Affairs with a small medium wave... (TURN TO NEXT PAGE)

MALDIVES (Continued)

transmitter under the name "Male Radio". This small service was expanded by the Male Cinema Co. (a company shared by the public and the government and a new station began broadcasting March 12, 1964 in the 100 meter band. The new name was Male Cineco Radio and it had only two transmitters of 7.5 and 10 kw.

On Sept. 11, 1966 the station was taken over by the government and operated under the Ministry of Finance. Since then it has grown steadily in its location in Male, the capital.

On April 1, 1968 a new 30 kw transmitter began to operate in the 61 meter band and a new building was completed and moved into on June 26. The name "Male Cineco Radio" was changed to "Maldives Islands Broadcasting Service" (MIBS) on Feb. 16, 1969 and when the country became a republic to its present title, "Radio Maldives".

With a fairly strong signal, Radio Maldives covers Ceylon, south and central-southwest India and Pakistan through the station's clear nighttime channel (4740 kHz 1500-1730 GMT), specifically chosen by international engineers who supervised the operation. Most of the components of the equipment for this transmission were constructed and assembled by the chief engineer, Q.A. Wickramasinghe, in the Maldives. N.T. Hassan Didi is the station director.

Radio Maldives now owns 5 transmitters, operates at various hours from 0100 to 1745 GMT on the SW frequencies of 3331, 4740, 6150, 7225 and 9538 and MW 1507 in the Divehi and English languages. All technical personnel are Maldivian nationals and all announcers.

Radio Maldives broadcasts numerous commercial programs on a contract basis and has 10 newscasts a day in both languages, including relays from the BBC, Radio Peking and Radio Australia. Entertainment programs include Hindi and English music, music from the latest Hindi movies and Divehi songs; among worldwide programs to which time is sold are "World Tomorrow", "Hour of Decision" and "Church of the Lord Jesus Christ of the Apostolic Faith". "U.N. Perspective" is another program heard daily.

Correct--repeat, correct--reception reports are verified and they have been received from all over the world, including Belgium, Canada, Australia, Denmark, England, France, Germany, Italy, Japan, Malaysia, New Zealand, Sweden, South Africa, U.S.A. and Holland.

 By ED RICCHEZZA (Let's have yours!)

DX Thrills

One afternoon in 1970 I was listening to the BBC news at 1600 when the announcer said: "Radio Cairo has announced the death of President Nasser from a heart attack." But why hadn't BBC mentioned it at the start of the program? Then lightning struck--obviously the BBC had just heard it themselves!

I called up the HOTLINE of WIP, Philadelphia, which offers \$25 for news scoop of the week.



ALL ANNOUNCERS ARE MALDIVIANS.

It was news to them and they immediately put it on the air. I worried--what if I had gotten it wrong? But no it was all over the world shortly.

Needless to say, my scoop won the \$25 prize. Shortwave made me the first in Philly with the news. Even though I deplored the event I couldn't help but be thrilled with my scoop.

(Keep sending 'em in to SWC)

Some Considerations For Frequency Measurements For DXer.

BY DAN HENDERSON

One of the requirements that a person must meet before he rates himself as a top DXer is the requirement of always reporting the correct frequency a station operates on. One method that has been perfected in the past few years is that of using a frequency standard and zero-beating the standard against the received signal, using the narrowest bandwidth available in the receiver. Obviously, the narrower the bandwidth of the receiver's IF filters, the better the frequency readout will be. Of course, with the advent of the direct readout receiver, this method can be used without the use of a frequency standard such as a BC-221. However, no matter what type rx you use, there are a number of things about the measurement technique described above that the DXer should be aware of and should beware of.

First of all, the tone or heterodyne produced when the BFO is switched into the circuit may be characteristic of the BFO itself: if the BFO is not "zero-beat" in a "no-signal" case, whenever a signal is mixed with the BFO signal, the result will be a "false" heterodyne, which can mislead the DXer in frequency measurements.

For example, if the tone of the BFO is set at 1500 Hz when not zero-beat against another signal, the resulting tone when the BFO is properly zero-beat against a signal will be 1500 Hz. Normal procedure is to null out the audio tone, thereby providing a frequency accuracy of less than 20 Hz. Since the null point in this case would be 1500 Hz, the filter characteristics of the ear cannot be used efficiently in the frequency measurement procedure.

Therefore, ALWAYS ZERO-BEAT the BFO to "zero" before heterodyning is attempted.

Another major item that affects the frequency measurement is the fact that not all SWBC stations have perfect transmissions or perfect RF Spectra emitting from the antenna. This will definitely affect the frequency readout as provided by the heterodyning technique.

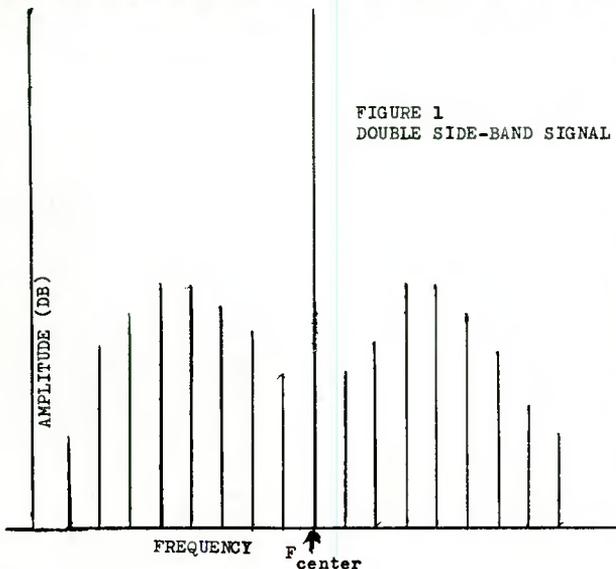
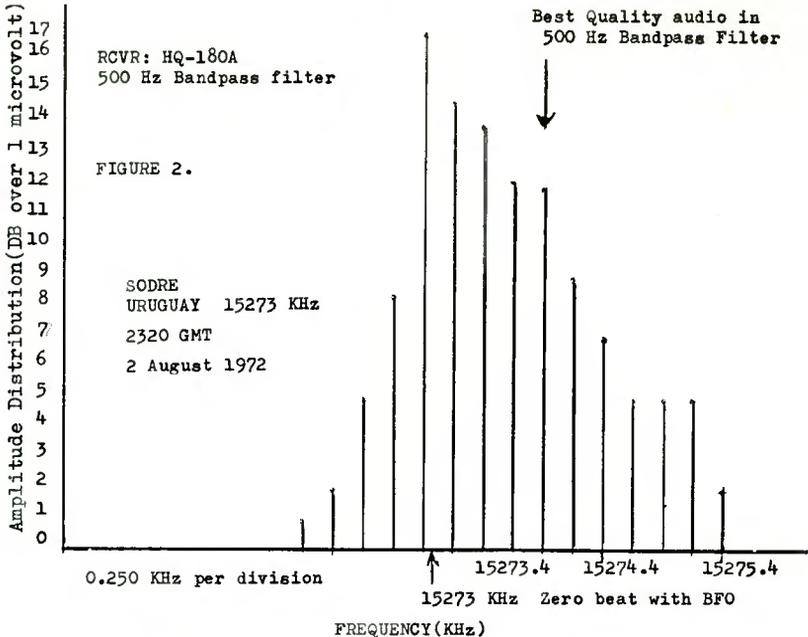


FIGURE 1
DOUBLE SIDE-BAND SIGNAL

Generally, the spectrum of a broadcast station is rated as AM, which is defined as double-side-band or (DSB). An example of this is shown in Figure 1. However, there are many stations which do not exhibit the classic DSB spectrum. One such station is SODRE, Montevideo, Uruguay, 15273 kHz. Figure 2 (next page) shows spectrum data taken from SODRE, Aug. 2, 1972, at 2320 GMT on a HQ-180A rx with a 500 Hz IF bandpass filter. Examination of the

(SEE NEXT PAGE)

FREQUENCY MEASUREMENT

(Continued from Preceding Page)

spectrum data shows that most of the energy is found in the upper sideband, with little or no energy in the lower sideband. When the heterodyning technique (zero-beating) is used on this signal, tests showed that the signal was zero-beated with the carrier on 15273 kHz (+20 Hz). Generally, the advertised and reported frequency for this station is 15273 kHz. However, tests indicated that the frequency that provided the very best listening quality and, therefore, the frequency that the receiver should be tuned to is actually 15273.9 kHz, which is considerably (almost two filter bandwidths) higher than the advertised frequency.

In general DXing circles this frequency difference is not enough to amount to much, but it was noted that a tone of about 900 Hz was noted between the "zero-beat" point and the point of best listening quality. Therefore, although the signal is reported at 15273 kHz, the receiver should really be tuned to 15274 kHz to get best listening quality from SODRE. Incidentally, there is some indication that the engineers at SODRE are aware of the shape of their spectrum. Radio Havana, Cuba, which had a fairly decent spectrum on both sides of the null point of 15270 kHz on 2 August, does not seem to interfere with SODRE, even though the last of the RHC spectral lines occur about 15272 kHz. The odd shape of the SODRE spectra allows its signal to be heard and discriminated with receivers which have 2.5-3 kHz bandwidth filters. If the signals were even 500 Hz closer together, the interference would be too much from RHC to the SODRE signal to allow the SODRE signal to be heard regularly. A check of two carrier signals from RHC and SODRE over a period of 6-8 months has shown the variance in their spacing to be no more than 100 Hz.

In conclusion, when the heterodyning technique is used as an aid in frequency determination for SWBC... (CONCLUDED NEXT PAGE)

DX Holiday Calendar

By STEVE SYKES

(D=Day. Clip and Save. We'll run as many as we can and pick up where we leave off next month)

MARCH

- 8 Syria, Revolution D; Nepal, USSR, Women's D.
 9 Brit. Honduras, Baron Bliss D.
 12 Lesotho, Woshoeshoe's D; Liberia, Decoration D; Mauritius, Ind. Celeb. D.
 16 Liberia, J. J. Roberts' Birth D.
 18 (Approx.) Israel, Purim.
 19 Guyana, Phagwah; Canary Is., Costa Rica, Colombia, Peru, Spain, Dom. Rep., Venez., Italy, St. Joseph's D.
 20 Tunisia, Independence D.
 21 Iran, Iraq, Naoroz Festival; thru 24 for Iran; Afghanistan, New Year's D; Japan, Ryukyu Is., Vernal Equinox; Mexico, Benito Juarez' Birth D.
 22 Lebanon, Syria, Arab League D.
 23 Bolivia, Memorial D; Laos, Armed Forces' D; Pakistan, Pakistan D.
 25 Greece, Cyprus, Greek Indep. D.
 27 Burma, Resistance D; Nigeria, E. Nigerian State Youth D.
 29 Taiwan, Youth D; Malagasy, Memorial D; Cent. Afr. Rep., Anniv. Death of President Boganda.

APRIL

- 2 Iran, 13th of New Year's; Liberia, Nat. Fast and Prayer D.
 3 Iran, National Holiday.
 4 Hungary, Liberation D; Senegal, National Holiday.
 5 Korea, Arbor D.
 6 Thailand, Chakri D; So. Africa, Van Riebeeck D.
 9 Philippines, Bataan D.
 10 Nepal, Chaitrasastami.
 11 Costa Rica, Anniv. Rivas Battle
 12 Vietnam, Hung Vuong D.
 13 Thailand, Songkran D; Cambodia, Laos, New Year's.

- 14 Cambodia, Laos, Nepal, New Year's; Haiti, Honduras, Guatemala, Pan-American D.
 15 Cambodia, Laos, New Year's; Arab and Afr. nations, Maulid-al-nabi.
 17 Syria, Evacuation D; Laos, Buddhist Holiday (through Mar. 19).
 19 Sierra Leone, Republic Anniv. D; Uruguay, Landing of the 33; Venez. Independ. D; Honduras, El Salvador, Beginning of Holy Week; Some Christian countries, Holy Thursday.
 20 Honduras, El Salvador, Holy Week; Some Christian countries, Good Friday.
 21 Holy Week. Brazil, Tiradentes, Brit. Hond., Queen's Birth D; Iran, Nat. Holiday.
 22 Turkey, Nat. Sovereignty D. (also 23). For Christians, Easter.
 25 Australia, New Zealand, Anzac D; Italy, Liberation D; Swa. iland, Nat. Flag D.
 26 Tanzania, Union D.
 27 Egypt, Sham al-nasim; Togo, Independence D, also Sierra Leone.
 29 Japan, Emperor's Birthday.
 30 Holland, Queen's Birthday.

MAY

- 1 Widely celebrated, International Labor D.
 2 Lesotho, King's Birth D.
 3 Ryukyus, Constitution D.
 5 Cambodia, Constit. D (also 6); Ethiopia, Victory D; Japan, Ryukyus, Children's D; Mexico, Anniv. of Battle of Puebla.
 6 Lebanon, Martyrs' D.
 7 Dahomey, Aniv. Pres. Council; Israel Independ. D; Thailand, Coronation D.
 8 Syria, Martyrs' D.
 9 Czechoslovakia, Liberation D; USSR Victory D.
 10 Mali, Baptism Mohammed; Camerouns Commem. Nat. Institutions D.
 11 Laos, Constitution Anniv.; Morocco, Ascension.
 13 Approx., Sabah, Harvest Festival (through 15th).

 FREQUENCY MEASUREMENT (Concluded)... stations, a good frequency measurement usually results. However, due to the spectra of the various SWBC stations, a misleading frequency indication could result, since the classic DSB signal may not be present. This indication may not be off more than 1000 Hz but the DXer should be aware of the possibilities and should try to compare the zero-beat point of the carrier with the point of optimum listening quality. This writer is not trying to imply that frequencies have to be read down to less than 1 kHz--this is not generally required for reporting--however, it is believed that the serious DXer would be interested in the phenomena explained above and would be aware of heterodyning techniques for frequency measurement. *****

The Forgotten Band

The area between 3500 and 4000 kHz, roughly the 75 meter band, is avoided by many SWlers. With reason--if you want to listen to something, stay away! But if you want to DX,ah,that is a different story!

Between 3500 and 4000 the World Radio and TV Handbook for 1973 lists only 85 stations.Doesn't seem like much,compared with 9500-10000 kHz? Stay with us! In these 85 stations are 30 countries,better than a 3-1 ratio.(And that's not counting USSR,heard at this QTH on 3910).

But even that statistic doesn't do justice to the goodies in "The Forgotten Band". What countries! Let's take a look.

The band offers you your only chance to log the ultra-rare Falkland Islands,last reported on 3942;your only real chance to hear Cape Verde (Mindelo on 4721 is extremely rare);Galapagos on 3520;Greenland on 3999 (occasionally reported on other bands) New Hebrides on 3945; Timor on 3668 (rarely noted on 3228)and the Solomon Islands on the 3995 channel.

Sounds great? Well, like most of the "great things" in life, there is a catch to it. Unfortunately for U.S.DXers, this band is also the home,day and night, of the AROs, amateur radio operators,"hams" for short. And, also unfortunately, they have many of the crazy habits of DXers--they're liable to have their receivers--and transmitters--turned on at any hour. When they're on, DXers are in trouble,especially if they're fairly near your QTH.

A Few Pointers

What to do? Certainly not give up. Here are two suggestions: (1)Try,try and try again.The AROs are sometimes off a frequency or leave it for a short time. A tip: avoid weekends when the "hams", like DXers, don't have to go to work--they're liable to be on all hours of the night. But let's face it: if you're going to DX this band brace yourself for bitter and frequent disappointments--a ham may sign on--"CQ,CQ,CQ,Calling CQ,CQ,CQ"--after you've waited.. (TURN TO NEXT PAGE)

3500 kHz	
3515	Ecuador
3520	Galapagos
3668	Timor
3778	Iran
3824	Lesotho
3883	Cape Verde
3905	West Irian
3930	Cape Verde
3942	Falklands
3945	Hebrides (Vila)
3970	Camerouns
3985	Burundi
3995	Solomons
3999	Greenland
4000 kHz	

ALL RARE DX ABOVE EXCEPT FOR IRAN.

EDITOR'S NOTE:The following article is humorous but the data are factual from WRTH, etc.

By HENRY MICHALENKA

(Article taken from the "New England DX News", the only daily 40-page newspaper devoted entirely to SWBC DXing).

STOCKHOLM (DXPI)-Two of the world's greatest DXers and foremost authorities on shortwave broadcasting are now presumed dead after weeks of fruitless searching.

H.Q.Lund-Hammar of Sweden and Aarfor B.Drake of Finland were presumed lost at sea during a severe geomagnetic disturbance while on their DXpedition to Tristan da Cunha. During a routine check of papers at the DXpedition Headquarters in Stockholm, authorities uncovered some information leading to the whereabouts of an unclaimed territory for the DXer, a veritable paradise of rare stations and countries never heard of or available to the average listener. This find was in a dossier entitled "The Forgotten Band". According to the dossier,...

(SEE NEXT PAGE)

THE FORGOTTEN BAND...(Cont.)

"...apparently this band of stations from 3500 to 4000 kHz has been abandoned by listeners in Europe and North America due to utility and amateur radio (ARO) QRM. Within this band, 5 continents can be logged; two rare countries operate exclusively herein and at least two more probably operate only in this band though listed elsewhere. Also there are enough rare stations to keep you busy while waiting for the postman."

The authorities speculated that because Lund-Hammar and Draak had logged and verified everything contained in this dossier, they did not wish to release this information to the general public for fear of duplication by (in their minds) lesser DXers. However, now that these two are no longer with us, their secret DX band can be revealed to all. Following are the excerpts from their file:

"3520 kHz--HCVG-8, La Voz de Galapagos, is a South American station/country that can be heard exclusively in this band since their move from 6150. Apparently no DXers in North America reported 6150 and having lost their main target area, they moved to 3520 to get the Scandinavian audience. Logged here at 0330 GMT, although a U.S. Dxr intercepted a morning SS transmission to Iceland at 1000 GMT.

"3942V kHz--Falkland Islands was logged on this channel during a summer DXperiment in a forest ranger lookout tower in Norway. The aurora borealis was bright enough that night to read by, for some reason we will check into later. We do not know at this time if there was any connection between the bright aurora and enhanced southerly reception.

"3668 kHz--Portuguese Timor is also listed for 3268 but this is the only frequency being logged. Caught giving greetings in Portuguese to members of Radio Timor DX Club branch in Rio de Janeiro.

"3945 kHz--New Hebrides has now extended its broadcasting hours due to popular request from North American DXers. Station now operates from 0745-0900 in French, directed to Champaign, Illinois. The former channel of 3905 has been deleted.

"3824 kHz--Lesotho Radio Station 7PA22 operates on this channel in French on Sunday from 0630-0700. The station is operated by the Secretariat of Catholic Schools in Maseru; power is 100 watts on a good day and is directed to students in the back row."

And so went the dossier. As this article is being put to press, there is an unconfirmed report of two DXers on a liferaft floating near the Maldives Islands. A passing freighter reported picking up two men and a crystal set tuned to Radio Maldives.

10 TOUGHEST COUNTRIES TO LOG: From John W. Hoogerheide, Michigan: 1. Falkland Is. 2. New Hebrides 3. Nepal 4. Laos 5. Cambodia 6. Sao Tome. 7. Cook Is. 8. Swaziland 9. Maldives 10. Mauritius. (Send in your list).



FROM ARCTIC GREENLAND (above, from Radio Greenland folder) TO THE TROPICS, FORGOTTEN BAND SAYS IT ALL.

 * A FEW POINTERS... (Concluded)
 * 25 minutes for the ID on the hour.
 * (2) Watch for unusual weather patterns, in particular solar storms on the sun, that may alter the ordinary scheme of radio transmission paths and make rare SWBC reception possible. The great solar storm of Aug. 15, 1972, blocked out all AROs in the northeast and allowed Dr. F. Earle Hall of Mass. and your editor to log Falkland Islands on 3942. Monitor WWV at 18 mins. past the hour for news of solar activity.



DIRECT READOUT FOR THE HQ-180? By JOHN CALLARMAN

Editor's Note: Don't go away non-Hammarlund owners. This could aid your receiver too.

Owners of the Hammarlund HQ-180, jealous of the 1 kHz readout of some of the newer DX machines, can make their receivers just as accurate and possibly more so with a simple addition to their shack.

Of course, the epitome of frequency measurement is the BC-221, a machine I've never owned, and one that sounds a bit complicated..(Ed. note: It is). It'll measure to the nearest Hz, via interpolation in the measurement tables that (hopefully) accompany the surplus unit. How much closer, though, does a DXer need to be than a tenth of a kHz?

Abumblefingers DXer such as I--afraid to tackle anything other than the simplest construction---may be a bit wary of trying to build one of the frequency standards outlined in various electronics magazines. Instead, I succumbed to the tempting CQ magazine ad and bought a frequency standard from Palomar Electronics, Escondido, Cal.

Here is what I now have--a frequency standard that augments my built-in 100-kHz marker, with selectable markers at 50,25,10 and 5 kHz. Even without the HQ-180's "vernier tuning" control, the markers--adjustable to zero beat with WWV-- provide fast bandsread calibration points anywhere on the dial. Interpolating between each 5 kHz marker is obviously more accurate than interpolating between each 100 kHz marker.

The vernier tuning control, though, covers a 6 kHz range, ± 3 kHz from the central frequency. It is marked each $\frac{1}{2}$ kHz and has sufficient space between marks so that an "eye estimation" to the nearest .1 kHz is no problem. To measure an "off" frequency, I'll first zero in the nearest 5 kHz marker, with the vernier set at zero by adjusting the bandsread. Then, I simply zero in the carrier of the station in question with the vernier, and add or subtract the vernier reading from the checkpoint.

For example, tuning Bangui on nominal 5038, I find the frequency standard's marker coinciding to 5040. Because of the relative strength of the signals, I have to disconnect the antenna to get my marker in clear. Then, I turn off the standard and zero beat Bangui's carrier with the vernier. It reads about a fifth of the way between minus 1.5 and minus 2 kHz on the vernier scale. I have 5040 minus 1.6 which equals 5038.4.

Returning the vernier to zero and tuning the bandsread dial to the next highest 5 kHz marker (or 5045), I zero beat Lome, Togo, at exactly "+2" on the vernier scale. Thus, I'm assured that Lome's nominal 5047 frequency is its transmitted frequency to the nearest .1 kHz.

Since precisely -3 and +2 on the vernier scale will measure exactly the distance from one 5 kHz marker to the next, and since when I zero beat WWV with the 100 kHz standard, the 50,25,10 and 5 kHz markers are also zero beat, I'm assured the very simple method of measurement is correct and accurate.

The Palomar unit (or other commercially available standards, or those that can be built at home from parts and plans) certainly can also be of use to the DXer not so fortunate to have the fine-tuning vernier control of the HQ-180. Even with the DX-150 or the old Hallicrafter S-38, the standard will allow the DXer to: (1) retune his main tuning to the same fixed spot so that (2) he can Calibrate his band spread accurately to the nearest 5 kHz.

+++++ +++++ +++++ +++++ +++++ +++++ +++++ +++++
UPCOMING IN APRIL: An exclusive, on-the-spot report on "Broadcasting in Guatemala". A chuckler: "The Adventures of Shortwave Ohms and Watt's Son" and more DX Tips and Thrills. Be with us, huh?

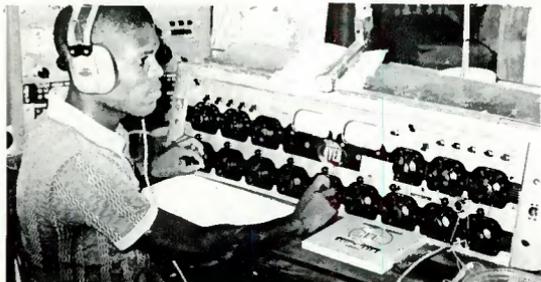
Lilliburlero *The Beggar's Opera* (1728)

George Schnabel, our scholarly DXer from Rochester, N.Y., informs us that the tune used by BBC for World Service programs--see Jan. SWC--and called "Oranges and Lemons" appears in his music book under the name "Lilliburlero". It first appeared in print in 1686. Some would attribute it to Henry Purcell, others give it a Dutch origin. It was popular as a setting for political and satirical ballads near the end of the 17th Century.

One reader pointed out that we published the wrong notes for the BBC Bow Bells. We clipped it from WRTH which made the mistake but if we had known music we would have caught it. Sorry about that!

----- RADIO SWEDEN JOINS THE BIG POWER RACE -----

Radio Sweden is getting ready to put into operation for shortwave broadcasting three new 500-kilowatt transmitters. Two of them will transmit from Horby, the site of Radio Sweden's two 100-kw transmitters, and the third from Karlsborg which will qualify for a new station under NASWA counting rules. You may already have heard the Karlsborg transmitter since the Swedish Telecommunications Commission has been testing it on the following frequencies--6175, 7215, 9745, 11705, 15295, 17865, 21715 and 26020 kHz. Sweden had come to realize its older transmitters, brought into service early in 1952, were no longer doing the job for them and the new equipment was needed because of increasing power competition and longer program schedules. The 500-kw transmitters each contain only seven valves (tubes), including two tetrodes in the final power stage; the other stages of the transmitters and the associated rectifiers are equipped with semiconductors. In order to make possible additional directions of radiation, each transmitter will feed a rotatable 500-kw log periodic antenna. (Data obtained by Brooks Morton Sweeney).



AT RADIO STATION 4VEH, CAP HAITIEN, HAITI, TRAINED HAITIAN CHRISTIANS MAN THE CONTROLS.

DX Tips

In making your rough notes for a QSL report don't forget to put the date and frequency at the top, figuring you'll insert it later. By then you may not remember the date you heard that rare station.

....Malcolm Archard
(Ed. Note: Elementary? It's happened to us more than once.)

A number of the spurious signals that appear on the Drake SPR-4 may be your own fault. If the pre-selector on your rx is not adjusted correctly you will get spurious signals. And the pre-selector number given on your dial is only good for mid-band; at either end of the crystal range you will have to alter the setting. The variance on some bands is greater than on others..... A.V.S.

MISCELLANY

Radio Cordac, gospel radio station in Burundi, is now back on air after being closed down by government several months.

Trans World Radio is planning to build a new station in the Far East.

Bill Graham seeks to erect 24-hour SW station in Hawaii. (From Marlin Field)

INSIDE the FBIS

EDITOR'S NOTE: We continue with Don Jensen's fascinating story on the FBIS, begun in February issue.

If you're dying to phone the Foreign Broadcast Information Service, try 1-202-351-2942. That will get you one of the FBIS offices, probably personnel, but who knows? The man who answers will say simply, "This is 351-2942", which is what you knew when you started. The 351 exchange is listed for McLean, Virginia, just across the Potomac from Washington. The same exchange is used by nearby Langley, Va., where CIA headquarters are located.

The FBIS headquarters are equally hard to locate. Some have suspected they were in the huge, off-white monolith of a CIA building at Langley. Also suggested have been nearby McLean or Arlington. The best information is that FBIS is located at 1200 Wilson Boulevard in Rosslyn, Va., about 5 and one half miles from Langley and a similarly easy commuting distance from 3175 Holms Run Road in Falls Church where director Paul Borel lives.

Borel, by the way, has described the work of FBIS as that of serving "the entire U.S. government by collecting and disseminating information overtly available from foreign radio broadcasts, press transmissions and publications, primarily newspapers and periodicals." One branch of the "entire U.S. government" it serves especially is the CIA's Intelligence Division, which draws from collected data to produce intelligence reports on the economic, social, political and governmental situation in any country of the world.

Every morning at 3 a.m., top ranking men begin poring over the overnight cables received from FBIS listening posts around the world. Their summary reaches the White House basement's "Situation Room" before the President has his morning coffee.

