

NORTH AMERICAN SHORTWAVE ASSOCIATION

NOVEMBER 1971

NASWA HEADQUARTERS

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VOL. X NO. 11
ALTOONA, PA. 16603 USA.

TEAM WORK IS A MUST!

We have seen clubs come and go over the years. Many begin enthusiastically, usually by young and inexperienced DXers who think the only important factor is the publishing of bulletins on a regular basis. For the most part, editorships are 'handed out' on a 'first come' voluntary setup. Sections are assigned with little or no forethought given except that each section is to deal with a particular phase or subject regarding the hobby. Each of the editors puts into his section that which he wishes, whether it be reports from members, articles copied from magazines or another clubs bulletins or original compositions the editor himself writes. They give of their time and they work diligently. So be it! But where the wrong is done is that each of the editors consider their section the only in the bulletin. Little consideration is given to the wants, the needs or the preferences of the majority of the membership. Such a club/bulletin does not last long, does not serve a useful purpose.

NASWA, via Frendx, has ever efforted to avoid such harmonetars.

NASWA, via Frendx, has ever efforted to avoid such happenstances. Editorships are appointed and filled by DXers of experience. Each well knows/understands that he is part of a team, that his section is likened to a link in a chain which, combined with other sections, gives our bulletins worth and our club strength. Each is given to know that, on occasion, certain of his section contents may be subject to censure/omission, or that he may be asked to relinquish a number of pages; In such cases these actions are thought to be in the best interest of the club and in compliance with the wants and preferences of the majority of the membership, another part of the team.

B.E.

NEW/HELFFUL FUBLICATIONS

Members interested in DXing the utility bands will be pleased to know that a new book will be available Jan. 1,72. Written by Paul Mayo and Steve Handler, it is the "Utility DXers Handbook"*and is to contain ver 70 pages of valuable data for both xpert and novice ute enthusiasts. Order before Jan. 1st and price is \$2.50 ppd. Order after Jan. 1st and price is \$3.00 ppd. Send orders to Jack White-SFEEDX, 780 N.W.Wallula Ave., Gresham, OR. 97030. (Do not send orders to NASWA Hdqs!!!!!!)
*Not a rehash of "Utility Address Book".

Frequency lists and call books published by the International Telecommunications Union in Geneva, Switzerland can now be bought direct from Gilfer Associates, F.O. Box 239, Fark Ridge, NJ. 07656. Write them for a complete list and prices of the ITU publications and tell them NASWA sent you. (For our younger members and newer DXers, the ITU is the worldwide treaty registration center for all radio stations and frequencies. Computerized lists of the 100s of 1000s of radio stations are updated quarterly.) Send for list/prices today!

NEW MEMBERS, WELCOME!

James B. Shirey, Fort Wayne, Indiana. Via friend/member Jerry Blake. George A. Ray, Delta, B.C., Canada. Via Communications World. Merrell Campbell, Kokomo, Indiana. Via PE Communications Handbook. Robert Carlsen, Sheffield Lake, Ohio. Via Elementary Electronics. Russell A. Lay, Virginia Beach, Va. Via WRTH and Bill Flynn. Richard J. Parkes, Kutztown, Penna. Via various magasines: Dr. James P. Ronda, Youngstown, Ohio. Via Radio Nederland/DX Jukebox. W. Norman Dittmann, Chambersburg, Penna. Via Communications World. Mohammad Reza Mohammad-Four, Woodside, New York. Via PE Communications World. Clarence Bugbee, Manchester, New Hamp. Via World Radio-TV Handbook. David Prezeau, Victoria, B.C., Canada. Via PE Communications Handbook. Frank A; exander Jr., Charlotte, No.Car. Via World Radio-TV Handbook. Anthony Grammatico, Farmington, Michigan. Via PE Commuincations Handbook. Daniel N. Kucij, Hawthorne, New Jersey. Via World Radio-TV Handbook. Doug Nathman, North Indialantic, Florida. Via Communications World. Mrs. Evelyn Dolyak, Atlantic, Iowa. Via Communications World. Alan W. Brocks, Portsmouth, New Hamp. Via LR Editor-Jerry Berg. Albert Linsenmeyer, Chicago, Illinois. Via FE Communications Handbook. Brent Turner, Pittsfield, Maine. Via '71 World Radio-TV Handbook. James A. Dixon, Phoenix, Maryland. Via CS Edward Sharr. Shafter E. Primrose, Alexandria, Va. Via World Radio-TV Handbook. Bernard Lenouvel, Toronto, Ont., Canada. Via World Radio-TV Handbook. H. Robert Bundy, Truk, E. Caroline Islands. Via SWC Editor Bill Matthews. William Larsen, Chicago Hts., Illinois. Via Communications World.

RENEWALS

Second year: Glenn kinks, Dick Bartos,
Larry Schlossman, Jim Roberts, Tom Smith,
John Smallshaw, Mark Drogin, Rom Howard,
W. Charles Ganscoe. Third year: Worner J.
Selby, John Walenter, James Smith, Dan
Morisseau, Carroll Patterson, David Williams, Al Drehman. Fourth year: Norm Starr,
Whit Cole, Curne Chadwick, Al Friedman.

Fifth year: David Baltimore, Harry Smith, Ken Lyon, Robert Moser. Sixth year: Bill Matthews, Art Glover, Robert Fadula, Charles Territo Jr. Seventh year: Marlin Field. Eighth year: August Balbi, Alex T. Primm, Donald Jensen.

(NOTE: Members joining or renewing after 15th of month will be listed next month.)

HELPING HAND SERVICE+

For sale: Drake SW4A receiver, minus spkr. Also SWL7 antenna. Write H. L. Reeder, 3276 Brevard Street, Memphis, Tenn. 38116. Wanted: JoyStick antenna + JoyMatch ATU. Must be in excellent condition. Contact Ben Lewis, 449 Pine Street, South Weymouth, Massachusetts 02190. Available: Copies of Frendx, Sept. '70 to Aug. 71. 25¢ per copy to cover the postage. Write Dan Romanchik, 24249 Beierman, Warren, Michigan 48091. Wanted: Copies of "How to Listen to World" prior to 1969/70. Write Anthony Marks, P.O. Box 521, LaGrande, Oregon 97850. For sale: Hammarlund HQ-200 in very good condition complete w/operating manual. I will also include frequency graphs for the SWBC bands. Write Tom Eby, 1235 N. Main Street, Naperville, Illinois 60540. For sale: Lafayette HA-600 receiver. Like new. Write Bob Cecala, F.O.Box 17161, Salt Lake City, Utah 84117. Wanted: Seventeen year old Tanzanian DXer is interested in pen-pals (prefers YL's). Address is Saidi A. Nauba, c/o Radio Tanzania, P.O.Box 9191, Dar es Salaam, Tanzania.

TIME TO COGITATE

Better start thinking about who you want to nominate for Board of Directors for the 1972-74 term. Also what member you wish to nominate as "Member of the Year". Next months bulletin will contain form(s) to be used for this purpose. All members in good standing are eligible for nomination, all have voting priviledge which we urge everyone to exercise. It is of the utmost importance, especially in regard to Board of Directors.

In order to expedite publishing and mailing of this edition, there will be no photo page this month.

A BOUNTIFUL 'THANKSGIVING' TO ALL!!!

OUR TASK

We in the states this month celebrate a day of 'bountiful harvest' which is designated "Thanksgiving". It is a holiday, one filled with pleasure from table full. A day when relatives and friends from afar oft times gather together in a common home to enjoy food and recollect fond memories. It is a good day, one for giving thanks.

We friends in club though, in states or worldwide, should not set aside just one particular day for being thankful. Our blessings are many, our harvest bountiful; Much too numerous for one days thankfulness. Surely the pleasures we find and the friends we make through our club/hobby efforts are worth threefold thanks and more. So let us stop for just a moment, think, and give thanks, count our blessings. We be all the better so doing!

We should join together in heart and mind, no matter the club(s) we belong to or the type(s) of listening we prefer. Let us join together thankfully as common true friends and cast out criticisms and belittlenesses; Let to enter in compliments and commendations. Give to understanding and thankfulness; Find ourselves being recipient of same in return.

We need to learn the worth of being thanked, yet moreso that of giving thanks. Let us help one another, share with one another, give happiness and pleasure to one another through cooperation and sincere friendship. Let us work side by side, each doing our part as best we can, as oft as we can, not for ourselves alone, but for the everyone overall. Let "Unity and Friendship" be our task as few clubs have known but for those of us who are thankful to make it our own.

In behalf of all NASWA officers and the Frendx staff, a most blessed and peaceful holiday this THANKSGIVING 1971.

(Gregg Calkin, Gerry Dexter,
Dan Ferguson, Edward Shaw, Bill
Matthews, Al Niblack, George
Schnabel, Warren Nordgren, Del
Hirst, Don Jensen.)



Bill Eddings

Watch for some special features and extra 'treats'. And why not help us celebrate by sending in a report/etc to one/some section(s)?

NOW IS THE TIME TO KEEP NASWA GOING AND GROWING BY GIVING YOUR SUFFORT !!!!!!!

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A ONE TIME SHOT

The 1972 edition of the World Radio-TV Handbook (WRTH) is sked to be ready for distribution by mid-January '72. List price per copy is \$6.95 ppd.

NASWA members wishing to order through the club can save \$1.00 provided they order prior to December 15th. Orders must be received at Hdqs by that data or they cannot/will not be accepted! This offer is being made only once and will not be made again. So if you wish to order a copy(s) of the 1972 WRTH, complete the below order form and send to Hdqs with

sufficient money (\$5.95 per copy) in check or money-order form made payable to NASWA. Canadian members must remit by postal money-order only, not by personal check. Mail order so it reaches club Hdqs prior to December 15th...this is very important!

I wish to order _____copies of the 1972 WRTH at \$5.95 per copy. Enclosed is \$____in check/money-order form (Canadian members remit by Postal money-order only) made payable to NORTH AMERICAN SW ASSN. I understand my copies will be mailed to me direct and postpaid.

Name		
Address	W	
City	State/Prov	
ZIP Code		

Again be alert to fact that all orders must be received at Hdqs prior to December 15th or they will not be accepted/filled. Checks/money-orders should be made payable to NORTH AMERICAN SW ASSN. This offer is valied only to members in U.S.A., Canada, Mexico.

CLUB SUPPLIES AVAILABLE

Club rubber stamps, \$1.50 ppd each. Order from Hdqs.

Club stationary, \$1.50 per 50 sheets ppd. Order from Corresponding Secretary Edward Shaw, 415 North Shore Road, Norfolk, Virginia 23505.

Foreign Language Report Forms, Spanish, French, Portuguese, Indonesian. \$.15 per copy. Order from QSL Editor Gregg Calkin, Calle Rio Blasas 35-702, Colonia Cuauhtemoc, Mexico 5, D.F., Mexico.

CLUB SERVICES AVAILABLE

Have a technical question/problem? Write Al. R. Niblack, 420 Shelby Street, Vincennes, Indiana 47591. Be sure to enclose SASE or mint stamp(s) for reply.

Want tape recordings of certain station IDs or IS? Write Edward Shaw (address above) or see this months Helping Hand Service column.

Want to buy or sell equipment, etc.? Notify Hdqs to put ad in upcoming bulletin.

Need report forms for submitting your loggings to Log Report Editor? Request same from Jerry Berg, 38 Eastern Avenue, Lexington, Mass. 02173. Enclose large size SASE.

Want names/addresses of other NASWA members in your area? Write Ed Shaw (see above for address)or contact club Hdqs. Be sure to enclose SASE.

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THE LOUDENBOOMER REPORT

"Charlie," I'M frequently asked by leaders of newly formed DX clubs, "from your vast experience and expertise, can you offer any helpful hints for successful club operation?"

The answer, of course, is "Yes!" And so, I've compiled the following basic rules which, if followed by the officials of fledgling DX clubs, will guarantee successful operation, rapid growth and long life.

HAVE A GOOD REASON FOR BEING. Don't found a new DX club unless there's a good reason to do so. Some examples of good reasons are: (1) If you don't like exisiting club A because they insist on printing their bulletin in black ink on white paper. What this hobby needs is a club bulletin in red and green. (2) If there is no internationally-oriented DX club headquarted in Gurney Junction, Vermont. Naturally this need must be met. (3) If you want to be a big wheel president of a club.

STICK TO THE TRIED AND TRUE. The major clubs got where they are today by beeting DXers needs; doing a job and doing it well. Therefore, for a new club the road to success is to slavishly follow the style, coverage and format of one of the large established clubs.

BUT HAVE YOUR OWN UNIQUE ASPECTS. Your club will grow by leaps and bounds when DXers find out that it is the only one (1) whose bulletins are bound in Morocco leather, (2) features a regular column covering harmonic frequencies of Nicaraguan aero beacon stations, (3) has a technical column in Braile (4) offers special member certificates for VAGO (Verifying all Greenville Outlets).

HAVE TOP QUALITY EDITORS. The sub-editors are the key to bulletin quality. But remember that (1) the hobby can be fully learned in less than three years, (2) Anyone can write intelligently, (3) Anyone can type stencils. Therefore it is safe to appoint any person who is sufficiently motivated (that is, hopes his name will be a household word in the DX hobby overnight) and is willing to volunteer for the job. Don't worry about making mistakes in your editorial selections. The editorial turnover will be significant and any dudy that slip in will quickly leave of their own accord.

KEEP BULLETIN CONTENTS INTERESTING AND INFORMATIVE. The best way to keep members contributing useful tips and articles is to regularly leave largewhite spaces in the bulletins. These "holes" should be headed with appropriate comments such as "This space reserved for those members who failed to contribute anything this month."

KEEP YOUR FINANCIAL COOL. Money is the root of all evil, so don't give it a second thought in your club planning. Never mind the size of the treasury balance. Base membership fees on one criterion only..50 cents a year lower than those of any other DX club. It is irrelevant that it requires 41 new members monthly to have sufficient funds on hand to publish next month's bulletin. PUBLISH BULLETINS REGULARLY. Remember that the regular publishing of your club's bulletin is the one critical factor. The bulletin is the glue that keeps your club from coming apart at the seams. Late bulletins and "skipped" months are permissable only when urgent, unavoidable problems intervene. Examples: (1) You get the measles (German measles only) (2) You start going steady with that zoftig cheerleader in Mr. McNerd's second hour algebra class. (3) Your dog eats the hectograph plate in the mistaken belief that it is orange jello.

Follow these precepts and success will follow.

73,

Charlie

The A.N.A.R.C. REPORT

Greetings Fellow-DXers from the Commonwealth of Virginia. Each month I hope to bring NASWA's membership enlightening news concerning the overall hobby of DXing, but with specific emphasis on how ANARC relates to NASWA as an all-SWBC club.

I am convinced that, heretofore, the general membership had only the vaguest conception of ANARC's purpose. Being only a titular organization (basically, a congress of DX hobby clubs), ANARC has several hobby projects in various degrees of activity, all of which are chaired by individual members of the associated clubs, for the purpose of benefitting ALL clubs. This month, I am presenting a list of the ANARC structure for your information. Save this list; tack it on your shack wall, and refer to it when you have questions and suggestions. Don't forget to always send a stamped return envelope if you expect a reply. Best 73, and good DX. Edward SHAW.

A.N.A.R.C.

Mr. Wendel Craighead, Executive Secretary 2110 West 74th Terrace Prairie Village, Kansas 66208 Newsletter Publisher, Mr. Donald Erickson 6059 Essex Street Riverside, CA 92504

Advisors to ANARC: Mr. Gunnar Carlsson, Karlskronavagen 23, S-121 52, Johaneshov, Sweden

Mr. Arthur Cushen, 212 Earn St., Invercargill, New Zealand

Mr. Ferdy S. Dombrowski, P.O. Box 5001, Milwaukee, Wisc. 53204

Mr. Wm. P. Eddings, P.O. Box 989, Altoona, Pa. 16603

Mr. Glenn Hauser, PSC Box 42309, Kelly AFB, Texas 78241

Mr. Lorne Jennings, 169 Grandview Ave., Winnepeg, 16, Manitoba

Mr. Donald Jensen, 5204 70th St., Kenosha, Wisc. 52140

Mr. Serge Neumann, RR #4, Bx 252, Anderson, Ind., 46011

Mr. Thomas Sundstrom, Box 205, Willingboro, N.J. 08046

Mr. Gray Scrimgeour, 227 Hanna Road, Toronto, 350, Ontario

Committee Chairmen

Awards Mr. Dan Ferguson, 1521 Smith Rd., Apt 7, Charleston, W.Va. 25314

Frequency Recomm. Mr. Glenn Hauser, PSC Bx 42309, Kelly AFB, Texas 78241

DX Census Mr. Phil Sullivan, 152 Third Street, Leominster, Mass. 01453

QSLs Mr. Edward J. Pyatt, 1715 Singleton, St., Conway, S.C. 29526

Mr. Kris Lemna, 2005 Concord Rd., Muncie, Indiana 47304

BCB Rpts & QSLs Mr. Jerry Starr, Radio Station WHOT, Youngstown, Ohio 44505

Manufacturers Liaison: Mr. Gordon Nelson, 19 Irma Av., Watertown, Mass. 02172

DX Archives Mr. George Schnabel, 151 Chesterton Rd., Rochester, N.Y. 14626

Conventions Mr. Serge Neumann, RR #4, Box 252, Anderson, Ind., 46011

Public Relations Mr. Alvin Sizer, 22 Country Way, North Haven, Conn. 06473

And that about does it for this time. Keep your ears tuned - Winter DX Season is here.

Address any inquiries (and return postage) to Ed Shaw, 415 N. Shore Rd., Norfolk, Va. 23505

Features/Articles

SHORTWAVE CENTER SHORTWAVE CENTER SHORTWAVE CENTER

Features/Articles

William A. Matthews-Editor, F.O.Box 15306, Columbus, OH. 43215 Deadline 15th of Mon.

BACKGROUND ON RADIO "JAMMING"

"Jamming" is a deliberate effort to prevent a potential radio audience from hearing certain broadcasts. This is usually accomplished by creating man-made interference on the frequency or frequencies carrying the selected program. Occasionally, two radio stations interfere with their own transmissions by inadvertently broadcasting on or near the same frequency. This is not jamming.

Jamming can be produced by superimposing a disruptive voice or music program on a frequency being used by another broadcaster. A transmitter designed specifically to broadcast noise can also be the jamming source.

All broadcasts can be jammed, whether transmitted on long, medium or short wave. Skywave jamming is accomplished by radiating the signal of powerful transmitters into the ionosphere, and, under proper propagation conditions, reflecting it back to earth a considerable distance from its origin. This jamming technique is used to cover large areas which are predominantly rural. All transmissions also have a groundwave component, and any signal received by skywave at a distant point is also being received in the vicinity of the signal source by groundwave. In large cities, several low-power transmitters can be used in this manner to disrupt the reception of tens of thousands of listeners by jamming the incoming signal. By combining skywave and groundwave propagation, governments engaged in a jamming effort attempt to blot out reception throughout an entire country.

In 1934, jamming was employed by the Dollfuss Government to prevent Austrian listeners from hearing of Nazi attacks. Jamming spread and developed rapidly as international tensions mounted before World War II. During the war, the Nazis used jamming on an extensive scale for the first time. Italy, and to a lesser extent Japan, also practiced jamming. The USSR jammed broadcasts from Germany in Russian, and France jammed French language broadcasts from Germany.

With the advent of peace, jamming continued. In 1945, Spain and the Soviet Union began jamming broadcasts beamed by each country to the other.

In February 1948, the USSR began to jam the Voice of America (and other Western) broadcasts to the Soviet Union. Most of the USSR satellite countries joined in this effort in 1950. Early in the 1950's East Germany began jamming the German language broadcasts of the Radio in the American Sector, (RIAS), the USIA-operated station in West Berlin. Communist China began jamming VOA's Chinese language broadcasts in 1956. In 1962, Cuba started a limited effort to jam VOA Spanish programs. At present, some jamming is in evidence against VOA Arabic broadcasts reaching the United Arab Republic.

It is impossible to estimate the number of jamming transmitters used by the Chinese, but the number has increased steadily over the past several years. It has now reached the point where it is extremely difficult to hear VOA Chinese programs on the mainland of China.

Estimates of the number of Soviet jamming transmitters vary. It is believed, however, that during the height of the Soviet jamming effort in early 1963, there were some 2,000 transmitters at several hundred sites both in the USSR and in Eastern Europe. In dollars the installation of such a network would cost about \$250 million with about \$185 million spent annually operating it.

No single, magical solution to nullify the effectiveness of jamming has been found.

BACKGROUND ON RADIO "JAMMING" (continued)

One technique tried by VOA engineers has been the use of certain electronic devices, such as heterodyne filters, speech clippers and exalted carrier-type receivers. High-power transmitters, more difficult to jam, have been built. The transmission of the same program simultaneously from various VOA relay stations located at different geographical points and on many different frequencies has made jamming more difficult. This technique is called saturation breadcasting and is often effective in penetrating large metropolitan areas. The VOA uses this means in an effort to penetrate jamming of Chinese broadcasts by massing 18 transmitters from different locations one hour each day.

The U.S. Government shares with the great majority of the nations of the world the position that intentional interference to radio transmissions is a violation of the International Telecommunications Convention. It has supported the resolutions against jamming which have been included in all major international telecommunication conventions during the past several decades. Typical of such international agreements, is Article 48, passed at the ITU Convention in 1965, held at Montreux, which states:

"All stations, whatever their purpose, must be established and operated in such a manner as not to result in harmful interference to the radio services or communications of other Members or Associate Members."

After the USSR's jamming effort and that of other communist nations has continued and increased, the issue came before the United Nations. In December 1950, the General Assembly adopted Resolution 424 (v) which "condemns measures of this nature (jamming) as a denial of the right of all persons to be fully informed concerning news, opinions, and ideas regardless of frontiers." This resolution was supported by the United States.

Over the years, and in various public forums, such as UN debates, radio and TV interviews and in publications, Soviet leaders have attempted to justify their attempts to seal off the USSR from foreign broadcast information. They have referred to their sovereignty over the "ether" in their country and their "right and duty" to protect their people from "radio aggressions".

In November 1949, for example, the USSR delegate to the UN, told the British delegate that the reason for jamming was that the British broadcasts were full of untruths about his country and that the Soviet Government was afraid the Russian people would react so violently that cooperation between the two countries would suffer. This remark was the first open admission of jamming by a Russian.

Former Premier Khrushchev followed the same line during a U.S. television interview when he said: "If the Voice of America does become the voice of America-because we respect the American people-it will not be jammed in our country; but when it is not the voice of America-but a sort of wailing-over-radio, supposedly the voice of America-in that case, we want to avoid our people getting the wrong view of the American people." During his visit to the U.S. in 1959, Khrushchev stated: "We jam the voice with which some of you want to speak to our people. If the voice with which you want to speak to our people will be a friendly voice, we will not jam it. As head of the working class, I will protect workers from capitalist propaganda."

In December 1958, when the UN Special Political Committee was debating a resolution calling upon UN members to take practical steps toward friendly cooperation in the fields of economy, culture, science, technology and communications, the U.S. delegate appealed to the Soviet Union to end jamming of foreign radio broadcasts, as one way of removing barriers to friendly cooperation with the West. The Soviet delegate replied: "Moscow has atomic bombs to reply to aggression, and jamming transmitters to handle subversive broadcasts beamed to Moscow."

In 1956 Poland became the first East European country to stop jamming western broadcasts, in the wake of the uprising in Hungary. One of the first targets of the

BACKGROUND ON RADIO "JAMMING" (continued)

Hungarian Freedom Fighters had been the hated jamming stations, which they proceeded to destroy. In neighboring Poland, the Gomulka regime, seeking to placate the population to prevent a similar uprising there, made a number of concessions, among them the cessation of jamming.

The Soviet Union unexpectedly stopped jamming VOA's broadcasts in the Armenian, Estonian, Georgian, Latvian, Lithuanian, Polish, Russian and Ukrainian languages on June 19, 1963. Quickly following suit, Romania stopped jamming VOA Romanian on July 29, 1963; Hungary, Hungarian on February 1, 1964; and Czechoslovakia, Czech and Slovak on April 1, 1964. Bulgaria has continued to jam VOA Bulgarian.

Shortly after the Soviets ceased jamming, VOA took its megawatt long wave transmitter at Munich out of service. This facility, on the air since 1953, had provided excellent coverage of Eastern Europe and the western parts of the Soviet Union. Since Radio Moscow also used the same frequency (173 kHz), it was decided to eliminate whatever unintentional interference occurred as a result of VOA's usage of this powerful transmitter. Without jamming, the need for a long wave facility was diminished.

The Soviet Union, however, resumed jamming of the Voice of America broadcasts in Armenian, Georgian, Russian and Ukrainian (and other western broadcasts) within hours of their invasion of Czechoslovakia in August 1958. After a year of futile diplomatic efforts to persuade the USSR to stop the jamming, which now affected all VOA programs in Russian, the megawatt was put back into service to try to recoup some of the lost coverage. Although VOA's use of 173 kHz may be causing some interference to Radio Moscow's use of the same frequency in the East European countries, there are many other frequencies carrying the same program that are clear and available to Soviet radio listeners.

Since the reactivation of the megawatt transmitter, the United States Government again (in July 1970) proposed negotiations for termination of broadcast jamming to the Soviet Government and stated that it is ready to close down 173. The Soviets rejected the proposal, insisting that "jamming" is an "internal matter." The United States is holding open its offer to discuss the matter, in its search to remove obstacles to the free flow of information.

Meanwhile, VOA is continuing to rely on the saturation broadcasting technique initiated in 1969. For one hour of the Russian broadcasts each day, 27 transmitters beam the same program to the Soviet Union. During this time, the listener in populated areas within the USSR can usually receive one to three frequencies and probably more frequencies in rural areas. And even at regular hours, it is impossible for the jammers to blot out all the signals, in all parts of that vast expanse of territory. Somewhere, each day and each night, people can and do listen to VOA and other free-world broadcasts in Russian, Armenian, Georgian, Ukrainian, etc. And because of the very evident attempts of the regime to interdict its free entry, the information is valued all the more.

In this sense, Soviet and similar jamming efforts have been selfdefeating.

This article is reprinted through the permission granted by the Voice of America, for which we are most grateful.

Special thanks to Hoyt Prisock for submission to the Short Wave Center.

The preceding article shows the build up of jamming in the Cold War years following the Second World War. Since all listeners are plagued by this interference at one time or another, it was felt that the article warrented sufficient space to be presented in its entirety. The attitude taken by the Voice of America is well explained and should be of interest to DXers everywhere. Views expressed are those of the Voice of America.

A CENTER FED DIPOLE YOU CAN BUILD Edward J. Insinger

Radio Nederland has a booklet in circulation that deals with various shortwave antennas. It is appropriately entitled "A Lot Depends on Your Aerial." Neither the booklet nor the title should be overlooked. One type of antenna covered in the booklet is the single dipole, or as I have called it here, the center-fed dipole. As the name suggests, the aerial consists of two equal lengths of antenna that are separated by an insulator at the center point. Here it gets "fed" into the receiver by a lead in or feeder line. So we can now visualize two equal sections of antenna separated at the center by an insulator, where a feeder line joins the two halves together and carries the signal on into the receiver. At this time, it becomes essential that we know what materials one can use in constructing such an antenna so as to gain optimum performance and be sure the setup will withstand the forces of nature.

The two equal lengths of antenna are going to be suspended between two supports at a distance of one hundred feet. (Or less, depending on which frequencies you use most I chose a length of one hundred feat because it offers good coverage over the entire shortwave spectrum. Of course, you must realize it is more sensitive to certain wavelengths than others: e.g. 31 meters brings in more signal strength than 13 meters. However, since it is nearly impossible to erect an antenna for each wavelength, one must compromise and choose a more generalized length which can be adapted to one's needs,) This means that the material used must be sufficiently strong to withstand the span, while being equally effective in picking up weak signals. these conditions, I chose copper-clad steel wire, commercially available by the name Copperweld. This material has all the advantages of copper with the added plus of being infinitely stronger. An excellent combination for our purpose here! These characteristics are accomplished by creating a wire with an inner layer of steel over which a coating of copper is secured. This combination does not effect the conductance of the material because the signal -- consisting of a group of electrons -travels along the surface of the wire only. It doesn't matter what material is below the copper conductor. So an inner layer of steel is used, affording excellent strength characteristics not present in a piece of solid copper wire. The copper-clad steel is also much stronger than hard-drawn copper. The diameter of wire used depends on local availability and the degree of concealment desired. My choice was #12, although a smaller diameter can be used equally well.

The Copperweld sections for the dipole now must be erected as high as possible above ground level (many books suggest 30 feet or more). Equally important is their being properly insulated from nearby obstructions which will drain off important signal strength. Here I used the well-known glazed porcelain insulator. This device is made of a material that will not absorb moisture. Also available are glass insulators that will work very well. The center fed dipole utilizes an insulator at each end and one at the center point. (I used the same type for the center). In effect, these insulators insure that the high RF potential existing on the antenna will be fed into the lead-in to the greatest possible degree and not lost because of leakage from a nearby object such as a tree branch. A branch touching the bare wire will lower the effective signal strength of the incoming signal by allowing it to pass off to a ground instead of passing through the lead in. Note on securing copperweld to a porcelain insulator: Before inserting the end of the antenna wire into the hole of an insulator, clean about 6 inches of the copperweld with emery cloth or a knife. Then tin the entire cleaned portion of wire. Now place it through the insulator eye and secure it by twisting the end over the long piece of copperweld. Now solder the two tagether easily -- your skin oils will not affect the solder and cause a poor fusion. The tinning also acts as an early "bond" or "flow" thus making it easy to now apply more solder.

To secure the antenna to a suitable stable object requires some type of rope which will support the antenna above the ground. It should be remembered that a good quality material be chosen. One such type readily available is $\frac{1}{4}$ inch polypropylene rope. Besides possessing excellent weathering characteristics, it has good tensile strength

A CENTER FED DIPOLE YOU CAN BUILD (continued)

to withstand wear and tear. When securing this type of plastic rope to the insulators, it is important to tie tight knots and tape the remaining ends with all-weather vinyl tape, so they will not slip or loosen.

I chose two trees as supports for my antenna. Trees make excellent anchoring devices, offering perfect heights to suspend the antenna. But one important consideration should not be overlooked. You must compensate for wind movement, ice and snow storms. An antenna's chances of surviving even the most brutal storms and winds are enhanced by utilizing a pulley and counterweight system. Besides allowing for the lowering of a wire antenna, pulleys remove extreme tension present when antennas are supported by trees. The tension is relieved by fastening a counterweight at the end of one halyard. The weight, which may be made up of metal or a galvanized pail filled with sand or stone, should be adjusted experimentally for best results under existing conditions. The pulleys best suitable are good quality four inch clothesline pulleys made of plastic or alloys which will not corrode readily. Since they are designed to carry at least 50 feet of line loaded with wet clothing in stiff winds, they should be adequate for normal spans of 100 to 150 feet between stable supports. One such pulley has a 4-inch diameter plastic wheel with a 2-inch shaft in bronze bearings. The sheath is of cast corrosion-proof alloy. (For further rigidity and longer wear, the ends of the shaft should be coated liberally with epoxy glue. This prevents the shaft from turning inside the drilled sheath hole and thus eventually shearing the ends of the shaft off under considerable strain as occurs during heavy winds.

All that remains now is to connect the dipole to the receiver using a feeder line that will carry the incoming signal to the receiver with the least amount of energy loss. For these requirements, I chose low loss foam twin-lead. This type of twin lead has the two paralled conductors separated and wrapped in a foam material before the entire contents are sealed in a plastic jacket. Now this twin lead has an impedance of 300 ohms to 75 ohms, for a proper matchup. Besides being a "low loss" feeder line, the twin lead was easily adapted to a standard TV lightning arrestor. This provides protection for the receiver while also draining off static discharges that collect on the antenna. Any excess twin lead between the antenna and receiver should be cut off. (But remember to leave some extra twin lead outdoors to allow for movement of the antenna during wind and storms). And be sure to use standoffs to secure the twin lead from foreign objects. Keep the twin lead and antenna away from power lines! This will affect performance and be a safety hazard.

You should now be ready to test the efficiency of your dipole, by tuning across each band and noting its response. I immediately encountered a hyperactive S-meter and very low atmospheric noise. These two factors will give you the potential of real fine DX:::

DEUTSCHLANDFUNK

The Federal Republic of Germany's youngest broadcasting station, the <u>Deutschlandfunk</u>, is also its smallest. What it lacks in size, however, it makes up for with its wide range of foreign-language broadcasts that can be heard throughout Europe and through its unique aim of reaching into the "inner-German reality" by giving a comprehensive and balanced picture of Germany--both East and West--to its German and non-German listeners, who are mainly outside the Federal Republic.

<u>Deutschlandfunk</u> (DLF) was called into existence by a law passed in 1960 (as was <u>Deutsche Welle</u>) dealing with overseas broadcasts.

The station first started broadcasting on January 1, 1962. It now employs about 600 people and is currently based in one-time private houses and rented new buildings in Marienburg, an affluent suburb in the south of Cologne.

It transmits German-language programmes day and night without break on five wavelengths

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and a further six and a quarter hours a day in 14 European languages.

Not only its range but also its content differs from that of the normal home stations. .DLF does not aim at minorities at home and does not provide children's, women's or schools! broadcasts. While the home stations have the twin function of catering to the needs of all minorities if possible and giving priority to the educational and entertainment demands by the mass of the population, Deutschlandfunk only takes account portant in providing a comprehensive picture of German. This principle demands a high degree of quality, political responsibility and objectivity. This is what gives DLF a special appeal despite the lack of its own drama department or orchestra.

Another attraction is the hourly news service (altogether there are 29 news broadcasts on a weekday) followed by reports of breakdowns and conditions on trunk roads. The foreign-language editorial staffs-teams composed of both German-speakers and natives from the country broadcast to--always attempt to adapt to the interests and mentality of their listaners act the value of the value of their listaners.

Deutschlandfunk is currently airing transmissions on shortwave to Italy via the Deutsche Welle's transmitters on 7130 from 1725 to 1755 GMT.