The CIA covert intelligence agents usually get the jump on the FBIS when it comes to world crisis time. Really hot news doesn't break first on the SWBC bands. But the FBIS monitors scored a coup in June 1967 when they picked up the first word of the outbreak of historic hostilities between Israel and Egypt--the 7 Days War.

Where are the FBIS monitoring stations? It is known that a goodly number are operated in embassies and diplomatic missions in many overseas countries. It is clear that the FBIS attention to radio broadcasts is set up to coincide with our particular national interests at the time. In other words, special attention is now being paid to the Far and Middle East, with less importance placed on most European and Latin American countries. It is probably in these lower priority areas where minor monitoring operations from embassies take place.

FBIS also draws on monitoring reports by the far less secretive BBC Monitoring Service. An exchange of information with BBC MS is clear when available data from the British source sometimes has borne a partly obliterated FBIS reference. Presumably other monitoring services also exchange data with FBIS and some, of course, comes from official government frequency lists issued by foreign countries concerning their own stations.

As to the major FBIS listening stations around the world, no list is published, of course. But it is known that two key operations are located in Bangkok, Thailand and near the little Okinawan town of Nagahama.

Okinawa's Zampa-Misaki peninsula jabs out into the East China Sea. Across the water, 650 miles to the west, is Shanghai. On the Okinawan peninsula, near the large American Kadena Air Force Base, is a FBIS listening station. It is the main center for monitoring programs from domestic Mainland China stations. Its antenna farm is set up to monitor Asian mainland signals. (Continued Next Page)

*** INSIDE THE FBIS by Don Jensen (Continued from previous page).

In the communications receiving building professional listeners, most of them foreign nationals employed by the U.S. for their language skills, comb the bands for signals from Chinese and other South East Asian domestic and foreign service stations and from the clandestine operations broadcasting from the area.

The monitors listen around the clock, in three shifts, tuning, recording and translating the barrage of broadcast words. It's not exciting work. Usually, in fact, it's quite dull. Can you imagine actually listening to hours of political diatribe, exhortations and then that curious type of oriental political soap opera? But bits and pieces of data, analyzed by intelligence experts, can provide a picture of current events and policy shifts "on the other side".

Their monitoring duties are directed by a handful of Americans. A few years ago, the FBIS bureau chief on Okinawa was one Col. Joseph R. Couch. The station's address is simply, FBIS, APO San Francisco, Calif. 96239. That APO ZIP, by the way, is assigned to the Kadena Air Base.

In Thailand, the FBIS regional office is located in a drab green building with a red tiled roof on Soi 39, Bangkok, a small compound amidst a group of shabby buildings along a narrow alley. It is surrounded by a high, corrugated metal fence and a cluster of antennas sprout from the building's roof and yard.

Perhaps 20 Asian listeners and a few American supervisors keep watch on broadcasts, in 14 languages and dialects, from stations in 8 neighboring countries. Countries both friendly and unfriendly. During the Indian-Pakistani war that ended with the creation of Bangladesh, regular broadcasting and clandestine stations in the sub-continent were added to the roster of outlets monitored in Bangkok.

Back home in the nation's capital, congressmen are generally beneficiaries of what the CIA calls its "courtesy clipping service". Teletype transcripts of what foreign broadcasters, and in particular the communist nations, are saying about the various lawmakers, as monitored by the FBIS, are delivered to selected senators and representatives, with a little note saying the CIA thought the translation "might be of interest".

Senate hawks like John Stennis of Mississippi and George McGovern, a dove, have received this FBIS feedback.

More widely distributed is a daily bulletin, mimeographed in blue ink. It has a larger, but still selected, list of readers who include certain segments of Washington officialdom, the diplomatic corps and the press, including, perhaps surprisingly, the Soviet news agency TASS. It presents a summation of world events as monitored by FBIS.

There's a curious tale about this daily bulletin. As Washington Post writer A.D. Horne relates, one day about two years ago, the usual warning on the bulletin prohibiting reporters from citing the FBIS as the source of the monitoring transcripts was missing. It was replaced by a notation: "FBIS may be cited as the source..."

"A call to the CIA," Horne reported, "confirmed the change. A CIA spokesman said, "It's no secret we monitor everything that falls freely in the air." But when the FBIS itself was asked, an official said there was no change in policy forbidding identification of the FBIS and that the ban would be re-imposed--as soon as it was cleared by the CIA:

Though not a classified document, the FBIS daily summaries are seen by very few--in this country, that is. Ironically, it's said that street peddlers in Southeast Asia use the sheets, discarded by embassies and the like, to wrap fish!

The only FBIS publication readily available to the average DXer is the "Broadcasting Stations of the World." (Continued next page)

*** INSIDE THE FBIS (Continued from the previous page) ***

This list of stations, in 4 volumes, two of which deal with SWBC outlets, supposedly contains all foreign broadcasting stations known to the CIA. Actually it isn't quite that. Observant DXers have noted that there are some obvious omissions from the list of stations, notably those clandestine broadcasters suspected to be CIA-run or supported outlets. In fact, serious clandestine fans generally assume that if a clandestine station is listed in FBIS, it is operated by "the other guys".

The latest issue of "Broadcasting Stations of the World" is dated July 1, 1972. It was the 25th edition of the list issued since 1947. Quite a long delay between issues may simply be due to a manpower problem. The list is compiled by only two men and a computer.

Of interest to DXers are Parts I and II, indexing short and medium wave stations by country and frequency. The price is \$2 each and they can be ordered by publication number PrEX-7.972 and the appropriate part number from the U.S. Government Printing Office, Washington, D.C. 20402. (Don't expect fast delivery).

Outside of this publication, FBIS is anything but helpful to DXers, in contrast with the British Broadcasting Corp.'s Monitoring Service which permits listeners to subscribe--for a fee of about \$60 a year--to regularly issued and fantastically helpful bulletins. The sheets of information from BBC MS are said to total in the hundreds in a given year. NASWA subscribes to the service and, by permission and upon payment of an extra fee, is allowed to reprint data from this source.

While FBIS has no similar service for SW listeners, it does draw on the collective observations of hobby DXers.. FBIS obtains, directly or indirectly, the bulletins of various DX clubs, which contain information on what SWLs are hearing. Though FBIS doesn't publicize its links with the hobby clubs, one European club boldly lists the FBIS in its annual membership tally. FBIS is not a member of NASWA, at least not in its own name. If it receives FRENDX it's not known to your club officials.

Lest this be misinterpreted, FBIS serves a very useful purpose and as far as can be determined, does a very good job of providing the government with information on what is being broadcast around the world. But one can seriously question whether all the secrecy is necessary. Surely the BBC MS, its monitoring counterpart in Great Britain, doesn't find it necessary to play cloak-and-dagger.

In researching the original question, "What Is FBIS?" one soon learns that the CIA, the real U.S. spy organization, seems to view with something akin to amusement the pseudo-spy role FBIS has adopted for itself. The Horne story, previously cited, supports this.

Why does FBIS try so hard to maintain this image? One can only guess. For one thing, the intelligence role is no doubt ego-building. Certainly it is more glamorous than that of just another governmental agency, like HEW or the Agriculture Dept. But possible more important is that in the governmental hierarchy the intelligence organizations stand high and seldom have to undergo the more rigid budget scrutiny of other, less sensitive departments. One might suspect that it is comfortable for FBIS to operate under the CIA protective umbrella.

The answer suggested by all this is that FBIS, admittedly performing an important but non-sensitive monitoring service, should really be outside the intelligence community. Where? Possibly back within the FCC, but better yet, under the wing of the U.S. Information Agency which also is the parent of our Voice of America. The parallel, then, would be very close to that our the BBC Monitoring Service and Auntie BBC herself.

That may never happen, of course. But we can only hope that someday FBIS will be another spy that came in from the cold.***-END-***

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QSL Report

Telephone: (613) 232-0539

Deadline: 15th of month

SCOREBOARD

Our featured continent this month is AFRICA, and as a reminder I mention that HIC/VIC = Countries Heard and Verified and HIS/VIS = Stations Heard and Verified. If your name is not in our listing, why not send it in for the June Scoreboard when the spotlight will fall on ASIA.

N°. Name/Location	HIC VIC		HIS VIS		AFRICA		Best QSL/Freq.
	HIC	VIC	HIS	VIS	HIC	VIC	
1. Gerry L. Dexter, Wisconsin	207	201	935	709	54	54	Radio Gambia/4820
2. James W. Young, California	206	167	651	198	60	52	São Tomé, 4807 kHz
3. Don Jensen, Wisconsin	203	200	---	---	56	56	Radio Gambia/4820
4. Edward Shaw, Virginia	202	180	395	233	60	55	Mauritius/9709.5
5. Dan Henderson, Maryland	202	175	---	---	49	41	ORTF-Reunion, 2446
6. Bob Padula, Australia	200	191	---	---	62	58	Lusaka, Zambia/2355
7. Bill S. Sparks, California	197	190	---	543	53	52	Hargeisa, 4797 kHz
8. Alvin Sizer, Connecticut	195	179	678	271	59	56	Sudan BC, 4994 kHz
9. Marlin A. Field, Michigan	194	189	738	585	56	55	Mt. Nyeri, 6170
10. Marvin E. Robbins, Nebraska	194	157	748	395	57	49	R. Katanga, 11865
11. John Campbell, Switzerland	193	152	---	---	56	43	R. Cl. de Benguela
12. Alan H. Roth, Connecticut	191	171	535	411	58	55	Biafra direct/7304
13. Ernest S. Behr, Ontario	188	134	875	230	52	33	Mogadiscio, 7121
14. Dr. T. B. Williamson, Ontario	187	170	---	389	52	49	ZNB, Mafeking 5900
15. Bill Flynn, California	186	173	623	430	--	45	Mauritius, 15062
16. Ralph Perry, Illinois	185	172	---	---	--	--	Conakry, 7125 kHz
17. Jerry Berg, Massachusetts	182	167	---	---	52	50	LV de Isla de Palma
18. Gregg A. Calkin, Ontario	181	165	390	310	50	45	Bujumbura, 6140 kHz
19. Hiroatsu Matsuura, Japan	179	171	---	---	53	51	Mauritius, 9710 kHz
20. Samuel L. Barto, Connecticut	177	150	---	---	--	--	-----
21. Dan Ferguson, West Virginia	176	---	---	---	45	---	-----
22. John W. Hoogerheide, Michigan	172	135	---	---	54	41	ORTF-Reunion, 4807
23. Dan Jamison, Virginia	172	69	415	81	--	--	Zambia BC Sce/3295
24. Serge C. P. Neumann, Indiana	171	154	---	---	48	41	Moroni, 3331 kHz
25. Robert Norko, Connecticut	170	149	224	189	51	43	R. Sahara, 4627 kHz
26. Bruce Churchill, California	160	139	210	170	52	45	R. Uganda, 5026 kHz
27. A. E. Martin, England	158	149	---	---	46	43	R. Cl Cabo Verde
28. Terry Adkins, California	156	95	320	108	21	11	Luanda, Angola 4820
29. Henry Michalsenka, Rhode Island	155	120	247	137	44	26	Bissau, 5041 kHz
30. Kris Lemna, Indiana	153	116	---	---	24	15	-----
31. Jim Zabransky, Illinois	152	129	205	168	48	37	Lesotho, 4800 kHz
32. Steven P. d'Adolf, Mass.	152	121	186	147	43	32	R. Santa Isabel
33. Bob Brode, California	151	94	391	122	33	17	Radio Gambia, 4820
34. Mike Ryan, California	148	148	---	---	--	--	ORTF/Reunion, 4807
35. Chris Loddell, Massachusetts	148	138	256	183	44	43	Thailand, 7115 kHz
36. Victor C. Jaar, P. Q.	146	3	---	---	--	--	-----
37. Ron Howard, Maryland	143	118	---	---	44	35	Afars/Issas 4780
38. Steve Kamp, California	141	111	373	198	30	24	Tananarive, 7105
39. Edward Kusalik, Ontario	140	118	173	138	34	32	R. Cl. de Cabo Verde
40. Charles Conner, Louisiana	139	75	332	88	37	13	Radio Togo, 5047

41. Joseph R. Avery, N. C.	136	60	---	60	40	10	FEBA Seychelles
42. Al Reynolds, N. C.	135	105	235	123	40	24	V. of Biafra/6145
43. Don Johnson, California	135	80	231	104	37	19	Swazi Radio, 6155
44. Leon Segal, New York	132	100	---	---	---	28	Radio Gambia, 4820
45. Jerry M. Stuart, Oklahoma	130	106	209	194	15	11	Radio Gambia, 4820
46. John Fisher, Ontario	130	81	251	113	35	11	NBC/Calabar, 6145
47. Alan Mayer, Illinois	130	73	---	---	33	13	Radio Ghana/11850
48. Errol Urbelis, New York	129	94	380	135	---	---	-----
49. Bob Slowe, Illinois	127	110	---	---	---	---	-----
50. Mark Duba, Vermont	127	96	---	---	---	---	-----
51. Greg Kelley, Virginia	127	94	150	125	28	23	Cape Verdes, 3960
52. Mike Watman, New Hampshire	126	101	179	131	35	24	R. Mauritania 4850
53. Scott Reeves, Maryland	124	90	254	---	---	---	ORTF/Brazzaville
54. Larry Marshall, California	122	98	170	133	28	20	R. Sénégal, 4890
55. Bill Schultz, Pennsylvania	121	89	206	137	33	17	Radio Gambia, 4820
56. Mario A. Sala, California	120	77	172	88	28	16	Radio Gambia, 4820
57. Marc Charon, California	120	65	205	70	35	15	Rhodesia BC 3396
58. Paul Mayo, New York	120	51	140	55	34	10	Brazzaville, 15190
59. David R. Alpert, Illinois	119	100	---	---	27	19	Radio Gambia, 4820
60. Jon L. Williams, Indiana	118	8	118	8	29	2	Comoro Isles, 7260
61. Rick Charnee, Massachusetts	117	73	176	85	31	14	MBC Blantyre 3380
62. Irwin Glasberg, P. Q.	116	107	234	166	19	17	Radio Sénégal/4890
63. Andrew Pappas, Illinois	116	98	---	---	23	20	R. Tanzania, 5985
64. Michael Seth, New York	116	73	253	81	---	---	-----
65. Dean Bianco, New York	116	---	145	116	---	---	-----
66. Brent Hailpern, Colorado	114	88	225	125	22	15	São Tomé, 4807 kHz
67. John Zaharek, Connecticut	113	103	198	146	29	26	Omdurman, 4995 kHz
68. George Schnabel, New York	113	90	---	---	26	16	-----
69. Carroll R. Patterson, Georgia	112	100	240	131	27	23	RTV Kaduna, 9570
70. Albert Miller, Ohio	112	96	---	---	---	---	Lomé, Togo, 5047
71. James S. Hurst, Maryland	112	95	161	132	14	13	Lomé, Togo, 5047
72. Mike Nikolich, Illinois	112	70	153	90	19	8	R. Brazzaville
73. R. Stephen Dildine, Virginia	111	88	---	---	31	22	Radio Pax, 3960 kHz
74. Angelo Gero, New York	111	40	---	46	27	5	Radio Ghana, 11850
75. Wesley Huggins, N. C.	110	90	230	160	35	27	Tananarive, 17730
76. Eric Draut, Illinois	110	68	149	96	24	11	Laurence Marques
77. Neal E. Kolb, Florida	109	70	---	---	24	13	Algiers, 9510 kHz
78. Neal A. Ferdue, Tennessee	109	36	---	---	---	---	-----
79. Richard S. Heggs, B. C.	108	91	151	108	18	12	FEBA, Seychelles
80. Gary S. Goltz, Pennsylvania	107	79	142	90	16	12	Enugu/Nigeria 7305
81. Steve Wallace, Pennsylvania	107	30	---	37	24	6	Zambia, 4965 kHz
82. John T. Soneff, Louisiana	106	86	203	101	31	21	-----
83. Jerry L. Green, Virginia	105	81	132	81	27	17	Yaoundé, 4972.5 kHz
84. Larry M. Abraham, Missouri	104	68	---	---	27	10	Rhodesia, 3396 kHz
85. Mark S. Konen, Wisconsin	104	64	---	---	30	12	ELWA, Liberia 11940
86. Woody Seymour, N. C.	103	84	143	112	19	14	FEBA/Seychelles
87. Joey Nonnast, Texas	103	83	144	108	25	19	Seychelles, 11955
88. Price Kagey, California	102	88	---	---	20	17	Lomé, Togo, 5047
89. Bob Kelleher, New York	102	56	165	80	23	10	Lomé, Togo, 5047
90. Brian Lym, California	100	65	---	---	23	13	Lesotho, 4800 kHz
91. Elliot R. Strauss, New Jersey	98	42	---	43	26	6	-----
92. Martin Imbert, Virginia	97	67	146	90	24	12	FEBA/Seychelles
93. Shirley D. Isaac, S. C.	96	63	---	---	22	15	Radio Gambia, 4820
94. Michael Wiseberg, Ontario	96	61	130	84	18	12	Brazzaville, 15190
95. Jean Burnell, P. Q.	95	76	157	105	25	17	-----
96. Steven E. Sykes, Ohio	95	58	133	76	22	11	R.C.M., 11780 kHz
97. Harold Kalkstein, Pennsylvania	95	55	130	65	20	9	ELBC, Monrovia
98. Mrs. Mildred Marshall, N. D.	94	85	131	114	18	16	Radio Sénégal/4890
99. Kim Stenson, Vermont	94	68	128	77	---	---	-----
100. Scott McGregor, Mo.	93	83	101	87	20	18	Algeria, 9510 kHz
101. Harold Sellers, Ontario	93	73	172	100	---	---	-----
102. Mark Schwing, Colorado	93	73	100	79	21	18	RBC Rhodesia 5012

103. Stan Mayo, Maine	92	88	---	---	---	---	-----
104. Ron Bruns, Missouri	92	75	143	100	---	---	-----
105. Ken Swatkoff, Alberta	92	58	129	72	10	7	DW/Rwanda, 15380
106. William G. Caldwell, Calif.	91	72	---	---	13	12	Radio Sénégal/9720
107. Richard Paschke, Wisc.	90	60	124	72	16	10	RNL/Malagasy Rep.
108. Kent Leonard, Colorado	90	38	134	58	17	6	ORTE/Brazzaville
109. Thomas E. Jones, Minn.	88	59	137	74	14	9	VONigeria, 15200
110. William Zuk, New York	88	46	---	---	12	8	Seychelles 11955
111. John L. Kolb, California	87	78	99	93	---	---	FEBA/Seychelles
112. Robert Moser, Illinois	87	63	---	92	6	5	Mozambique/11742
113. David Volle, Illinois	86	75	130	80	13	11	RTT Tunis 6195 kHz
114. Tom Gavaras, Minn.	86	67	108	76	7	5	Springbok R., 6195
115. David Baltimore, Penna.	86	62	92	64	16	10	Radio RSA
116. Peter Taylor, Ontario	85	68	116	73	---	---	Radio RSA, 9715
117. Bob Carlsen, Ohio	85	65	112	79	14	9	Radio Sénégal/4890
118. Thomas Cwikla, Connecticut	84	53	106	70	13	6	ELWA/Liberia 11940
119. Audie Kaufman, Tennessee	82	71	125	98	6	6	Radio Ghana 21545
120. S. W. Eichenhorn, Michigan	82	55	---	---	17	10	Zambia B. C. Corp.
121. Bob E. Estand, Texas	81	79	100	97	15	15	Voz de Angola 9660
122. Kevin Klemen, Wisconsin	81	29	116	32	---	---	-----
123. Anthony Marks, Oregon	80	69	107	87	---	---	-----
124. Fred Willshaw, S. C.	80	43	88	46	13	5	Mozambique, 11780
125. Ivan Grishin Jr., Ontario	78	51	---	---	15	10	Radio Gambia, 4820
126. Steve Squires, Illinois	77	54	87	54	12	9	OTC Leopoldville
127. Corky Webb, Texas	76	68	107	93	14	13	Brazzaville/15190
128. Dave Megyesy, N. J.	75	49	109	62	16	5	Radio Ghana, 3366
129. Larry M. Nebron	75	37	90	45	5	3	FEBA Seychelles
130. Ralph Richards, California	75	15	---	---	---	---	-----
131. Andrew Rugg, P. Q.	74	64	121	105	14	18	Cotonou, 4870 kHz
132. Les Gaynor, Michigan	74	62	127	76	---	---	-----
133. William White, N. J.	74	51	108	60	14	6	ELWA/Liberia 4770
134. Larry Yamron, Penna.	74	49	90	52	14	12	-----
135. Thomas O. Clark, Ohio	72	57	80	65	10	8	V of Nigeria 11900
136. Frank E. Aden, Idaho	72	55	---	---	7	6	ETLF, Addis Ababa
137. Alan Hamilton, Ontario	72	39	77	42	10	5	Springbok R. 4945
138. David Demeey, Massachusetts	71	60	87	66	---	---	-----
139. Marty Austin, Connecticut	70	47	94	57	12	7	Radio Ghana/11850
140. Rick Loustau, California	70	43	83	47	---	---	-----
141. James Ducharme, Massachusetts	70	8	87	8	---	---	-----
142. Mike S. Hardester, California	69	59	103	89	13	10	Brazzaville, 15190
143. John Walenter, Illinois	67	57	---	---	---	---	RCM/Mozambique
144. Richard L. Dushane, Michigan	67	56	---	---	10	7	Accra, Ghana 11850
145. Terry R. Hicks, Florida	67	44	83	57	---	---	-----
146. Jerry Word, Georgia	66	48	---	---	8	5	-----
147. Jim Weber, California	66	45	71	47	---	---	-----
148. Ken Hunt, California	66	41	82	43	10	7	-----
149. Robert J. Koziokowski, N. Y.	65	37	73	44	8	4	ELWA/Monrovia 11950
150. Leslie Geir, N. D.	65	37	65	37	7	3	Radio RSA, 6080 kHz
151. Guenther Tumasz, Penna.	65	32	78	35	10	5	Springbok R., 6195
152. Tom Blossom, Indiana	64	54	72	61	7	6	RVOG Ethiopia
153. William J. Plum, N. J.	64	50	106	83	10	7	SABC, 4945 kHz
154. Geoff Oates, B. C.	63	53	79	70	9	7	ORTE/Brazzaville
155. Steve Estes, Virginia	63	29	---	---	11	4	Radio-Cairo, Egypt
156. Pauline Brock, P. Q.	60	29	77	31	14	5	Radio Sénégal 11895
157. Jack Rosenberg, Mass.	59	37	68	37	10	4	Cairo, Egypt
158. Gary H. Toncre, Florida	59	35	75	44	8	5	Radio Ghana 21545
159. Mitchell Lewis, N. C.	58	22	73	22	6	4	Radio Ghana 11850
160. Bob Peritz, N. Y.	57	54	63	59	6	6	ELWA/Liberia 15095
161. Normal Starr, Ohio	56	22	---	---	---	---	-----
162. Arthur Smith, Alabama	53	36	65	42	8	5	Radio Ghana, Accra
163. Henry E. Fino, N. Y.	53	29	56	32	4	2	Cairo, Egypt, 9475
164. Charles Self III, MN.	52	20	70	25	6	4	RNL/Madagascar

165. Robert Ingram, Ohio	52	14	59	17	4	1	Radio RSA, 15440
166. Danny Richardson, Nebraska	51	29	80	43	8	4	ELWA/Liberia, 11760
167. Steven P. Fix, N. Y.	50	31	88	--	--	--	-----
168. Dan Kening, Illinois	48	36	57	37	--	--	-----
169. Frank Orcutt, New York	46	31	53	39	9	4	-----
170. Joseph L. Brown, New York	46	27	51	32	4	2	Cairo, Egypt, 9475
171. Craig Wicks, Missouri	45	33	54	43	3	3	ELWA/Liberia 11970
172. Bob Jinkerson, Missouri	43	8	53	8	10	1	Cairo, Egypt, 9475
173. J. Cole, Colorado	42	18	44	18	1	1	Radio RSA, S. Africa
174. Larry Van Horn, Virginia	41	11	--	--	7	1	Radio RSA, 9695 kHz
175. Edward Fudman, Maryland	40	28	45	30	--	--	-----
176. Joey D. Kennedy, Louisiana	38	30	47	34	3	3	Radio Ghana 11850
177. Vic Argabright, Colorado	38	23	42	23	4	2	VOA/Monrovia 9530
178. David Sturm, N. J.	37	18	46	23	4	1	Radio RSA, 11900
179. Cal Cornils, California	36	35	48	45	5	5	-----
180. Paul D. Lynch, South Vietnam	36	14	40	15	5	2	Radio Ghana, 21545
181. Tom Jeffrey, Oregon	34	17	34	17	4	2	Radio RSA, 11970 kc
182. Christopher J. Gay, Ohio	18	7	21	8	2	1	Radio RSA, 6080 kHz

QSLs RECEIVED

An excellent month, with an alltime high number of reporters. Of particular interest are QSLs from Azad Kashmir, Burundi, Guinea, Indonesian regionals, Latvia, New Guinea, Papua, South Yemen, Spanish Sahara, Syria and the Trucial States, plus time signal stations in France, G.F.R. and the G.D.R. On the Latin American scene we have a good selection of QSLs from Brazil, Colombia and Ecuador. John Campbell, in Switzerland, advises us of new clandestine "pirates" while Jerry Berg has verified Madagascar the hard way.