The size of the ward of the supply of the BULLETIN.....via Richard Anderson. (adapted text) The state of the s

the control of the second second

the property of the large level and the state of the second state of the second state of the second AUSTRIA CALLING ON SHORT WAVE

ar<mark>alianaki denake k</mark>ara san opa ng<mark>a-</mark>, pada danga nga penga . Have YOU done your part in the fight to save the Short Wave Service of the Austrian Radio? If not, WRITE TODAY to the Austrian Embassy and voice your concern over the SW service of the ORF ending. The address....

AUSTRIAN EMBASSY

2343 Massachusetts Avenue, N. W.

Washington D. C. 20008

YOUR CONCERN and YOUR LETTER may just help convince the Austrian Government to maintain

the Short Wave Service. WRITE!!!!!!!! and WRITE!!!!!!!! This is your chance to save one of Europe's better shortwave stations,

The December issue of the Short Wave Center will have a long article dealing with the Austrian Radio - be sure to look for it. In addition, this article will have 👊 🧢 🚉 something "extra" - this holiday special will be with you NEXT month in FRENDX!

Something a bit unusual for FRENDX.... the story of a British pirate broadcasting on Short Wave. The station ended transmission on June 13, 1971, and a British DXer, Mr. A. E. Martin passed on this information to the SWC. So, off we go to the days of ... y ... Channel Radio....

Channel Radio was formed in May 1970, when Roger Lane, a radio and sound engineer and Eddie Austin, a local Disc-Jockey, came up with the idea to form the station. Until this time no inshore pirate station had operated in the South-East Kent area.

The original transmissions were on short wave (6.22 MHZ) in the European 49m broadcast band. The Station name was Radio Channel. Few asknowledgments were received, so it was decided that the transmitter should be overhauled and modified. In November, 1970, plans were made to operate the station on 240 metres, medium wave, under the name of Radio 240. Meanwhile, programmes went out on shortwave advertising the proposed broadcasts. During the reign of Radio 240 the station was joined by D.J. Steve England, a

CHANNEL RADIO (continued)

well known East Kent D.J. who proposed a totally new format, and that the station should be re-named Channel Radio. January 31st, 1971, saw the first Channel Radio broadcast on both medium and shortwave. Andy Archer joined in on the day's broadcast, along with Roger, Steve and Eddie. Reception was reported first class on medium wave up to 20 miles and on shortwave reports were received from Holland, Denmark, Germany, Ireland and all over the United Kingdom.

Ex RNI D. J. Andy-Archer ran the day's transmissions alongside the original three. Local press aroused interest in Dover, and local firms sought advertising at the rate of 2 pounds (\$4,89) per minute, all revenue was donated to a local charity. Operating from a different location each time, Channel Radio continued transmitting every two weeks, on Sunday's for 4 hours. May 16th, 1971 saw the final medium wave transmissions.

On June 13th the final broadcast was made on Shortwave, in order to thank the many regular DX ers for their support over the past year.

Madium Wave transmissions were carried out on 200.9 metres (1496 Khz)

Using a Collins T.C.S. 15 transmitter.

D.C. input...20 watts. E.R.P...15 watts into end fed 4 wave aerial Short Wave transmissions were carried out on 6.225 Mhz or 6.240 Mhz. depending on band conditions, using a modified type 19 set. TX.

D.C. input 18 watts. E.R.P. 14 watts into 2 wave center loaded dipole.

During the short life of the station, our determination to present programmes of an individual and original format, have made the station's character well respected and well loved by the majority of our listeners even if sometimes we have upset a few people with our independent ctyle. Every effort has been made to ensure that transmissions have been of a reasonably high standard, even though this has sometimes meant setting up equipment and rigging aerials in the early hours of the morning in the depths of winter.

So, the saga of Channel Radio ends. A most interesting and unusual chapter in short wave radio.

A. E. Martin, NASWA Member

NASWA REVIEWS THE HAMMARLUND HQ-200 RECEIVER

Hammarlund's HQ-200 Receiver basically follows the Hammarlund concept down through the years, ie, sturdy construction with quality parts, mounted on a heavy chassis and discast aluminum front panel. With today's trend toward miniaturization the Hammarlund HQ-200 Receiver is somewhat smaller than some of its predecessors, measuring 17" wide, 9" high, and 9 1/8" deep. It is finished in conventional Hammarlund communication colors of black and gray.

While physical appearance has little to do with actual performance, the receiver is pleasing to the eye, and one's thoughts are, "Oh, what a pretty receiver," upon unpacking it. It weighs in at around 26 pounds shipping weight. Early production line runs of this model were all conventional tube jobs; however, later models became hybrids, with some solid state components being incorporated; namely in the AM Detector Stage, the Voltage Regulator Stage, Rectifier Stage, and Noise Limiter Stage.

The HQ-200 is a general coverage receiver covering from 540 kcs to 30000 kcs in four bands with no "gaps" in the tuning. The antenna input impedance is broad-band accepting any load between 50-600 ohms, though 100 ohms is the normal input match. In other words, the matching is not sticky, most any type of aerial will give a good response.

The HQ-200 has an Antenna Trimmer that compensates for loading effects of various types of antennas; either balanced or unbalanced transmission line. Included in the flexible operating arrangement is a BFO with provisions for SSB tuning, either upper or lower selectable sideband. A noise limiter provides limiting action. A well calibrated S Meter calibrated to 60 DB over S9 is conveniently mounted.

Main Tuning and Bandspread ratios are satisfactory for optimum ease of operation, with

THE HAMMARLUND HQ-200 RECEIVER (continued)

Hammarlund's always adequate broad tuning Bandspread much in evidence. Included are a Q Multiplier for variable selectivity; an AVC-MANUAL Switch; and OFF-AM-SEND-CW/SSB Switch. An RF Gain control is included. Hammarlund rates the audio output as 1.0 watt Undistorted.

The HQ-200 is a single conversion superhetrodyne receiver with two IF Amplifier stages, an RF Stage, and two Audio Stages. Plenty of signal gain there, in this lineup, though it is not quoted in sequence. As to operating specs, the receiver measures up quite well in the necessary three "S" catagory (Sensitivity, Selectivity, Stability).

Sensitivity-wise, the ability of a receiver to hear a signal, is no problem for the HQ-200. Attached to a 30 outdoors long wire antenna, all bands exhibit high and even sensitivity with no dead spots anywhere evident in the tuning range; Hammarlund includes a Performance Data Sheet with each HQ-200 and the performance figures as quoted for this particular receiver (one picked at random) shows an AM sensitivity of .58 microvolts at 600 kcs; at 4000 kcs, .30 microvolts; at 10000 kcs, .32 microvolts; and at 30000 kcs, .88 microvolts. And, your reviewer can believe these figures as on the air checks substantiate the quotes.

Stability is good for when the HQ-200 has had a warm up period of 30 minutes and zero beat with WWV on 10 megacycles it will cling to the marker without annoying retuning at intervals.

Selectivity, the ability to hear the wanted signal and reject all others, is good; one position for high quality broadcast; and a continously variable Q Multiplier variable from 3 kcs to 100 cycles handles the duties of variable selectivity; it will be noted that the Q Multiplier is of the peaking type; upon peaking the control on the desired signal of the two, that the undesired signal will <u>fall out</u> of the passband of the receiver.

The Q Multiplier (as do all Q Multipliers) provides excellent on the "nose" selectivity; however it does not have steep sideband selectivity (this is normal with all Q Multipliers) and your reviewer judges the selectivity of the HQ-200 as reasonably adequate. It is not as excellent as a receiver with double conversion, and a T Notch. Speaking of double conversion, as stated before in this article, the HQ-200 is single conversion. Being single conversion, it is heir to repeat points. This is a necessary evil of all single conversion receivers. Due to a good RF stage before the first detector stage in the HQ-200, repeats are at a minimum and reasonably well suppressed. They are not annoying.

We come now to calibration; Hammarlund has evidently spent some labor time and money on the receiver for alignment. We found the calibration to be quite close on the AM broadcast band. And, checks across the shortwave bands proved the calibration good with 100 kc check points being nearly on the multiples, quite satisfactory. Of course, it is not frequency meter calibration and should not be taken or quoted as such. Hammarlund has not changed its method of direct drive for the main and bandspread tuning and still uses its famous combination "pinch-cluth" drive, which makes for positive drive action and ease and accuracy of resetability. More manufacturers should follow this method and get away from "string" drives. String drives are an odious practice, of value to no one. About the only place your reviewer can fault the HQ-200 is the placing of the phone jack on the rear panel. This is an unhandy spot and we can't award any orchids to the design engineer that so willed it. But its a minor thing really, a thing of little consequence. The phone jack is there. A vote of confidence should go to Hammarlund for including such a complete Description and Operating Book as goes with the HQ-200. In it there is a little bit for everybody, the ham operator, the DXer, the casual listener. The book even illustrates the drawing of a calibration chart for the receiver. Following it, one can make charts for all bands. The HQ-200 exhibits the audio response that is characteristic of all Hammarlund receivers, plenty of audio wallop, clean and crisp. The receiver is now selling for a price around \$ 345 and it invites comparison! A.R. Niblack

AND THE PERSON NAMED IN COLUMN

Verification Info-Facts-Data

QSL REPORT QSL REPORT

QSL REPORT

QSL REPORT

Info-Facts-Data

Deadline 15th of the Month

Gregg A. Calkin-Editor, Calle Rio Balsas 35-702, Colonia Cuauhtemoc, Mexico 5, D.F. Mex.

As you will recall, the september QSL REFORT did not appear as the stencils were lost in the mails between lexico City and Altoona. For this reason, QSLs ALCAIVAD has been expanded this month to include the major QSLs received during August. We think you will find the listing of interest as many rare USLs have been obtained.

ALDANIA: Radio Tirana, 7500, b/w folder card in 2 months for 1-IRC (Hailpern) ALGLAIA: Radio Algiers (RTA), 96.5, card and rpt forms in 2 months (Field) black/gold card for test tx in 2 months seamail. 9660 kHz (Rosen)

AMGOLA: Aadio Clube do Cuanza Sul, letter, card and the return of my tape re-recorded with Angolan folk music. la months after card of transmitter bldg rovd (Berg)

Radio Clube do Huambo, 3345, nice card w/multi-lingual acknowledgement. 4 wks air for English report w/3 IROs (Fadula)

Radio Clube do Loxico, 5075, personal letter in cortuguese from Ivo Miranda Ferreira, who advises new 5 km tx just installed and requests further reports. Also sent nice selection of mint angolan stamps. 4 weeks air for Fort. rpt w/3 IRCs (Tadula)

Radio Ecclesia, 7215, letter verie in Fort. plus sked from Inocencio Augusto rereira in) weeks. Seems friendly, no explanation for their years os silence (Dexter) Angle TIMA: LOL/Observatorio aval, 5000, replied with friendly English/Spanish &SL folder in 4 months seamail for a report in English and 3 IRCs. V/S: Jefe del Observatorio Naval (Calkin) 15000, folder in) weeks air. 2 IdCs (Insinger) 2 mos (Dexter)

LEGO time signal, rlanta General, Lancheco, verified w/Spanish letter for Spanish rpt w/2 IRCs. 1 month for 6167.5 saying mine was 1st rpt from USA (Sizer) Madio acional Lendoza, 6100, letter and stamps from Carlos O. regnolo,

Director, in 4 months. Apted to Mendoza. Aeply by air using my SASE (Field) ASCL SION IS: BEC, 15105, Thames card in 27 days w/sked. 1 IRC sent (Schultz) AUSTRALIA: Radio Australia, 55.0, Darwin aerial card in 27 days for 5 IRCs (Flum) 11765, card in 30 days (Aoseliep) cards for warwin/17715 and Shepparton/17795; 5 months sea (Sizer)

VL19, Felbourne, 9680, ADC map card in 39 days airmail. (Laufman) 72 days w/full verification (Hardester)

VLW9, lerth, card in 29 days air for 3 IRCs (Schultz) AUSTRIA: ORF, 6155, lake scene card, sked and rpt form in 7 wks air. (Lroll) 6155/9770, card air in 5 wks (Ricchezza)

AZLRBAIDJAN SSR: Radio Baku, 6110, paper QoL with anglish veri stmnt and p/card of paku; 4 months by registered mail; direct (Behr)

DELIGIOM: ORU4, 9550, map card in 33 days. o IRCs. Also sked and full verie (Raufman) BOLIVIA: misoras lio AII, siglo AA, 5900, nominal 5955, now on 59(1.5, sent 2-page letter in Spanish for report in same from ladre Tvo Lescouzeres, Director General. Full, highly specific verie, all details, admitting frequency discrepancy and drift. lennant separately; 59 days air. ADDA: Lasilla 404, Oruro (wood) letter in 2 wks (Fiold) BOTSWALA: Madio Botswana, card in 1 month for English report and 2 Incs (Isen) BOUGAT VILL IS: VL9BA, 3322.5, folder (SL in 1 month air for 3 IRCs (Shaw) BRAZIL: Radio América, 11054, letter and 2 p/p/cards in 3 weeks after f/up (Dexter)

BRAZIL: Radio Clube do Para, 4865, letter and Brazilian stamps in 3 weeks air from V/s: B.F. Frequency/Date given. (Shaw)

Radio Timbira, 4975, letter, 2 years, mint stamps. Reply by registered airmail in English from V/S: Dr. Joao Ferreira, International Correspondent (Sparks)

BRITISH HO DERAS: Radio Delize, 2000, map card in 31 months and 11 days after f/up

w/mint stamps. Signed by the Chief Broadcasting Officer who says station is no longer
on SwBC (Richalenka)

Bro I: Radio Drunei, 7215, Rosque/map of Borneo card in 21 days (Fetersky) 4-color card plus sked from the C...; air in 22 days for 5 IRCs (Calkin)

Borne: BBS, Rangoon, 50-0, formal letter in 8 years after countless f/ups. Complete details and reply came via the Burmese Embassy in Washington (Shaw)

BYLLONUSSIAN SSA: Radio Roscow, Orsha, 9750, card by air w/full data (Schultz) Rinsk, 15150, card in 3 weeks (Behr) Rinsk, 15150, card via All in 1 month (Ramp)

CAMBODIA: Radiodiffusion Lationale Ihmére, Fhnom renh, verified in 3 weeks with French letter from Im Saroeum, of the ministry of Communications. Rpted in French for 6092, and enclosed U.S. 1. Asks for more rpts (Sizer) I don't wonder (Ld.) letter in 17 days from same V/S for 3 IACs (Latsuara)

CA ADA: Radio Canada Int, special card commemorating the opening of new xmtrs (Glasberg) CBC Forthern Sce, 15190, Eskimo sculpture card in 32 days (Carlson)

CHU Time Signal, Ottawa, 3300, card from Hational Research Council in 2 weeks (Glasberg) 14670, blue/white card in 8 days. To IRCs (Carlson) hardt),

CFCK, Montreal, 6C05, card w/date/freq. only. 150 days for mint stamp (Leon-/ CFAK, Toronto, 6070, City Halls card in 2 weeks from Clive Eastwood (Field)

CAMAL ZOND: BA, form letter, direct from Balboa for time signal on 17697.5 (Sparks)

CAMAN IS: R., 15565, b/w antenna card from Badrid. 1 IRC. 55 days (Carlson) full

data letter written on reverse of har sked, indicating site, and enclosing pennant.

2 wks air (Rroll) 44 days for 2 IRCs (Baufman)

CENTRAL AF. REF: Radio Bangui, 5055, OCORA card in 3 wks after f/up (Behr) 5038, after

4 reports reply received in 10 days. Form letter with full data. 3 IRCs (Ferry) CHILE: L/V de Chile, CE969, 9690, large "Gracias" card w/white map/mike pennant. 36 days air for English rpt w/mint stamps (Zabransky)

Radio Fresidente Balmaceda, card in 4 months air for 2 IRCs (Micchezza) CHIMA: Madio Feking, 15060, color festival card, sked and letter; air (Mosen) 15435, card w/date and frequency in 46 days air (Hardester) thank-you letter and p/card w/out data (Melleher) post cards and propaganda magazines in 2½ months, plus Mao's red Book u/sprte cover (Blossom) 15060, Yenan p/p/card w/full details and confirmation stmnt and request for more rpts, plus long extremely friendly personal letter. 6 wks air after about 20 tries in a decade. Fing-pong, anyone? (Lagne) card w/freq and date given in 96 days airmail (Watman)

CLA DESTINE: Voice of the Funk, 10090, replied by friendly letter in French from the Bureau d'Information près le Bureau Folitique du Comité Central du Front Uni Mational du Kampuchea in Peking. By air, for taped report in French, and included sked (Calkin)

Radio España Independiente, 12140, replied w/attractive card featuring Ficasso drawing and full data verie on reverse, in English. Reported to Box 359, Frague 1, in Spanish w/2 IRCs. Reply posted in Faris 96, undoubtedly from their editorial offices, and it arrived in 4 months seamail. (Calkin)

Channel Radio, 6240, card in 14 days from ADDR: 97 Oswalk Rd, Dover, kent. Channel Radio was formed in Lay/70 and original xmsns were on 6220 and subsequently on 6240. Sw channel has 18 watt power input and an LRF of 14 watts into 2 wave center loaded dipole. Final BC on Sw on June 13/71. (Martin) Recently reported active again, in SCDX, I believe (Ld.)

COLORBIA: Em. Rueva Granada, 6160, letter and pennant in 1 week air. (Fyatt)
Radio Continental, Bogota, 6125, personal letter from V/S: Carlos martinez
R., Director, who expressed interest in reception of station at such a distance. Air
in 2 weeks for rpt in Spanish w/LS 31. (Fadula)

Radio Nacional, 6030, card w/date only. 43 days airmail for MS (Leonhardt)

COLOMBIA: Radio Santa Fé, 4965, plantation card confirms report - no data, w/pennant in 10 weeks for mint Stamps (Milly)

Radio Vision, 6105, letter confirming statement, w/date. V/S: Maria Blena Vasquez U. Air in 16 days and said stamps were enclosed, but none were (Wood) 3 wks

air for Spanish rpt w/3 IRCs. Sent clombian stamps (Fadula)

L/V Del Tolima, Ibaque, 6040, personal letter from Carlos J. Rojas Castro, who also sent a banknote (un peso oro - whats that worth?) plus QSL folder. Air in 3 weeks for rpt in Spanish w/US one dollar bill (radula) 1 Col. Feso = approx .05 US (Ed) Transmisora Caldas, letter and pennant in 1 month for 5020, reported in Spanish (Glasberg)

COMGO (DER REP): R. C/kinshasa, 15245, regular "QSL out of stock" letter in French for French rpt. /s: V. Mikuna. 67 days (Milly) 15245, 6 weeks for 3 IRCs (Hailpern)

Radio Bukavu, letter in French w/Veri statement, no details, in 72 months after 1st registered rpt w/mint stamps and 1 month after f/up. ote ADDR is B.F. 2220, different from WRTVH. V/S: Raewezi G., Le Directeur Provincial-Chef du Service

de l'information (Berg)

COMGO REFUBLIC: ORTF, Brazzaville, 15190, card and sked in 56 days air. 3 IRCs (Schultz) COSTA RICA: TIFC, 9645, card w/full data plus p/p/card, sked and travel lit. Temporarily out of pennants. 3 weeks air for 2 IRCs (Kroll) 23 days (Schultz) CUBA: RHC, 9655, colorful card, form letter in 6 months air (Hilly) 9525, globe card, Castro lit and red/white/blue pennant, w/skeds in 515 days air. (Iroll) CYPRUS: BBC, 11955, World Radio Club DX Award cert. 3 weeks; no return postage (d'Adolf) CZECHOSLOVAKIA: Radio Frague, 7345, plain card in 29 days (Flum) 11990, color card of buildings stamped "35 years of Foreign Broadcasting". Air in 7 weeks (Banta)

DECHARK: Voice of Denmark, Copenhagen, card and personal letter from Vagn Skovgaard, for 11895. Said my report only one rovd from Australia for this freq. 12 wks (Tadula) DOMINICAN REPUBLIC: Radio Comercial, 4880, letter w/full data except time in 1 month for MASWA Spanish form and 1-IRC. (Glasberg)

Radio Reloj, 3600, card from Fedro J. Santana, Director, in 31/2

months air for SASE (Field) Is this a new station, Marlin? (Ld.)

Radio Libertad, Santiago, 3225, 3 cards for reception in March/71, October/70 and May/69. V/S: Lucia Vanderhorst S. Now admits station transmits in 90 mb. SASE sent, not used (Field)

L/V de las Fuerzas Armadas, 4025, two map cards and pennants after f/up and personal visit to station by out friend César Objio (Behr) DUBAI: Voice of the Coast, 6040, card airmail from V/S: Abdul Hakim Totah, Advertising Manager; long time coming for rpt in Jan/71 (Fadula)

EIGLAND: BDC, 15070, card in 2 months for 1-IRC (Flum)

VOA/wooferton, 7200, card lacking time from Anita Milavec in 5 days (Kroll) 17655, card in 9 days from same V/S (Relieher)

ECUADOR: Radio Jésus de Gran Foder, 5070, sent letter, stamps, 4 p/cards, slide of

convent and press clipping of station personnel. V/S: F. Francisco H. Fernandez, Dir. SASE sent, not used. 1 week on 2nd try (Field)

Em. Luz y Vida, 4825, long personal letter from Lisioneros Sociales de la Iglesia, Fadre Julian Lorente L., and Drnesto Jimenez L., Gerente. Full, specific text. States frequency recently stabilized and further drift not expected. 19 days by

special delivery air; SASE used w/extra stamp added (wood)

Radiodif. Faz y Bien, Ambato, 4820, letter giving freq. only from F. Luis Florencia Leon E., Gerente. Says SW off the air recently for some time "debido a la irrespondibilidad del técnico"! Air in 55 days (Wood) See also L/V de Galapagos (Ed) EQUATORIAL GUINEA: Radio Santa Isabel, 6250, b/w photo card of station w/personal veri on reverse; no data. 11 months seamail for 1970 logging on Awajalein. Card dated ov/70, but postmark June/71. Must be a long walk to the post office! (d'Adolf) 371.1 3

FINLAND: Radio Finland, 15105, card, sked in 5 wks (Fyatt) 6 weeks (Banta) 15205, 46 days air (Hardester)

GABON: LV de la Renovation, 4777, Africa map card in 2 wks (Sehr)

GAMBIA: dadio Gambia, Bathurst, stencilled letter in 4 wks returning my IRCs. (Fadula)

2 weeks air; sked followed (kroll)

GALAFAGOS IS: L/V de Galapagos, lto. Baquerizo, pleasant letter from F. Jorge H. arvaez, standing in for F. Uria, Director. Fadre Parvaez was formerly with Radiodif. laz y Bien, Ambato; delete him as V/S there. 50 days air (Wood)

G.D.R. RDI, 9730, p/card GSL w/full data in 73 days seamail. (Relleher) 21 mos (Rennedy) 121 days w/photo card (Schultz) 144 days seamail (Hardester)

Deutschlandsender, 71.5, card in 2 months w/all data (Weber)

REI, card from Budapest for Radio Budapest's relay of ABI on 6175. Card shows photos of Underground. 10 weeks seamail (Fadula)

G.F.M. Dayerischer Rundfunk, Lunich, 172 Olympic card in 3 weeks for 6085 (Glasberg)

Deutsche welle, 5040, 64 days seamail. No IRCs (kelleher)

DAM, Elmshorn, 6475.5, letter and brochure on time services from Dr. H. Enslin; months (Dexter)

GHANA: Radio Ghana, Accra, 11650, form letter frollowed by GSL; 5 weeks (Roseliep)

33 days w/sked seamail (kennedy) 6 weeks for 3295 (Fadula)

GREECE: FRST, 15045, plain card seamail in 3 weeks. Full data (Rosen)
GREENLAND: Grønlands kadio, Godthab, 5980, GSL folder in 5 months, giving date and
time only. Returned tape, by air, for 3 IRCs and sent brochure on country (natthews)
GUAN: US AVCOMSTA NFN, 6150 & 13380, two blue/gold cards direct from station in 2
weeks (Behr)

GUYAMA: Radio Demerara, enG new call-sign, card in 2 months (Schnur) 5980, card in 3

weeks for 2 InCs (prode)

GBS, Georgetown, 3290, letter for test pgm w/veri stmnt, date & time. 17 days air for 3 IRCs from V/S: N. O. Denny. ADDB: Guyana Being See, 68 Hadfield St., Georgetown. (d'Adolf) letter from A. A. Mayman for N.O. Denny. Fower is 10 kW. (Wood) 3 weeks air for rpt w/4 IRCs (Berg) full data letter in 1 month air (Calkin) 3 weeks for 2 IRCs (Isen) air in 3 weeks for 4 IRCs (Kroll)

GUATEMALA: Radio Cultural, 9505, Quetzal Bird card, relig. material, and sked in 4 wks air. (Fadula) 31 days (Drake) 23 days; card saying 9505 now 10 kW (Raufman)

Radio Chortis, TGCH, 3380, replied by friendly letter in Spanish from V/S: Frof. Raul Amilear Casasola F., Director, who enclosed sked and attractive 4-color pennant. 3 weeks air for Spanish rpt and 3 IRCs (Calkin)

HAITI: 4VVI, 15280, folder map card in 2 months (Kaufman) 9 weeks for 11835 (Hailpern) 9770, 63 days for 3 IRCs (Hardester)

HAWAII: WWVM, haui, 10000, new cream colored card featuring a warrior on isle of haui; by wks (Glasberg) Green lagoon first day QSL w/all data; 20 days (Keonhardt) 2 first day cards w/drawing of boat and island; by wks (Behr) 15 days (Carlson) by days (Pappas) HONDURAS: L/V Evangelica, HRVC, 4520, card in 12 days for 1-IRC (Hailpern)

L/V Occidente, Santa Rosa de Copan, 5960, (hrd on 5961.5) sent letter, date and confirmation stmnt, from V/S: miriam Audely Rosa, Depto. de Reportajes. Air in 29

days (Wood)

Radio América, Tegucigalpa, nominal 6050, (hrd on 6062) form letter stating freq. only. V/S: Rodrigo Wong Arévalo, encargado Correspondencia Internacional. 61 days air w/attractive pennant (Wood)

Radio Frogreso, 4920, letter in Spanish from Jerry Tolle in 45 days for

mint stamps. Complete verification (Bruns)

Radio Suyapa, 6125, full data card w/pennant in 7 weeks for MS and Spanish report (Brode)

(Kelleher)

HUNGARY: Radio Budapest, 6165, p/card QSL w/full data in 36 days seamail. No IRCs // 9833, card w/full data in 6 weeks airmail for 2 IRCs (kroll)

INDIA: AIR, 15255, nice color card of Taj hahal in 32 months air (Rosen).

INTERNATIONAL WATERS: R.I., 6205, Mebo II card after 4 rpts (Schultz) 4 months for 2 IRCs (Rusalik) 2 weeks for rpt to Hilversum Address (Howard) 2 months for 2 IRCs and SAE, unused. o data (d'Adolf)

ISRABL: Nol Israel, 6100 (test freq.), card w/full data and programme booklet with notation "hope to resume transmissions to USA soon". (Danta) ITALY: RAI, Rome, 9575, antenna and map card w/all data. 101 days sea for 2 IRCs (Leonhardt)

IVORY COAST: Radio Abidjan, 11920, card in 44 days w/out f/up. Requests other rpts. (Hardester) 11920, card after 1 year by registered air for 3 IRCs. Card has notation of apology for delay. 25 InCs total sent over the years to get a reply here (Ferry)

JAFAN: AH, Tokyo, wood carving card for 9505 in 1 month (Fyatt) 21640, festivals card via airmail in 3 months. Returned stamps (Burns) 17825/17725, "Winter Olympic Toster _o. 2" card, p/cards, News, skeds, rpt forms, etc; air in lo days (Burns) indoor skating stadium color card; > weeks air (Banta)

JJY Time Signal, Roganei, 15000, attractive thank-you card, but no data. 3

IRCs (Sizer)

JORDAN: Radio Amman, 9560, pic p/card w/view of Jerusalem; 17 days air. (Schnur)

kOdin: Voice of Hope, 6170, Korean doll card in color; 27 days seamail for 1-IRC. Full data (Matsuura)

LEBATION: Radio Lebanon, 11775, card of station in 42 months for 3 IRCs (Flum) LESOTHO: Radio Lesotho, Raseru, 4000, card, airmail in 2 wks for 3 IRCs. Shows the wational Flag; new country verified (Fadula) 3 weeks air for 3 IRCs (Zabransky) LIBERIA: VOA, Mcnrovia, 17775, card in 14 days (Kelleher) 7 days (Schultz) 7280, card w/data lacking time in 5 days from Anita Lilavec (Kroll) LIBYA: Libyan B/C Sce, 8630, letter from ouri El Sharif, C.E., with data lacking time, sked and with request to check AN channel 1124 kHz operating with 1000 kW!! Apted by registered mail, in English, with mint stamps and 5 IRCs. 7 wks (Eroll) 8627, letter expressing surprise the 10 kW outlet hrd in USA (d'Adolf) LITHUATIA: Radio Moscow, 11870, Raunas, card in 3 wks (Behr) ditto in 1 month (Ramp) 24 days air (Schultz)

LUXELBOURG: Radio Luxembourg, 6090, card w/verie stmnt and DJ photos from England in 2 months air; 3 IRCs (Kroll) 24 days; no data card from London (Laufman)

MALAYSTA: BBC relay, Tebrau, 17080, card 12 months seamail (kamp) *Radio halaysia, 6175, flag map card in 1 month after f/up (Behr) PEXICO: Radio Lexico, XERIX, 21705, form letter by registered mail with attractive pennant. 1 month air. (no name) 17 days air for 3 IRCs (Rosen) 2 months by registered airmail. To data (Kennedy) 40 days by registered air for 1-IRC (Hardester) black and white card plus letter, pennant in la months from V/S: Victoria L. Ferez de Leon. Rpted in English w/2 IRCs. (d'Adolf)

Radiodifusoras XEQK, La Hora Exacta S.A., 9555, letter from Ing. Felipe Gomez

B., giving date and frequency plus confirmation statement. 3 weeks (Calkin)

L/V de Veracruz, XEFT, 9545, letter from Juan de Dios Rodriguez D., Gerente General. 5 IRCs. 32 months airmail (Matthews) letter in 14 days from same V/S, extending an invitation to visition station when in Veracruz (Calkin)

Eco de Sotavento, XELW, 6020, Veracruz, letter, p/card and new 7-color plastic pennant in 6 weeks. V/S: Elvia Cazamin Gil, Sub-Gerente, also extended invitation to visit station and see transmitter "que tiene 41 años de estar trabajando fielmente". (Calkin) personal letter, pennant and p/card for 6020 (Wood)

L/V del haestro, XEICH, 6185, México DF, letter and pennant from V/S: Profr. Fidel Delgado Casillas, El Jefe de la Oficina de Radio, Direccion General de Mejoramiento Profesional del Lagisterio, Secretaria de Educacion Fublica, Dr. Jimenez 244, México DF. note that WRTVH street address is incorrect. Station is government operated (Calkin)

Madio Huayacocotla, Kada, 2390, replied by friendly letter for this previously unlisted station located at Huayacocotla, Ver. Address for rpts is Sistema Educativo Radiofonico de México A.C., Zaragoza No. 78, Coyoacan, México 21 DF. V/S: Elena J. Chavez A., Directora. Confirmation statement and date only; 3 weeks (Calkin)

MONACO: TWR Lonte-Carlo, 7290, program sked and card with all data; 56 days airmail for 2 IRCs (Leonhardt) 11920, 12 weeks, plus sked; seamail (Fadula)

MOROCCO: VOA, Tangier, 15205, card in 13 days (kelleher)

RTH, map folder card w/inspecific data; 2 months for 11755. Reported in English w/2 InCs. (Glasberg) 11755/9615, car in 2 months on 3rd try. (Field) 1024MBIQUE: Radio Clube de hozambique, Lourenco harques, card for 3210, air in 3 months. (Fadula) 6050, 100 kW, card in 18 days w/letter and sked. (Drkae)

NETHERIANDS: Madio Rederland, Lopik, 21695, new style card showing outside bc unit recording Carillon of St. Jan's Cathedral. Air in 2 weeks (Fadula)

NETHERIANDS ANTILLES: Radio Nederland, Bonaire, 11730, carillon card w/full data. 12 days air (Banta) 60 days seamail; no IRC (Relleher) 17610/21570, 2 different cards in 46 days air (Telleher) 11c15, card in 10 days air (Flum) 12 days (Carlson)

NEW GUINEA: Radio Madang, 3260, folder, 10 days, 2 IRCs. V/S: Joseph Gohen, Station Manager (Sparks) 1 weeks air for mint stamps (Fadula)

Radio Mount Hagen, 2450, folder QSL in 1 week air for mint stamps. V/S:

Brian Merrott, Station Manager (Fadula)

Radio Morobe, 3220, QSL folder in 10 days and letter from John Waters,

O-I-C; for test transmission (Fadula)

ZEALAID: TZBC/ZL4, 15280, programme sked, two tourist folders, globe QSL w/date and frequency only. 110 days seamail for 3 IRCs (Leonhardt)

NICARAGUA: Radio Nacional, 11875, card in Spanish w/date only. V/S: Tacho Sanchez Diaz. 5 weeks (Fyatt)

NIGER: ORTH, Miamey, 9705, "Ici Miamey" map card in 22 days air for French report w/mint stamps (Zabransky)

MIGERIA: Voice of Nigeria, 7275, flag card in 51 days. (Hardester) 15200, card with small green flag; 22 days (Carlson) (Glasberg)

Radio Higeria, Benin City, 4932, green/white card in 3 weeks. Fo IRCs// MORVAY: Radio Horway, 11850, card, small flag; full data in 3 wks (Fyatt) card showing Fjiord, air in 2 weeks. 17775 kHz - new frequency (Fadula)

FAFUA: VLT9, Fort horesby, 9520, blue map card in 17 days air. 2 IRCs (Schultz)

VLT4, 4890, card in 12 days for 2 IRCs. (Schultz)