ANGOLA: A Voz de Angola, 9660, full data p/p/card of sailboats in Luanda Bay; 9 mos. for 3 IRCs and EE rpt. (Schnur)

Radio Clube do Huambo, 5060, beautiful no data cd, white in 7 wks for PP rpt & 3 IRCs. (Perry) 3 weeks airmail (Barto)

Radio Clube Moxico, 5076, full data PP letter, p/p/crd; 29 days from V/S: Antonio Manuel Pinheiro. Reported in PP w/mint stamps. (Perry)

AFGHANISTAN: Kabul, 15265, aerogramme in 25 days for 2 IRCs. (Nikolich)

ARGENTINA: RAE, 9690, globe card w/freq. only in 5½ months for no IRCs (Orcutt)

ARMENIAN SSR: "Radio Yerevan" programme, 11690, plain card in 45 days air w/full data. (Willshaw) 15190, plain paper QSL; 7 wks air (Lym)

ASCENSION IS: BBC Atlantic Relay, 15260, Thames card and letter w/full data for IRC. (Hamilton) 9510, special World Radio Club card in 2 months (Hebron) 24 days (Self)

18 days air w/sk'd (Estes) 1½ months w/WRC card w/all data & site (Hafer) 2 months (Cwikla)

AUSTRALIA: Radio Australia/Shepparton, 9580, radio telescope card in 5 months sea (Cwikla) card w/pic of Parliament House in 18 days (Carlson) 15320; 3 mos (Eichenhorn) 11 days air (Williams) 96 days (Self) 17795 in 8 wks (Archard)

Radio Australia/Lyndhurst, 15240, telescope card in 91 days sea (Webb)

Radio Australia/Darwin, 17715, photo card in 3 months w/all data (Webb)

VLR9/Melbourne, 9680, map card in 9 months (Fisher) 6150, crd, full data in 3 wks (Young)

VW9/Perth, 9610, map card in 21 days (Megyesy) 33 days (Caswell) 14 days (Romerika) 15 days air for 1 IRC (Matsuura) 1 month (Eichenhorn) 13 days (Zuk) 6140, 33 days air (Wiseberg) 15425, full data card in 1 month (Wiseberg)

VLMA/Brisbane, 4920, small map card in 19 days for no IRCs. Full data. (Megyesy) 2½ months; no IRCs. (N. Kolb) 2 months (Reynolds)

VLI6/Sydney, 6090, veri card w/full data via airmail in 3 months for 2 IRCs. (Norko) card airmail in 2 wks (Young)

VNG Time Signal, 12000, card of antenna and studio in 12 days air. Full data (Eichenhorn) 12 days air for English report and 4 IRCs (Willshaw)

AUSTRIA: ORF Aldrans, 6000, oblong card giving site w/full data; 1 month. (Perry)

AZAD KASHMIR: Radio Azad Kashmir, Trarkhel, 4730, brownish p/card w/full verie info; 40 days for tape recording and \$1 w/report in EE. Received airmail. (Shaw) without exception my best QSL! absolutely complete with station stamp and site. 4 IRCs, p/cs US stamps, pic of radiolisting post in 7 weeks. (Young) prepared card using mint Pakistani stamps rcvd in 7 weeks. Reported to Muzzaferabad. (Dexter) brown card air via Rawalpindi in 7 weeks, all data, for 4 IRCs to Muzzaferabad. (Sizer)
AZORES: Emis. Reg. dos Açores, 4865, boat card in 19 days w/all data via Lisbon for EE rpt and 2 IRCs. (Orcutt) 1 month for 1 IRC (Behr)

BANGLADESH: Radio Bangaldesh, Dacca, 17935, card in 25 days air for 3 IRCs. V/S: M. Habibullah; still using Pakistani stamps. (Dushane) 15520, card in 5 wks air (Young)
BELGIUM: Brussels, card for 9550 in 20 days w/full data and sked. (Slaughter)
BOLIVIA: Radio Fides, 4845, letter & pennant in 2 wks, air for mint stamps. V/S: Padre José Maria Lop, Director. (Sparks)

Radio Altiplano, 5045, red, white, blue card with date and name; 21 days by air for 3 IRCs and rpt in SS. (Henderson) 3 weeks airmail for mint stamps. (Sparks)
BOTSWANA: Radio Botswana, 4845, foto-card of police camels; 7 months air (Lym)
BRAZIL: R. Aparecida, 9655, full data card w/small pennant and bumper sticker; also folder w/prayer. 4 wks air from V/S: Waldomiro José Fontanara, Gerente. Rpted in PP w/p/card and mint stamps. (Lohe)

R. Bandeirantes, 11925, letter in EE and beautiful pennant air in 29 days; 1 IRC and PP rpt sent. V/S: Samir Razuk. (Noroko)

R. Cl. de Pernambuco, 11865, p/c w/no data, but friendly personal note in PP saying my rpt was correct. Card shows aerial view of Recife. 16 days air (Lohe)

R. Cultural, 17815, letter w/all data returning my IRCs. 26 days air for PP rpt w/p/card from V/S: Eng. Miguel Cipolla Junior, Director Técnico. (Lohe)

R. Difusora do Maranhão, 4755, friendly personal letter from José Marinho Raiol Filho, Relações Publicas, but no data given. 3 weeks air for PP rpt (Lohe)

R. Globo, 6055, usual card w/complete data; 4½ months for PP rpt (Lohe)
R. Jornal do Comercio, 15143, rpt in EE and 1 IRC brought letter & pennant in 4 months. V/S: Manoel Jorge Tavares, who wishes to swap stamps. (Barto)

R. Nacional, Brasilia, 11720, letter in 30 days for 3 IRCs & US mint stamps (Archard)

R. TV Educativa, 6165, 4 months for 1 IRC, returning my IRC + 1 other (Barto)

BOUGAINVILLE: R. Bougainville, full data "data sheet QSL" in 18 days; 3 IRCs (Berg)

BRITISH HONDURAS: Radio Belize, 3300, map card air in 21 days (Webb) 17 days for 2 IRCs (Nikolich) 16 days for 3 IRCs (Schultz) 1½ wks air (Reeves) 22 days for 1 IRC; (Fisher) 1 month after 5 reports (Behr) 20 days (Orcutt) 5 weeks (Imbert)

BULGARIA: Sofia, 9700, card in 5 months (Eichenhorn) 156 days (Willshaw) 4 months showing village snow scene, plus pennant (Johnson)

BURMA: BBC Rangoon, 5040, full data letter veri from Embassy in Washington. V/S: Pe Kyang. 5 weeks surface mail (Johnson) 2½ months w/full data (L. Marshall) letter in 26 days (Carlsen) 11 weeks airmail for 1 IRC (Barto) full data in 36 days (Fisher)

BURUNDI: Bujumbura, 3300, folder card w/all data but time; air in 4 months (Young)

BYELORUSSIAN S.S.R.: Radio Moscow, Minsk, red card in 29 days w/site. 6065 (Nikolich)

CAMEROON: Radio Buea, 3970, beautiful card in 5 weeks for 1 IRC. (Barto)

Radio Yaoundé, 4972.5, 2 cards in 5 months for 4 IRCs; seamail. (Young)
CANADA: RCI, 6085, "Maison de Canada" card w/full data in 36 days (Paschke) 40 days (M. Marshall, Austin, Eichenhorn) 3 weeks (Kelleher)

CKFX, Vancouver, 6080, see Feb issue: letter returned w/full veri. 3 weeks. (Young)

CKZU, Vancouver, 6160, full data card in 2 weeks for 1 IRC (Young) 10 days (Henderson) card in 16 days for Canadian dime (Meehan)

CFRX, Toronto, 6070, card in 12 days (King) 9 days (Willshaw) 5 wks for 1 IRC. (Jeffrey) card of Toronto skyline (Machen) (Eichenhorn) 12 days (Meehan) (Fino) 2 weeks for 1 IRC surface mail (Young)

CHU Time Signal, Ottawa, 7335, blue/white card in 16 days (Sykes) 2 weeks for 1 IRC (Conner)

CHNX, Halifax, 6130, card in 1 week for 1 IRC (Siciliano, Stiles, Young).

- CANADA: CJCX, Sydney, 6010, green card w/no data in 10 days (Nikolich) 3 wks (Young)
- CANARY IS: RNE/Tenerife, 11800, antenna card and pennant from Madrid in 2 months for 1 IRC. (Draut) 15365, 1 month (Wiseberg) 27 days (Mayer) 2 months (Barto)
- CAPE VERDE IS: CR4AA, Praia, 3884, card, veri stant, no data in 3 wks seamaill for 3 IRCs. This for extended sked on New Year's Eve (Young)
- CENTRAL AFRICAN REP: Bangui, 5032, form letter in 3½ months for 3 IRCs and EE report. Says no QSL cards at the moment. (Orcutt)
- CHAD: Ft.-Lamy, 4904.5, large card in 2 months (Barto)
- CHILE: L/V de Chile, 9690, colored thank you card of announcer at mike for SS report w/mint stamps. 5 weeks; no data. (Sizer)
- CHINA: Peking, 15060, card w/date and freq. plus record 2 weeks later (Lym)
- CLANDESTINE: Radio Apollo, 6225, letter, card and station card in 15 days for SASE. Station card says name is "Appollo International" and power is 100 w. Posted from Leicester, England. Station seemingly opened on this year. (Campbell)
- Liberty Radio, 6230, black-white printed card arrived after 51 days. Says they broadcast "from a location in the British Isles". Still believe they are in Ireland. (Campbell)
- Radio Gemini, 6220, brown-white card in 30 days for mint stamps. 150 watts given as power. QSL posted from Hornsey, London. ADDR: 50 Hempstead Road, Watford, Hertfordshire, England. (Campbell)
- Radio Venus North, 6225, plain white card, personal letter and bulletin on station history in 88 days using my mint stamps. Delay due to printing of cards. Power is 20 watts and QSL posted from Crewe, Cheshire. (Campbell)
- World Music Radio, 6250, 2 green cards in 67 days for IRCs. (Campbell)
- COLOMBIA: Ondas del Meta, 4885, friendly letter & pennant in 2 months air (Reeves) 6 weeks w/pennant from V/S: J.E. Cifuentes. (Barto) letter in 7 weeks (Lohe)
- Radio Bucaramanga, 4835, friendly letter and pennant in 5 months, 20 days for mint stamps and Spanish report. (Lohe)
- Radio Guatapuri, 4915, no data veri letter in 3 months for SS report and mint stamps. Decal also received. (Johnson) 3½ months for Spanish report (Howard)
- Radio Nacional, 9635, photo card in 1½ months w/date only (Eichenhorn)
- Radio Santa Fé, 2 plantation cards w/veri stant for 4965 kHz (Fisher)
- Radio Super, 6065, letter w/no data. V/S: Gustavo Rivero Mendez; also white/gold pennant. 2 months for SS report, mint stamps and p/card (Zabransky)
- Radio Sutatenza, 5075, folder card in 141 days for SS report, & 2 IRCs. (Isaac) 4 months for 1 IRC (Megyesy)
- Radio Vision, 6105, CARACOL card in 5 weeks for 1 IRC; (Barto) card of an orchid and friendly personal note from V/S: Maria Elena Vasquez; 5 weeks (Lohe)
- Transmisora Caldas, 5020, friendly letter w/out data from V/S: Ignacio Escobar Uribe, Gerente and beautiful pennant. 4 months for SS report and mint stamps (Lohe)
- CONGO: Radio Brazzaville, native card w/date as Sept. 20, 62 days for 2 IRCs. For 15190; valued as now extinct. (Nikolich)
- L/Voix de la Révolution Congolaise, 15190, full data aerogramme letter in 1 month air for 2 IRCs and report in FF. (Wiseberg) mimeo letter in 2½ weeks (Perry) 25 days for 2 IRCs (Archard) letter in 4 months (Eichenhorn) letter in 15 days for 1 IRC for 15190 kHz (Hamilton)
- COSTA RICA: Faro del Caribe, TIFC, 6037, red/white/black religious quote card w/full data and personal letter from Miss Sharon Saylor, Sec'y. 16 days (Willshaw) (Reeves) 1 month air w/full data (Eichenhorn) 16 days for 1 IRC (Herson) 8 days for 3 IRCs. (Siciliano) 4 weeks for 3 IRCs (Carrington)
- CUBA: Voice of Vietnam relay, 11930, paper card from Hanoi in 4 months; (Hafer)
- Radio Havana, 11920, pinwheel card in 102 days (King) 11 months (Rosenberg)
- CYPRUS: BBC relay, Thames card w/site only in 4 months for IRC. (Carlsen) 11925, card from London w/site indicated (Isaac) Special World Radio Club award (Nebron)
- CZECHOSLOVAKIA: Prague, 11990, castle card in 4 months (Hafer) 110 days (Stiles)
- DENMARK: Copenhagen, 15165, radiohouse aerial card w/full data in 17 days air (Zuk) 3 weeks for EE rpt and 2 IRCs. (Stiles) 20 days for 1 IRC (Nikolich) 25 days (Austin)
- DODECANESE IS: VOA Rhodes, 7110, antenna card in 20 days from Washington (L. Marshall)
- DOMINICAN REP: R. Mil, 4930, letter in Spanish after 1 month w/veri stant. (Ball)

G.D.R. RBI, 9650, photo card in sports series in 4 months (Eichenhorn)

Stimme der DDR, 7185, home service card in 1 1/2 months w/date, time and freq. and service indicated. 5 kW only. Rpted by aerogramme in EB. (Perry)

DIZ/Nauen, Central Earth Physics Institute time signal, 4525, personal letter and pic of measuring room in 3 weeks from Dr.-Ing. M. Meinig (Herson) 97 days from same V/S who is Geodetical Astronomy section leader. (Campbell)

G.F.R. Deutsche Welle, 9545, new multi-color card in 34 days for 1 IRC. All details. Reported in English (Sykes) card for Wertachtal site on 11925 (Paschke) similar card for Julich site on 15245 in 14 days too (Paschke)

VOA/Munich, 3980, card in 2 weeks from Washington. (Barto)

Radio Free Europe, Liberty Bell card in 3 weeks via New York (Barto) 24 days for no IRCs. (Archard)

Bayerischer Rundfunk, 6085, amusing rotatable toy card and colorful books on B.R. and Munich in 87 days. (Campbell)

Deutsches Hydrographisches Institut, 2614/2775/4265, colour card of ferry and Institute building with full details and personal letter in 21 days. 1 IRC (Campbell)

Radio Liberty, 15290, card showing mike over USSR w/full data; 2 weeks air; no IRCs (Foster)

Südwestfunk, 7265, vry nice card w/out time; 2 weeks for Rohrdorf. Rpted in German with mint stamps. Card in EE and GG. (Reynolds) new card, predominantly brown with "SWF" superimposed, pic of tower. 3 weeks after f/up; 4 months total. (Perry)

GHANA: Accra, 11850, white card with colored border; full data (Eichenhorn)

GREECE: NBI Avlis, 21610, plain card with complete details in 5 weeks air for no return postage. (Foster) full veri plus sked in 5 weeks air for 2 IRCs. For 21610. (Reeves)

GUATEMALA: La Voz de Guatemala, 6180, flag card in 15 weeks for mint stamps. V/S: Rodolfo Chenal Luna, Sub-director. (Sparks)

GUINEA: La Voix de la Révolution, Conakry, 4910, French report answered in 61 days by 3-page letter from the Director-General with verification statement and returning my IRC. (Campbell) 4910/7125, letter in 7 weeks airmail. (Barto)

GUYANA: Action Radio, 3290, form letter with complete verie in 17 days (Fisher) 2 weeks for 3 IRCs. (Siciliano) 2 weeks for 2 IRCs. (Herson)

Radio Demerara, card of building in 3 weeks following f/up with \$1 which was donated to the Radio Demerara Needy Childrens Fund. (Hoogerheide)

HAITI: 4VEH, 11835, card and religious info in 1 1/2 months for 1 IRC (Megyesy) 11835, folding photo card in 9 weeks (Carrington)

HAWAII: WVVH, 1000, folder card in 27 days (Stiles) 18 days for 5 & 10. V/S: C. L. Trembath, Engineer-in-Charge. (Isaac) brown native and map card in 15 days; IRC was returned. (Kelley)

HONDURAS: HRVC, usual pink, gray, black and white card in 21 days for 24-cents in mint US stamps. All details. (Sykes) What are they going to do with US Stamps?? (Ed) 1 month for IRC. V/S: Ethel R. Fleming (Carlsen)

Radio Suyapa, 6125, card, friendly letter and beautiful large pennant fm V/S: Francisco Elortegui, Gerente in 24 days airmail for SS rpt w/mint stamps and p/p/card. (Lohe)

HUNGARY: Radio Budapest, 9833, full data card, Church tower scene, personal note, club membership; 6 weeks for 2 IRCs. (Wallace)

INDIA: AIR/Madras, 6085, personal letter with full data in 7 weeks (Fisher)

AIR/Delhi, 9912, paper QSL with full data in 8 months for 2 IRCs (Draut) 9912 card/letter in 2 years, 1 month from V/S: P.N. Virmani, Programme Exec. (Patterson)

INDONESIA: RRI Mataram, 3223, letter in Indonesian w/full data. V/S: Dawood. Also enclosed Indonesian stamps. 18 days air for Indonesian rpt w/no IRCs. (Foster)

RRI Padang, 3960, letter in II from V/S: A. Hamid; 12 days air for II rpt without IRCs. (Foster)

RRI Palembang, 4855, letter from Poedjono w/veri stant but no data. 3 IRCs in 4 weeks surface mail. (Young)

RRI Semarang, 3935, fully detailed letter in II from V/S: Rachmat Bowos-oharto. 24 days airmail for Indonesian report without return postage. (Foster)

IRAN: Radio Iran, Tehran, 15084, card in 30 days air for 3 IRCs (Paschke) 27 days, by registered airmail for 2 IRCs (Dushane) white card, sked and tourist info in 30 days for no IRCs (King)

IRAQ: Baghdad, 9745, map card w/pic of bridge; 4 months (Seymour) 3 months for 2 IRCs (Lobdell) 4 months (Linsenmeyer) 121 days (Nikolich) 4 months (Noroko)

ISRAEL: IBA, 9625, painting p/card of Jerusalem in 30 days air (Eichenhorn) 1 month air (Johnson) 1 month air for 2 IRCs (Yamron)

ITALY: RAI, 11810, towers and map card in 4 months (Carlsen) two full data cards in $3\frac{1}{2}$ months for 1 IRC. (Howard)

IVORY COAST: Abidjan, longest QSL time-wise by card in 31 months for July 1970 rpt on 4940 (Sizer) Well, guess there is still hope for my Sept/70 rpt. hi (Ed.)

JAPAN: NHK, 17825, 35th anniversary card in 6 weeks air (Johnson) 14 days (Archard)

JORDAN: HBS, Amman, 7155, card in 27 days for EE rpt and 2 IRCs (Word) $1\frac{1}{2}$ months w/ Mosque card (Orcutt) 9560, card showing Dome Of The Rock in Jerusalem and sked. (Insinger)

KOREA (REP): KBS Taegu, 2510, multicolored card showing traditional ceremony "The Ring Fight"; all details provided. 7 weeks air for no IRCs (Foster)

VOFK, 9640, card of Buddhist Pagoda w/sked (Insinger) 48 days w/full data by air (Paschke) card in 19 days airmail; no IRCs together w/blue pennant. (Castello)

LATVIAN S.S.R. Radio Riga, QSL-card in Swedish with date and verie stmnt, plus ltr in English from Swedish Dept; airmail for no return postage in 2 months (Noroko) card direct with letter stating only Swedish Dept. will QSL. Very pleased; for 5935 (Perry)

LESOTHO: Radio Lesotho, 4800, white card w/blue-red-green flag in 5 weeks after f/up 2 IRCs sent. Now calls itself Voice of Lesotho. (Fehr)

LIBERIA: VOA/Monrovia, 15445, antenna card with info about VOA and latest skeds in 11 days. (Austin) 3 cards in 7, 19 and 26 days (Caswell) 7260 (Eichenhorn)

ELWA/Monrovia, 11940, native drummer card with full data in 224 days sea for an IRC. (Mayer) 11950 full data card (Eichenhorn) 4770, 2 months (Wallace) 2 IRCs for crd in 1 month (Yamron) card for 1 IRC w/sked. Rpted to Accra address. (Hamilton) 265 days (Wiseberg)

ELBC, 3255, "Sound of Progress" card in $1\frac{1}{2}$ months for EE rpt and 3 IRCs. (Perry)

LITHUANIAN S.S.R. "Radio Vilnius" programme, 9685, card in $4\frac{1}{2}$ months w/full data. No site. (N. Kolb) 9610, flowers card in 5 months (Yamron) $3\frac{1}{2}$ months (Nebron) 131 days for no IRCs. (King)

MALAGASY REP: RTV Malagache, no data "thank you" card showing the studio building, plus up to date sked. 3 weeks air for taped report and 3 IRCs. Card calls station "Radio Madagascar". (Berg)

Radio Nederland, Talata, 11720, attractive card showing Ben Loog, Propagation Officer and assistants; 11 days airmail for mint stamps. (Calkin) 9715, card from Hilversum in 12 days air (M. Marshall) 10 days (Willshaw)

MALAYSIA: BBC relay Tebrau, 11750, Thames card after 1 month with no details, but relay location typed in. (Ball) no data card in 2 months (Draut) 47 days (Schultz)

Radio Malaysia, 6025, card w/no data in 28 days air. (Fisher)

MARTINIQUE: ORTF, 3315, beach card w/no data but date in 20 days for mint stamps. (Megresy)

MAURITANIA: Radio Nationale de Mauritanie, 4850, 2 cards in 288 days for 1 French report w/3 IRCs and f/up with mint stamps which were used on one of the cards. (Campbell) On f/up, rcvd personal letter in FF from Mohamed Mahmoud Ould Weddady, Director, who gave veri stmnt but no details. 26 days air for FF rpt, registered w/ SASE and return receipt. (Schnur)

MAURITIUS: Forest Side, 9710, crd w/date & freq. air in 18 days for 2 IRCs (Noroko)



DEPARTMENT OF INFORMATION AND EXTENSION SERVICES

BN/et

Telegrams

ADCAST

Telephone

52 1177

Our Reference.....

6/8/7

Merrett
.....

Mr. Ralph W. Perry,
301 East Chalmers Street,
University of Illinois,
Champaign,
Illinois 61820,
UNITED STATES OF AMERICA

Government Broadcasting Station

Radio Mt. Hagen,

P.O. Box 311,

Mt. Hagen.

Papua New Guinea.

1st February, 1973

Dear Mr. Perry,

Thank you very much for your most interesting and informative letter dated January 7th.

We are pleased to have been able to verify your reception report of this Station, which was accurate in all detail.

You may be interested to know that yours is the third report received from the USA in the past month concerning this and other Government Broadcasting Stations operating in Papua New Guinea.

We have forwarded your letter to our Headquarters in Port Moresby for their interest, particularly as you mention having been able to receive signals from Radio Kerema and Radio Morobe on this occasion.

We have pleasure in enclosing a copy of our QSL form for your further interest, and look forward to hearing from you again in the future.

Yours sincerely,


BRIAN MERRETT

Station Manager

encl.

MEXICO: XEWS, La Voz de la America Latina, 15160, letter from V/S: Bernardo San Cristobal, Gerente General. (Webb)

XERMX, Radio Mexico, 11770, letter in 7 wks air (Castello) 3 months (Wiseberg) 10 weeks for 1 IRC airmail (Carrington) 3 months (Barto) 129 days (Self)

MONACO: TWR, 7290, full data Monte-Carlo card in 40 days by air for 2 IRCs w/skcd. (Wiseberg) 4 months (Fisher) 1 month (Ball)

MOROCCO: VOA Tangier, 17875, anniversary card in 45 days (Wiseberg) 15270, card in 3 weeks (Ball) 7 days (Webb) 15195, 23 days w/tower card (Johnson) (Reeves)

MOZAMBIQUE: RCM, full veri c, PP skcd and EE ltr in 1½ months air for 2 IRCs //

NETHERLANDS ANTILLES: RNL, 9715, card (Machen) 11730, card of ship "Amsterdam". (Machen) 11815, 18 days (Paschke)

TWR, Bonaire, antenna/studio card in 2 months (Eichenhorn) 1 month sent (Carlsen)

NEW BRITAIN: Radio Rabaul, 3385, folder QSL in 14 days for 3 IRCs (Schultz)

NEW GUINEA: Radio Madang, 3260, P/NG folder in 16 days air for 3 IRCs (Henderson)

Radio Morobe, 3220, letter & folder in 3 weeks airmail for 2 IRCs. V/S: M. L. Hadlow, Acting Station Manager (Sparks) friendly letter from E-I-C, plus new full data P/NG folder and R. Morobe station publication. (Perry) 15 days (Dexter)

Radio Mt. Hagen, 2480, letter QSL from Brian Merrett, Station Manager; 1 month for EE rpt and 3 IRCs. (Perry) See QSL letter on page QSL-10. (Ed.)

NEW ZEALAND: RNZ, 9520, blue globe card for 2 IRCs in 118 days seamaill. (Archard)

NICARAGUA: Radio Mar, 9581, letter airmail in 3½ weeks from Ricardo Perez Ulloa (Dexter) (Shaw)

NIGER: ORTN Niamey, 3260, OCORA card in 1 month for FF report and tape w/3 IRCs. //

NIGERIA: Benin City, 4932, letter in 5 weeks air (Barto) 2 weeks (Perry)

PAPUA: Radio Kerema, folder in 17 days airmail w/all data. (Henderson)

Radio Milne Bay, 3360, folder in 19 days air for 3 IRCs. (Henderson)

Radio Western District, Daru, 3305, P/NG folder in 17 days airmail (Henderson)

PERU: Radio Arequipa, 5950, letter from P. Rufino Zuniga, Dir.-Gen.; 3 weeks (Barto)

Radio Atlantida, 4785, personal letter in Spanish from V/S: Julio Reategui Burga; airmail with used Peruvian stamps in 44 days for SS rpt w/mint stamps.

(Calkin) 2 months (Berg) 9625, 49 days for rpt in SS (Mayer)

PHILIPPINES: PBS, 6170, letter from V/S: Alejandro Laragan, BC Ops Chief. 10 weeks air for EE rpt with 1 IRC (Foster) (Williams)

Voice of the Philippines, personal letter in 1 month air for 2 IRCs// 9580; green VOP card in 27 days (Henderson)

PORTUGAL: IHRA Radio, 9670, full data card & pennant in 20 days for 1 IRC (Cwikla)

R. Trans-Europe, Sines, red/white card w/full data from C.P. 235, 1211 Geneve 11, Switzerland. 23 weeks via seamaill for no return postage. Station not listed in WRTVH. (Foster)

PORT. GUINEA: Bissau, 5041, green folder card in 6½ months air for PP rpt (Matsuura)

RHODESIA: RBC, card, skeds and Rhodesian stamps in 3 weeks (Hoogerheide)

SABAH: card in 27 days airmail (Henderson)

SAO TOME: R. Cl. de São Tomé, 4807, card w/full data in 6 months for 4 IRCs (Young)

SEYCHELLES: FEBA, 11955, full data card in 6 weeks air for 3 IRCs (Carrington)

SICILY: Caltanissetta, 6060, full data RAI map card in 3 months for 1 IRC (Noroko)

SOUTH AFRICA: Springbok Radio, 4945, industries card w/full data in 20 days for 1 IRC. (Hamilton)

SOUTH YEMEN: Aden, 5060, pink card w/tower; all data except time. 3 weeks for 3 IRCs by airmail. V/S: R. M. Ahmed (Young)

SPANISH SAHARA: Radio Aaiun, 7230, form letter, no data, w/thank-you for reception report. 10 months airmail for 3 IRCs. (Young)

SWEDEN: SCB2/Karlsborg, 7215, letter from Central Administration of Swedish Telecommunications; 3 weeks. (Blythe) 21715, 1 month air w/full data (Wootten) 21715,

letter in 26 days (Sweeney) 3 weeks for 7215 returning IRCs (Eichenhorn)

SYRIA: Damascus, 15165, large card with map of Syria/tower; 4 weeks w/full data after 3 tries. (Hoogerheide) card for July/71 report (Miller)

TIMOR: Dili, 3668, card, full data in 4 weeks (Young) card in 6 weeks for FP report and mint stamps (Flynn)

TRUCIAL STATES: Abu Dhabi, 9619, QSL from V/S: Abdalialah Nouwais, Aot. Dir. Radio & TV in 9 weeks; for 1 IRC. (Barto)

U. S. A. La Voz de la OEA, 15160, replied on 2nd try w/letter from V/S: Herbert Morales, Jefe, Division de Radio y Television, w/confirmation stmt, date and freq. 10 days after original thank-you were returned with request for full data (Calkin)

URUGUAY: El Espectador, full data DDU card & rolled-up pennant in 4½ months (Reeves) 11835, ditto in 5 weeks (L. Marshall)

CONFIRMATION

We thank you for your reception report and have pleasure in confirming that this is in accordance with our scheduled programme

Date: 10th Nov 1972
 Time: 2200 G.M.T.
 Frequency: 4965 KHz
 Programme: News + Radio news reel
 Remarks: Transmitted at 2.5 Kw

(Signed)
 for Chief Engineer,
 Zambia Broadcasting Services.