VLSB., Fort Loresby, 11880, folder in 7 weeks from the Director (Sparks) 1 month for 3 InCs and tape (Kamp) 56 days w/orange map folder (Natsuura) 2 weeks for taped airmail rpt; reply by air for 5 InCs (Natthews) 7 weeks for 1-InC (Sparks) 3 weeks (Dexter) 3290, folder and letter roud from Director of Bc Sces; 10 days air for mint stamps (Fadula) 11880, 1 month (Brode)

FARAGUAY: Emis. Faraguay/Radio Faraguay, 6015; letter, specific, all details from Carlos II. Sanchez Leira, Director Gerente. Registered air in 27 days; also sent 2 large magazines by separate registered air (Wood) card and pennant in 3 weeks. SASE sent, but not used (Field)

FERU: Radio América, 9505 (stated "9510") letter from Angélica Montoya Cortegena, Depto. de Relaciones Fublicas. No details except nominal frequency. Air in 14 days. (Wood)

Radio Atlantida, 4848.5, letter in 7 wks air w/date and confirmation stmnt, plus stamps and different pennant showing Indian woman w/jug. Used by SASE w/extra stamps (Wood) very friendly letter in reply to Spanish rpt w/mint stamps. Sent many colorful cancelled Feruvian stamps and a large pennant picturing an Indian girl. 12 days time (Perry)

Radio For-Feruana, 9655, letter, full data, except time and very specific confirmation statement. Enclosed a magnificent pennant showing girl carrying basket of fruit on head and map of Peru. Used my SASE but added many other stemps front and back. Registered air in 30 days from V/s: Manuel Ruñoz Chacon, Gerente (Wood)

PHILIPPIALS: FABC, 11920, sked, religious pamphlets, and full data QSL in 40 days air for 3 IRCs (Leonhardt) 15440, green tinted card from V/S: Mrs. Eva Fitzpatrick (Banta)

VOA/Fcro, 11715, card in 13 days (Kelleher) Tinang/15110, 7 days (Schultz)
15175/Tinang, 4 days (Kroll) 15185, card gives site as "Foro/tinang"; 13 d (Milly)

POLATD: Polish Radio, 6155, colorful map card, sked and personal letter from editor in chief. 2 LRCs; reply air air (Schultz)

PORTUGAL: Deutsche Welle/Sines, 7295, card in 21 months w/sked (Field) blue card in 3

months for 5995. 1-Int (Glasberg)

IRA Radio (via Radio Trans Europe) card for 9660 and sked, pennant and religious info. L5 weeks air for 1-IRC (Fadula) card from Lisbon w/drawing of RT mutr building and antennae on front and full data veri on reverse, plus letter on IBRA stationary, sked and blue/IBRA/RTE pennant. 5 weeks air for mint stamps (Berg)

RUSSIAN S.F.S.R. RM/Simferopol, 15130, card in 1 month (Field)

Ris/Orsha, 9750, card in 1 month from Moscow, w/site (Field)

RM/Ivano-Frankovsk, 9665, 28 days for A Sce (Kaufman)

xii/17860, card for komsomolsk in 2 months (Glasberg) 1 month air for

17360 (Field)

RII/Rursk, 11770, card in 1 month (Sizer)
RII/Riazan, 11790, card in 1 month (Sizer)

Ri/Lichurinsk, 9775, card, p/card and letter in 4 months from the IA

Sce of Radio Moscow (Field)

Ri/Gorky, 11860, card in 27 days (haufman)

RMANDA: Deutsche Welle, Kigali, 11905, card w/sked in 58 days air. (Layo) 15380, card for German programme (Larks) 11965, yellow/blue Africa map card; 4 months (Larshall) RYUKYU IS: VOA/Okinawa, 7165, blue star card in 4 days. (Schultz)

SAO TOLE: Radio Clube de São Tomé, 4807, beautiful lagoon card w/full data in Port. Apted w/IRC to Portugal; reply direct in 25 days (Hailpern)

SARAWAK: Radio Malaysia, Ruching, 4950, b/w photo card of studios in la months air for 2 IRCs. Full data (Calkin) 8 days for 4 IRCs from the "Controller of Radio" (Ferry) 7160, 59 days air for 3 IRCs (Fetersky)

SAUDI ARABIA: Jeddah, 15150, swords card in 18 days from V/S: Werner Storg (Fetersky)

SELECAL: Radio Sénégal, 4090, card w/pic of musical instrument on front; 28 days;
full data for mint stamps and French rpt. (d'Adolf)

SEYCHELLES: FEBA, 15260, card w/full verie of test transmissions to Mideast in English. 5 weeks (Kusalik) 51 days air for 2 IdCs (Carlson) 15415, 19 days air for 3 IRCs (Hilly) 15415, 29 days (Schultz)

SIERRA LEONE: Radio Sierra Leone, 5516, p/p/card w/personal full data veri; 40 days air for English report, 5 IRCs. 'd'Adolf)

SINGAFORE: Radio Singapore, 11940, card with verie stmnt only, by air in 22 days for 3 IRCs from the Director of Broadcasting, Ministry of Culture, Box 1902, Singapore 11. (Calkin)

SOLOMON ISLANDS: SIBS, 7235, card w/map of islands in 5 months for 2 IRCs (Howard)

white card of island group in 132 days (Drake)

SOUTH AFRICA: ZUO, Olifantsfontein, 5000, card showing Observatory and letter from V/S: D. J. Smuts for Acting Director, 4 months seamail for 2 InCs. Station also sent info sheet on operations (Calkin)

SOUTH YAMEN: Radio Aden, 5060, card in 6 weeks on 2nd try (Field)

SFAIN: A.E., 9570, folder sked w/QSL text typed on reverse; 8 weeks seamail. Separate note stated site to be Roblejas (Ferguson) card of control room in 1 month airmail for 11925. 2 IRCs sent (Rennedy) 12 days, tower card w/Spanish verification text w/full details, plus sked and Spanish stamps. (Ingram)

SUDAN: Omdurman, 9505/4994, form letter USL in approx 3 months, plus travel folders from V/A: A. Rahman A Basit. Complete sked on veri (Perry) 1 month for mint stamps (Fyatt) 9505, form letter w/date filled in; 1 month and 2 IRCs later (d'Adolf) SWEDEN: Radio Sweden, 15295, orthern Lights card in 1 month by air (Lobdell) 3 wks for 15295 (Fadula) 1 week (Magne) 15,15, air in 4 weeks (Banta) 10 days air (Ingram) 9509; air in 5 weeks for 1st day on this freq. (Fadula)

SWITZERLAND: SBC, Beromuster, 9535, card in 6 weeks from J.A. Chisholm (Field)

SWITZ RLAD: SBC, Berne, 11715, sent attractive b/w skating card confirming Schwarzenburg in 2 months. Full data from V/S: J. A. Chisholm. Also an attractive card of ski plane and mountains (Calkin) antennas photo card in 11 days air for 2 IRCs (Diladine) 21 days air for 2 IRCs (Lennedy) 9505, 36 days air; no IRCs (Dickey) SYRIA: Damascus, 15165, card in 2½ months seamail. IRCs sent (Fyatt)

TAHITI: ONTF, lapeete, mermaid card in 6 weeks air for 2 IRCs. Apted in English. For 9735, new frequency, QSL states in use on test basis only but regularly heard (Fadula) 15170, specific card, all details for first day reception of this freq. Air in 65 days (wood) 11825, "hermaid" card w/sked in 2 months (Mayo) 5 weeks (Glasberg)

TAIWAN: VOFC, Taipei, 17720, map card w/date, freq. and time along w/sked, pennant, newsletter and pic/p/card in 37 days air. 1-IRC (Watman) 10 weeks air (Banta) 1 month (Fyatt) QSL and returned my tape of details re-recorded with Chinese classical music. (Burns)

AFNT, 3990, Typhoon chart, programme guide and card w/veri statement but no details in $2\frac{1}{2}$ weeks for stamp (Brode)

THATLAND: Thai TV Co., Bangkok, 710c kHz, registered letter in 21 days after f/up. Full data given; (Myan)

TOGO: Lomé, 5047, globe card in 2 months for 2 IRCs (Lroll) 1 month, full data for IRCs (Fyatt)

TURKS A D CAICOS IS: VSI8, Turks Island nadio, 4788, letter in 2 weeks. 2 IRCs. letter in 2 weeks air from D.R. mattocks, Station manager. Date and Frequency given. (Shaw)

TURKEY: Voice of Turkey, 9515, small card, prog. guide, sked, flag, in 13 weeks for 2 InCs from V/S: Llizabeth Selanik (Howard) 56 days air. Time not given (Lewis) 10 days for 15165 after 4 tries. (tosen) 15160 and 15195, 15 weeks; 2 InCs (Burns) 15195, 42 months for 2 InCs; seamail w/sked (d'Adolf)

URRAINIAN SSR: Radio Moscow, Lvov, 11900, card via Moscow in 1 month (Ramp) 11900, card w/site in 1 month (Brode) 11900, card and rpt form in 2, days air; full data (Schultz) 15180, card in 1 month; no return postage (Field) 7150, months (Behr)
Radio Moscow, Vinnitsa, 11050, card in 1 month w/site (Field) 11755/
11650 in 2t days for N.A. Service (Raufman) 11705, card in 3 weeks w/site typed in, plus report form. No IRCs (d'Adolf)

Radio Loscow, Riev, 12070, card in 1 month (Field) 28 days for N.A. Service (Raufman)

"Radio Kiev", 9520, card in 1 month w/sked and monitor cards (Field) 7200, card, sked, air for 1-IRC (kennedy) 9755, card in 10 weeks air. No xmtr site and gave incorrect frequency (Fadula) 11900, 6 weeks by air w/sked (no name).

Radio Loscow, Ivano-Frankovsk, card in 1 month for SCNA Service (Sizer)

I month via Moscow. No return postage (Field)

U.A.R. Madio Cairo, 9475, mimeo letter in 15 weeks by air, plus books on ArabIsraeli conflict (Flum) 5 months seamail, with letter saving new USIs being new

Israeli conflict (Flum) 1 months seamail, with letter saying new USLs being printed (Maslak) letter, N.A. sked and long letter; 5 months seamail (Banta)
U.S.A. WWV, 15000, Indian chief card in 19 days. No IRCs (Carlson)

WIMB, med Lion, Fa., 11795, card, sked surface mail from Rev. John Norris.

Full data (Kennedy)

VOA, Bethany, 9525, card in 15 days (Kelleher) 17815, projection card in 11

days from V/S: Anita rilovec (rlum)

VOA, Greenville, llo40, card, program and frequency skeds listing xmtr sites, in ll days (rlum) 9650, 7 days giving date and time only (relleher) 15415, card in 13 days (kelleher) 17765, card in 9 days (Flum) 9550, 3 weeks from V/S: Beth de Garchi (Moseliep)

WNYW, 21525, card and sked in 11 days (Ingram)

hGLI, 15280, lightning card, pennant in 10 days for .25 return postage (Hailpern) card and new pennant w/sked in 2 weeks air (Field) 24 days (Flum)

AFRIS, 6020, card in 5 days. No site given however (Flum) card for 6110, via Delano, 10 days airmail (Fadula)

URUGUAY: Radio El Espectador, 11655, answered my Spanish rpt in 2 months sending verification typed in on their QSL-sized business card. V/S: Hector Amengual. Also sent pennant featuring a smiling microphone with tophat. (Ferry) card w/full data in only 10 days for registered report and) INCs (Glasberg) plain black/white card w/ full data veri typed in; by seamail in 2 months for 72 ips taped rpt + 2 IRCs(Lobdell) UZBERISTAN: Madio Tashkent, card for new frequency/ 15115 used in English Service, 10 weeks air direct plus stamps and nice post card (radula)

VATICAN: Madio Vaticana, card w/sked in 7 days (Coleman) 15420/15425, full data cards by air in 16/21 days. V/s: nichele Lemme. 2 IRCs per rpt (Lobdell) card for 7155 in 14 days air, but gave incorrect frequency. (Fadula)

VENEZUEIA: Ecos del Torbes, 4980, vague letter in Spanish w/small personalized blue/ green pennant in 2 months for registered report w/mint stamps. V/S: Carlos Alviarez Sarmiento (Hailpern) 9640, letter and pennant in 2 months. Reported in Spanish (Pyatt) Radio Angostura, 6120, letter and pennant and 5 p/cards in 52 months from

V/S: Sinar Guerra Hadriz, Director. SASh sent, but not used (Field)

Radio Barquisimeto, 9510, standard globe card in 1 month for 2 IRCs (Hailpern) 16 days for 2 IRCs (Howard) 29 days for Spanish report and mint stamps (Bruns) 4990, 2 weeks for English report w/mint stamps (Grode)

Radio Cagigal, YVTO (Time Signal) 6100, card w/frequency only in 166 days

air for 2 IRCs. Vo: Oswaldo Fonce Fonce, Capitan de Fragata (Hardester)

Radio Lara, 4800, network card in 5 weeks using MASWA Spanish report form and 1-IRC (Glasberg) 1 month for Spanish report and state decal (Smallshaw)

Radio Racional, 6170, Spanish form letter from Alfredo Gerbes; 30 days by

registered air (Milly)

Radio Fuerto La Cruz, 5365, personal letter in 2 weeks on 2nd try from V/S: D.R. de Alcala, Secretary. SASE sent, but not used (Field)

Radio Universidad, 3395, letter giving date and confirmation stmnt only,

from V/S: L. Faez-M. Air in 19 days (Wood)

Radio Rumbos, 9660, p/card w/scene of local plaza in 112 days air for mint stamps (Hardester) 4970, 122 days for Spanish rpt and IRC (Watman) 4 months for English report and mint stamps (Sizer)

Radio Valles del Tuy, letter, LF record, broken, in 2 months on 4th try. V/S: Tomas Espinoza, International Relations. SASE sent, not used. Reply by registered

airmail (Field)

Radiodifusora Venezuela, 4090, nice letter verie w/info on station and country for Spanish rpt and state decal (Smallshaw) pleasant letter from Raul Varela, air in 46 days. Mailed in Jamaica, .Y! (Wood) VIETNAM (REF): VTVN, Saigon, 7245, sent a 2nd QSL for rpt sent some 6 months ago. Originally verified in 4 wks. (rerry) card w/full data in 2 months w/form letter and sked. V/S: Nguyen The Nam, Chief, Training/Planning Dept. (Lobdell) VILTMAM (Dall. Ant): Voice of Vietnam, Hanoi, 10040, full veri on card size letter, w/sked and propaganda newspaper. 42 months for 1-IRC (Hailpern) 12050, 4 months and yeeks. 5 IRCs sent w/local post card + rpt (Clark)

WINDWARD ISLANDS: W.I.B.S., 11970, green card in 3 months for 3 IRCs (Kroll) 37 days for 2 IRCs and after 3 reports (loser) 1 IRC in 3 months (marshall) 11975, large green card w/sked on it, all details; 6 weeks air for Incs (konen)

YUGOSLAVIA: Radio Belgrade, 9620, folder card in 32 months w/picture of Budva. Seamail for 3 IRCs (d'Adolf) 9620, 4 months together with sked, calendar and new pennant for 1-IRC (Field) 92 days by folder card; 3 IRCs. Full data (Schultz)

An excellent month, gentlemen, with 123 countries represented, containing many fine, rare QSLs. Just a reminder here that all reports should arrive at your editor's desk by the 15th of each month if they are to be included. ext month we will again feature our tri-monthly SCOMBBOARD, with the spotlight again on ASTA which we missed due to the loss of the September stencils.

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QSL OF THE LO TH presents

DEPARTMENT OF BROADCASTING MINISTRY OF CULTURE, SINGAPORE

Date 29th June, 1971.

RECEPTION REPORT CARD

Thank you for your reception report. Your report agrees/ Track Market with our programme schedule.

We hope you have enjoyed the programmes and will continue to tune in to our transmissions.

Selmont Mendengar Lagi!

Nadio - Television Singaporey Box 1902, Singapore, 11.

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Director of Broadcasting, Ministry of Culture.

This month's featured Qol is from Madio Singapore, one of Southeast Asia's voices which is currently well heard on the west coast on their 25 meter band frequency of 11940 kHz around 1200 GAT.

Sincere thanks this month to the following 66 reporters who made this month's Report possible:

Steven d'Adolf, lass John Banta, . Y. Ernest Behr, Ontario Jerry Berg, Mass. Dean Bianco, Y. Tom Blossom, Ind. Bob Brode, Calif. Mon Bruns, Missouri John Burns, Florida G. A. Calkin, México Don Carlson, Fenna. Tom Clark, Ohio Bill Coleman, ... C. Gerry Dexter, Wisc. Stephen Dildine, Va. Donald Dickey, Linn. Chris Drake, B. C.

Marlin Field, Mich. Dan Ferguson, W.Va. Irwin Glasberg, F. Q. Brent Hailpern, Col. Mike Hardester, Cal. don Howard, hd. mobert Ingram, Ohio Ed Insinger, Calif. F. W. Isen, IId. bteve hamp, Cal/Tex. A. Kaufman, H. Y. Robert Helleher, ...Y. Chris milly, Md. Joe kennedy, La. Ed Kusalik, Ontario mark konen, Wisc. Allan kroll, Lich. Ben Lewis, Mass.