ZAMBIA: Radio Zambia, 3346, plain white card in 55 days for 3 CRCs (Campbell) 1½ months air (Eichenhorn) 4965, card w/all data in 6 weeks for 4 IRCs (Wallace)

And thanks to this month's reporters:

Malcolm Archard (MI) S. Eichenhorn (MI)
 Marty Austin (CT) Steve Estes (VA)
 David Ball (ONT) Henry Fino (NY)
 Sam Barto (CT) John Fisher (ONT)
 Ernest Behr (ONT) Bill Flynn (CA)
 Jerry Berg (MA) D. Foster (AUST)
 Bob Blythe (PA) G. Hafer (PA)
 Pauline Brock (PQ) A. Hamilton (ONT)
 G. A. Calkin (ONT) D. Henderson (MD)
 John Campbell (SWITZ) B. Hensley (AR)
 Bob Carlsen (OH) J. Hoogerheide (MI)
 Wendell Carrington Ron Howard (MD)
 (TN) M. Imbert (VA)
 G. Castello (CA) E. Insinger (NJ)
 Fred/Robert Caswell S.D. Isaac (SC)
 (OH) Tom Jeffrey (OR)
 Chas. Conner (LA) D. Johnson (CA)
 Thomas Cwikla (CT) Bob Kelleher (NY)
 G. L. Dexter (WI) Greg Kelley (VA)
 Eric Draut (IL) Donald King (PA)
 Richard Dushane (MI) Neal Kolb (FL)

A. Linsenkemeyer (IL) Ken Schnur
 Chris Lobdell (MA) Bill Schultz (PA)
 E. G. Lohe (VA) R. Schwartz (DE)
 Brian Lym (CA) Chas. Self (MN)
 Dave Machen (WI) W. Seymour (NC)
 L. Marshall (CA) Edward Shaw (VA)
 M. Marshall (ND) P. Siciliano (OH)
 H. Matsuura (JFN) Al Sizer (CT)
 Alan Mayer (IL) J. Slaughter (VA)
 Jim Meehan (CA) Wm. Sparks (CA)
 D. Megyesy (MN) F. S. Stiles (MA)
 Albert Miller (OH) B. Sweeney (OH)
 L. Nebron (CA) S. E. Sykes (OH)
 M. Nikolich (IL) S. Wallace (PA)
 Bob Norko (CT) Corky Webb (TX)
 Frank Orcutt (NY) J. Williams (IN)
 C. Patterson (GA) F. Willshaw (SC)
 Wm. Paschke (WI) C. Wooten (MORO)
 R. Perry (IL) M. Wiseberg (ONT)
 Scott Reeves (MD) Jerry Word (GA)
 Al Reynolds (TN) L. Yamron (PA)
 P. Romerika (MD) Jim Young (CA)
 J. Rosenberg (MA) Jim Zabransky (IA)

Clandestine

Bulletin



Clandestine

Bulletin

REPORT ON CLANDESTINE, REVOLUTIONARY, PIRATE & ESPIONAGE RADIO & TV ACTIVITY

Larry Magne, P.O. Box 2133, Middle-City Station, Philadelphia PA 19103, Tel. 215-K15-7699
Deadline: March 20

STATION OF THE MONTH

VOICE OF THE NATIONAL UNITED FRONT OF KAMPUCHEA

For a number of years there has been clandestine and revolutionary radio activity in Cambodia. From 1963 until the late 1960's, the Khmer Freedom Station (a/k/a "Voice of Khmer Freedom") broadcast on 4910v, 5940v & 6080v kHz, apparently identifying in Khmer as, "Thini, Samleng Canala Khmer Serai". Whether this was a Special Forces/CIA venture or a pro-communist operation is not really known, but at least some sources have placed it within the borders of the People's Republic of China.

Another reported clandestine operation during this same period was "Issarak Cambodia"; all we uncovered on this was its operating frequency: 7890 kHz.

The entire picture changed drastically when on March 18, 1970, Samdech (Khmer for "Prince") Norodom Sihanouk was deposed by a rightist military coup led by Lon Nol, the Cambodian personality most favored by the CIA, and Sirik Matak, favored by the CIA's rival organization, the State Department. Prince Sihanouk escaped to Peking and there formed a government-in-exile, the "Royal Government of National Union of Cambodia", which, along with the Khmer Rouge (Cambodian Communists), became the dominant force in the "National United Front of Kampuchea" (NUFK), the umbrella organization for the anti-Lon Nol-Sirik Matak organizations. Shortly thereafter a bulletin was aired over Radio Peking and Liberation Radio and appeared in Peking Review indicating that on August 1, 1970, the official station of the NUFK, the "Voice of the National United Front of Kampuchea", would commence operation on various frequencies at certain times.

Meanwhile, in Pakse, Laos, where the CIA's Laotian operations were largely conducted, the CIA decided to capitalize upon this advance notice by firing up a phony VNUFK -- a black clandestine radio operation -- to discredit Sihanouk and the real VNUFK. Since the lead time until the legitimate VNUFK commenced operation was just a matter of days, the CIA obviously had a suitable shortwave broadcast transmitter (or transmitters) already in operation, perhaps a holdover from some earlier clandestine radio venture.

Accordingly, the fake "VNUFK" went on the air just before the real one did, causing howls of indignation from Peking, Tirana and Hanoi, where the ruse was immediately exposed. About the same time, a former Peace Corps volunteer, Boris Baczynskyj, then on assignment as a news correspondent in Phnom-Penh, unearthed the phony operation, which he found to be located in the "Annex", a nondescript white, multi-storied building covered with antennas and sealed from the outside by an electronic keyboard lock and containing within sophisticated electronic devices to allow a Khmer CIA employee to fake the Prince's squeaky voice. Among other things, the CIA broadcasts had "Prince Sihanouk" giving slavish praises to "Mao Tseung Thought" and urging Cambodian girls and women to sleep with the "North Vietnamese soldiers fighting in Cambodia" (both to offend conservative Khmer morality and to "admit" North Vietnamese troops were in Cambodia). Although the original revelations by Baczynskyj and the aforementioned Communists made little news in the United States, the State and Defense Departments, eager to take a poke at their rivals in the CIA, "leaked" information on the fake VNUFK (dubbing it "Pakse Radio") to numerous Western reporters, which resulted in so much negative publicity for "Pakse Radio" that it went off the air altogether in short order.

While the fake "VNUFK" operated from Laos, the real VNUFK has always operated from sites in Cambodia itself -- Stung Treng & Kratie -- but has also been relayed on two frequencies by the Voice of Vietnam (incorrectly termed "Radio Hanoi" in the Western press). However, the transmissions have, from the start, suffered from low power output and poor modulation, with the result that listenership in Cambodia is not so large as it otherwise might be. By contrast, the Khmer Service of Radio Peking, another Sihanouk operation, is very widely listened to throughout Cambodia. Various of these transmissions have been jammed at times in the past, but if they are jammed now the jamming is ineffective.

Once in a great while the VNUFK will verify through the Peking headquarters of the NUFK -- see page CB-3 for one such rare example. Another possibility, in view of Jeff Bell's response from the Prince himself to an enquiry concerning the clandestine Voice of Malayan Revolution (also see page CB-3), is to try writing to the office of the Prince via Radio Peking. Reports should be most carefully drawn up and, if possible, be in French -- these people are busy fighting a war (as of press

time) and are not too inclined to respond to such minor items as reception reports. The NUFK address is: La Voix du F.U.N.K., Madame Van Piny, Front Uni National du Kampuchea, Bureau d'Information, B.P. 9010, Peking, China.

The VNUFK transmits solely in the Khmer (Cambodian) language, with the ID, "Thini, Vithayu phsay samleng Romnace Ruab Ruam Cheat Kampuchea". It signs on with Asian string and drum music and usually is best heard in North America on 9988v kHz (via Hanoi) from 1100-1200 GMT (ECNA) or 1300-1400 (WCNA), although all frequencies are traceable at one time or another throughout North America. Nevertheless, clear reception is rare and students of Cambodian affairs will doubtless prefer to listen to the Prince speak in Khmer, French and English over the powerful facilities of Radio Peking (where the ID is, "Thini, Sattani Vithayu phsay samleng Pekin").

The VNUFK transmits on 4675, 7010v, 9988v, 10079 & 12006 kHz from 0000-0100, 1100-1200 & 1300-1400; and on 4675, 9988v, 10079 & 12006 kHz from 0100-0200 (dictation-speed news) & 0400-0500. The 4675 & 9988v kHz transmitters are part of the Voice of Vietnam complex near Hanoi.

The Radio Peking Khmer Service schedule is: 1030-1125 on +8450**, 9460, 9880, 11455, 11695**, 15060, +17490*; 1200-1255 on 1190, 1300, 6520**, +8450**, 9460, 9470, 9920, 11455*, 11695**, 12015**, 12080**, 15030, 15060*, +17490*; 1400-1455 on 1300, 6520**, +8450*, 9340**, 9920, 11455**, 11675**, 15060*. *Summer frequency **Winter frequency +Reduced-carrier double-sideband tx

Thanks to those who generously helped, including T.D. Allman, BBC MS, Jeff Bell, Bob Bundy, Gregg Calkin and Don Jensen.

NEWSLETTER

LIBERATION RADIO REVISES SCHEDULE: Thanks to Bob Bundy and the BBC Monitoring Service, we now have most of the post-bombing Liberation Radio schedule, which supercedes that given in last month's column. Apparently one transmitter is still out of operation, while the 10220v kHz transmitter has drifted to around 10240v kHz and is much weaker than before the B-52 raids.

To Europe & South Vietnam:

1900-2000	Vietnamese	10010v, 12115v
2000-2030	French	10010v, 12115v
2030-2045	English	10010v, 12115v

To South Vietnam:

2200-2400	Vietnamese	7415 $\frac{1}{2}$, 10240v
2330-2400	English	7470v, 10010v
0400-0430	Laotian	7470v, 10010v
0700-0830	Vietnamese*	7415 $\frac{1}{2}$, 10240v
0830-0900	English	7415 $\frac{1}{2}$, 10240v
0900-0915	Khmer	7415 $\frac{1}{2}$, 10240v
0915-0930	Laotian	7415 $\frac{1}{2}$, 10240v
0930-1700	Vietnamese	7415 $\frac{1}{2}$, 10240v
1100-1130	English	7470v, 10010v
1130-1200	Khmer	7470v, 10010v
1200-1230	Vietnamese	7470v, 10010v
1230-1300	English	7470v, 10010v
1300-1330	Khmer	7470v, 10010v
1330-1400	Laotian	7470v, 10010v
1400-1430	French	7470v, 10010v

*Dictation-speed news

The New York Times reports that "at noon and 7 P.M. every day the guards tuned in either Liberation Radio...or the Hanoi Radio and made the prisoners pay attention." So indicated a SVN prisoner held in NVN.

Thanks to reporters Bob Bundy, Caroline Islands; Ed Insinger; John Lackmann; and the BBC MS!

POSSIBLE NEW AFRICAN CLANDESTINE: An unidentified station broadcasting in what appears to be a Portuguese dialect, but not signing off with "A Portuguesa" (the Portuguese National Anthem, traditionally played at s/on and s/off in Portugal and its colonies), has been noted since mid-February on 6240 kHz from before 2145-2303 s/off, with an interval signal and ID by a woman at 2245 and frequency information/ID at 2300. Reception in Ottawa and Philadelphia so far has been rather poor, but one ID seemed to be (very roughly, due to intense static), "Aqui e Radio Libertan... Emissora de (name given sounding like "Toa Eptu")...Guinea-Bissau", but reference was possibly also made to "Revolucão do Angola". Programming consists largely of African music, Portuguese music, and talks by a man. The technical quality as noted in Philadelphia has been fairly good, which makes it more likely that this is using the technical facilities of some existing legitimate broadcaster, as opposed to being a "jungle operation"; output seems to be roughly 5 kw. At sign/off, what seems to be three transmissions are announced, two of which are on 49 meters (presumably 6240 kHz) and one of which apparently is on 30 & 31 meters. The station closes with a strange anthem, which resembles none of the known Portuguese or Communist anthems. Without more information, it is not possible to say with any certainty whether this is, in fact, a clandestine operation, but it certainly bears checking out, especially by European and African monitors, and further information on it will be welcomed. Thanks to fellow editor Gregg Calkin, Ottawa, for his telephone call informing CB of this very fine catch!

LIBYA-MORROCCO PROPAGANDA WAR ESCALATES: The political differences between the Nasserite Libyans and



**OVERSEAS
TELEGRAM**

FRONT UNI NATIONAL DU KAMPUCHEA
BUREAU POLITIQUE DU COMITE CENTRAL
BUREAU D'INFORMATION

Pékin, le 31 Mai 1971

Chers amis,

Nous vous remercions de votre lettre et de l'intérêt que vous avez bien voulu porter à l'émission et au programme de notre Radio - Diffusion, " La Voix du F.U.N.K. ", organe du Ministère de l'Information et de la Propagande du Gouvernement royal d'union nationale du Cambodge .

C'est un témoignage de sympathie et de soutien auquel notre peuple en lutte contre l'agression américaine pour le salut national est particulièrement sensible et dont il s'efforcera à l'avenir de se montrer digne .

Nous nous permettons, afin d'améliorer vos écoutes, de vous préciser les horaires et les fréquences des émissions de " La Voix du F.U.N.K. " :

1ère émission :
23.00 - 24.00H. GMT sur 25 m (12006 kcs), 30 m (10090 kcs, 9988 kcs et 60 m (7020 kcs) et 60 m (5000 kcs) ,

2ème émission : (Emission spéciale) .
24.00H. - 01.00H. GMT sur 25 m (12006 kcs), 30 m (10090 kcs - 9988 kcs et 60 m (5000 kcs)

3ème émission :
4.00H. - 5.00H. GMT sur 25 m (12006 kcs), 30 m (10090 kcs, 9988 kcs), 60 m (5000 kcs) :

4ème émission :
11.30H. - 12.30H. GMT sur 25 m (12006 kcs), 30 m (10090 kcs, 9988 kcs), 40 m (7020 kcs), 60 m (5000 kcs) .

5ème émission :
14.30H. - 15.30H. GMT sur 25 m (12006 kcs), 30 m (10090 kcs, 9988 kcs) et 60 m (5000 kcs) .

En vous renouvelant l'expression de nos remerciements, nous vous prions de croire à nos salutations les meilleures .

P. Le Bureau d'Information près le Bureau Politique
du Comité Central du Front Uni National du Kampuchea .



Madame VAN PING

AUSTRALIAN POST OFFICE
TELEGRAM

+
CN 002- SPM - NOXC 251- OSEA
KVA420 PEKING 56/55 11 1050



LT

MR J A BELL 2

84 ACTON AVENUE RIVERVALE 6103 PERTH

AUSTRALIAN POST OFFICE
TELEGRAM

N051/CABT JE VOUS REMERCIE CORDIALEMENT DE VOTRE LETTRE MEXPRIMANT VOTRE SYMPATHIE ET SOUTIEN MAIS VOUS PRIE DE MEXCUSER DE NE POUVOIR TRANSMETTRE VOTRE MESSAGE A LA RADIO DE LA REVOLUTIONMALAISIENNE AVEC LAQUELLE NOTRE FRONT UNI NA PAS DE CONTACT SINCERELY YOURS NORODOM SIHANOUK

COL 84 6103 N051/CABT

POST OFFICE
TELEGRAM

WANT SOMETHING DIFFERENT? TRY THIS, A PERSONAL REPLY FROM PRINCE NORODOM SIHANOUK TO AUSTRALIAN DX-ER JEFF BELL CONCERNING THE CLANDESTINE STATION, "VOICE OF MALAYAN REVOLUTION"

RARE VERIFICATION LETTER FROM THE VOICE OF THE NATIONAL UNITED FRONT OF KAMPUCHEA IN PEKING TO VETERAN DX-ER GREGG CALKIN.

the monarchist Morroccans, which in the recent past helped foster an attempted assassination of Moroccan King Hassan, are being broadcast once again by both sides. The Moroccan program, "Voice of the Truth", is aired on 209, 6170, 6190, 9615, 11735 kHz and some medium-wave and TV outlets in classical Arabic from 1900-1930 Wednesdays & Saturdays, and repeated in colloquial Arabic from 2000-2030 those same days, with a rebroadcast via Tangiers on 1232 kHz from 2300-2330.

The Libyan program, "Liberation", is aired the same days from 2115-2145 in Arabic and Moroccan Vernaculars on 674, 1052, 1124, 1394, 8630, 11795 kHz. Additionally, the Libyan radio broadcasts a revolutionary program for residents of the Gaza Strip and Israeli-occupied Arab territory -- "The Steadfast" -- daily in Arabic on 674, 1052, 1124, 1250, 1394, 8630 & 11795 kHz (BBC MS).

??CUBAN CLANDESTINE??: Our most recent copy of SCDX -- quoting from a SPEEDX-Gram -- indicates that a new anti-Cuban clandestine, "La Voz de la Revolucion Cubana", has popped up on 3543 kHz around 0145-0250, complete with announcements in American-accented Spanish. However, a check of any frequency that is a multiple of 590 kHz (and, in most cases, 600 kHz) will reveal that this "clandestine" has numerous parallel channels. As Glenn Hauser and others can attest, these are merely the rich harmonics of the Cuban domestic radio network, nominally termed "Radio Rebelde", but which IDs in a variety of ways, including, unsurprisingly, "La Voz de la Revolucion Cubana". Presumably the "American" accent refers to an English-language accent, but most Latin Americans also consider themselves Americans.

EUKKADI QSL'S FORTHCOMING: Those of you who have been wondering why Radio Euskadi hasn't been verifying can take heart from a letter received from John Campbell. While he was in Paris, he stopped off at the rue Singer office and was informed that, due to their workload, they had fallen behind in verifying reception reports, but that shortly the backlog would be cleared up.

BALUCHISTANI LIBERATION MOVEMENT HITS THE AIRWAVES: "Free Baluchistan Radio" now operates from Baluchistan, Pakistan, airing revolutionary songs and news bulletins of the "Baluchistan National Front" in Baluchi and English, so the publication "Bangladesh" would have us believe. Perhaps one of our UADX friends can help tie this allegation down (via SCDX).

NEW ESPIONAGE STATION IN WASHINGTON: The Chinese, whose embassy code transmissions have already caused some minor problems abroad (see Jan CB-2), are due to open a "liaison office" -- a *de facto* embassy -- in Washington "in the nearest future", according to Henry Kissinger, who further indicated, "The people in the liaison office will have diplomatic privileges and will have an opportunity to communicate with their home government in -- by code." (N.Y. Times) Such coded messages are sent by both wire and radio, usually the former (Ed.).

AUSSTIE RADIO MONITORING IN SINGAPORE DISCLOSED: A high-ranking Australian Government source, believed to be Prime Minister Gough Whitlam, indicated that 600 Australian "logistics personnel" in Singapore were actually acting as a cover for a secret code-breaking operation involving the interception of radio messages throughout Southeast Asia. This has caused something of a political stir in Australia, where the governing Labor Party had pledged to end Australian troop commitments in Southeast Asia (Robert Trumbull/N.Y. Times; Gregg Calkin; John Campbell, Switzerland).

I AM CURIOUS (RED): Numerous pirate radio stations are once again appearing in the Soviet Union, airing not only forbidden Western rock music, but also bawdy songs and descriptions of various sex techniques (Richard Leggett, England, via DSWCI). According to reliable Western sources, printed pornography featuring supersexed Amazons (e.g., "Ooktoberina") and caricatures of Stalin is now popular among Soviet youths (Ed.).

ITALIAN MUSIC PIRATE APPEARS IN SWITZERLAND: John Campbell, temporarily catching his breath in Geneva, has discovered a pirate operating weekends around 1200 on 9250-9400 kHz, apparently from a site in Meyrin, a village near Geneva. Programming consists solely of Italian music from Caruso to Sicilian rock and it seems to enjoy an audience among the many Italian expatriate workers around Geneva. The 150 kHz-wide signal is due to sloppy transmission, which is also evident in the poor quality of modulation.

RADIO NORTHESEA INTERNATIONAL RETURNS TO 31 METERS: RNI has reactivated its 31 meter band transmitter on 9780 kHz (per SCDX) or 9720 kHz (per DSWCI). Reception reports and comments should be sent to RNI World Service, P.O. Box 113, 8047 Zurich, Switzerland (DSWCI, SCDX).

NEW U.S. HOBBY PIRATE APPEARS: The "Voice of Young America", WTIT (sic), has been unearthed by fellow editor Al Niblack on 7415 kHz from 2110-2200 s/off with an announced power of 50 watts. It intends to return to the air at some unspecified time in the future (via Don Jensen).

SOUTH INDIAN MYSTERY PIRATE: From around 1400-1600 on (usually) 11830 kHz, a pirate station, believed to be located in southern India, is heard in Sri Lanka playing only pop music, no announcements (Victor Gometilleke via UADX).

BRITAIN YIELDS TO PIRATE PRESSURE, ALLOWS FIRST TWO PRIVATE RADIO STATIONS: Two privately-owned radio stations have been licensed to operate in London later this year, one carrying 24-hour news and the other carrying general material, the latter being the "London General Network". Heretofore, the only alternatives to "Auntie" BBC's radio were the numerous pirate and hobby-pirate operations (Reuters).

NEWS/REP: The World Radio Bulletin, which recently was transferred from Danish to Scottish hands, indicates in issue No. 2 (1973), "It is illegal under Scottish law for World Radio Bulletin to assist stations in international waters--only news can be given to help other radio stations and monitors have complete news about world broadcasting." Well, no such nonsense seems to apply to Danish publications, so we gladly recommend to European pirate radio buffs that they join the Danish Shortwave Club International, DK-8382 Hinnerup, Denmark, which regularly publishes an excellent column in English on the subject.

END



HEADQUARTERS CALLING

NASWA, P.O.Box 8452, S.Charleston, W.Va. 25303 USA

HELPING HAND Hallicrafters S-125, 14 mo old, good as new. Logged 110 countries/ 225 stations on it. Just bought SX190 & need cash. Bought for \$65, will sell for \$40 (you pay shipping). Write Scott Reeves, 16506 Forest Mill Ct., Laurel, MD 20810.

FOR SALE Allied SX190 & speaker, 1 year old & used very little. Priced for sale. Also, Aegis "All-wave noise reducing aerial system". Used but short time. Write Corky Webb, 4014 Travis, Apt. 4 Dallas, Texas 75204

FOR BULLETIN BOARDS

We have available some mimeographed notices for placing on bulletin boards in grocery stores, laundromats, etc., noting some of the things one can hear on shortwave. NASWA's HDQ address is on the notice, along with a space for you to fill in your name and phone number. This has proved to be an effective means of meeting others interested in shortwave radio. We will send a supply for a SASE. The more postage, the more blanks. Write HDQ.

FOR COLLEGE CAMPUSES

Work has begun on a booklet which will briefly explain shortwave radio, and list programs on various subjects which can be heard from the world's SWBC stations. We expect to have about 16 pages in the booklet. It should be finished in the next month or so, and will be announced when available. This one should be extremely useful to college students trying to spread the word about shortwave!

ENGLISH PROGRAM SCHEDULES

After much thought and discussion, it has been decided to compile and issue regularly a list of English transmissions that can be heard in North America. We will proceed with the project as soon as we find someone to coordinate the compiling and prepare the final list. In addition, we will need several people working with the person in charge. Most of the work will come just after the quarterly schedule changes. Contact NASWA HDQ.

LOCAL BRANCHES We are occasionally asked to supply members with the names of other members living near them. In the past this has not been practical, since it meant flipping through the entire membership list. With the new addressing machine, it will be easier, once the address cards are arranged in order by zip code. That should take about a month or so, and we shall then be looking for increased personal contact among members, as it becomes possible to put them in contact with each other.

NASWA AWARDS PROGRAM The Awards program has been reactivated and expanded. A sheet outlining the program is available from HDQ. We had hoped to include it as an insert with the bulletin this time, but it looks like that would put us over the weight limit again. So, for your copy, send an SASE to HDQ.

THE ART OF VERIFICATION was overpriced last month. Cost is really only 50¢. Those who sent in \$1 received a 50¢ refund. Sorry for the error.

MAIL CALL

LETTERS FROM MEMBERS WITH PROBLEMS

Deadline: 20th of the month

Edward C. Shaw
621 Burleigh Avenue
Norfolk, Virginia 23505 USA

One of the greatest benefits I have derived from this hobby besides the logging and verification of foreign stations is the camaraderie established with the many, many correspondents I've had over the past ten years. Many faces I have finally met in person, which didn't lessen the pleasure at all. I want to thank the many club members who have written - many of them being regulars. I can't really answer whether or not I have been of service to you, but you have certainly been satisfaction to me.

Dear Ed: Why won't some stations answer my letters when I have supplied IRC's?

Answer: Many small stations are so poorly staffed and financially strained that to answer mail is often a personal gesture of some station personage. I know of one instance where the owner, engineer, operator, and administrator were the same man. His 500 watt, revamped amateur transmitter was housed in a small shack in the interior of Brazil, miles from the nearest post office. So, IRC's were useless, if not meaningless, to him. Mail arrived once every couple of weeks and came back even slower. Have patience. Make your reports useful. Postcards, stamps, decals and other small enclosures may help foster a feeling of obligation to answer you.

Dear Ed: Everyone has his own preference on how to mount QSLs, but I found that the "magnetic page" type photo album really does the trick neatly

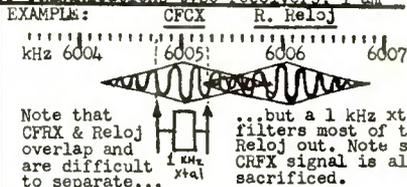
Comment: Hold on there! I have some first hand sad experiences in this direction. Most of these albums are designed the same way - an acetate sheet adhering to a resin coated stiff piece of cardboard. You might be dismayed to find that once mounted in the album, your QSLs have become firmly and permanently glued (by the resin) to the cardboard - removable only by an expensive solvent treatment. I suggest that if you continue to use this type of album to first cut a card the same size of your QSL to place between the QSL and the resin-coated board before re-laying the acetate sheet.

Dear Ed: When listening to Radio Moscow I became familiar with Moscow's interval signal. However, I occasionally hear other interval signals over the Moscow broadcasts between transmissions. Are these separate stations?

Answer: Moscow has interval signals to identify various programs. They are played in the interval between programs - hence the namer 'interval signal'. It would be more correct to call the opening transmission tune an identification signal, but we all know what you mean. You will hear different IS for programming of "Radiostansiya Atlantika", Radio Peace and Progress", Radio Majak", and others. BBC and Radio Nederland are other stations employing different interval signals - perhaps not commonly heard in the USA unless sought for. By the way, NASWA will be happy to attempt to ID any interval signal you want to send in. Simply get it on a few feet of tape, wrap it around a 3 x 5 card and mail it to me. Chances are we can help you. I have a private collection of over 200 world interval signals.

Dear Ed: After reading about many of the better communications type receivers, I am in the dark about one function I see on many of them. What is meant by crystal filtering?

Answer: Crystal filtering greatly enhances the selectivity of your receiver by providing a narrow gate, so to speak, for the desired signal to come through, but blocks off a good deal of QRM of other stations above and below the frequency heard. See diagram at right. See how a 1 kHz crystal cuts out unwanted QRM.



HARMONIC HUNTING

with
HAUSER

Glenn Hauser
Box 62
Von Ormy TX 78073



Questions and
comments welcome!