M.R. Leonhardt, Ind Chris Lobdell, Mass Larry magne, lenna. Bill Latthews, Ohio anthony marks, Ore. A.E. .artin, England Firs. A. Harshall, ID Joseph Haslak, Hass H. hatsuura, Japan Faul Layo, ...Y. Hank Michalenka, MI Bob Moser, Ill. Andrew Fappas, Ill. Ralph Ferry, Ill. Faul Fetersky, Wa. Bob Fadula, Australia

W. J. Flum, J. Ed J. Fyatt. N. Y. Ld. Ricchezza, Pa. Tom loseliep, Iowa Bill Schultz, la. Alvin Sizer, Conn. Evan Rosen, . Y. Kenneth Schnur. ...Y. Wm. b. Sparks, Cal. Edward Shaw, Calif. John Smallshaw, Wisc Mike watman, ... H. D. J. Keber, Ohio Dr. michard wood, Louisiana Jim Zabrańsky, Illinois.

Just a brief reminder that all reports for QDL REFORT and SCOREBOARD (which will re-appear next month with the accent on ASIA) must reach your QSL Editor by the 15th of each month. Reports should be sent airmail, and with sufficient postage, or they are being returned to the sender. Until next month, Dest 73's, Garage.

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News-Tips-Skeds

LISTENERS DIGEST LISTENERS DIGEST LISTENERS DIGEST

News-Tips-Skeds

Dan Ferguson-Editor, 1521 Smith Road, Apt.7, Charleston, WVA.25314 Deadline 15th.

CHILE The scheduled special pgm in English for NZDXL, 26 Sept, was not broadcast by R. Presidente Balmaceda. The station simply signed off 0501.(DF)

CONGO(DR) Last month we indicated that Mbuji-Mayi, 7300 kHz might be heard around 0400-0500. Don Jensen has now indicated that the station may be inactive, since it is no longer heard at 0400, and was at one time fairly regular there.

NEPAL see October. Some sources show the 100 km tm on 7165, 0100-0400, 0700-1000, and 1200-1700. If correct, NA DXers might try around 0100 and around 1200, later on WCNA.

HEATH COMPANY In response to a rather long letter detailing some of the needs of the SWBC DXer, in regard to possible replacement of the SB310 rm with a solid state model, as has been done with the ham-band receiver, I received a nice letter indicating that they agree with many of my suggestions, and they "will be incorporated in a new model of the SWL receiver." They indicate the new receiver is not sufficiently developed to release information on it. (DF)

TAPE RECORDINGS Ed Shaw notes that most stations would prefer to receive tapes recorded at $7\frac{1}{2}$ i.p.s., rather than 3-3/4 i.p.s. Ed accomplishes this by recording at 3-3/4 ips, then playing at 1-7/8 ips while copying at 3-3/4 ips. The result is a tape at $7\frac{1}{2}$ ips. This technique might be useful to those who do not have a recorder capable of operating at $7\frac{1}{2}$ ips....Another thing to note is that you should record only one track. Do not record anything on the second track, and do not record anything on the second side of the tape. If more than one track is used, or if both sides of the tape are used, the station cannot play the tape on standard studio equipment, which is full track.

ETHIOPIA I have several copies of two or three pamphlets from ETLF, and will send to those who send SASE for them. Much info on the stn & its history. (DF)

MALAGASY REP Latest info available shows the R.Nederland relay will not be operational until December, at the earliest, and likely not until sometime in January. The fqys which may be used in December are 15330 in Indonesian to SEA at 1230-1350 - parallel the Lopik transmitters on 21480 and 17810. Also on 15330 in English at 1400-1520, to SEA, again //21480 and 17810. Of no consequence to NA listeners will be the transmission on 6020 in Dutch at 1700-1820, and in English at 1830-1950...Beginning in January, look for the Malagasy relay on 11895 in Dutch at 1530-1650, //Lopik on 17810 kHz. (Bill Eddings, John Banta, DF)

SWITZERLAND SBC will add 9750 kHz to the list of fqys in use to MA in English at 0130, beginning 7 November. Fqys will be 6120, 9535, 9750, 11715 kHz. (John Banta)

ZAMBIA - C. M. Drake forwards a lotter from ZBS indicating that the new ZBS transmitters given them by the Chinese Gov't will not be operational until mid-1972. One is a 200 km MW tag the others, 50 km SW tag, two of them. One SW tag will be used for the home sve; the other SW tag may be used for limited external coverage in Africa, likely in the 25 m.b. (C. M. Drake, via Anthony Marks)

USA (?) National Bureau of Standards is operating a time & fqy svc by satellite on 135.625 mHz, 1700-1715 & 2330-2345 GMT. For info, send postcard to Code 3, National Bureau of Standards, Boulder, Colorado, 80302. (Tom Gavaras)

SWEDEN R. Sweden announces for change for 0000-0230 to NA. 11825 is dropped. To is now on 6175 kHz; English at 0030-0100 & 0200-0230. Another change. The 1400-1530 to is now on 21505, ex 21625(SCDX)

W.GERMANY Deutsche Welle has indicated tha	at the first	t 500 kw tag at Wertachtal will be
used during the winter broadcasting quarter	. The follo	owing transmissions are skeds
6000 kHz 1900-2100 to SEA/ANZ	11810 kHz	1400-1900 to S.As/SEA
6075 0600-0700 to NA		1900-2000 to NA
6130 0000-0215/0700-0900 to NA	11810	2230-0000 to NA
6155 0230-0600 to NA	11865	1945-2200 to NA
6160 2100-2200 to Australia	11895	0030-0300 to CA/SA
9585 1800-2000 to NE Afr/ME	11965	0700-0900 to E.Afr/S.Afr
9585 2000-2200 to FE, Australia	11965	0900-1200 to SA
9610 1500-1800 to Eur/NE Afr/NE	11965	1200-1400 to S.As/SEA
9735 0615-0900 to SEA/ Australia	15150	0900-1200 to E.Afr/S.Afr
9735 0900-1200 to 0.Afr/S.afr	15150	1200-1900 to SA
9735 1200-1500 to NE Afr/NE		

With the overlaps contained in the above "schedule" it is clear that it cannot be for daily use by a single transmitter. The schedule seems to be for test purposes. So these fays and times may serve those who are looking for the initial operations of the new transmitters.

SWITZERLAND SBC is listing the new 500 km to at Sottons for the following times for the winter quarter:

0600-0645 on 11765 to E.Afr/S.Afr in German/French/Italian

0700-0915 on 11865 to Japan/Australia/NZ in EE/GG/FF/It/EE, EE at 0700-0730/0845-0915 1315-1500 on 17845 to FE/India/Pakistan in EE/GG/FF/It, EE at 1315-1345

1515-1730 on 21585 to SA

1745-2145 on 11720 to Africa in FF/GG/It/FF/PP/SS/EE/GG, EE at 2100-2130.

POLAND Sked from R. Warsaw shows English at 0630, 1200, 1600, 1830, 2030, 2230, each for one half hour. Fqys are not given, only meter bands. (George Rabone)

PORTUGUESE TIMOR Bob Padula indicates Dili definitely back on the air on 3268 kHz. WRTH 71 shows sked as 1000-1430, Bob has heard them at 1010, and ARDXC member David Foster has noted the station at 1115-1205, according to the October ADXN. The fqy is a very bad one for reception in NA due to uto transmitters; those who hear Dili have a real prize!

RAMADAN We neglected to note last month that Ramadan runs 21 October to 19 November this year. Most should receive this month's bulletin before the 19th of November, so we mention it this month. During Ramadan many stations of the Moslem world operate on extended schedules. For many of these stations Ramadan is the only time of the year that the station can be heard in NA. A few stations that would be worth checking for follow.

Djibouti, AFARS & ISSAS, operates on 4780 kHz, and was scheduled last year to 0100 GMT during Ramadan. As far as I know, the station was not heard in NA, due to the strong LAs on 4780 kHz.

ABU DHABI operates on 4988 kHz, and normally signs off at 1950 GMT. During Ramadan it may operate late enough to be heard in parts of NA. DXers in the NE part of NA would soom to have the best chance at this one.

S.YEMEN. Another rare station is Aden on 5060 kHz, this one might also provide some good reception late afternoons(EST) in ENA, Watch for Tirana, also on 5060. Tirana signs on at 0400 and runs to s/off shortly before2200. Aden runs from s/on 0330 to s/off 2200 (though has also been reported to s/off 2300 last year). Another stn on fqy is RC Huambo, ANGOLA....So, care is needed on this fqy. And remember, the sked for Aden may be extended during Ramadan.

ED SHAW indicates the trouble he was having with his new SX-190 receiver has now been corrected, and the receiver is performing excellently.

CONDITIONS the past few weeks have been poor, according to observations here in W.Va., and according to comments received from several other DXers. Hopefully they will be improving shortly.....Earle Hall says one that has improved is the condition of his chimney, which has been repaired after being pulled down by a new antenna: 73, Dan

Current Loggings

LOG REPORT LOG KEPOKT LOG HEFORT

Current Loggings

Jerry Berg- Editor, 38 Eastern Avenue, Lexington, MA. 02173 Deadline 12 th of Month

Gang, I won't bore you with any tales of woe about how much time it takes each month to put Log Report together -- Dan made the point many times, and I can only emphasize what he's said. The point is, each of you -- oldtimers and newcomers alike -- can help make my job a little easier by following these few rules:

1. Put your items in order, by frequency.

2. Get your report in by the deadline, the 12th of the month. That means your report must be in my hands by the 12th, so give your-self a few days to allow it to reach me.

3. Please do not use lightweight or "tissue" type paper when you report. Each report must be cut apart, and slips of tissue paper have a way of getting lost. If you send a carbon copy of your report, please use a medium weight paper, even if legibility is reduced.

4. Put your initials after each item you report.

PLEASE COOPERATE and help bring a little light into my life. On to the goodies . . .

GUATEMALA LV Atitlan, Santiago Atitlan, mx (maybe IS) 0200, 2390 ranchera mx. Tlk 0300, ID 0327, closing anmt 0335, 0339*. Call is TGDF. Barely audible. First time reported? (GH).

MEXICO XEJN, R. Huayacocotla, Veracruz, ID 0114, call and anmt 0120. Drama 0130, march 0208, 0211*. Fair reception (GH). 2390

2540 HAITI 4VSO, good w/Creole or FF tlks at 1018 (DJ).

2660 ECUADOR R. Canal 1330, 2x1330, TC at 1103 (GH).

2860 COLOMBIA R. Magdalena, 2x1430, probably the one weak, mentioning Bogota at 1053, also CARACOL net. Much QRN (GH).

2940 Rdif.Comercial XESM, 2x1470, fair at 1017 (GH).

GUATEMALA R. Rumbos, 2x1480, mx and many IDs at 0250 (MAF). Also 2960 at 0346 w/pop mx, TCs, IDs, ads, etc, and overmodulated. Fair then, but poor at *1115 w/marimba, barnyard sounds (GH).

CZECH OLB5, time stnd stn, 5 kw, CW anmt 0230 (ECS). 3170

3200 MEXICO Stn here is XERTP, San Martin Texmelucan, 2x1600. *1157 w/mx, many IDs, till arnd 1300. Also before 0100 (GH).

* 3204 NIGERIA Ibadan, old US C&W mx 2230, but better arnd 0615 (ECS). Also drum IS 0430, anthem, into EE w/YL. Poor (GH).

MOZAMBIQUE Emis. Reg. de Zambezia, Quelimane, clear ID 1916, 3210 PP anmt and into pop mx. Vy weak but clear (BBy).

3227 LIBERIA ELWA, chants and EE anmts 0640, also vernacular (RWP).

3230 FIJI Suva, anmts and EE ads at 0940, good but het (BBy).

3242 INDONESIA(Celebes/Moluccas) Ambon, local mx and local ID by YL at 1001. Poor, w/utility QRM (BBy).

3250 S.AFR SABC, lite mx, man in Afrikaans at 0345. CV QRM (LM).

3255 LIBERIA ELBC, EE variety prgm, pops and comls at 2315, low but in the clear (ECS). N:E 2345 (JDT), same w/cmtry at 2350 (CSW). Good lvl w/N:E, 2350 (ARN)(Al, you rptd it as 3215--oversight?).

VENEZ LV Tigre, good w/quality mx Oll5, frequent IDs (ECS).

GUYANA R. Demarara, mx 0210 (DF). Anthem twice 0903, EE ID 0905, into Hindi chants. *0854 (LM).Good, but fades by 1030 (RWP). MOZAMBIQUE E.Marques, "Hapy Hour" in EE, 1930. Fair (BRy).

NASWA-FRENDX NOVEMBER 1971 3268t TIMOR Vy, vy weak, but something here at 1400 that sounds like PP, but too weak to be certain (BBy).
3270.5 UNID LA, weak from 0315, off 0335 after tlk in SS(?)(DF). 3275 R. Mara, hrd 0315 to 0330* w/ID, anthem. Vy poor (CSW). VENEZ 3285 BRAZIL Em. Educ. Rural, fair at 0130 (TW). 3290 GUYANA GBS, clas.mx 0200, 0345* after ID, anthem (CSW). ID, ads 0945, Tć, then nx (GH). *0845, EE prgm summary, Indian mx. Vy good. Also hrd fair another day at 0342* (RWP). BURUNDI Bujumbura, good w/ID at 2250 (TW). 3300 3300t GABON Libreville, good, FF tlk to 2300 t/out(ECS) GRENADA WIBS, tlk 0124, then tropical rhythms (GH). Nx 0200, 3300 O210* (REW). Tentative, 3300a, mx to 0200, presumed off 0215(RB). N.GUINEA R.Daru, ukelele mx 1130, EE/Pidgin anmts.Fine sig(RWP). 3305 3307t RHODESIA Gwelo, N:E 0400, then mx. Heavy QRM (TDS). 3315 MARTINIQUE ORTF, piano mx 0215, FF ID 0230 (ER). 3314, good w/ clas.mx 2330, but degenerates and under the mud by 2345 (ECS). BRAZIL R.Gazeta de Alagoas, regular w/PP mx arnd 0045 (TW). 3315 Not sure which, but definitely a Brazilian at 2330, native programming, language (ARN). Freetown, IS 2300, high life mx w/EE anmts to SIERRA LEONE 2330* w/anthem (ECS). IS at *0600, Sun EE religious svc (BB). 3320t S.AFR SABC presumed (see 9/71 LR), vy poor, bad QRM. 1945 (BBy). 3322 BOUGAINVILLE 4 -- tone chimes, clear EE/Pidgin ID at 1132, then country mx, good prgmng(RWP). 3322.5, weak w/tlk by man, 0920(LM). GUATEMALA R. Maya, fair-good w/ID at 0100 (RWP). Rel mx, "Stars 3325 & Stripes" at 1107, EE/SS ID (AAM). 3320, rel mx, ID 0103 (MAF). BRAZIL A Voz do Sertao, Jap anmts mixed w/PP at 0015, chimes 3335 0029, then PP ID. Poor (GH). N.GUINEA R.Wewak, good, overiding CHU at 1130 w/financial nx in 3335 EE, also earlier w/pops at 0945 (RWF). Chimes, TC 1145, ID 1158, then mx. Poor (GH). 3336 Ziguinchor, FF anmts, Afr pops and Arabic chants, very SENEGAL weak at 0710. Hrd 9/20 only (RWP). ZAMBIA Lusaka, Fish Eagle Bird Scream IS at pre-s/on, 0159(ARN). 3346 3350 GHANA Ejura, fair w/Afr mx 0550 (DF), N:E 0610 (BS). Hymnals, ID in EE, fair lvl at 2245 (AEM). GUATEMALA LV Nahuala, marimba mx 0307, IDs, man ancr (CW). 3360 3365 R. Exitos, LA mx and ID at 0214. Fair (AAM). 0332 (RB). DOM. REP. 3366 Accra, fair w/pop mx, ads, Afr lang, from 0550 (DF). N:E GHANA by YL 0605 (BS). 3375 . R.Olinda Pernambuco, nx 2350, ID 003 (MAF). BRAZIL 3380 GUATEMALA R. Chortis, SS mx, many IDs 0240 (RB), songs 0335 (DF). Blantyre, rooster at *0258, then nx. Vy strong (RMP). 3380 Tentative, w/EE ID 2000, then N:E, but vy weak and QRMed (BBy). VENEZ R. Barcelona, mx prgm and ID 0200 (MAF). 3385, fair in 3380 SS arnd 0340 (DF). 3380 In SS, w/local noise, to 0404* (LM). UNID R.Cl.de Teresina, mx prgm, ads 0245 (MAF). Pop mx, PP 3385 BRAZIL anmts to 0250* (TW). 3385 FR. GUIANA Cayenne, pop mx, nx 0930, ID 0935 (LM). FF talk, folk mx at 0937. Fair (GH). ECUADOR R. Zaracay, weak, Ecuadorian mx 0420 (WH), from 0405, 3390 w/ID in SS 0433 (LM). IDs, sports coverage at 0813 (GH). BRAZIL R.Cl.de Conquista, PP tlks, pop mx 2330 (TW). Mx from 3395 2250, ID at 2331 (MAF). Tentative, in PP 0125, but no ID hrd(ECS). NIGERIA Kaduna, vernacular chants, drums at 0530 Much QRM/QRN(ECS) 3396 3400 CHINA Fukien, 1045 w/CC revolutionary mx (LM). 3559 UNID Asian, maybe China or Korea, vy weak 1132, tlks and mx(TDS). 3905 INDIA Delhi, EE ID in GOS at 2300, good clarity (AEM).

3952.5 ENGLAND BBC, tlk in GG to Europe, 0440 (LM).

3960t.W.GERMANY RFE, tlk in Eur lang, SSB QRM, 0445 (LM). UNID Jazz mx 0145, few wrds and abrupt s/off at 0200. RM(ECS).

3985 ECUADOR Esc.R. Populares, local mx 0255, ID 0300, 0301*(GLD). W. GERMANY R. Liberty, jammed at 0450 (LM).

3990

3995 ECUADOR LV Rio Tarqui, Andean mx at 0625 tune, past 0700 (GLD). Sounded like "Ghana Radio" ID 2259 after US pops, DJ in 4672t GHANA

Afr lang, church svc 2255. Anthem, then 2301* (HM).

ECUADOR. R.Nac. Espejo, full ID 0132 (JDT), and 0215, then show of 4679

coastal mx, jingles, DJ anmts (HM). So talk 0155 (DF).
N.VIETNAM Hanoi, 1245, interview, singing by lady 1315 (TDS). 4698.5 4701

N.KOREA Stn listed in 10/71 LR believed Pyongyang, hrd opening in Korean 1203, then dictation. Hrd this type programming in Thailand on Pyongyang fcys (GH).

UNID Maybe Cape Verde, local pops at 1310, some PP tlks by lady, 4717

no ID hrd. R.Cl.Mindelo?(TLA) Strange hour for Afr (Ed). INDONESIA(Sulawesi) Makassar, NF apparently ex-4752, singing 4719 ads 1225, Djakarta ID 1227, IS and local ID 1229 (GH).

4725 BURMA Rangoon, weak in lang 1207 (DJ), play, C&W mx 1258 (TDS). Children's song 1259, anmt 1300, native percussion. Fair (GH).

4734 ECUADOR R. Nac. Progreso, local mx, strong at 0154 (JDT), folk

mx, SS anmts, poor voice quality at 0245 (TW).

4747a ECUADOR R.El Mundo, many IDs for "El Mundo" during LA mx show, 0155. Off abruptly 0200 during jingle. Hrd 10/10, not since(HM). 4749

UNID Weak LA here at 0330 (GLD). These last two related? (Ed).

4755 COLOMBIA Em. Nuevo Mundo, ID 2315, and pops (AEM).

BRAZIL Feira de Santana, tlk, pop mx, ID 0855. Talk 0900, pop 4765 mx 0910, faded by 0915. Fair (BBy).

4765 COLOMBIA R. Catatumbo, futebol at 0256, fair (AAM).

4765

CONGO RTVC-Brazzaville, 0429 w/FF ID, Afr mx (LM). ECUADOR CRE, LA mx 0341, nx 0355, comls, IDs to 0421 t/out(KS). 4765 VENEZ R.Bolivar, LA mx 0014 (AAM), SS greetings, many IDs 2341-4770

0020 (KS). IDs, ads, jingles 1005 (RWP). 4769, LA mx 0150 (DF).

ELWA, EE, pop and C&W mx, 2312-2348* (JDT). 4770

4771 UNID Oriental prgmng, some playing of "East Is Red." 4 pips at 1000, into a different lang. Hrd 0935-1033, 9/26, poor-fair(DC).

4780 ECUADOR R. Atahualpa, mx at 0523 tune (DF).

4780 VENEZ LV Carabobo, hrd by many running late lately, past 0546 anyway, though off by 0748 at recheck. Usual LA stuff -- SS pops, IDs, ads, etc (GH, RBO, DJ, DF, AEM, TLA, LM, MAF, KS).

4782 MALI Bamako, poor-fair w/Fr pops, 0605 (TLA). 4783, tentative,

Afr mx at 0620 (JDT).

4782.5 DOM.REP. Onda Musical, mx at Oloo (REW).

4794 ECUADOR LV Caras, on late Sun w/mx, 0440 (DI). Abrupt s/off at 0520 w/no ID or anmt (BS).

4795

ANGOLA R.Commercial, PP songs, anmts. Surong but QRMed,2315(AEM). BRAZIL R.Congonhas, ID 2328, then tlk. Listened 5-6 weeks to 4795 get ID (JDT) Congrats -- that's the way we should all DX (Ed).

4795 UNID Brazilian, good signal, pop mx and Pr tlk, 2315 (TW).

4795 INDONESIA RRI, ID 1130, then nx (TDS).

4800 PERU R.15-50, SS nx 0300, IDs. Poor, high RN (ER).

4800 VENEZ R.Lara, booming in at O150 w/ID, mx (DF).

4806a BRAZIL Rdif.de Amazonas, mx 0920, anmts 0924, ID and mention of Manaus 0938 (JDT).

Emis. Regional, good 2245, all PP w/high life mx, to 4807 SAO TOME 2300* w/AP (ECS).

ECUADOR R. Canal Manabita, LA mx 0432. closed w/anthem 0450*(JDT). 4815 4810, pop mx, complete ID at 0500* (BS).

VENEZ R. Popular, ads, ID 2330 (AEM), ID 0059, nx (ER).

NASWA-FRENDX 4815 PERU R.Amazonas, pop mx, ID 0430 (BS). UPPER VOLTA Ouagadougou, mx 2209, nx 2218, mx to 2238 t/out(JDT). 4815 FF ID 0608, Afr mx (IM). 4820 Bathurst, IS 0625, s/on 0628, then chants (WJS). EE ID and BBC nx 0700 (DJ). Hvy RM by 0705, though good sig (RB). HONDURAS HRVC, good w/EE rel prgm 0334-0358 (HMS,RD). Off at 4820 0457 after long anthem (WJS), and at 0500* (TLA). 4820 INDIA Calcutta, singers and chants at 2310 (AEM). 4825u BRAZIL Fair w/PP mx at 2340. RM (TW). 4825 ECUADOR R.Luz y Vida, requests 0500 (REW), drifting a bit (LM). 4832 COSTA RICA R. Capital, ID 0530, then went off or sunk way down into the QRN (RBO). 4835t BRAZIL Rdif.Roraima, mx and talk, but no clue to ID. Three gongs at 0258, then off. RM pretty strong (GLD). ECUADÓR LV Valle Portoviejo, ID 1100, nx till 1130 fade (MAF). 4835 4839 INDONESIA (Molaccas) Ambon, pop mx 1248, anmts, no ID hrd but previously rptd as Ambon (GH). RRI, chimes 1200, C&W mx (TDS). 4839.5 INDIA Bombay, nx(?) 1310, then M&W tlking (TDS). 4840t PERU R. Andahuayala, IDs 0456, Peruvian mx. ID 0600 when sig good, but usually poor. Hrd 9/26-29, but not since (RB). 4840 VENEZ R. Valera, LA fare, IDs at 0222 (RWP). 4843 RTVC-Pointe Noire, rhythms FF anmts, tlks, ID 0545. CONGO Poor-fair (RWP). 4845 Rdif. Teresina, vy good w/Pr anmts, pops, comls. *0800(?)(RWF BRAZIL 4845t MALAYSIA RM-K.Lumpur, mx and lady singing at 1210 (TDS). 4850 MAURITANIA Nouakchotte, native mx and anmts to 2200, nx, mx to anthem at 2227, 2230* (SPD). R.Atlantida, ads from 0225, full ID 0231 (ARN). ID thru 4850 QRM at 0300 (LM), and ads and pops at 0350 (TLA). Pop dance mx at 0452* (BS,DJ). QSL in 9 days confirming this fqy (RWP). 4855 INDONESIA Palembang, fair w/tlk by man at 1355 (TLA). 4860 R. Maracaibo, SS ID 0045, into LA mx (ER). ID to 0405*(TLA). 4863 Musical play or poem reading 1255, f/out 1355. No ID at 1300 (TDS). 4865 Ponta Delgada, clas.mx 2210, pop mx to 2300* w/AP (SPD). AZORES Cotonou, lang nx 1810, then jazz (AEM). Tlk and mx to 4870 2145 (KS), FF ID 2200, 2201*(ER). Also hrd w/anthem to 2301*, and also w/EE lesson 0551 (DJ). Hrd at 0515 s/on after drums, IS, anthem (GH,TLA), and then soul mx (RWP). 4870 VENEZ R.Tropical, mx prgm w/ID at 0345 (MAF). BOLIVIA R.La Cruz del Sur, EE rel prgm 0240-0301*, but much 4875 splash and vy, vy poor (RWP). 4875 R.Jornal do Brasil, PP nx 2215-2230 (KS). S.AFR SABC, Afrikaans talks, ads, pops 0500 amid het and noise (TLA). Mx box IS 0358, birds 0400, ID and anthem (LM). 4875 R. Comercial, "La Hora Exacta" and ID 0145-0150 (ARN), 4880 0430* after ID and anthem (RB), ditto, w/mx at 0425 to 0430*(RBO). R.Universo, nx 0230, ID 0300 (MAF). 4880 R.Lux, recent US and LA pops, good level to full ID 4890 HONDURAS and 0424* (RWP). Dakar, *0600, nx item, tlks, mx, chants. TC 0659, nx 4890 SENEGAL in FF 0700 (AEM, RB). 4890 R.San Juan, Andean mx and complete ID at 0529* (BS). Mx from 0450, complete ID 0514 and end of xmsn (MAF). VENEZ Rdif. Venez, IDs and closing anmts, anthem to 0404*(RWP). 4890 Hrd w/pop mx from 0345, to 0400 close (RB). INDIA Kurseong, poer w/chants and local mx at 0610 (AEM). 4895

Chants at 1222 (GH). Malaysia, tentative, nx at 1130,

4895

SARAWAK

then time pips (TDS).

NASWA-FRENDX

VENEZ R.Juventud, good w/pop mx, many IDs, arnd 0315 (RB). 4900 NIGERIA Regional stn hrd from 1800, N:E from Lagos 2100, into Hausa 2115 (BP). Hrd afternoons to arnd 2200 when QRMed, also at *0430 when gives EE opening, then into Arab style program. Believe is Enugu, or maybe Kaduna (Ed). Seems to announce test frm Enugu, //1797. Pop mx 0430, some chants, N:E 0500(IM, DF, RWP, J)/1

CHAD Ft. Lamy, AA ID 2125, into chants (ER). High life mx, all FF 4904 at 2200. Vy low, and gone before s/off (ECS).

4906 COLOMBIA Em. Atlantico, nx and IDs 2359 (JDT), also in SS 0130 (ARN). Talk at 0445 (DF), and also good at 0200 (GLD).

4907t CAMBODIA Phnom-Penh, mx program at 1245 (TDS).

R.HIN, ID 0138, good lvl. Up from listed 4910 (ARN). 4912 DOM.REP.

4915 GHANA Accra, N:E at 0607 (WJS).

4915 KENYA Nairobi hrd well in late 9/71, Swahili prgms hrd 0315-0345, pops, coke comls (RWP).

4920 VENEZ R. Caracas, rock mx 0515, IDs w/giggling women (RWP).

MOZAMBIQUE L. Marques, poor but audible some days from 2137 f/in, 4923 pop mx, EE/Afrikaans anmts. 4 chimes on quarter hour, off abruptly 2200 after TC. No anthem (Ed).

4926 RIO MUNI R. Bata, native mx, anmts to 2204* after ID, anthem (SPD, ECS). Also hrd w/pop mx, ID 0531. How do you QSL? (RWP).

DOM.REP. R.Mil, strong at 2330 w/ID, nx (RWP). Also lite LA mx, 4930 many IDs at OllO to past Ol45 (WJP).

4932 INDONESIA(Sumatra) Surakarta, Indo vocals and tlk, 1154 (DJ).

NIGERIA Benin City, strong w/rel prgm 0438 (ER). Talking drum 4932 0437, choral anthem, rel prgm (GH). ID 0500 (AAM), then N:E, mx, TC at 0515 (TDS). ID 0507 (GLD), N:E 0532 (RWP), pop mx 0550(LM).

4937 PERU R.Tropical, pop mx and ID at 0355* (BS).

4940 VENEZ R. Yaracuy, anthem at *0955, then ID, mx (JDT). 4945.

BRAZIL R. Educ. Braganea, LA mx, man ancr 0310, under HJ (LM). COLOMBIA R.Colosal, good at 0557 w/SS mx, nx, ID, past 0725(RBO). 4945

SARAWAK Kuching, sports tlk in EE at 1216 (DJ). N:E 1200, also 4950 an EE lesson 1130 (RWP). EE, island mx at 1220, into lang 1230(JDT)

4945 Springbok Radio, EE coml svc 2150 (ECS). Good in EE/

Afrikaans, w/comls 0310 (RWP). 4947, comls, quiz 1720-1805 (AEM). 4955 COLOMBIA R. Nacional, SS tlking, ID hrd. Bad modulation (RBO).

4960 CHINA Peking, theme, then Jap ID 1219 (GH).

R.Sucre, good at 0330 when joins R.Rumbos (GLD). 4960 VENEZ

R.Antillas, LA mx 0008-0109, several clear IDs(JDT). 4962 4960, off at 0506* w/anthem, but drifted up to 4962 since(REW). Songs, TCs, IDs to 0500* (BS), also good arnd 0300 (GLD). Baseball 2240-2335, ID 2338 (LM).

4965 ANGOLA R.Cl.de Malanje, fair w/pops, Pr anmts to 2259* w/AP(TW). 4965

S.AFR. SABC, rock mx 2150, ID and ads 2200 (ER). Tlk, ute QRM

0405 (LM). Cmtry hrd 0405, but QRM also (TLA).
4970 CLANDESTINE(Port.Guinea) La Voix Libre du Peuple de Guinee, IS of xylophone and chants 0617, ID 0619, mx, FF ID 0638, jazz to 0650. Off arnd 0730*. Also tentative, 2138-2214* (LM).

4970a DOM.REP. New stn, R.Infernando, IDs and nx 2310-2324 (KS). Any

chance of this being Antillas w/SS nx prgm? (Ed).

4970 VENEZ R.Rumbos, off 0502* w/anthem, rather than 0400 (REW). 4972.5 CAMEROUN Yaounde, varied mx at 2240 f/in, FF ID, anthem, off 2300*, apparently only on this late Sat/Sun (RWP).

4975 PERU R.del Pacifico, IDs and fqys 0426, piano mx 0428 (GH).

GHANA Ejura, good w/EE rel prgm 2240 (ER), hymns 0535, ID and 4980 anmt for 60 and 89 m.b. (RWP). N:E 0600 (TLA, WJS).

MALAYSIA RM-Penang, N:E 1100 (Ed), nx 1239 (GH). Also pop mx 2315, pips and N.E 2330. Poor (AEM).

NIGERIA Lagos, chants 0452, EE ID 0500 (DF). Fades in arnd 0530,

then pops, EE ads, vernacular anmts. Fair lvl (RWP).

4995 PERU R. Andina, Andean mx, ID 0500 (BS), 3 notes at 0510* (TLA). 4996v SUDAN Omdurman, strong w/chants at 1825, AA nx 1830. QRM (AEM).

5010 CAMEROUN R.Garoua, bell and nx 2153, then anthem 2200, IS and 2201* (SPD). IS 0454, ID 0459, anthem, prgm summary, chants (GH, DF, GLD).

5010 R. Cristal, ID 2336 after being off a few days (ARN). DOM.REP. IDs, mx, nx 0234 (KS), short nx 0600, ID 0605. Strong (AEM).

5015 BOLIVIA R. Universo, concert mx and ID at 0430 (BS).

GRENADA WIBS, nx to 2315 (RWP), hrd to 2359* (RD). Also have hrd 5015 something here to 2302* under WIBS, maybe Moxico rptd in Europe (RWP). I've had Mocamedes here closing at 2300, but not often(Ed).

5018v COLOMBIA Trans. Caldas, LA mx 2315 (ER), also ads 0340(TLA), ID 0328 and then bullfights (IM), nx or cmtry 0600 (RBO).

5030 R.Continente, Greensleeves and ID at 0400* (CSW).

C.AFR.REP. Bangui, Afr pops 2220, to 2302* Sat/Sun. Also at 5038.5 *0430 (RWP). High life mx 0446, w/xmtr troubles(GH), in FF 0500(DF) 5040 BURMA Rangoon, lady doing an exotic Asian tune at 1123, fair (RWP)

PORT.GUINEA Bissau, PP tlk 2345 (ARN), and some mx 0722 (GH). 5041

5047 TOGO Lome, biggest sig daily arnd 2200 (RWP), also good 0640(DF). 5050 R.Loreto, pops and comls 0530 (BS), also ID hrd fairly well PERU

at 0700*. Sometimes IDs as LV de Inter-Peruano (AEM).

5050 SINGAPORE RS, good w/N:E 1405 (TLA), also N:E 1130. Fair (RWP).

R.Mundial, mx 0100, ID 0130 (MAF), ID 0338 (LM), and vy 5050 strong 1005 w/"comentaria social" and slow LA pops (RWP).

5052at MONGOLIA Low cmtry and oriental mx and opera. Listed //4085 not hrd. Possible? (ECS).