"I am particularly pleased that you introduced the column with some questions of DX philosophy...I do think that all serious DX papers should carry regular discussions of DX philosophy. To this end I submit the following. You cite Bahamas, etc., as possible new countries by harmonic. Does this not totally upset any reasonable listing of what constitutes "active" and "dead" countries on SWBC, and make a mockery of the achievements of those SWBC DX'ers who logged, say, Bahamas when they were intentionally active in the SWBC bands? Will not the NASWA country list as it now stands have to be scrapped or totally rewritten?" --Richard Wood

This demonstrates the danger of establishing a proscriptive country list ('these are eligible countries, and only these'). A cogent quotation from the NASWA Country List introduction: "It is purely arbitrary, with but one aim in mind: To provide SWBC listeners with the maximum number of target areas to tune and verify." Jamaica would be a better example, as Bahamas is missing from the list even as a former SWBC country. I should hope that any oldtimer who logged Jamaica as conventional SWBC would not be so greedy as to hope it is never again heard on SW! Objectively compared, a reception today of, say, JBC on 2250 might well be a better DX catch than the old ZQI (on 4900?). To further the express aim of the country list, I think any requirement for 'intentional' broadcasting on SW must be scrapped. It is not for us to say whether a MW station intentionally lets its harmonics radiate. In fact, the transmissions are clearly broadcasts, (i.e. programming for public consumption) and just as clearly they are on shortwave...ergo, shortwave broadcasts. Whoever first succeeds in logging an otherwise 'dead' SWBC country via an MW harmonic may place a test case before the Country List Committee, presently split on the issue of allowing harmonics. Possibly the Panamanian on 3390 (apparently 3x1130 despite its WRTN73 status) may be the one, should it prove to be the only active broadcaster in Panama on SW. It seems to me programming should be the primary definition of a broadcaster; this would include harmonics, but exclude such clearly utility operations as CW Naval timesignals, which have no programming--not even speech!--and are not intended for the public. Permitting them as at present is also inconsistent, as VOLMET AM wx may not be counted.

How do domestic MW harmonics fit into the overall picture?

This is a wide-open field--a way to boost one's SWBC state total far beyond the usual five (CA, OH, NC, PA, MA) currently active on regular SWBC. Over the years I have heard many domestic harmonics, more often locals or regionals than fundamentally more powerful clear-channel outlets. Has anybody else heard South Dakota on SWBC? (KCCR-2480 kHz). No doubt northeast DXers could hear many more than I--though America's much more rigorous technical standards keep the number down compared to the IAs. I urge LR editors not to discriminate against domestic MW harmonics, since compared to easy VOA, KGEI, WNYW and WINB, they are very fine DX indeed! A few appear below....

YOU OWE IT TO YOURSELF TO TRY THIS

SPECIAL OFFER: Would you like to hear a bandscan of harmonics audible at the editor's snack? Both skeptics and devotees may apply! Just send a cassette (C90 will be plenty) preferably with mailer, and enclose return postage. Offer expires 31 March.

- 2340 VENEZUELA Despite a fund. listed here for another station, now being hrd is 2 x 1170, R. El Sol, La Fría, 2/16 0100-0158*; 2/19 1110 SINPO 42443 "Alegre Desperstar" pm; 2/20 1059 ID, La Fría often ment. YVPX, 1 kw; Hall also hrd in MA.
- 2343v GUATEMALA TGRL varies, again hrd w/R. Landivar ID, 2/18 0400, 2/19 1153; 2x1171+
- 2460 USA KEKE Nacogdoches TX 1/6 1339, 2/20 1135 ABC-E nx ending; 2 x 1230
- 2480 USA KADS Elk City OK, 1/5 1308 local PSAs; 2 x 1240
- 2820 COLOMBIA HJFS Ondas del Gualf, Honda, new 2/20 1055 CARACOL, ID; 2 x 1410
- 2980 USA KQTY Borger TX 1/6 0504-0527 much wx, headlines at :24; 2 x 1490
- 3120 USA KEGG Daingerfield TX, 2/18 1313 hymn, 1330 nx, ID; also 1/2 2239 USAF mx pm, 230? nx, 2329 s/off by twangy YL illegally omitting QTH; 2 x 1560

LISTENER'S Notebook!



Dan Ferguson
1521 Smith Road, Apt. 7
Charleston, W.Va. 25314
U. S. A.
Phone: (304) 346-5738
Deadline: 18th of month

DEUTSCHE WELLE REPLIES NASWA member Ernst Lohe sent some clippings of the LOG REPORT to DW. He received a reply from Mr. Rogler of the HF department. There follows a translation of the letter, provided by Ernst....

"Deutsche Welle" would like to state that the frequency planning is done in strict accordance with the "International Radio Regulations" and all frequencies are checked with the International Registration Board in Geneva. DW broadcast special programs during the Olympic Games which were relayed by more than 300 radio stations all over the world. These transmissions were beamed in addition to the normal program and frequency schedule. After the Olympics DW returned to its regular services.

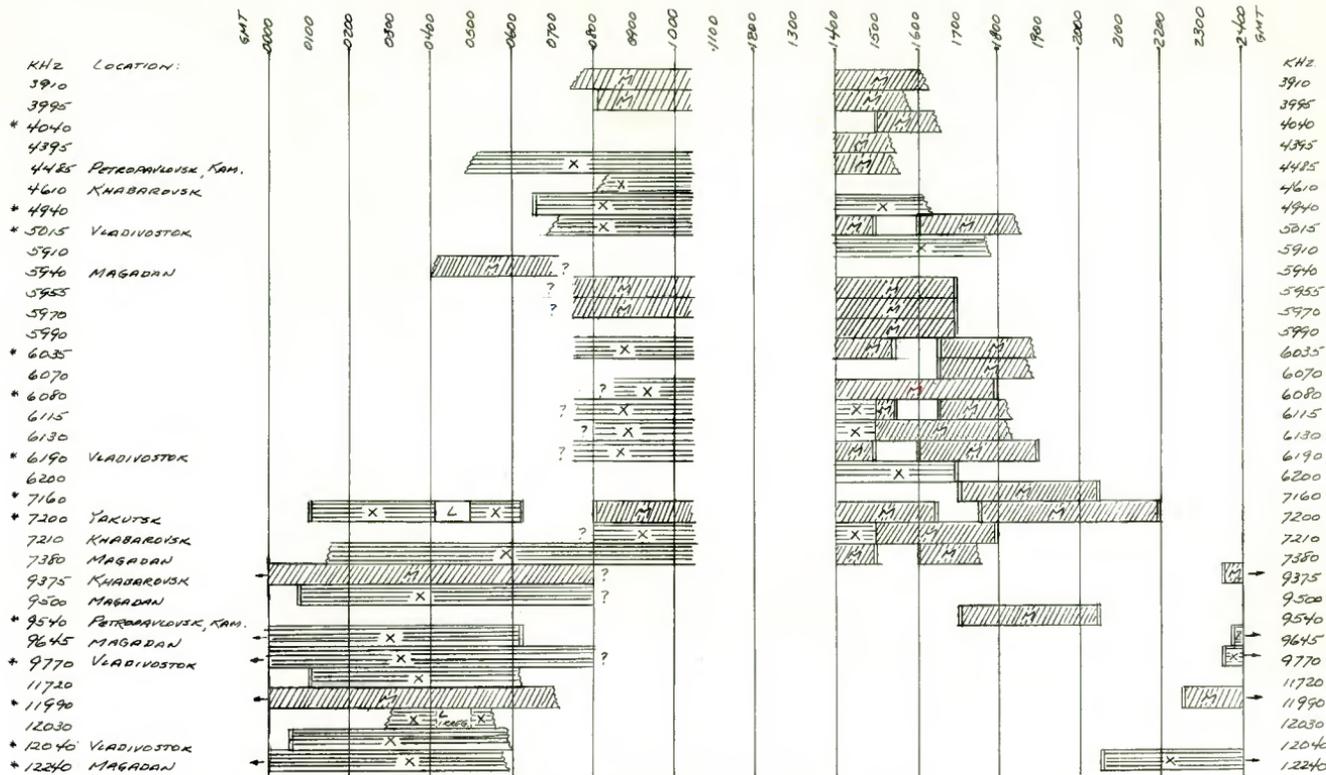
"Specifically, DW would like to correct as follows:

- 1) the frequency of 6120 was used with the agreement of the Swiss SW Service with a power of 100 KW rather than 500 KW as stated in the log report;
- 2) 9520 kHz was used for transmissions to the southern part of South America, while Spain beamed towards North America which is an azimuth difference of 70°. Regarding international guide lines this is more than sufficient.
- 3) We do not see any interferences with Norway on 11850 kHz. In the first place, our transmitter was on the air only during the absence of Radio Norway, and in the second place, we are broadcasting now on this frequency to Iran, Japan, and Australia; at times when no propagation to NA is possible.
- 4) Concerning the frequency of 15150 used for our transmissions to West Africa no interferences were likely. Radio Moscow did not use this frequency at all. In the event Radio Moscow would have used this channel the International Communications Treaty would have been violated.
- 5) HCJB never used 6085 kHz,
- 6) ORF broadcasts to NA on 6155 before our time.

"The statement that we are anticipating to put 10 more transmitters into service is incorrect."

A letter with essentially the same information has been received from G. G. Thiele, of the DW HF Dept. Mr. Thiele also notes that DW is not anticipating the introduction of a further 10 500 kw transmitters. Certainly for this, DXers will be grateful.

In his letter, Mr. Thiele notes that for the German program to NA DW is using only 3-5 transmitters simultaneously, "which is definitely not too much for such a large continent." He indicates that for the English programs DW uses 4 transmitters simultaneously. "This number is relatively modest even on comparison with other broadcasters. Among these transmitters there are never more than one, or utmost two, 500 kw transmitters. As a matter of fact, many of our listeners have complained that this choice of frequencies is inadequate in view of the difficult propagation conditions caused by the aurora zone."



W.F. DAVIS
 24442 LOS SEBRANOS
 LAGUNA NIGUEL, CALIF.
 92677 2-14-73

LOG REPORT

NASWA LOG REPORT
P.O. Box 8452
S.Charleston, W.Va. 25303

Deadline: 12th of the month

All reports to the LOG REPORT MUST be arranged in order by frequency. Reports which are not so arranged cannot be used due to the excessive processing time required. Please list your last name with each item; otherwise, if there is time, it has to be done by the editors, and sometimes there just isn't enough time. Remember the deadline, the 12th of the month. Items received after the 12th cannot be used and are not held over to the next month. Your report should contain only loggings no earlier than 5 days previous to the past month's deadline. This will help keep the LOG REPORT up to date and accurate.....Your cooperation in these matters will make life much easier on the LR editors and will help keep the LOG REPORT as the standard of reference it has been for so many years. Thanks.

- 1700h GUATEMALA TGX, R.Ciro's, Guat City, 2x850, 0600+, ment "Zona-9" (zonas are a dead giveaway for Guat City. Past 0700. Also noted 0526.(Hauser)
- 2000h MEXICO XEFV, R.Rancherita, new harm., 2x1000, 1251 TCs, IDs, songs(Hauser)
- 2010h MEXICO XEOTR, Torreón Coah, at check 2/2 1320 on 3x670. (Hauser)
- 2050h MEXICO XELJ, Lagos de Moreno Jal, 2x1030, FM distortion, 1320. Also hrd s/off 0059. (Hauser)
- 2160h MEXICO XECN, La Onda Juvenil, Irapuato Gto, 2x1080, 0056-0104*. Do not confuse with nonexistent XEVJ-Chilpancingo, listed 2160. (Hauser)
- 2180h UNID. 1/20 SS mx 1235, not //4360. Prob 2x1090. (Hauser)
- 2200h GUATEMALA? Fqy still open in absence of earthquake YNQ La Líder, but on 2/2 at 1252, weak SS mx here; could be TGRS, R.Superior, hrd last yr(Hauser)
- 2280h MEXICO XENR, Monterrey NL, 1/20 1333 plugging "Grupo R.Alegria". 2x1140. Not there before 1330. Apparent time of day power/antenna switch(Hauser)
- 2300h MEXICO 1247, 1/30, X---, R.--- ID, CCI, likely 2x1150(Hauser)
- 2357h MEXICO?? SS, Mex mx, het 2360, hrd 1255, gone by 1326. ? x ? (Hauser)
- 2360 GUATEMALA R.Maya; 2330-0332* gud lvl, M&W in SS mx, nx. IDs $\frac{1}{2}$ hr. Closes with national anthem. (R.Perry, Shaw, Tuchscherer)
- 2410 NEW GUINEA R.Goroka, native lang, south sea mx, weak, RTTY on 2411. Hrd 1032-1049. (Young)
- 2450 NEW GUINEA R.Mount Hagen; armts, children's singing 1050-1112. Weak, but in the clear. (Young)
- 2468 NEW GUINEA R.Popondetta, reported here; M voice in native lang 1112(Young)
- 2520h MEXICO XEZH Salamanca Gto probably, 2x1260, 1253 CST TC. 1335+(Hauser)
- 2620h MEXICO XEBP, Torreón Coah, 1244-1320+, 1/20&2/2, 1cl ads, 2x1310(Hauser)
- 2679h MEXICO XESL, Canal 134, San Luis(Potosí), 0035, 1320, 1416(Hauser)2x1339 $\frac{1}{2}$
- 2798 $\frac{1}{2}$ h MEXICO XELH, Acaponeta Nay, 1/19, 1327 mx, ad. 1/14, 0047 SS mx(Hauser)
- 2800 CHINA Fukien Front Station, presumed, 1336 seems //3200, het Mex(Hauser)
- 2969h GUATEMALA UNID seems woman's stn, 1/18 0350, 0418 ID sndd like R.Sundunga, off 0557. 2/3, 0100 w/automation, 0600*, 3x990. (Hauser)
- 2999 $\frac{1}{2}$ h PERU?? Vy tentative, 1/29 1104 LA mx, armts, 1112 rapid SS mx, TC in EST, maybe ID as "R.Mundo"(OAX3T Chimbote is only such slogan on known possible fundamentals, as 4x750), 1119 painkiller ad, 1145 f/o. (Hauser)
- 3016 N.KOREA Bob Bundy checked & says this is not a 3x1105 harm, but ex-4410. Hrd in JJ? songs & tlk, 1/14, 1349. (Hauser)
- 3080h COLOMBIA HJHD, LV del Petróleo, new harm, seems slightly low, 2x1540. 1/18 0245 SS ball game, 0413*. (Hauser)
- 3180h MEXICO XEVOZ, R.Voz, México D.F. presumed as previously IDd; 1/15 at 0755 fair. 2x1590, also hrd. (Hauser)
- 3215 VENEZUELA Ondas Panamericanas, 0150-0158* SS mx, tlk, s/off w/YV NA(Lohe)
- 3220 N.GUINEA R.Morobe, 0850-1130+; Pidgin, native vocals, drums, S.sea mx, C&W mx. (Dexter, R.Perry, Young, Williams)

- 3223 INDONESIA RRI, UNID Indo stn here 1315 t/1-1400 t/o after they switched to national mx from Djakarta. 1330 EE lesson, fair 1/19. (Henderson-CA)
- 3223 INDIA AIR-Simla, II mx 1248 tune, all tlk from 1259 to 1313 when lost in electrical QRM. (You have that too? DF) Fair on 1/11. (Dexter)
- 3230 TAIWAN? 1426 whistle mx, signs of jamming, BCC listed here. (Hauser)
- 3232 CONGO RTNC vy poor 2215 w/local mx (Heutte)
- 3235t INDIA AIR Gauhati, 1503 guitar mx, like Indo mx; tent ID 1515. Not // to 3375, 1/16 (Williams)
- 3241 INDONESIA RRI-Ambon; 1050 Indonesian amts & pops (Foster-Australia)
- 3245 PAPUA R.Kerema; 0904-1205+, chanting mx, chimes, maybe mx 0935, MOR ballads, no English noted. (Tuchscherer, R.Perry, Young, Henderson-CA)
- 3250 INDONESIA-KALIMANTAN? Bandjarmasin listed, RRI, Indo tlk briefly 1338, "Borneo is name of entire island, including Sarawak, Sabah, Brunei. "Kalimantan" is the Indonesian name for the Indonesian portion. (Hauser)
- 3260 CHINA 1350 CC mx noted 1/22. Kweiyang has been reported here. (Hauser)
- 3260 N.GUINEA R.Madang, poss mx 0847-0900, gong on hr, TC, S.Sea mx past 0907 (Young) 0834 CW mx, Poly mx. EE & Pidgin amts (Henderson-CA)
- 3265 BRAZIL Unid here in PP 2300, no ID hrd; talks & fanfare. (Heutte)
- 3265 MOZAMBIQUE RCM 1731 EE & Afrikaans ads & pops (Foster-Australia)
- 3270 CHINA R.Peking in EE s/on 1500. (Henderson-CA)
- 3270 UNID, SS mx by M voice 1115. Weak. (Young)
- 3275 MOZAMBIQUE RCM Beira, 1725 African singing and amts. (Foster-Australia)
- 3277 INDONESIA Djakarta; F voice w/amts at 1147. Light western mx 1150. RRI type ID 1200. 73 WRTH lists 1600*, I seem to find 1400*. Seems that Kashmir is unlikely before 1400. 3277 & 4805 always //. If you suspect Kashmir, ck 4805. Have never caught the normal RRI IS on 3277, but have hrd here for 3 yrs. Question for Don Jensen: Have you ever hrd Djakarta here? (Young) RRI 1534 rel type chanting, singing by YL, till 1545 (Williams)
- 3277 KASHMIR Srinigar from 1244 t/i II mx, YL ancr, after 1300, orch mx & M ancr. Surprisingly good level, 1/8 (Dexter) 1424-1510 t/o w/fair to good sig, no UTE this day. II & orch mx. Almost positive this is Srinigar, not the listed Indonesian, as no mx 1500, while others had it. (Henderson-CA)
- 3291 CHINA 1355 CJKT ID, not // 3260, 1400opera, new HS fgy? (Hauser)
- 3294 INDIA AIR stn, presume Bombay or Delhi, II lingo/mx, from 1414 t/i (Henderson)
- 3300 BURUNDI R.Burundi, 0410 Afr instr mx, good Jan 16, weaker on //6140, no sign of Belize. (Behr)
- 3306 VENEZUELA R.Carupano from 0334-0400*. Vocal mx, frequent TCs. Fair lvl 1/8, UTE gone Sundays. (Dexter)
- 3306 RHODESIA Gwelo, 1730 Af lang (Foster-Aust) 3306.5, 0412, 1/30 EE mx, R&R. (Henderson) 3307, ID & EE mx //3396 at 0400 (Sparks)
- 3315 ECUADOR R.Pastaza, 0300-0400+, long Ec anthem, Ec songs (Behr, Dexter, Sparks) *1123-1132+ w/NA, ID, Ec mx (Tuchscherer)
- 3315 BRAZIL R.Gazeta de Alagoas from 0000 tune, 1/20. Fair lvl, mx & PP (Dexter)
- 3315 INDIA AIR-Bhopal; 1237 M&W, II mx (Dexter) 1416 II mx, Hindi type lang. (Henderson-CA) 1509 EE and ?? lang, II vocals, mx 1530 in EE by YL (Williams)
- 3315 MARTINIQUE ORTF, s/on 1000, FF ID, FF mx (Young) 0000-0100 FF (Schnur, Miller)
- 3316 SIERRA LEONE RSL, 2200-2300 EE mx, jazz, Af mx. 0615-0730+ jazz, BBC mx 0700. (Cwikla, Sparks, Wallace)
- 3320 PERU R.Erpa, 0530 LA mx, SS tlk, ID "Aqui Radio Errrrpa" (Wallace)
- 3320 UNID SS mx 0335, weak. Amts 0338. (Young)
- 3331 USSR Unid regional 1135-1304*. Piano mx, bass OM singers. Some days fair-good, usually poor; pips & Int 1300 & off (R.Perry) 0800 tune, better abt 1033. Orch mx, piano mx. ID by YL 1100. Lang not recognized, but pgmmg sound-ed Russian. (Henderson)
- 3331t MALDIVIVE ISLANDS Tentative, 1238 t/i w/woman operatic type vocal, MW ancrs classical piano. Possible ID, mention of "Radio" abt 1300, down & out shortly after. (Dexter) UNID, after USSR off, hrd once when subcontinental reception was good. Not RR-type soviet usual mx, but western type movie theme, lost by 1312. Ann lang unreadable, vy weak, Vy tentatively Maldives. (R.Perry)
- 3335t TAIWAN Prob BCC, CC tlk & jamming 1353, 1/14 (Hauser) Tentative, 1449 YL in CC, jamming. Jammer not here before. (Williams)
- 3345 ANGOLA RC do Huambo, 2250 PP, recorded mx (Henderson)

- 3346 ZAMBIA Lusaka, 0300-0421+, Af lang & mx, N+E 0400(Collier,Schmur,Sparks)
 3347 PHILIPPINES? low het de 2 stns, 1401, 1/14, maybe FEBC & Mex harm(Hauser)
 3350 GABON LV de la Renovation, list 4 kw, v good in FF 0455-0510(Heutte)
 3355 INDIA AIR-Kurseong, 1306-1324+ fair lvl, ute qrm, M&W anc, mx(Dexter)
 3355 DOM REP LV de la Romana, 2320 SS, good lvl. (Heutte)
 3360 PAPUA R.Milne Bay; 1010-1130+, C&W island mx, Pidgin/EE(Henderson,Dexter)
 3370a UNID African, 0600-0645*, local mx, lang tlk(Wallace)
 3375 ANGOLA Em Nac., PP 2230-2300*(ex 0000*), lmx, mx, after NAs(Heutte)
 3375 BRAZIL R.Olinda, 2300 after Angola leaves; IDs, ads, mx(Heutte)
 3375 INDIA AIR Gauhati; 1234-1417 t/o, 1/19; EE/Hindi pgmg(Henderson-CA) 1533
 EE mx by YL, 1/27, tent ID(Williams)
 3380 MALAWI MBC, 0400 EE mx, pops(Collier)1735 Af chants, EE ID(Foster-Australia)
 3380 ECUADOR R.Iris; 0412-0458* after NA, 1/29(Calkin)0433* 1/22 after NA(Lohe)
 3385 R.GUIANA ORTF, 0915 FF, mx, IDs(Megyesy)
 3390 ECUADOR R.Zaracay; 0400-0430* SS, LA pops, ID, fqy(Lohe)
 3394 INDONESIA RRI 1441 Indo, YL singer, anmts, RRI ID 1448(Williams)
 3396 RHODESIA Gwelo, 0400 w/"R.Rhodesia" ID, EE mx, strong 16 Jan(Behr) 0420 EE
 tlk by m(Wallace)*0355 ID after cow bell IS(Collier)0428 f/o(Nikolich)0414
 EE ads, mx(Henderson) 1730 EE, cl mx(Foster-Australia)
 3422 BRAZIL? 1/15, 1110 believe Braz.PP, 1130 almost f/o. (Hauser)
 3512 ECUADOR HCKD5, R.Centro de Gualaceo, 1/18 0253-0258* till 7 am, off w/march,
 not NA, nominal 3515, ever reported before?(Not to my knowledge-DF)(Hauser)
 3560 N.KOREA Pyongyang, EE 1337, 1/16, also 1237(Hauser)
 3384 CAPE VERDE IS RC Cabo Verde, once 2359 march mx. Do they usually s/off late?
 (Tent)(Young)3385, RCCV, PP mx 2250-2333*, also 0850 fade(Reeves)
 3900 CHINA? u/Fukien Front stn best-sounding talk, 1/22, 1406(Hauser)
 3910 RSPSR(As) Soviet HS in my yearly logging, 2/4 0845 singing u/FEN. 1009 //
 3995. Anybody know where this is?(Hauser)
 3925 JAPAN JOZ, JJ tlk 0750 early f/i(Padula-Fiji)
 3930 CAPE VERDE IS R.Barlavento, 0100 PP, pops & PP mx, 0100*(Martin-Eu)
 3945 BALI RRI-Dempassar, 1/20, 1055 t/i, ID 1100, local mx(Henderson-CA)
 3945 N.HEBRIDES R.Vila, 0728 Pidgin & FF. US pops, FF songs(Williams) (Sykes) //
 3995 SOLOMON IS SIBS, 0745 vern. tlk(Padula-Fiji)0810-1000 EE pops, C&W mx, TCs //
 4025v UNID, am sure was Pak stn. II lang, chanting mx 0132. Drift to 4031 at 0137.
 Mx to 0151, seemed mx to 0200, TC anmts, many mention of Pak. Reported last
 month, but not hrd again in three weeks. (Young)
 4157 BOLIVIA New stn in Riberalta, diff from 4283 stn, 1/18, 0325-0334*. ID is
 something like Rdif. Paraguna, "estudios en Riberalta", 0334 off(Hauser)
 4273 N.KOREA Pyongyang HS, KK drama, RTTY, 1343 on 1/16(Hauser)
 4283 BOLIVIA R.Riberalta, 0340 mx(Hauser)
 4400h GUATEMALA TGJ R.Nuevo Mundo, 5x880(cf previous x7=6159), 1/18, 0259, past
 0400. Also 1/20, 1236 (Hauser)
 4400 CHINA 1/29, 1158 vy poor, mx, 1200 China type TS, ID per Bob Bundy as
 Urumchi, Sinkiang Provincial Station. (Hauser)
 4660 UNID, Thought to be La Voix du Pathet Lao, 1510 good sigs in Lao, FF anmts,
 into SEA mx. (Henderson-CA)
 4698 INDONESIA QTH unknown, 1/19, 1316 Indo tlk, 1359 7 tones several times as
 IS, 1400 chimes, RRI mx. (Hauser)
 4700,5t BOLIVIA R.San Miguel tentatively, OM semming SS 0030, mx to 0040, then
 lost or off?? (R.Perry)
 4705 CHINA RP w/woman yakking, fair & //4760 at 1200(Hsutte)
 4715 UNID, seems like CC 1511 by F. voice. 1530 seems VV past 1603. Hanoi?(Young)
 4719 SULAVESI Presumed RRI Ujung-Padang, active again 1330, 1/30(Hauser)
 4722 UNID; VV 1306-1353 under jammer. (Young)
 4729vto 4732 AZAD KASHMIR AKR, 1230-1330+ M&W tlk in lang, subcontinental mx,
 ragas, lang ID presumed on the hr. Mentions of Pak & Kashmir. (Tuchscherer,
 R.Perry, Whitacre, Henderson-CA, Hauser)
 4740t MALDIVE IS R.Maldives... There is a MW harm from either 790(x6) or 1580
 (x3) that hets another carrier at the MW s/on 1500. If Maldives here, it is
 on early with carrier, or more than one MW harm are hetting each other. Lets
 ID this harm & see if we can clear it up. Any suggestions? Comments?(Young)
 4760t INDIA AIR-Delhi, 1615, 1/27, OM EE pol cntry, YL poss ID 1628(Williams)
 4760v INDONESIA RRI-Medan; 2345 Indo, orch mx, mx box chimes, 0030+(Martin-Eu)

- 4760 VENEZUELA R.Frontera, 1005-1020+ SS, ID(Tuchscherer)0023 ID, ads(Dorfman)
 4762 MOZAMBIQUE RCM, 2045 N+F, M&W ancors(Martin-Eu)
 4766 BRAZIL R.Sociedade Feira de Santana, Baia, ID in passing 0853, 2/4(Hauser)
 4770 VENEZ R.Bolivar; 0000-0340+, IDs, pops, sports(Duba/Ronda/Trkula/Smallshaw/
 4770 N.KOREA Pyongyang, YL in KK dictation 1406, 1/14(Hauser) (Zilmer)
 4775 COLOMBIA LV de Maria, 0115 SS mx, songs, ID(Andrews)
 4775 ECUADOR R.El Progreso, 0045 SS IDs(Ronda)
 4777 GABON Libreville, 2200-2330+, FF, Afr mx(Tuchscherer/Wootten-Morocco/Whitacre
 0515 drums, FF tlk, past 0530(Nikolich, Wallace)
 4780 AFAR & ISSA Djibouti, 1720 amnts in Afr lang(Foster-Australia)
 4780 VENEZUELA LV Carabobo, 0115 SS ID by man(Ronda)
 4781 UNID LA w/sports 0035(Andrews)
 4782 HONDURAS R.Juticalpa, 1238-1250+, SS, LA mx, IDs(Tuchscherer)
 4785a BRAZIL R.Caiari, 0900-1001+ PP, mx(mostly organ mx), ID 0958(Tuchscherer)
 4785 TANZANIA RT Dar es Salaam, 1718 Swahili mx items(Foster-Australia)
 4797 BOLIVIA R.Nueva America ID, ads, mx 0440, 1/9(Dexter)
 4800 LESOTHO R.Lesotho, 0410 vern/EE, RTTY(Henderson)
 4804 KENYA VoK, ID 0400, TC, N+E. L1st Nairobi now, as had been suspected. Kisumu
 list 4885, but no sign of them due LA there, 2/1(Dexter)
 4820 GAMBIA RG, 2140-2205+ EE(Straus, Ronda, Whitacre)0730 BBC px(Smallshaw)
 4820t INDIA AIR Calcutta, tentative, II mx 1334 tune, fair lvl 1/13(Dexter)
 4820 ECUADOR R.Pas y Bien, Ambato, 0930-1000 Ec mx(Ball)
 4825 ECUADOR R.Luz y Vida, 0400-0609+(Schnabel, Patterson)
 4835 BRAZIL R.Triangulo Mineiro, 0250-0304* PP, mx(Barto)
 4839 CELEBES&MOLUCCAS RRI-Ambon, 0925-1401:27*(!) w/chants, guitar mx, cl & rock
 mx. (Henderson-CA, Whitacre, Barto, Heutte)
 4839 ZAIRE Bukavu, 0420 FF ID(Duba)0439 FF tlk(Henderson)1950 lcl mx(Foster-Au)
 4840 CHINA RP -1130-1330+ f/i & f/o, in lang, sometimes het Ambon(Heutte)
 4840 PERU R.Andahuaylas, fiesta mx, Coke ad, ID & 0400*(Sparks)
 4843 CONGO Pointe Noire, 0547-0645+ FF, drums, tlk(Tuchscherer/Hagen)
 4845 BOLIVIA R.Fides, 2318, 2/8, ID, mx(Calkin)0156-0207 LA mx, ID(Barto)
 4845 BOTSWANA RB, 0400-0430+ in EE/lang. Hrd by Dexter, Tuchscherer, Smallshaw,
 Sparks, Henderson. Tuchscherer noted the EE nx 0430, 2/1. Dexter noted it at
 the usual 0420, 1/16. So, it apparently varies.
 4845 MALAYSIA RM-Kajang, 1208-1245+, II mx, chants, sounds almost AA(Heutte) but
 sounds Indian to (Tuchscherer)
 4853 BOLIVIA R.Centenario, 0230 pops & ID(Sparks)0150-0203 pops, mx(Barto)
 4855 MOZ RCM, 0400-0437+ PP, EE R&R mx, variety of mx(Henderson, Tuchscherer)
 4855 INDONESIA RRI Palembang, 1/19 1534 t/i to 1600*, good lvl, nice SEA mx
 (Henderson) 1234-1254 Indo, instrumentals, chants(Barto)
 4860 CHINA 1600 CC by M&W, nx w/Chairman Mao(Martin-Eu)
 4860 UNID Vy weak stn 0435 1/8, lost or off 0500. Seemed Andean mx(Dexter)
 4865 BRAZIL RC Para, 0320-0357+ PP, IDs, mx, nx, sports(Andrews, Lohe)
 4865 MOZ RCM, 0426 EE R&R mx(Henderson)1722 Af vern(Foster-Australia)
 4875 S.AFR SABC, 2208* Sat(Torok)2245 1/30(Henderson)04-0600+(Wallace/Straus)
 4877rf S.VIETNAM VTVN, 1225-1600* VV(Hauser/Henderson/Williams/Sparks)
 4880 ZAIRE Kinshasa, 0130 FF nx, QRN(Ronda) (Sparks)
 4890 SENEGAL Dakar, 0515-0727+ FF/Af lang, chants(Nikolich/Torok/Wootten-Mor//
 4890 MOZAMBIQUE RCM Beira, 1842 Shualli discussion(Foster-Australia)
 4890 HONDURAS R.Lux, peaks 1230-1240, pwr increase? In daily. (Hoogerheide)
 4891 MOZ RCM Beira strong 0405, 2/1, lcl langs, nearly gone by 0430(Dexter)
 4895 SARAWAK RM-S; daily w/Malaysian px, ID as "Inilah Radio Malaysia", some
 recorded selections in EE, at 1400(Henderson)

73, Dan J.

FOR SALE Heathkit GR-64 receiver, good condition, \$20 or best offer. Heathkit Q-multiplier, good condition, \$10 or best offer...Knight-kit Star Roamer II, needs some repair, but otherwise good condition, \$30, or make an offer. For details, write Marck C. Pugh, 104 Royal Ct., Williamsburg, VA 23185.

- 4785 TANZANIA RT-Dar es Salaam fair at 1840 with Swahili mx (Wootten-Morocco)
- 4900 INDONESIA RRI-Gorontalo weak but clear with island mx and ID 1433 by woman for Inilah Radio Republik Indonesia (Henderson-CA)
- 4900 VENEZUELA R Juventud fair with mx, talks in SS 0100-0400 (Megyesy, Swatkoff)
Not noted here since last summer; perhaps is irregular. FH
- 4900v Unid Asian quite good at 2245 with marches and talks, probably Peking (Smallshaw) Very weak long-path Asian at *2230, shortly faded (Heutte)
- 4904.5 CHAD Ft Lamy at 1905 with FF mx, het from Khmer-4907 (Foster-Pac)
- 4905.5 COLOMBIA Em Atlantico poor with SS talks, mx 0355-0430 (Odlin, Straus)
- 4908 VENEZUELA R Carora at 1130 with SS IDs, TCs, ads and local mx (Lohe)
- 4910v DOMINICAN REP R HIN exc with LA pops, SS talks, apparently regular now at 2300-0605v* (Alcock, Galkin, Heutte, Lohe, Schmur, Sparks)
- 4911 ZAMBIA Lusaka at 1907 in vernacular speech (Foster-Pac)
- 4915 BRASIL Rdif de Macapa with many armts, IDs, mx 0840 (Tuchscherer)
- 4915 GHANA Accra with vernac mx cmtry 0625 (Padula-Fiji) 2150 fair with lang. talk by a man (Ronda)
- 4915 KENYA VOK-Nairobi best ever at 0410 with Swahili-EE pgm (Shaw) 1840 very strong with Swahili talk (Foster-Pac)
- 4916 COLOMBIA R Guatapuri good around 0445 with usual LA format; to 0503* but close is irregular; mx, SS armts and IDs (Eichenhorn, Graham, Smallshaw)
- 4918 Unid CC speaker here at 1310 (Dexter) probably Ha-erh-pin, noted here in definite move from 4914 (Henderson-CA, Heutte)
- 4920 AUSTRALIA VIM4 hrd 0600-1330 with pops, EE nx and commentary (Cwikla, Eichenhorn, Megyesy, Whiteacre)
- 4920 HONDURAS R Progreso good at 0100-0500 with pops, SS talks and IDs, back on after short inactive period (Andrews, Dexter, Odlin, Sparks, Tuchscherer)
- 4920 INDIA AIR-Madras fair after VIM4-1400* in lang. and mx (Henderson-CA)
- 4923 ECUADOR R Quito good with SS mx, mx, recently reactivated (Heutte, Sparks) 1100 with LA mx, ads, man ancr (Barto)
- 4923 MOZAMBIQUE RCM B pgm good, mixing with R Quito at 0330 with pops and EE-Afrikaans ads, armts (Heutte)
- 4926 EQ GUINEA R Bata fair with vernaculars, SS armts, mx (Henderson)
- 4930 DOMINICAN REP R Mil good at 0030-0500 with all SS mx, talks, armts, ads and IDs (Ball, Eichenhorn, Graham, Ronda, Wallace, Yamron)
- 4932 JAVA RRI-Surakarta poor-fair at 1230 with Indon vocals and armts (Barto)
- 4932 NIGERIA NBC-Benin City good with EE nx 0600 and 0400 (Dexter, Nikolich, Sala) 2130 in EE with ID by woman and into vernacular, good (Duba)
- 4937 ANGOLA R Clube do Lobito, ex-4910, poor to fair at 2030-2300*, daily in PP mainly with light mx (Heutte) t with pop mx, QRN (Tuchscherer)
- 4940 IVORY COAST Abidjan poor at *0600 in FF (Sala) 2145-2300* dual 11920 with FF talk, pop mx, very good (Duba, Straus)
- 4940 VENEZUELA R Yaracuy good at 0030-0330 with ads, pops, LA mx, frequent IDs (Eichenhorn, Leonhardt, Miller-Eu) 1139 nice ID, LA mx (Foster-Pac)
- 4940 Unid, possibly R de la Cruz, with SS mx pgm at 0130 (Wootten-Morocco)
- 4945 COLOMBIA R Colosal at 0300-0800 with Fiesta mx, IDs and SS armts (Padula-Fiji, Swatkoff, Torok)
- 4945 SOUTH AFRICA Springbok R at 0150-0500 with pops, ads (Fabian, M.Marshall, Ronda) 1640 with EE and drama (Williams) EE quiz pgm 1913 (Wootten-Morocco) 2130-2330 with TCs, ads, mx in EE-Afrikaans, All Night Service (Alcock, Eichenhorn, Hauser, Lineback, Miller, Swatkoff, Torok, Wallace, Whiteacre, SARAWAK RMS-Kuching fair at 1215 with vocals (Heutte) Zilmer)
- 4950 BRASIL R Cultura do Campos at 0506 tune, all talk, ID (Dexter) FB!
- 4953 COLOMBIA R Nacional at 0130-0430 with classical mx, SS(D'Angelo, Dorfman, Duba, Eichenhorn, M.Marshall, Trkula) EE lesson 1130 (Straus)
- 4955t INDONESIA RRI-Banda Atjeh with vocals, Indon mx relay 1500 (Williams)
- 4955 Unid at 2215 with FF speech, unreadable ID, QRN, poor (Wallace)
- 4959 Unid LA here New Year's Eve very weak with mx 0523 (Dexter)
- 4960 ECUADOR R Federacion Sucua, at 0000-0300* and 1030-1100 with Andean mx, IDs, very overmodulated, exc (Behr, Heutte) t 1035 but QRMed badly (Dexter)
- 4965 COLOMBIA R Santa Fe with pops and LA mx, many IDs, all SS 0130-0730 (Ball, Dorfman, Eichenhorn, Kozek, M.Marshall, Padula-Fiji, Ronda, Straus, Swatkoff, Torok) Whew!
- 4965 SOUTH AFRICA R South Africa at 2130-0000 (Estes, Miller-Eu, Torok, Wallace)

- 4970 SEBAH R Malaysia fair in EE to 1500, lang after; IDs (Henderson-CA) 1540 with best signal in years, no RTTY; Hawaiian songs (Sparks)
- 4970 VENEZUELA R Rumbos at 2330-0500 with US and LA pop tunes, SS IDs, abmts, nx, chimes (Dorfman, Duba, Eichenhorn, M. Marshall, Martin-Eu, Ronda, Swatkoff, Trkula, Yaron) Has an EE ID at times
- 4972 FR Guiana CRTF at 0930 with FF talk, tunes (Tuchscherer) t at 1014 with vocals, pope and man ancr, Rumbos QRM (Barto)
- 4975a Unid African at 0530 with FF talk, poor (Wallace)
- 4976t PAKISTAN Unid at 1650 with possible EE abmts by gal, utility QRM (Williams)
- 4980 GHANA Ejura with EE nx, program sked, church svc 0550-0715 (Padula-Fiji, Torok) 1815 EE wxcast (Martin-Eu) 2055-2200 EE nx, talks, pope and rel pgms, good (Duba, Wallace, Wootten-Morocco)
- 4980 PAPUA Port Moresby poor at 0610 with EE nx (Sala) Methinks 4890! FH
- 4980 VENEZUELA Ecos del Torbes at 0000-0700 with all SS, talks and mx, sports (Calkin, Dorfman, Eichenhorn, Ronda, Swatkoff, Torok) 1137 with Venezuelan mx and ads (Foster-Pac) 1425 with cycling, unusual late signal (Hauser)
- 4982 Unid LA with mx, songs and pop tunes 0135 (Andrews)
- 4985 MALAGASY Tananarive at 1903 hrd with Malgache service (Foster-Pac)
- 4985 MALAYSIA RM-Penang good with EE nx, TC 1530, some het QRM (Henderson-CA)
- 4990 VENEZUELA R Barquisimeto at 2300-0530 with LA and US tunes, sports, IDs in SS (Andrews, Dorfman, Eichenhorn, Estes, Graham, Swatkoff, Trkula) 1055 in SS with abmts, Venezuelan mx (Foster-Pac)
- 4995 BRASIL R Brasil Central at 0030-0430 and 0900-1030 in PP with nx, ads, IDs, TCs, poor-fair (Collier, Graham, Martin-Eu, Patterson, Smallshaw, Straus)
- 4996 PERU R Andina at 0500-0630 with man in SS, vocals, good (Alcock, Barto) 1030 with Peruvian vocals, IDs and TCs, fair (Collier)
- 5000t NEPAL Kathmandu presumed with Asian chants under WWV at 1315, fair (Perry)
- 5000 SOUTH AFRICA ZUC over WWV once at 2215 with time signals, CW IDs (Smallshaw)
- 5000 Unid time stn under WWV with CW IDs at 0014 and 0029 (Wallace)
- 5010 CAMEROUN R Garoua only fair at 2120 with talk in FF by a man (Henderson)
- 5010 DOMINICAN REP R Cristal 0030-0700 with SS talks, mx, ads (Andrews, Ronda, Swatkoff, Torok, Trkula, Wallace)
- 5010 SINGAPORE R Singapore very poor under Cristal at 1135 with singing (Heutte)
- 5015 WINDWARD IS R Grenada at 2215-2355* in all EE, local and BBC nx, mx, fair (Calkin, Carrington, Dorfman, Estes, Lineback, Nikolich, Ronda, Wallace)
- 5015 USSR RM-Arkhangelsk at 0230 in RR with mx, poor to fair (Zilmer)
- 5015 USSR Vladivostok fair at 1240 with IL talk in RR, mx (Nikolich)
- 5020 ECUADOR R Centinela del Sur with mx and SS 0400-0430*(irr s/off)(Barto)
- 5020 NIGER ORTN weak with rythm mx, possible FF nx at 2230 (Shaw)
- 5020 VENEZUELA R Nac fair at 0356 with SS, mx and ID by man (Nikolich)
- 5026 UGANDA Kampala fair in vernacular, native mx 0315-0350 (Hoogerheide, Straus)
- 5030 SARAWAK R Malaysia with US mx and talk by man 1400-1430 (Tuchscherer)
- 5030 VENEZUELA R Continente at 0000-0517* with SS sports, LA mx, IDs, abmts (Alcock, Andrews, Dorfman, Duba, Eichenhorn, Estes, Martin-Eu, Ronda, Smallshaw, Swatkoff, Wootten-Morocco) 1135 SS ads, Malaysia QRM (Foster-Pac)
- 5035 KAZAKH SSR R Alma Ata fair with Kazakh svc IS 1327, *1330 (Behr) FB, Ernie!
- 5038 CENTRAL AFRICAN REP Bangui with FF cmtry by man 0535 (Eichenhorn) 2130-0000 in FF with mx, sports and nx (Nikolich, Ronda, Straus, Wootten-Morocco)
- 5039 ECUADOR R Nac Espejo-Puyo at 1030 with Andean vocals (Barto)
- 5040 CHINA CC ID ending in Kwangpo Tiental at 0900; prev rep as Foochow (Hauser)
- 5040t ECUADOR 0824 Andean mx, EST TCs, slogan R Remuno de Bordullo often, 0906 TC en los estudios de Rdif de Puyo (or Puno=Peru?)(Hauser)
- 5040 VENEZUELA R Maturin with pop mx and ID 0300 (Sparks) Long inactive. FH
- 5041 PERU R Mar OCAJE, Lima, with 0901 ID, ID, Andean mx (Hauser)
- 5041 PORT GUINEA Em Oficial fair and fading at 0810 with mx pgm (Smallshaw)
- 5042 PERU R Libertad exc at 0930-1000 with Andean mx (Tuchscherer) Confusing! FH
- 5045 BOLIVIA R Altiplano at 2350 with lottery ad, mx, IDs, sports at 0000, fair (Schnur) t at 0345 with SS talks and mx, no ID (Swatkoff)
- 5046t INDONESIA RRI-Jogjakarta with Indon mx at 1330, down from 5047? (Behr)
- 5047 INDONESIA RRI-Jogjakarta with talk in lang at 1230 (Nikolich)
- 5047 TOGO Lome with gong IS, *0530 with FF ID and African mx, mx (Ball, Hunt, Eichenhorn, Padula-Fiji, Sala) 1805 with FF, EE 1950 (Wootten-Morocco)

- 5047 TOGO Lome at 2200-2300* in FF, LM (Ronda, Torok, Yamron)
- 5050 TANZANIA Dar-es-Salaam at 1835 with Swahili tunes (Foster-Pac)
- 5052 SINGAPORE R Singapore fair but noisy at 1150 with EE and mx (Heutte) 1530
EE mx and orchestral mx but never good (Martin-Eu)
- 5060 ANGOLA R Clube do Huambo very weak dual 7160 with PP anmts 0538 (Young)
- 5060 YEMEN Aden weak and noisy with AA chants to 2200* (Heutte, Niblack) Tux All
- 5073a CHINA 0910 CC drama but unlisted anywhere (Hauser)
- 5075 COLOMBIA R Sutatenza at 0045-0400 with nx, mx and talks in SS, EE ID noted
once, not dual 5095 (Dorfman, Estes, Kozek, M.Marshall, Swatkoﬀ) 1140 with
classical mx and cultural pgm (Foster-Pac, Heutte)
- 5082 Unid, probably LA with SS at 0358, anmts and anthem 0404* (Young)
- 5095 COLOMBIA R Sutatenza at 0030-0100 with mx and SS nx (D'Angelo, Eichenhorn)
- 5273 PARAGUAY R Nac with anmts, mx, all SS; seems off 0130-0145 daily (Young)
- 5805 YEMEN Sana good at 0315-0400 with AA chants, nx and talks (Calkin, Perry,
Reeves) *0300 as far as I recall. FH
- 5855 Unid Indonesian with American pops at 1125; anmts; mentions Jogjakarta at
1130 but not dual 5047 (Young)
- 5870 USA NSS-Annapolis with time pips 1755-1800 (Reeves) 2255-2300 (Heutte)
- 5875 HONDURAS IV de Honduras at 0130-0200 with SS ads, nx, mx (Schnur, Stephens)
- 5930 CZECHOSLOVAKIA R Prague at 0100-0159* and *0300 with EE nx, press review,
commentary and features (Higham, Stephens, Yamron)
- 5940 USSR RM at 2315-2330 in EE with commentary by woman, IS (Fino)
- 5954 COSTA RICA R Casino at 0530-0603* with US and LA mx, EE anmts by man, Fanta
and Coke ads (Reeves) t at 0000 with SS talks, unreadable IDs (Wallace)
- 5955 GUATEMALA R Cultural at 0015-0430 with SS and EE religious pgms, poor-fair
(Miller, Smallshaw, Sykes, Trkula, Zilmer) 1200 with SS talk (Megyesy)
- 5955 SOUTH AFRICA R South Africa good with EE nx, talk 0357-0415 (Nebron)
- 5960 CANADA RCI Northern Svc with EE and Eskimo 0430-0600, LM, v good (Archard)
- 5965 BRASIL R Guaiaba at 2300-0200 and 0800-0845 with PP anmts, mx, sports, dual
11785 (Torok, Swatkoﬀ, Zilmer)
- 5970 COLOMBIA R Horizonte poor with GRM from Peru at 0115, SS mx (Zilmer)
- 5970NF DOMINICAN REP RTV Dominicana at 0130-0300 and 1100-1300 with SS nx, mx, IDs,
features, ads, very good (Reeves, Tuchscherer, Leonhardt, Zilmer)
- 5970 GERMAN FEDERAL REP RFE at 2300-0100 with anmts in EE and languages (Torok)
- 5970 PERU R El Sol at 0000-0330 with SS sports, mx, IDs (Graham, Zilmer)
- 5975 AUSTRALIA RA fair at 0340 in EE with mx (Guarducci)
- 5975 ENGLAND BBC IS at 0507, *0515 in FF (Torok)
- 5980 EL SALVADOR R Nac at 0040-0400 in SS with all kinds of mx, IDs (Archard,
Graham, Megyesy, Martin-Eu, Sweeney, Yamron) *1158-1300 with LA mx, SS ID,
TCs; possible Greenland heard before s/on (Ball, Torok)
- 5980 Unid LA with fast SS talks at 2330, IDs unreadable (Wallace)
- 5985 ARGENTINA R Splendid at 0330-0355 with LA mx and SS men ancrs (Reeves)
- 5985 GERMAN FEDERAL REP RFE in Hungarian at 2351 and 0448 (Torok)
- 5985NF SPAIN RNE with EE at 0205-0245* and *0300, once only (Reeves)
- 5985 TANZANIA RT Dar-es-Salaam at *0300 after IS, chimes, Swahili ID, anthem,
chants and talks (Reeves, Russell) 1737 Swahili songs (Foster-Pac)
- 5985 USSR RM at 0330-0730 with EE nx, cmtry, mx (Rakow)
- 5987 CELEBES RRI-Menado at 1305-1430 with Indon man and woman, orchestral mx,
good bjt Japan GRM (Dexter, Henderson-CA)
- 5990 CANADA RCI with EE 2300, PP 2330, nx, cmtry, mx (Fino, Torok)
- 5990 ECUADOR HCJB exc with European lang at 0440 (Padula-Fiji)
- 5990 JAPAN NHK poor with EE nx 1100 (Torok) *1656-1714 in EE GOS (Nebron)
- 5990 ROMANIA R Bucharest at *0000 in SSS, *0130 in EE (Heutte, Torok)
- 5995 AUSTRALIA RA-Lyndhurst at 1030-1210 with concert mx, EE nx to 1215*, exc
(Ball, Guarducci, Leonhardt, Lineback)
- 5995 USA VOA-Greenville with EE Breakfast Show at 0345-0500, mx (Estes) 0300-
0315 with pop mx and EE anmts (Fino)
- 5995 VATICAN VR daily at 0030-0100 with standard EE religious pgm (Schmur)
- 6000 BRASIL R Inconfidencia at 0030 with long talk about Brazil, fair (Duba)
0800-0845 with PP mx and anmts, good (Guarducci, Torok)
- 6005 ASCENSION IS BBC strong at 0430 with EE WS, unusual early afternoon signal
(Padula-Pac) 0500 EE nx (Torok) 2115 with WS dual 6110 6180 9530 9580; TC
with signal out of phase with duals (Reeves)

- 6005 BOLIVIA R Progreso with SS mx and ads 0220 (Andrews)
 6005 CANADA CFCX weak with pops, KE nx, TCs, wx etc. at 1815-2015 (Eichenhorn, Ronda, Smallshaw, Ronda, Sykes)
 6005 HOLLAND RNL with IS and *0510 in EE, mx and talks on health (Fino)
 6006 COSTA RICA R Reloj at 0145-0930 with SS mx, IDs, amnts (Alcock, Kozek, Russell, Sparks, Torok)
 6010 GERMAN FEDERAL REP DW in EE at 0200-0250 with film cmtry, mx, exc (Fino)
 6010 ITALY RAI with EE at 2230* and *0100 with nx, cmtry, LM (Stephens, Zilmer)
 6011v THAILAND Thai TV fair to good at 1233-1252 with Asian mx and talks (Perry)
 6015 CZECHOSLOVAKIA R Prague at 2035 in FF with nx and cmtry, VOA QRM (Duba)
 6015 ECUADOR HCJB in SS at 0030 and 1140 with nx bulletin, excellent (Fino)
 6015 SWITZERLAND SBC with EE at 0145-0215* and 0458*, then into Italian dual
 6015 6120 9535 11715 (Guarducci, McCall, Torok)
 6020 COLOMBIA LV de Colombia at good lvl 2314 with SS and mx (Nikolich)
 6020 NETHERLANDS ANTILLES RNB exc at 0130 with SS mx and talk (Stephens)
 6025 PORTUGAL RP poor in EE at *0100-0145, 0215-0245, 0400-0430* with IS, nx, very heavy QRM (Estes, Fino, Stephens)
 6025 UZBEK SSR R Tashkent fine in EE at *1200-1230* and *1400-1430* with nx, cmtry, mx dual 9540 9600 11925 (Eichenhorn, Heutte, Nebron, Nikolich, Smallshaw, Torok, Whitacre)
 6030 COLOMBIA R Nac fair with SS and mx at 1210 (Zilmer)
 6030 JAPAN NHK at *1330 in JJ after EE (Torok)
 6035 BRASIL R Globo fair with PP talk, ID at 2330 (Wallace)
 6037 COSTA RICA Faro del Caribe with SS rel mx, fair at 1200 (Straus, Zilmer)
 6040 UNITED ARAB EMIRATES Saut-as-Sahil, Dubai, at 1330-1400 fade with AA mx and amnts (Dexter, Perry)
 6040 CANADA RCI in SS at *0000-0056* with nx, talks, mx (Estes, Torok)
 6040 COLOMBIA LV de Tolima fair at 0115 with SS and mx (Zilmer)
 6040 GERMAN FEDERAL REP DW exc at 0145 with EE talk (Stephens)
 6050 ECUADOR HCJB exc with SS, opera mx, IDs at 0100-0400 (Fino, Rakow)
 6050v HONDURAS R America good at 0200 with SS talk and ID (Nikolich)
 6050 ENGLAND BBC exc with EE talk about Africa at 0605 (Eichenhorn)
 6050 ENGLAND VOA good with EE talks and nx at 0405 (Stephens)
 6055 AUSTRALIA RA at 2056 with IS, mix Rwanda, then EE to SE Asia (Reeves)
 6055 JAPAN NSB with JJ talks at 0715 (Padula-Fiji)
 6055 KUWAIT RK at 0400-0430 with woman ancr, AA mx (Hagen, Shaw)
 6055 RWANDA R Rwanda poor at 0435 with chants (Zilmer) 1915 FF discussion (Foster-Pac) 2045-2102* with African mx, ID; reception varies (Reeves)
 6060 ARGENTINA R Nac strong at *0900 with anthem, ID, freqs (Padula-Fiji)
 6060 CUBA RHC fair at 0330-0515 with SS mx, talks (Estes, Stephens)
 6064 COLOMBIA R Super at 0500-1200 with IDs, mx, TCs, nx in SS, het from 6065 (Hauser, Sparks, Zilmer)
 6065 BRASIL R Nac Brasilia at 0730-0800 with PP nx, songs, ID (Hauser, Sparks)
 6065 MOROCCO VOA-Tangier poor at 0455 with EE nx (Stephens)
 6065v SPAIN RNE in EE at *0100 and *0200, poor (Behr, Stephens)
 6065a USA VOA at 0345-0500 with nx, amnts and cmtry in EE (Fino)
 6065 USSR RM fair with EE to NA at 0330, QRM (Reeves)
 6070 CANADA CFXR at 1700-2030 with mx, nx, IDs, DJS, fair-good (Eichenhorn, Fino)
 6070v SPAIN RNE *0100-*0145 and *0200 with EE to NA, mx, nx (Miller, Zilmer)
 6071 ECUADOR R El Mercurio at 0230-0330 with LA songs, little CFXR trouble; possibly has higher power now (Behr, Sparks, Tuchscherer)
 6075 COLOMBIA R Sutatenza poor at 0109 in SS talk (Swatkoff) 1215 nx (Zilmer)
 6075 GERMAN FEDERAL REP DW poor at 0230 with US rock mx (Estes)
 6075v ITALY RAI in EE at *0100 and 0430 with nx, mx, cmtry (D'Angelo, Wicks)
 6075 SOUTH AFRICA SABC (sic) in EE with religious mx, talk at *0430 (Zilmer) Please say if RSA or internal (R South Africa). FH
 6076 HONDURAS LV del Junco at 1200 with SS ID, ads, local mx (Behr, Leonhardt)
 6080t ALGERIA RTVA at 0720 fair with AA chants (Swatkoff)
 6080 SOUTH AFRICA R RSA unusual at 0130, late morning local time (Padula) EE to NA at 0230 and 0240 in FF with nx, mx, features (Estes, Fino)
 6085 BRASIL R Jornal do Comercio fair at 1200 in PP with mx (Zilmer)
 6085 CANADA RCI exc at *0100 with nx, Magazine, sports (Higham)
 6085 NETHERLANDS ANTILLES RNB exc at *0500 in EE to NA (Padula-Fiji)

- 6086 COLOMBIA Onda del Darien good at 2350-0030 with ads, mx, IDs (Leonhardt, Tuchscherer) 1030-1300 with SS mx and amnts (Heutte, Reeves)
- 6090 AUSTRALIA VLI6*Sydney good at 0805 with EE nx (Swatkoff)
- 6090R* DOMINICAN REP RTV Dominicana with pops and IDs at 0430, poor modulation (Sparks) 1000-1150 with SS, mx, ads, amnts (Lohe, Reeves, Zilmer)
- 6090 LUXEMBOURG RLI at 0000-0200* with EE and pops, RCI-6085 QRM at 0100 (Carrington, D'Angelo, Graham, Higham, McCall, Wallace, Whitacre, Yamron)
- 6090 NIGERIA RTV Kaduna good over Luxembourg with native mx at 0640 (Padula-Fiji)
- 6093 KMERE REP Phnom Penh fair and clear with FF, mx 1330-1530 (Henderson-CA)
- 6095 BRASIL Rdif Sao Paulo fair-poor at 2300 with PP (Zilmer)
- 6095 COLOMBIA LV del Centro with dance mx, ID, SS nx at 0450 (Sparks)
- 6095 GERMAN FEDERAL REP VOA-Munich good with FF talk at 0713 (Swatkoff)
- 6100 AUSTRALIA RA at 2213 with IS under Yugoslavia, VV sked (Reeves)
- 6100 GERMAN FEDERAL REP DW at 0200 with EE nx and mx (Andrews)
- 6100 YUGOSLAVIA R Beograd good with GG talk and mx at 2040 (Duba)
- 6105 COLOMBIA R Vision fair at 1200 in SS (Zilmer) Details pset FH
- 6105 MEXICO XEOM-Merida good at 0145-0501* and *1159 with amnts, light and pop mx (Behr, Dexter, Calkin)
- 6110 ENGLAND BBC good with EE mx in World Svc at 2300 (Fino)
- 6110 HUNGARY Budapest with IS and opening Hungarian at 2045 with nx (Duba)
- 6110 USA VOA-Delano fair with EE at 0500 (McCall)
- 6115 BRASIL R Tupi good with PP nx at 1205 (Zilmer)
- 6115 COLOMBIA LV del Llano at 2300 with mx and many IDs, strong but QRM (Schnabel) 0935-1000 with mx and Cadena Super IDs (Calkin)
- 6115 CONGO Brazzaville at 0520 with speech in African dialect (Padula-Fiji)
- 6115 MEXICO XEUDS with classical mx to 0140* (Rakow) 0430 Mexican mx (Zilmer)
- 6120 ARGENTINA R El Mundo at 0435-0500 with US rock mx, IDs, TC (Reeves)
- 6120 SWITZERLAND SBC in II 0045, SS 0100, EE 0130 (Andrews, Archard, Wootten-Mor)
- 6120 VENEZUELA R Angostura at 0945-1000 with LA mx and anors in SS (Reeves)
- 6120 Unid with stik and drum IS at 0728, *030 in possible FF, much QRM (Young)
- 6125 BRASIL R Nac de Sao Paulo fair-with PP sports at 0130 (Zilmer)
- 6130 CANADA CHNX with pops, promos, nx; 0220 (Swatkoff) 0440 (Eichenhorn) 0630 (Sykes) 1248 (Miller) 2215 (Wicks)
- 6130 GHANA RG at 2115-2145 mix CHNX with EE nx, African mx (Seymour, Stephens)
- 6135 BRASIL RTV Gaucha fair-poor at *0800 with PP ID and talks (Reeves)
- 6135 CHILE R Universidad at 0215-0300* and *1035-1100 with SS IDs and LA, pop and jazz mx (Behr, Tuchscherer)
- 6135 POLAND PR poor at 0300 in EE and 0400 in SS (Behr, Yamron)
- 6135 TAHITI ORTF-Papeete good in FF and native with mx (Padula, Swatkoff)
- 6140 AUSTRALIA VLW6 good with EE at 1130-1510 with horse races, sweepstakes amt, wx, pops, world and local nx (Eichenhorn, Heutte, Straus, Tuchscherer)
- 6140 BURUNDI LV de la Revolution clear and good in FF with mx, ID 0417 and short signature tune, FF nx to 0430, signature tune again, into Swahili nx; FF nx length varies but always starts around 0418 (Behr, Calkin, Heutte, Perry)
- 6140 CZECHOSLOVAKIA R Prague fair with EE cmtry and mx pgm 0715 (Eichenhorn)
- 6144 NIGERIA NBC-Calabar *0430 with IS, TL ID and nx 0433, DW QRM (Heutte, Reeves) 0600 EE ID, TC, nx (Alcock)
- 6145 GERMAN FEDERAL REP DW at *0435 in EE after IS, Calabar het (D'Angelo, Heutte)
- 6147 HAITI R Citadelle regular sked around 2300-0300, also irregular test around 0415 and later, FF and pops, LM, IDs (Behr, Dexter, Heutte, Perry, Sparks)
- 6150 VLW6 poor with VOA splatter in EE mx at 0800 (Swatkoff) Make it AUSTRALIA
- 6155 ENGLAND BBC at *0015 with EE ID and opening in Burmese (Torok)
- 6155 AUSTRIA in EE with nx, cmtry 0030-0045 (Torok, Yamron) 0620 fair with EE Xmas story (Eichenhorn) EE ID at 2309 during GG xmas (Schnur)
- 6155 URUGUAY R Carve at 0000-0030 with SS nx and ads, QRM (Behr)
- 6159 GUATEMALA R Nuevo Mundo at 1947, puny weak with mx, ID (7x880) (Hauser)
- 6159 VENEZUELA R Canaima at 0956-1100 with SS mx, IDs, amnts (Behr, Dexter)
- 6160 CANADA CKZU good with nx, wx, mx pgm, no QRM (Henderson-CA)
- 6160 COLOMBIA R Nueva Granada G at 0230 with rapid SS amnts, CBC QRM (Lohe) 1210 with SS nx (Zilmer)
- 6160 GERMAN FEDERAL REP at 1030-1050 (sic) with PP to Brasil, nx, amnts (Fino)
- 6165 CANADA RCI in EE at 1830-1900 and 2200-2220 with talks, nx (Estes, Fino)
- 6165 MEXICO LV de la America Latina at 0430-0545 with SS nx, mx (Heutte, Reeves)

- 6165 SWITZERLAND SBC good at 0725 with EE talk by man (Eichenhorn)
 6170NF NETHERLANDS ANTILLES RNE Datch to NA at 40330-0450* with IS, ID, nx, cmtry, features, ex-6060 (Rakow, Torok, Tuschcherer)
 6170 VENEZUELA R Nac fair at 2336 with SS ID, amts and mx (Leonhardt)
 6170a Unid with talk by woman in lang 0450, unreadable ID, piano IS (Wallace)
 6175 BRASIL R Guarani at 2300-0800 with PP sports, mx, cmtry, IDs, mx running all night (Heutte, Reeves, Ronda, Zilmer)
 6175 CANADA RCI in EE at 2115 with 3rd European svc, magazine pgm, nx (Kozek)
 6175 HUNGARY *0415-0445* with EE nx and commentary (Torok)
 6175 MALAYSIA RM dialy in Indon with pops after 1300; verie received (Hoogerheide)
 6175 SWEDEN RS-Karlsborg (500 kW) with EE test 0715-0800 (Padula-Fiji, Torok)
 6175 VENEZUELA R Turismo with LA mx and SS ads at 1030, fair (Behr) Oops! 6179
 6180 GUATEMALA LV de Guatemala good with mx 0350-0445 (Graham, Smallshaw, Wallace)
 6185 BRASIL R Bandeirantes good at 0100 with ID and PP nx (Heutte)
 6185 Unid, maybe Portugal, in PP at 2200-2300 in USB, no ID heard; why SSB?(Behr)
 6190 USA VOA-Greenville in SS with mx, mx, cmtry, exc at 0300-0400 (Fino)
 6195 MALAYSIA BEC-Tebrau very good at 1200 with EE nx in World Svc (Heutte)
 6195 NIGERIA NBC-Sokoto usually clear from 0646-0730 fade with highlife mx, EE amts, chanting, ID 0704 during mx (Perry) 0530 mx very weak; RSA QRM(Heutte)
 6195 SOUTH AFRICA Springbok R at 0400-0530 with EE and Afrikaans, mx, nx, IDs, ads for Lexington and Paul Revere cigarettes, bank, etc.(Carrington, D'Angelo, Graham, Heutte, Leonhardt, Lineback, Torok, Trkula)
 6195 TUNISIA RTT good with chanting and AA talk at 2230; VOA QRM 2300(Leonhardt)
 7135 MONACO R Monte Carlo good at 1058 with religious pgm in II (Wootten-Morocco)
 7200 VOA very good with Breakfast Show in EE at 0500-0645 (Fino)
 7240 USSR RM good in EE at 0430-0500 with nx, talk and mx (Fino)
 7250 USSR RM very good in EE at 0330-0400 with nx, cmtrys (Fino)
 7270 USA VOA at 0450-0500 with Breakfast Show in EE, talk (Fino)
 9009 ISRAEL Jerusalem good at 2043 with EE nx and commentary (Wootten-Morocco)

There were about 100 less items this month than last, but despite cutting most of the program details, I still was not able to hold the second quarter to less than six pages! I would like to ask everyone not to report items over and over unless they are new catches for you or there is a change in reception or programming that is worthwhile of note. I will not cut reports unless absolutely necessary, and you don't really have to report stations like Radio Barquisimeto month after month! For the moment, the log report is of limited length, but even so it takes more than a third of your monthly NASWA bulletin. This is a sign of a healthy and active club, and I hope that all the members continue to report. To newcomers and veterans alike, many thanks for your continued support. Best of DX and 73 until April. Fred Heutte, Jr. 1600 Newton Street, N.E. Washington, D.C. 20018 (WDX3FH/WA3QIA)

NEPAL According to an announcement given by Radio Nepal, Kathmandu, the external services of Radio Nepal will operate daily from 1435-1520 beginning 18th February. Hitherto external broadcasts have comprised 30-minute programmes in Nepalese at 1420 on Sundays, Tuesdays Thursdays and Saturdays.

PAKISTAN Radio Pakistan announced on 14th February that President Bhutto would inaugurate a new 250 kw transmitter at Islamabad on 16th February at 1000 and that the proceedings would be broadcast on 21730 and 15325 kHz. Although there was no trace of these two frequencies or any report of the inauguration ceremony on 16th February, both channels were heard carrying the scheduled Burmese service from 1100-1200 on 17th February in parallel with the normal frequencies of 21590 and 17800 kHz.

From 17th February Radio Pakistan has been using 11672 kHz instead of 7235 kHz for its United Kingdom service (2000-2130) in parallel with 9460 and 7095 kHz.

The 1600 English news bulletin broadcast by Radio Pakistan's domestic service from Karachi is currently heard on 7240, 6257, 4975 and 3940 kHz.

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- 6205 INT WATERS RNI 2215-0050; EE rock, nx on the hour(Cwikla)
 6210 PR CHINA R Peking 2230IS into CC? (Smallshaw)
 6210 INT WATERS RNI nitely till 0200*, but 0105* on 7 Feb 0105*(Whitacre) (Martin)
 6225 INT WATERS R Venus North 1400 EEpops on a Sun, Venus South is off the air/
 6225 INT WATERS R Apollo International 1013-1046 EE; also ann. "10.2 megs", not
 hrd; asks for rpts to CRAM, 21 Forest Gate, Amstey, Leicester, England(Martin)
 6250 EQ GUINEA Sta Isabel 2020, 2124 EE/SS anmts, mx requests (Duba, Whitacre) On
 late 26 Jan 2345 w/ EE+FF NX (Reeves)
 6276NF ENGLAND R Lancashire (ex-6325) 1030 Sun. EE request program, soap ads; rpts
 to Dept 314, BIRM 23, Dorset Gardens, Brighton, Sussex England(Martin)
 *****ERROR*****The two pirates on 6225 are supposedly England, my error
 6301.5 ROMANIA R Bucharest 0130 EE, 0230 Yiddish, 2 Jan only, strong, now on 6156
 in hvy QRM(Behr) Hmm, could have made Feb. deadline, but 'tis a good item
 6387t N VIETNAM Tay Bac 1210 OM+YL in VV, 19 Jan, faded by 1220, F-P (Shaw)
 6405 N KOREA Pyongyang 2/4 KK tx, not //6600(0810); 0818 into song //6250; nom
 6400, at one time audio faded but not carrier; outside relay?(Hauser)
 7038 N VIETNAM VoV 0937 VV by YL and what seemed to be SS, F (Shaw)
 7065 IRAN Teheran 1320 FarsiHS, nx 1330, //15084 (Poster-Pac)
 7095 PAKISTAN Karachi 1822 dictation nx in EE (Wooten-Afr)
 7108 THAILAND Thai TV 1100 oriental string+vocal, ID, 2-3 chimes, F (Shaw)
 7110 MALI Bamako 0915 vernacular, still strong after daylight, traces under Malay-
 sia at 1050! (Shaw)0902 OM FF tx 0902 on a Sun (Sala)
 7115 ZAIRE FF ann. and native mx 0215-0245(Torok)All SW freq 24hrs acc. WRH 73
 7130 TAIWAN BCC 0920 CC mx, OM w/commentary., F, (Shaw)
 7135 FRANCE ORTF 0515-0535 EE "Paris Calling Africa(Kamp)
 7150 TAIWAN BCC 1045 s/on NA, BED-35 list 3 kw (Shaw)
 7155 JORDAN Amman 0600-0730* AA chants; QRM from ORTF, hams(many) 100 kw
 7170NF GREECE VOA Kavala (!) 2310-2359 close w/ local ID, VOA jazz hr at 2310(Calkin
 0000* Thessaloniki (Swatkoff) Could very well be Kavala, was ID for Thess.?
 7170 NEW CALEDONIA Noumea 0400 FF tx, E, this station noted running all day recent
 ly, as heard in Fiji, with no early afternoon break. // 3355, 7171, 9510,
 11710, not on 4913 currently, 9510 poor mod, 11710 strongest(Padula-Fiji)
 I should have said //3355, 9510, 11710, sorry
 7175 S VIETNAM VTVN 1025 VV anmts, GG folk tunes(!) (Foster-Aust) (Perry)
 7180 MALAYSIA BCFES Tebrau *2200 JJ (Hagen) we'd hoped, Vladivostok my foot/
 7220 USSR Mrs S says the xmsn 0400+ on this fq is Vladivostok not Dunshabe as /
 7235 NIGERIA ECSES 0457 drums IS, into EE rx pgm, 0505 pgm preview (Kamp) EE world
 news 0601 (Smallshaw) This frequency unlist WRTH 73
 7245 ANGOLA Em Official, Luanda, Vy strong 21 Jan when on late sked 0130; PP anmts
 through to 0200* with AP, similar propagation to RSA 6080 via S Pole(Padula)
 7255 NIGERIA VoN 0550 rapid drum IS, EE ID, pgm sked, 0600 EE nx, past 0700(many)
 7260 NEW HEBRIDES Vila 0040 request pgm in EE/native. This outlet has only limited
 range but it gives good reception around Fiji, NZ, New Caledonia area
 as heard on previous trips there(Padula) xmtr listed as 2kw
 7265 W GERMANY Sudwestfunk1115 GG pops and Nescafe ads (Martin-Eu)
 7270NF S AFRICA Springbok Radio EE/Afr hd right through period 2200-0300, unusual
 propagation similar to Angola 7245, RSA 6080(Padula)(listed in WRTH for
 "Special Services" only and not for Springbok, so I assume NF-ed) 0415* RSA
 Swahili, 0430* EE; about the only signal on the band in Aust(Padula,Zilmer)
 7270 ALGERIA RTVA 0800 chants, definitely not // 6080(Nikolich) listed for here
 7280 AUSTRALIA Perth+FINLAND 1428 IDing almost together, F (Martin-Eu) neither /
 7292 MONACO TWR 0650 "Back to the Bible" and ID, using split freq(Sparks) (Kamp)
 7460 CLANDESTINE VV cland. 1003 VV, still in business 13 hrs after cease-fire/
 9009 ISRAEL IBA 2130 FF tx+mx; //9625(Zilmer)
 9028 IRAN Tehran special px in Farsi 2035 to abrupt s/off 2053, 12 Jan(Padula-Pac)
 9375 RSPSR(As) RM Khabarovsk 1205 light mx, RR tx (Heutte)
 9380 KAZAKH R Alma Ata carrier on 2342, 2350 tone, chime IS(beautiful) at 0000,
 anthem (not Moscow), maybe nx to 0012, then mx+anmts to 0020 then piano
 exercises to 0030; //10530(Young)
 9460 PAKISTAN Karachi 2000 EE nx, comment, letterbox w/ mx request (Fabian)
 9470 USSR(WRTH lists 4 sites) RM EE/Afr 0520, into FF at 0530(R Perry)
 9475 EGYPT Cairo EE to NA 0200-0330(many)

- 9492.5 PERU R Tacna 2345 LA mx, SS ads, 0006 ID, fair 8 Jan (Behr) WRTH list 9500
 9498.5 CLANDESTINE Bizim Radio *0600 IS, into Turkish pgm to 0630*, G (Behr)
 9500vNF NEW CALEDONIA Noumea 0440 FF anmts+pops, accompanied w/ usual hum; down
 from 9510(Foster-Aust) WRTH-73 sked is hopelessly out-of-date(Foster)cf 7170
- 9505 DOMINICAN REPUBLIC 1900-past 0200(many)2205 carnival mx, long path(Padula)
 9515 S AFRICA R Suid Afrika 0530 Afrikaans, good (Behr)
 9515 MEXICO LV de la America Latina 1450 SS ID (Leonhardt)
 9515 TURKEY Ankara 1825 Turkish comedy, local mx, 1901 t/o (Tuchscherer)
 9520 KUWAIT RK 1805 EE documentary, mix jamming (Padula-Fiji)
 9520 N ZEALAND RNZ 0900 EE mx (Torok, Cwikla)
 9520 PERU R La Cronica 1115-1145 Andean mx (Reeves)
 9520 PAPUA ABC Pt Moresby 0800*, Listeners asked to retune(Torok)
 9525 CUBA Habana *0630-0800* EE (Torok)
 9533 PERU R Nac Tacna 0015 SS tx, 0045 mx, F (Behr)
 9535NF NETH ANTILLES TWR PP 0740 new time, SS 0945-1000*, 1000 GG, 1030 SS; PP xmsn
 is ex-6110, others are ex-9735(Padula-Aust, Foster-Aust, Reeves)
- 9540 UZBEK SSR Tashkent 1200 EE til 1230(Schnabel) EE 1400-1430 // 9600, 11925,
 6025; Moscow FS on 6025, 9540; many new Tashkent freqs may be relays (Behr)
 9550 WINDWARD ISLANDS R Grenada rx pgm to 1945,mx, 2000 BBC " Carribean Magazine
 9550 LEBANON Beirut EE to NA 0230-0300 (many) credit above (Duba)
 9550vNF FRANCE ORTF 2030* after FF nx, recent NF(Foster-Aust)
 9556v CLANDESTINE(?) Unid stn *1445 Persian tx, some mx to 1545* varies to 1548*,
 slow drift, varies to 9558.5; plays Internationale in pgm; is this National
 Voice of Iran or V of Iranian Liberation (Behr)
- 9555 MEXICO XEQK La Hora Exacta 1515 SS ads, time checks, tone every minute,
 clear on LSB (Behr) unlist 73 WRTH
- 9560 ECUADOR HCJB Two pgms simultaneously: EE+RR 0445(Torok) Hoogerheide)
 9560 JORDAN Amman 1700-1730* EE nx, comment, American pops, QRM(Wootten-Afr./
 9570 CHILE R Portales 0140-0432v* SS govt tx, mx(many) at 0432* gives full details
 of address, legal representative, FM freq 98.9, its call is XOP 2j; then
 first 4 notes of Habana IS on gongs(Hauser)
- 9570 NIGERIA R Kaduna *0430 drums IS, EE nx 0500, 0645 mix Qatar till 0600(Hagen)
 since 22Jan heard in period 0700-0930 now that RA(Shep) has moved to 21675
 for the 0700-0915 svce; Hausa anmts, local songs, somewhat regular(Padula)
 9570 QATAR Doha 0229 single repeat of IS, AA ID, no Romania (Shaw) 0415 AA (Hagen)
 1606 AA mx, m ancr, not daily(Tuchscherer)1530 AA nx, AA chant+mx to 1615
 L+C on 31 Jan (Behr) 100kw sked 0230-0600, 0930-1930;Zilmer rpts it at 2200
- 9575NF AFRTS Greenville 20 Jan 2120 special sports broadcast; unsked, and appears
 NF (Padula-Aust) That must have been the NFL All-Star game-ed
 9580 PHILIPPINES VoP after RA 1315*, clear w/ EE tx+mx till BBC Tebrau comes on
 at 1333; heard once, since then R. Mar comes in after R Aust 1315*(Torok)
- 9581 NICARAGUA R Mar 2230 LA mx, SS ads, ID to 2258* w/anthem; weak but clear
 (Behr) here 31 Jan to 2302* w/anthem(Behr)1315-1430 21 Jan, 1410 4 Feb
 (Reeves) 1514-1543 SS pops suprisingly good for time of day(Schnur)
- 9585 BRAZIL R Nac Sao Paulo; 0810-0830, 0915-1000, PP mx,tx, IDs(Reeves)
 9590 NETH ANTILLES Bonaire-Noord SS nx 0230 one of the 1st 1/1 (Padula-Aust)
 9595 BRAZIL 0842 PP anmts+mx(Torok) R Clube da Bahia 0915-1000 E, PP tx, mx(Reeves)
 9595 NICARAGUA R Mar 2258* 29 Jan, but 9581 31 Jan(Behr) Is heard here at 1500
 -1530 checks LA mx, ads, SS tx 17 Feb, 18 Feb(Potter)
- 9600t CLANDESTINE R Sparks 0948-0950* 23 Jan, martial mx (Kamp)
 9603.7 GREECE Athens *1758IS, anthem, Greek to 1850; not on listed 9520; also at
 1500 w/ VOA QRM; new 100 kw xmtr(Behr)
- 9615 MOROCCO RTVM AA HS 1900 AA nx by man(Duba) 0135 AA mx (Potter)
 9615 INDIA AIR Delhi RR 1615-1715*, //7105(Behr) (Behr)
 9619.5 UAE Abu Dhabi 1340-1355+ chants, Stringed instr(R Perry)1415-1430 AA chants/
 9620 IRAN Teheran 2110-2127*v; 2130 anthem, Persian tx+mx, 2230 IS, Persian nx
 to 2237* abrupt s/off // 9022 (Behr)
- 9630 SWEDEN R Sweden 1240 EE mx+tx (Wootten-Afr)
 9633t IRAQ R Baghdad 1400 Swahili? tx, AA mx to 1445*, F-G; new pgm?(Behr)
 9635 COLOMBIA R Nac, Bogota Full SS ID, TC 2145, into R Nederland transcription
 pgm in SS 20 Jan (Padula-Aust) 0340-0400, 0505 SS tx, pops,P(wallace,
 9635 BRAZIL R Aparecida 2355 PP ID,nx(P) at 0000(Martin-Eu) /Eichenhorn)
 9645 PAKISTAN Karachi*0015 EE to SEA (Foster-Aust)

- 11705 VATICAN VR 2205 EE, cmtry to Australia, (Zilmer)
 11710 ARGENTINA RAN 2205 EE, ID, mx, amts, P-G (Martin, Leonhardt, McCall)
 11710 NEW CALEDON ORL 040-0820 FF, IS, FF nx, QRN, F (Reeves). This freq.
 not listed WRTH 73-ed.
 11710 INDIA R *2245 EE, under USSR, ID hrd, rest unreadable, P (Zilmer)
 11715 BRAZIL R TVA 1630 AA, chants, //11810, 11922, 11965, 9610, (Behr). This
 freq. listed WRTH 73-ed.
 11720 MALAGASY REP RN Talata 0030-0150*, 0220 EE, nx, cmtry, mx, local ID 0150,
 P-F (Eichenhorn, Cwikla, Zilmer, Calkin)
 11720 CANADA CBC No. Serv. 2300 EE, nx, (Yamron)
 11720 BRAZIL R Nac Brasilia 2115 FF/PP, 2230-2335 EE/PP, mx, ask for repts, tlk,
 P-F (Wootten-Morocco, Martin, Nebron, Archard, Sykes)
 11725 SRI LANKA R Ceylon 0115 EE, mx, rel px, //9720, F (Zilmer)
 11725 NETH ANT TWR 2130* EE to UK, Fri only, E (Behr). Unlist. WRTH 73-ed.
 11735 YUGOSLAVIA RB 1530 EE/AA, tlk, G (Wootten-Morocco)
 11740 VATICAN VR 1500 EE, rel nx, P-F (Zilmer, Eichenhorn)
 11740 USA OAS Bethany 0011-0030* SS, LA & US mx, (Foster-Aust.)
 11740 USSR RM Novosibirsk 0700 RR, IS, ID by M, P (Wallace)
 11750 MALAYSIA BBC Tebrau 1530-1600 EE, WS to WCNA, F (Ball)
 11755 ARGENTINA R El Mundo 2340-0000, 0115-0200 SS, mx, nx, ID, temp, QRM de RHC,
 (Calkin, Reeves)
 11765 AUSTRALIA RA 0730 EE, ann //21675NF, (Reeves)
 11770 SPAIN R Liberty 1745-1925 RR, ID every 5', IS on hr, "R Svobada", jammed,
 F-G (Reeves)
 11770 MEXICO R Mex (XERMEX) 0050-0130, 1520 SS, LA mx, ID, //9705, 15125, F-G
 (Smallshaw, Andrews, Yamron, Archard)
 11780 MOZAMBIQUE RCM 0525, 0630 EE, nx, pops, ads, P-F (Smallshaw, Seymour)
 11780 NEW ZEALAND RNZ *0615-0700 EE, BBC nx, "DX World", G (Nebron)
 11785 BRAZIL R Guaiba 0030-0048 PP, mx, ID, QRM de SABC, P-F (Duba, Smallshaw,
 Plum, Zilmer)
 11790 S AFRICA SABC 2300-0130, 0522 EE/Afrik, ads, pops, yacht race, F-G (Zilmer,
 Behr, Miller, Wicks, Sweeney, Leonhardt, Sykes)
 11795 ZAIRE LV du Zaire 2305, 0115 FF, Afr mx, amts, //15245, F (Behr, L'hardt)
 11800 SRI LANKA R Ceylon 1430, 1520 EE/Lang, ID, ads, TC, (Eichenhorn, Leonhardt)
 11800 CANARY IS RNE 0010, 0415-0430 SS, RNE ID followed by local ID, nx, tlks,
 G (Andrews, Lineback)
 11805 BRAZIL R Globo 0000-0150 PP, ID, mx, tlk, sports, ads, F-VG (Cwikla, Zilmer,
 Guarducci, Yamron, Archard, Straus, Miller)
 11810 INDIA AIR 1330-1450 EE, nx, cmtry, Indian mx, ID, P-G (Eichenhorn, Sykes,
 Leonhardt, Carrington)
 11815 NETH ANT TWR *0028-0130*, 1215 EE, 2105 FF, ID, mx, rel px, E (Estes,
 D'angelo, Russell, Smallshaw, Wicks)
 11820 MEXICO Rdfc Sonora 1716 SS, ads, (Smallshaw)
 11820 ASCENSION IS BBC 0015-0145 SS, mx to LA, F (Estes, Cwikla)
 11825 KUWAIT RK 1915-2115* AA, AA mx, F (Hagen)
 11825 TAHITI RT 0300-0530 FF, EE pops/Poly mx, G (Seymour, Schnur, Yamron)
 11835 HAITI 4VEH 1245-1431 EE, rel px, ID, P-E (Lohe, Sykes, Stephens)
 11835 URUGUAY R El Espectador 2300-0300* SS, pops, tlk, ads, nx, F-G (Calkin,
 Smallshaw, Schnabel, Duba, Trkula)
 11855 SAUDI ARABIA 2100-2215 FF, quiet AA mx hosted by W, QRM de CBC, (Reeves)
 11855 BRAZIL R America 0030 PP, under WNYW, P (Zilmer)
 11860 AUSTRALIA RA 1820 EE, variety px, G (Guarducci)
 11865 BRAZIL RC Pernambuco 2045, 0100, 0410-0445 f/o PP, sports, pops, some live
 mx, ID, P-G (Duba, Plum, Zilmer)
 11870 BELGIUM RTB 2305 EE, //9550, F (Zilmer)
 11875 ANGOLA Em Official *1500-1525 EE, tlk, FF/PP also hrd, ID, IS, mx, P-F
 (Eichenhorn, R. Perry)
 11880 ARGENTINA R Splendid 0009, 0100-0131, 0230-0318 SS, sports, ads, ID, G
 (Schnabel, Calkins, Reeves)
 11880 TURKEY VoT *2200-2230* EE, nx, cmtry, ID, mx, P-G (Carrington, Smallshaw,
 Fabian, Wootten-Morocco)
 11880 ETHIOPIA ETLF *1930-2015* EE to Africa, nx, cmtry, P-G (Ronda, Behr,
 Lineback, Trkula)

- 11886 BRAZIL R Maua 0832-0845 PP, tlc, local mx, TC, P-F (Reeves)
 11895 SENEGAL Rfid du Senegal 2230-2245 FF, mx, ID, P (Straus)
 11900 UNID 2020-2028 AA, tlc by M, off w/na 2028; F (Wallace). Tunisia listed-ed.
 11905NF MALAYSIA BBC 1040 EE, WS (Padula-Aust.)
 11905 ITALY RAI 0140-0145, IS, f/o, P (Estes)
 11915 ECUADOR HCJB 0000-0230 SS, LA mx, tlc, F (Estes, Rakow)
 11920 IVORY COAST Abidjan 1830-2000 EE, 2300-2315, 0610 FF, ID, opera, chants, mx, F-E (Wootten-Morocco, Smallshaw, Andrews, Leonhardt)
 11925 USSR R Tashkent 1204-1225 EE, daily, cmtry, G (Schnur)
 11925 BRAZIL R Banderiantes 0030-0220 PP, PP/EE mx, sports, P-G (Zilmer, Duba, Lohe)
 11930 SWEDEN RS 1620 EE, DX px, F (Eichenhorn)
 11935 PORTUGAL RP 0200-0245, 0400 EE, mx, F-G (Archard, Wicks)
 11940 RUMANIA RB 1507-1525 EE, nx, cmtry to Asia, (Tuchscherer, Eichenhorn?)
 11940 LIBERIA ELWA 2015-2100* EE, rel px, G (Plum, Russell, Leonhardt, Andrews, Sweeney)
 11945NF CHINA RP 0100-0200 EE, cmtry, nx, //11965, G (Archard, Rakow, Zilmer)
 11945NF ISRAEL IBA 1730 Heb/Ruman, 1800 Ladino, 1815 Maghrebi, //9785, 9009, (Behr)
 11948 PARAGUAY R Encarnacion 2338 SS, LA mx, tlc, P (Swatkoff)
 11950 BRAZIL R Min Educacao 2245-0150 PP, Bossa Nova, tlc, class mx, G (Lohe, Martin)
 11955 SEYCHELLES FEBA 1730-1800 EE, rel px, mx, ID, F (McCall, Straus, Ball, Sykes, Wootten-Morocco, Eichenhorn). Only 6?-ed.
 11955 ETHIOPIA ETLF 1430 IS, EE ID/Hindi, 1500-1510* EE, rel px, P (Yamron, Leonhardt)
 11960 ISRAEL IBA 0500 EE, 0515-0530* FF, //9009, 9625, E (Foster-Aust.)
 11965 BRAZIL R Record 0000-0100 PP, mx, QRM, P (Lohe?, Zilmer)
 11965 CHINA RP 0100-0300 EE, (Rakow)
 11980 WINDWARD IS R Grenada 0200 EE, nx, F-G (Eichenhorn). Lists 11975 cf Jan LR-19-ed.
 11980 CHINA RP 0100-0200 SS, (Rakow)
 11985 ALBANIA RT 1410 EE, nx, cmtry, F (Sweeney)
 11990 CZECHOSLOVAKIA RP *1800 EE to Africa and Asia, African mx, P (Leonhardt)
 12020 USSR RM 1330 RR, cmtry, G (Wootten-Morocco)
 12060 USSR RM 1710 FF, cmtry, G (Wootten-Morocco)
 12060NF CHINA RP 0100-0200 EE, (Rakow)
 12176 ICELAND Reykjavik R 1200-1300 Icelandic tlc by OM, ID Reykjavik R 1257, also R Boonome said several times, UTE tape returned 1300 w/same OM, (Schnur). We need to ck if this is regular and on what is said to determine if they are really broadcasting or if entirely UTE in operation-ed.
 12179.5 DOM REP RTV Dom 2325 SS, ID, mx, F, 2 x 6089.7RF, fund burried in QRM, //9505, (Behr)
 15045 CHINA RP 0100-0200 SS, (Rakow)
 15055 EGYPT RC 1518 AA, chants, tlc, P (Eichenhorn)
 15080 INDIA AIR Bombay 1900-1945*, GOS, EE nx & ID, P (Wallace)
 15084 IRAN RT 1525 Farsi, mx, tlc, P, also hrd 1/28 on 15094, AA, mx, cmtry, NF?, F (Eichenhorn)
 15095 LIBERIA ELWA 1715* AA, ID, IS, E (Alcock)
 15105 JAPAN NHK 2315 EE, nx, G (Ronda, Graham); 0010 EE into JJ, nx, (Stephens)
 15105NF N VIETNAM VoV 0450 FF, peace a reement articles read; 1015-1030 EE into Thai?, (Padula & Foster-Aust.). Getting respectable?-ed.
 15105 WINDWARD IS R Grenada 1750 EE, sports, F (Straus)
 15105 CYPRUS BBC 1500 EE, nx, QRM de HCJB, F (Stephens)
 15105 BRAZIL R Rural 2030-2330* PP, mx, tlc, nx, ID, F-G (Lohe, Andrews, Plum, Martin, Wootten-Morocco)
 15110 N ZEALAND RNZ 2000-2015 EE, BBC nx, F (Nebron)
 15120 NIGERIA Von 1630-1645, 1840-1845 EE, 1920 EE/FF, nx, cmtry, sports, P-G (Wootten-Morocco, Nebron, Nikolich, Leonhardt)
 15120 FRANCE ORTF 1900-1930, 2100 FF, mx, ID, tlc, nx, G (Wicks, Estes)
 15120 MEXICO R Mex(XERMX) 1444 SS, ID, sched, F (Eichenhorn). cf Feb. LR-24 on 15125-ed.
 15125 TAIWAN VoFC 0235 EE/CC, 0340 EE, cmtry, nx by YW, P-F (Nikolich, Eichenhorn)
 15125NF FRANCE ORTF 1230-1245* Greek, ex 15135, (Foster & Padula-Aust.)

- 15135NF IRAN Tehran 1030, HS relay of R Iran in Farsi, //15084 hrd, new tx?, (Padula-Aust.)
- 15150 N KOREA R Pyongyong 0000-0030 SS, nx, P-F (Nebron, Smallshaw)
- 15155 BRAZIL Rdf de São Paulo 2350-0359 PP, tlk, mx, ads, sports, P-G (Andrews, Eichenhorn, Smallshaw, Guarducci)
- 15165 INDIA AIR *1215 Cantonese, (Padula-Aust.)
- 15165 DENMARK RD *1600-1620 DD to NA, nx, IS, EE ID, P-F (Straus, Yamron); *1157-1217 DD, IS, EE ID, rel px, G (Sykes)
- 15170 LIBERIA ELWA 1000-1046, 2230 AA, AA mx, tlk by M, F-E (Reeves, Fino)
- 15170 TAHITI RT 1745-1800, 1940, 2315 FF, EE nx, wx, & ID at 1745-1750[±], tlk, mx, P-C (Cwikla, Hunt, Reeves, Nebron, Sykes, Williams, Swatkoff, Leonhardt); 0530-0600 FF, mx, tlk, //11825, P-F (Straus). 9, tied with Zambia for this month's popularity champ-ed.
- 15175 PHILIPPINES VoA Tinang *2230 EE ID into Indon, F (Swatkoff)
- 15183v NIGERIA VoN 1700 AA, 2215-2227* abrupt s/o EE, 0850⁺ EE sports, (Behr, Foster-Aust.)
- 15185 USA WINB 2045, 2200 EE, mx, tlk, P-G (Eichenhorn, Guarducci)
- 15185 FINLAND FBC *1400-1430 daily EE px, G (Lineback)
- 15190 ETHIOPIA ETLF 1325 EE, mx, cmtry, IS, to India, F-P (Martin)
- 15190 CONGO RTVC LV de Rev 1800, 1900-2130 FF, ID, mx, some local Lang, often G (Trkula, Swatkoff, Smallshaw, Archard, Leonhardt, Reeves)
- 15230 PHILIPPINES FEBC *2325 EE, nx, F (McCall). Lists 15235-ed.
- 15240 SWEDEN RS 1500 FF, ID "R Stockholm", F (Eichenhorn)
- 15245 ZAIRE LV de Zaire 1905 FF, tlk, African mx, QRM de VoA, P (Swatkoff)
- 15245 PAKISTAN RP 1330 EE, dict. nx, F (Wootten-Morocco). Unlist. WRTH 73-ed.
- 15250 S AFRICA SABC 1535, 0910-0925* EE, special tx'n for yachts in Cape to Rio race, wx, RSA IS, SABC ID, F-P (Eichenhorn, Foster-Aust.)
- 15250 RUMANIA RB 1315 EE, Rum mx, F (Zilmer)
- 15255 NETH ANT TWR 1422* EE, ID, E (Eichenhorn)
- 15260 ASCENSION IS BBC 0015 EE, WS, mx, nx, G (Nebron, Fino)
- 15265NF ISRAEL IBA 1610-1655 Yiddish/RR, jammed, (Behr)
- 15265 AFGHANISTAN Kabul *1200 Pushtu, ID, svc. lists 15415 WRTH 73, (Foster-Aust.)
- 15265 UNID CLAND? African 2130-2303-7* PP/African langs, PP ID and unknown anthem, (Behr)
- 15270 MOROCCO VoA Tangier 1600-1630 Lat., 1630-1700 Czech-slovak, F (Ball)
- 15270 SEYCHELLES FEBA *0600, 0800-0830* EE, rel px, rarely hrd, (Padula & Foster-Aust.)
- 15280 USA KGEI 0024 SS, 2233 EE, EE LL, rel px, 2300 RR, F (Miller, Wicks)
- 15285NF S AFRICA RSA 1025 EE to Aust, ex 15220, P (Foster-Aust.)
- 15295 SWEDEN Karlsborg RS 1130 EE, ID, test (Foster-Aust.)
- 15295 MOZAMBIQUE RCM 0750 PP, ads, pops, G (Padula-Aust.)
- 15295 FRANCE ORTF 0515-0545 EE to Africa, (Rakow)
- 15305 SWITZERLAND SBC 1315, 1530-1600 EE, nx, cmtry, F (Nebron, Wootten-Morocco)
- 15320 AUSTRALIA RA 0100-0115 EE, ID, sched, mx, F (Eichenhorn, Zilmer)
- 15335 S KOREA KBS 0300-0330 EE, nx, tlk, KK mx, (Rakow)
- 15345 MALAYSIA BBC *0900-0930* EE WS, unsched., //15310 (Foster-Aust.)
- 15350 LUXEMBOURG RL 2030-2050 GG, var px, QRM de RFE, F-G (Lohe)
- 15360 MOROCCO RTM 1800-1830 AA, chants, G (Reeves)
- 15365 ETHIOPIA ETLF *1915-2000* FF, EE/FF/Vern ID, mx, blocked by RNE *1954, G (Lohe, Leonhardt)
- 15365 CANARY IS RNE *1940, 2315 SS, mx, F (Wootten-Morocco, Lohe)
- 15385 MEXICO R Mex 2330 SS, mx, F (McCall)
- 15405 AUSTRALIA RA *2230 EE ID, px in Indon, pop mx, P (Leonhardt)
- 15415 KUWAIT RK 1700-1800 EE, pops, nx at 1730, ID, F (Yamron, Seymour)
- 15415 BRAZIL RC Ribeirão Preto 2125, 2250, 2325-2340, 0030 PP, mx, nx, ID, G (Reeves, Collier, Padula-Aust.)
- 15435 MALAYSIA BBC 0000 EE, WS, P (Zilmer)
- 15435 TANZANIA RT 1905-2000 EE, nx, African mx, ID, some local Lang, P-F (Duba, Carrington)
- 15445 BRAZIL R Nac de Brasilia 0500-0600 PP, blocked 0600 by R Liberty jammer, hrd in clear past 1100 1/17 when Liberty off (Foster-Aust.)
- 15445 LIBERIA VoA 1850-0205 EE, nx, African px, F (D'Angelo)
- 15789.5 CLAND VoMalayan Rev 2335 Tamil?, rev mx, G (R. Perry)

- 16320 N KOREA Pyongyang 2330-0035 f/o KK into SS to LA at 0000, nx, (Duba, Graham)
 17730 MALAGASY REP R Madagascar 1450-1600* EE/FF, Int. Svc., nx, folk mx, G (Martin)
 17735NF BANGLADESH Dacca 1245 EE, lbx px, P (Foster-Aust.)
 17780 TAIWAN REP 6659 Hakka (listed), IS, then Chauchow sched w/freq. and Calls in EE, G (Hauser)
 17795 AUSTRALIA RA 2350-0100 EE, tik, nx, club forum, P-F (Nebron, Stephens)
 17810 MALAGASY REP RN 1400, 1505-1520* EE, pops, nx, F (Nikolich, Tuschcherer)
 17815 BRAZIL R Cultura 0055 PP, mx, cmtry, (Andrews)
 17825 JAPAN NHK 0815 EE, nx, cmtry, P (Wootten-Morocco)
 17860 UNID African? 1705-1800, African and US mx, hrd on Sat., (Archard)
 17870NF S AFRICA RSA 1035 EE to Aust., ex 17820, (Foster-Aust.)
 17895-17900v ZAMBIA RZ 1630, 1800-2105* EE, also PP/African Langs, nx, mx, various px, IDs, "Angola Combatente" in PP, s/o w/anthem, strong signals since early Jan. New CC tx in action, F-E (Russell, Wootten-Morocco, Shaw, Carrington, McCall, Behr, Miller, Calkin, R. Perry). Repted freq quite var. Rept. as low as 17887. Taming new txs-ed.
 21470 ENGLAND BBC 1600 EE, nx, G (Eichenhorn)
 21495 PORTUGAL RP 1817 EE, nx, cmtry, F (Wootten-Morocco)
 21520 SWITZERLAND SBC 1530 EE, nx to Africa, //15305, 9520, 11870, F (Zilmer)
 21535 S AFRICA RSA 1606 EE, 1800-1850 GG to Eu, nx, cmtry, G (Eichenhorn, Schwartz)
 21545 GAHANA RG 1500-1530 EE, nx, mx, F (Estes)
 21560 ITALY RAI 1535* II, G (Sweeney)
 21580 FRANCE ORTF 1425 FF, 1550 EE, 1605 FF //21645, 21620, 21675, nx, tik, G (Sweeney, Estes, Eichenhorn)
 21595 CANADA RCI 1850 EE, Mon. Mag., Can. nx, G (Wicks)
 21675 AUSTRALIA RA Shepp. *0700-0915 EE to Eu. ex 9570, (Foster & Padula-Aust.)
 21710 ENGLAND BBC 1500 EE, nx, G (Sweeney)
 21715 SWEDEN RS 1430 EE, test of 500 kw tx, P (Zilmer)
 21720 PORTUGAL RFE 1410-1430 EE, ID, pops, F (Carrington)
 21730 NORWAY RN 1448 NN, nx and press review, F (Megesy)

Thanks again for supporting Log Report. I hope everyone has lots of good DX this Spring. 73 til next month.

Jerry A. Lineback

CREDITS

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 Charles Wootten, Morocco
 Larry Yamron, Pittsburgh. PA/HQ180
 Jim Young, CA/HQ180
 Robert Zilmer, WI/SPR4

BANGLADESH From Radio Bangladesh, via
 Chris Lobdell, comes this sked for RB,
 effective from February 1, 1973.

0230-0300 EE to ME/S.As.	9690, 15520
1230-1300 EE/ Eu/India/Af	15400, 17730
1320-1400 Nepalese/Nepal	9850, 4890
1400-1420 Pushto/W.Pak.	15520
1430-1530 Bangla(GOS)/India & Pakistan	15520, 11650
1530-1600 Punjabi/Pak/India	15520, 11650
1600-1700 Hindi/ India	15520, 11650
1700-1800 EE/ Eu, Afr	15520, 11650
1845-2100 Bengla/ Eur	9550

This is the external service sked.

Reports to DIRECTORATE GENERAL, RADIO
 BANGLADESH, 20-GREEN ROAD, DACCA-5,
 100 kw except 9690,9850. (Chris Lobdell)

Due to an error on the part of the
 distributing editor(DF) the report
 from Joe Torok was almost entirely
 deleted. Very sorry!

WRTH 73 CORRECTIONS, from Hans J. Rakow:

R.MOSCOW II: Sked as anned & logged in EE
 for WCNA is: 0330-0730 on 5985, 7175(0530-
 0730), 9580, 9735, 9780, 11690, 11850,
 15140(to 0500), 15180(to 0430).

RADIO NEDERLAND, via Bonaire, Dutch at
 0330-0450 moved from 6060 to 6170.

LEBANON, SS 0300-0330 s/off, not at 0330.

ECUADOR/GALAPAGOS The Organization of
 American States has announced a new
 supplement in its series of country
 studies. Called IMAGE OF ECUADOR, it may
 be obtained for \$0.25 by writing to:
 OAS - Sales and Promotion Division
 19th and Constitution Avenue, N.W.
 Washington, DC 20006.

This publication might be of use to those
 interested in DXing Ecuadorian stations.
 (via Richard E. Wood)

FOREIGN LANGUAGE REPORT FORMS

Member Dan Jamison has available
 copies of report forms in Urdu,
 Persian and Vietnamese. Cost is
 30 ¢ each(for Xerox) and a double
 stamped SASE for each. Write
 Dan Jamison, 310 Roanoke,
 Richmond, VA.

COUNTRY LIST/STATION COUNTING RULES

There has been some confusion recently
 regarding the country list and the
 guidelines for counting stations. A
 few words here may be helpful.

First, note that Trinidad has been
 listed with South America. This is
 an error. Trinidad is counted as a
 North American SWBC country.

It should also be noted that it is the
 transmitter site that counts. Thus, the
 UN Radio, using the transmitters of other
 broadcast organizations, does not count
 as a separate country. Multiple fqys
 from the same transmitter do not count
 separately. Different services from the
 same broadcast organization do not
 count separately. Harmonics of MW
 stns do not count as SWBC, according to
 the Station Counting Rules. DF

ADDRESS CHANGE Long time NASWA

member and official, Gerry Dexter,
 now has a new address: 173 Forest
 St., Lake Geneva, Wis. 53147.
 Effective March 21.

NASWA RUBBER STAMP

The NASWA rubber stamp is still
 available, at \$2.00 postpaid.
 Order from HDQ.

Some have suggested that the stamp
 should be redesigned. This could be
 done. If you have a design you would
 like to see adopted as the design of
 the NASWA stamp, send a sketch of it
 to HDQ. If you'd like it left the
 way it is, let us know that, too.

FRENDX FOTOS

Edward C. Shaw
FRENDX FOTO EDITOR
621 Burtleigh Avenue
Norfolk, Virginia 23505

Beginning this month, FRENDX FOTOS returns to a similar format used when the photo page was first begun in August 1970. Many new members have joined NASWA during the ensuing years since then, and to them this format will be new - and we hope, added enjoyment of this section. We cannot possibly use all photographs submitted to us each month, and we regretfully must leave aside all but four or five which will be the monthly selection after this month. Because of such a great backlog of members who have never had their photos used, we may try to present an occasional double set of pages. Submit your photo (either B&W or color - and clear) with DX biography to me. I'll be sure to let you know well in advance if we can use them. Many thanks!

This month, we are happy to present one half of a father/son DX team from Terrace Park, OH. Robert's father Fred travels extensively, but the twosome have managed to salt away over 23 countries in just 3 months. Robert uses the exotic SONY CRF-160 portable, a fine dual conversion outfit capable of a lot more than just 23 countries. Hang in there, Robert. As a matter of fact your editor started DXing on just such a receiver. I would recommend you do install that external antenna you mentioned. Robert joined NASWA after reading about us in a magazine article. He also belongs to the World Radio Club sponsored by the BBC. His favorite QSL comes from the spot on Earth nearly furthest from him - ABC Perth, Australia. Robert may be NASWA's youngest member at age 10! How bout dat?



ROBERT CASWELL



MALCOLM ARCHARD

In addition to DXing, this guy also does some CBing. A career Coast Guardsman of 18 years, Malcolm makes his home in Ludington, Mich. with XL and two hets. His SW-4A rig is fed from a Mosely SWL-7 and homebrew inverted "L". To date he has netted over 35 QSLs, including his favorite - Ivory Coast. Malcolm first saw us mentioned in Communications World. He likes to tapespond, hike, camp, bike ride, and climb mountains. (Fella, where were you when Ferguson and Jamison and I were crawling around the rocks on our first DXpedition?) Judging by the loop over your desk, I'd also say you did some AM DXing - as a side diversion?

Going a little further west now, we find Jerry Rappel of Davenport, Iowa nursing a Midland 13-500. Now, we know Jerry has an SX-190 and able to do some serious DXing. Jerry works as a warehouseman full time, and still puts in part time studying radio broadcasting. His DX-abilities are reflected in the memberships he has with six SWL clubs, and in the 75 QSLs he has received from 23 countries. Welcome aboard, Jerry.



JERRY RAPPEL



MICHAEL W. RICHARDS

Another active member is Michael W. Richards from the Bronx, New York. Mike's main receiver is Lafayette's HA-600 with a 40 foot antenna between apartment windows. In addition, he has a Hitachi KHL400H and Realore 2424 portables to back him up on trips. Mike belongs to the Radio Prague and Radio Canada's Shortwave Clubs, and a local member of Riverdale Radio Club. He has QSLed 49 out of 58 countries heard - the prize being VLT-4 from Port Moresby. Mike enjoys journalism and hopes to attend Bronx High School of Science next year - perhaps as a prep to broadcasting training, Mike? Other interests include sports, collecting souvenirs, youth activities, and corresponding with pen pals.



LARRY ABRAHAM

NASWA can always be thankful to John Hoogerheide who snagged Larry into the club. Larry teaches mathematics in Saginaw, MI. He's 26, married, and wants to get to know other NASWA members. Larry, I'll delve through the NASWA membership files and see if I can come up with a few of the club members closest to you. DXing is no new game for Larry, having been a ECB DXer for 13 years and a SWBC DXer for about 10 years, although he only admits to being a "SWL" most of the time. Friend, John mentioned above has visited with Larry and maintains contact by letter and phone. Number of countries heard so far amounts to 124 and 75 of these are verified. Glad to have you around, Larry. We have quite a number of math teachers around... some of them are hillbillies, though (and, he lives in Charleston).

Jack comes from Quincy, Massachusetts where he works as a photo lab technician. He first got wind of NASWA from Radio Nederland's DX Juke-box program. Jack is 22 and has been DXing for about a year and a half, netting 32 QSLs out of 50 countries heard on his Realistic DX-150A and 40 foot longwire. Other clubs are the European Benelux DX Club, Radio Canada SW Club, and Riverdale Radio Club in the Bronx. Hobbies include 16mm movies, philately, numismatics, and Laurel and Hardy.



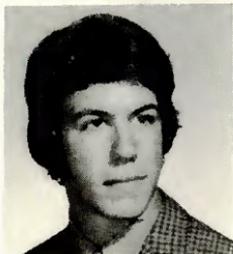
JACK ROSENBERG



HANS RAKOW

Way out west we find Hans Rakow from Sherwood Park, Alberta. Hans is an estimator, but doesn't indicate for whom. He first learned about NASWA from Popular Electronic's Communication Handbook and the WRTH. Hans's equipment consists of a Drake R4A and a GRAETZ superhet which has 49-25 meterbands on it. He uses a 50 foot longwire. Though not particularly interested in the QSL aspect, Hans has logged about 50 countries. Other interests include photography, languages, cultural history (you should meet George Schnabel in New York state, Hans), and philosophy. Your quest for that small-sized and discriminating directional antenna is shared by many a DXer, including this writer. Line forms at the rear. Welcome to NASWA, Hans.

This fellow came to NASWA thanks to WRTH. Barry is a high school senior in Ambler, Pennsylvania. His DX-150A seems to have done him great service with 21 QSL'd countries out of 38 logged. Other equipments are the Lafayette Mark V, Lafayette G-6000, Cold Line Antenna Tuner. Antennas are the SW-6 and SW-9 by HyGain. In addition to SWBC, Barry also expresses interest in VHF DXing, or perhaps just tuning through to scan the public service and aircraft bands. He plans to attend Penn State this coming Fall. Prized QSL for the present is from CHNX in Nova Scotia. Other interests include bowling, bridge, magic, and tropical fish. Good luck in your future studies, Barry. Hope that you'll be able to find time to put in a few hours of DXing.



BARRY PETERS



GEORGE SCHNABEL

Here we see George Schnabel of Rochester, New York with his toys. This ace DXer has been around for a good number of years (DXing, not age)(hi) and enjoys the distinction of being a member of the DX Century Club (DXCC) for QSLing 100 countries. Equipment includes Drake's SW-4A, National NC-180, Mosely SWL-7 antenna, and Gilfer's A-20 preselector. George is well traveled, a talented musician, student of history and humanities. George also owns trotting horses. He is a member of NNRC in addition to NASWA. The hobby is fortunate to have such an active and willing fellow-DXer like him.

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