5054 R. Vitoria, PP anmts and EE pop mx at 2315 (SPD).

5060 R.Cl.do Huambo, hrd several times at 2230 to 2300* (TW). ANGOLA

5060 R.Catolica, mx prgm, best after Litoral goes off 0235(MAF) ECUADOR 5060t VENEZ R.Litoral, ads, tropical mx, 0010-0040. Poor sig (Tw).

5075 COLOMBIA R. Sutatenza, fair 2240 (RWP), tlk, ID 0130, mx (RB), exc ID at 0350 before 0355* (DM).

INDONESIA Medan, Indo nx 2335, but lost at 2340. Weak, poor (AEM). 5085

5270 INDONESIA(Celebes/Moluccas) R.Chusus Pemerintan Daerah Kabupaten Poso, in Poso, hymns at 1157, tlk 1200 (//Sorong-4872 at that time), local anmt 1226. Apparently a local govt stn, not RRI(GH). Fairly good at 1128 w/mostly mx (GLD). FBIS lists as "Admin. District of Poso Radio" (Ed).

5400 XEZD, 4x1350, mx and ads arnd 1600, ID 1622 (GH).

5492 INDONESIA Unid. regional w/mx 1320, Indo anmts, maybe ID at 1329, but unreadable (GH).

5560 INDONESIA Unid. again, mx 1335, strange 2-tone time sig 1359, mx, then tones spaced a bit more. 9 chimes at 1400 indicating W. Indonesia, but ID not readable (GH).

5804 Sanaa, at *0257 w/AA anmt, into chants (ECS, ARN, GH, KS, ER).

HONDURAS IV Honduras, futebol 0145 (LM), quality mx 0250 (ECS). 5873 5940 Magadan, trumpet jazz 0320, IS 0329, but poor (RWP).

5952t PERU R.Arequipa, tlk by man at 0520 tune (DF).

5952<u>v</u> R.Casino, ID 0545, but SABC-5955 QRM (TLA). In EE w/ COSTA RICA mx, now to 0600 (JA).

5955 GUATEMALA TGNA, EE rel mx under noise; positive ID 0330 (ACM).

5955 MALAWI Blantyre, hrd well after VOA goes off at 0730 (DJ). 5955 SABC w/lite mx, TCs in EE. Fair-good (DM). S.AFR.

HCJB, NF, in RR 0430, //9530 (DF). GG DX prgm on Sat at 5960 0615 (GH), GG to 0628, EE ID, into FF (TLA, JA).

R.El Sol, strong w/modern mx 0700. Also pops, jingles, 5970 IDs arnd 1030 (RWP, JF).

5980 EL SALVADOR YSS, poor w/mx and IDs 0100 (RB), SS pop tunes 0230 NASWA-FRENDX TACA THREATHE TALT

(MRL). Clas.mx, good ID at 0400 (ACM).

ARGENTINA R.Splendid, ID and tangoes 0931 (GH), ads 1015 (REW). 5985t TIBET Listed (where?-Ed), alternate tlkng, cmtry 1135, 6 gongs 1200, then opera (ECS).

5990 CANADA CBC, NF ex-11935, EE to Canadian forces at *0600 (BP). 5995 MALI Bamako, nx headlines 2230, closing after anthem at 2359*

(RWP). FF anmts, Afr mx 2330 (JF). Tent, in FF to 0000* w/march(AL) VATICAN VR, N:E 0050 (AAM, HSt), into FF for Canada Ollo (ECS).

5995 BOLIVIA R. Progreso, Indian lang 0912, but SS ID 0913 (GH). 6001

JAPAN NHK HS, unknown location, in Jap 0930, //7230 (BP). 6005

6006. COSTA RICA R. Reloj, SS mx and IDs, 0100 (MRL).

CANADA CJCX, C&W DJ show hrd at 1019 (AAM). 6010 6015 R.Sutatenza, hrd here 9/10 w/SS tlks, mx, fqys at COLOMBIA

1035. Not hrd on 6075 at the time (JF).

6020 COLOMBIA LV Colombia, SS mx, some anmts at 1030 (JF).

6020 PERU R. Victoria w/LA and pop mx, many IDs, 0642-0700* (JDT). Also frm 0600 to 0703*, and many IDs also at 1035 (RWP).

6025 PORTUGAL Lisbon, EE political tlk at 0200, excellent (HSt).

6030 CANADA CEVP, mx at 2200, but noisy (ACM).

6030 USSR Simferopol (listed), RR, w/ mx at 1340 (ACM).

BRAZIL R.Globo, hrd at 0230 w/mx and ads (DF). 6035

6035 NIGERIA RN outlet here, listed 6025, closes 2305 w/EE ID after the nx. Good lvl but much QRM from Brazil (ARN).

6040 COLOMBIA LV Tolima, SS tlks, ID at 1045 (JF). ID 0010, then mx (ER), mx and ads 0020 (AAM). Closing anmt to 0359* (RWP).

6045 GREECE FBS, Athens, martial mx 0440, IS 0500, then ID.Low(ECS). INDONESIA Maybe Djakarta, strong w/island mx, but no ID (JDT).

6050 USSR Irkutsk, hrd w/RR tlk at 1400 (ACM).

6055 COLOMBIA R. Pacifico, ID 0531, then most likely nx (DJ).

6060 ARGENTINA R. Nacional, SS ID and nx at 1000 (JF).

VENEZ R.Sucre, moved frm 4960, pop mx, many IDs hrd mainly after 6065 0500 and still on at 0700 (BS).

6070 SENEGAL Ziguinchor, Afr high life mx 2145, gone by 2215 (ECS). 6070 R.San Sebastian, good w/SS mx, anmts 0245 (MRL), rapid prgm and ads at 1140, mixing w/CFRX and others (GH).

6075 COLOMBIA R.Sutatenza, SS mx, many IDs arnd 0905 (JF).

W.GERMANY DW, NF ex-9640, *2205 in PP to Eur (BP), N:E 0520(CW). 6075 6080

E.GERMANY R.OPS (RBI), in EE at *2300 (REW). More info?-Ed. 6082 R. Nacional, vy good w/US pops, frequent IDs arnd O150(RWP), SS ID and rhythms 0555 (DJ), ID 1103, then local mx (JDT).

LUXEMBOURG R.Lux, rock mx to 0205*, nx at 0100 and 0200(WJP,TLA). 6090 6090 MEXICO

R.Mante, SS mx, anmts 1302, ID and bulletins 1315 (JDT). NIGERIA R.TV Kaduna, strong at *0430 w/drum IS and EE ID (ECS). 6090 And w/chants, EE and vernacular anmts arnd 0450. Good ID 0500(RWP).

6092 CAMBODIA Phnom-Penh, 1249 going from FF to EE nx (GH). Clas. mx 1420, FF ID and local pops 1430 (TLA). Best here from 1030 w/ oriental mx, hrd one day also w/EE/FF lesson 1100 (Ed).

6093 SOMALIA Mogadishu, 0258 anthem, 0259 ID, then chants. Faded by

0340 (RWP, ER).

6095 PERU R. Nacional 1080, ID 0536 during Andean mx (GH).

6105 COLOMBIA R. Vision, SS mx and an ID at 1035 (JF).

6110 USA AFRIS-Delano, N:E 0800 and 1300, NF ex-11805 (BP, JDT).

6115 BRAZIL R. Tamoio, ID 0100 as R. Tupi (MAF).

6115 CONGO RTVC-Brazzaville, in FF w/Afr mx 2225 to 2232* (JDT). Also fine level at 2240 w/Afr rhythms (RWP).

6115 MEXICO R.Universidad, clas.mx to 2305, ID, address, more mx(DM).

6115 R.Union, SS songs and many IDs arnd 0308 (DJ), past 0400, and also at 1058. IDs 1st for MW R.Mil, then R.Union (RWP).

6120 VENEZ R. Angostura, SS mx, IDs, ads at 0920 (JF).

NASWA-FRENDX BRAZIL R.Nac.de S.F. w/PF mx and anmts at 0020 (MRL). 6125 CANADA CHNX, hrd w/local ads at 1010 (REW). 6130 6130 GHANA Tema, weak in EE at 2020 (DF). JAPAN NHK HS hrd w/EE lessons 0925, //7285, unknown location(BP). 6130 AUSTRALIA Perth hrd w/interview 1320, requests 1330 (JDT). 6140 COLOMBIA LV Cali, exc in SS 0510 (DF). Pop mx, SS nx until 0600*, 6140 apparently a move from 6195 (DJ,BS). And see 10/71 LR-Ed. 6140 POLAND Warsaw, N:E to 0229, then into Polish (RD). 6144v NIGERIA Calabar, hrd fair w/orch mx and pops 0600, but lost by 0610 (RWP). Lagos N:E relay 0603, local ID and light mx 0610(GH). Surprisingly good at 2045 w/rel mx, nx 2100, pop mx, many IDs(Ed). COSTA RICA R. Atenea, well hrd at 0515 w/LA mx prgm (DF), and 6150 requests for Nicaraguan listeners at 1015 (REW). 6155 AUSTRIA Vienna, IS and ID 0200, then N:E to NA (HSt). 6155 FEN, N:E, mx, sports, wx, IDs. Good 1vl 1305-1545 (RBO). CANADA CKZU, mx at 1500, fades by 1800 (ACM). CANADA CKZN, DJ show at 2106, but poor quality (AAM). 6160 6160 6160 COLOMBIA Em. Nueva Granada, vy good 0330 w/IDs and many ads(DM), and SS ID 0600 (ACM). 6160 THAILAND NBS hrd w/Thai play at 1315 (BP). LV Amer. Latina, SS tlk 0430 (DF), strong w/interviews 6165 FIEXICO and requests at 0520 tune (RWP). S. VIETNAM VTVN, Viet tlk and mx 1145. Most lists show Saigon, 6165 FBIS shows "Saigon(Quan Tre)," Quang Tri is north of Hue. What goes? (GLD). Slow songs at 1240 (GH). MOROCCO RTVM, AA mx 2240, ID 2245 (ER), strong in chants 2305(ARN) 6170 R. Nacional, nx to 0353, operatic march, anthem to 0401*(GH). 6170 VENEZ 6171 R.Corporación, Andean mx and complete ID at 0512* (BS). 6175t ANGOLA PP stn mixing w/RTVM and Venez, Afr mx to 2300* w/AP. Presumed to be Voz de Angola (RWP). BRAZIL R.Guarani, good w/mx 0000 (MAF), then nx, anmts, comls, 6175 TCs (KS). And good w/mx prgm at 0510 (DF). 6180 GUATEMALA R. Nacional, yodel mx 2350, ID 0001, and a het (GH). 6185 W.GERMANY Dw exc in GG at 0510 (DF). 6195 S.AFR. Springbok Radio, exc w/ads 0315 (ECS), 0330-0409 w/mx, ads, in EE/Afrikaans (wJS). Also EE 0400-0500 till Tunisia came on (JA). Good w/EE ID at 0430 (CW). TUNISIA Tunis, drama 2010, then AA mx (ECS). AA chants after 6195 0500 (JA, DF, RWP). 6199 LAOS LV du Pathet Lao, theme mx between Viet and Lao, 1230 (GH). ALBANIA Tirana, beautiful at 0130 w/IS, N:E till 0137 (KS). 6200 6205 INT'L WATERS RNI, usual rock mx, TCs at 2240 (RD), 0008-0030 (HMS), N:E 0100 to 0107* (WH). IS 0456 before s/on at 0500, into mx w/FF, Dutch anmts, ads (WJS, REW, JA). 6250 EQ. GUINEA R. Santa Isabel, mx 2055, ID and more mx 2103. ID 2250, to 2258* (ER). Vy good w/Afr pops 0520 (RWP), chimes and ID 0700(GE) 6250t PERU R.Cuzco, monologue at 0015, vy low, only LA arnd here(ECS). 6280 INDONESIA(W.Irian) Manokwari, ID 1101 preceded by marches, then pop mx (GH). Also joined Djakarta nx 1201 (GH,GLD,TDS). N.KOREA Pyongyang, good lvl w/YL tlks at 1007 (DJ). 6540 CLANDESTINE SS political tlk, martial mx in background, vy good 7005 lvl arnd 1415. Suspect R.de Luego, V of Free Cuba, which also has been hrd on 6750 (ECS). 7019, vy weak SS interview at 1123, off abruptly 1133. BB rpts 10/71 LR as LV de Cuba Libre (GH). 7090 Tirana, into Rumanian at *0500 (REW). DODECANESE IS. VOA-Rhodes, exc in AA at 0500 (DF).
MALAYSIA BBC, WS nx 1423, lite mx 1432 (JDT).
SARAWAK Kuching, chants, tlks, ID 1356, western dance mx, ID 7110 7120

7130 1358, tlk. NF maybe replacing 7145 (GH). 7131, R.Malaysia, YL w/ NAS A-FRENDX

ID and short mx interlude until IS at 1230. Vy low (ECS).

TAIWAN VofC, Jap tlk and mx at 0903, //9685 (BBy). 7131

7140 CYPRUS Limassol, BBC EE ID 0135, then Asian langs, incl. Persian. Vy poor, and faded out under ARO QRM at about 0210 (CSW).

7150 UKRAINE Lvov, exc lvl w/RM EE at 0500 (DF).

7170 N. CALEDONIA Noumea, US and FF songs from 1030 to 1100* (AAM).

7175t INDONESIA ID and musical chimes 1150, then pop mx (TDS). 7180 MALAYSIA Tebrau, BBC at *2200 in Jap, NF ex-7120 (BP).

7210

SWITZ ICRC, good w/tests at 0600, 2300 (JA), 1700 (HMS). BRUNEI Tutong, vy poor in CC, ARO QRM, 1210 (DJ), poor also at 7215 1230 w/rock songs, old pops, small talk (RWP).

ISRAEL IBS, EE to 2130, then FF, asking for rpts on this fqy(ECS). 7225 PHILIPPINES FEBC, EE rel prgm well hrd 1200 (ECS), EE IDs clear 7225.

at 1230, then into Malay (RWP).

SP.SAHARA A Swedish DXer, in FDXC "DX-Kuuntelija" rpts hearing 7232 them to 2302 s/off (RWP). Bad time for ARO QRM (Ed).

7235 MALAYSIA BBC-Tebrau, N:E to 1115* (AAM).

RSFSR(Eu) Tula hrd w/RM in EE, fair, at 0500 (DF). 7240

SINGAPORE RS, Malaysian mx 1550, ID 1600. Good lvl (AEM). 7250

COMORO IS. ORTF, Mcroni hrd 0330 or a bit before w/IS, sometimes 7260 audible after that under BBC LA svc. Fair 9/20 after 0415 w/mx, not hrd after 0430 (MAF). Only hrd few minutes after BBC s/off 0415. Seems another FF stn there opening just before 0430, so beware (DF). Tentative, under Minsk to 0400, BBC to 0415, plus a 3d stn. M&W tlking, some mx, maybe an IS on bass-type instrument at 0428. Off 0430 (GLD).

UNID w/church svc till 2100, mx till 2110, then tlks (ECS). 7260

7275 HOLLAND RN, IS then into Dutch at 0800 (ECS).

7275 ITALY RAI, EE 0420-0440, //5990, both good (JA). PORTUGAL DW-Sines, *2115 in Czech, NF ex-15300 (BP).

7275

7280 INDIA Gauhati (listed) w/N:E to 1135, then vernac. Poor (BBy).

JAPAN NHK HS hrd w/GG lang lessons at 0850 (BP). 7285

POLAND Warsaw, good in EE 2230-2300, but ARO QRM (JA). 7285 7300 ALBANIA Tirana, hrd in GG at 0500 (DF).

7301 NIGERIA(Biafra) ECSB/CS-Enugu, drums, EE TC 0500, into lang (DF). Local ID by lady at 0500, good sig (RWP).

7310 UNID Maybe Moscow or perhaps Pathet Lao, lang tlk, mx, RTTY QRM at 1115 (LM). USSR xmtr w/RM EE arnd 0500 (DF).

7320 BYELORUSSIA Minsk (listed), 0500, seemingly in AA (DF).

7335 CANADA CHU, weak w/EE/FF TCs at 0132 (JK).

7395 N. VIETNAM Hanoi, tlking 1115, many mentions of Hanoi (ECS).

7414 N. VIETNAM Hanoi, fair thru jamming at 1109, in Viet (DJ).

CLANDESTINE Liberation R., oriental lang, straight cmtry,1130(ECS) CLANDESTINE LV du Pathet Lao, good w/cmtry 1104, mx 1123(DJ). 7470 7480

Many mentions of Souvanna Phouma, 1100-1130 (ECS). 7479, unid. in oriental, QRMing Peking-7480, maybe Laotian (BBy).

7504 CHINA Peking, CC HS, tlks, revol mx, arnd 1130 (LM).

751.1 UNID Asian just separable from Peking-7508. Tlks, 1025 (DJ).

7546 N. VIETNAM Hanoi, Sihanouk radio prgm to 1055, then anthem, silence to 1100, ID, anmts, N. Viet anthem (ECS).

7610 USSR RM HS, RR mx, tlking, deep fades, 2245 (IM).

8070t CLANDESTINE Maybe Radiofonicas Stathmos I Foni Tis Althias (Greek), nx 1830 in unknown lang, but "Stathmos" hrd. Mainly nx and pop mx. Seemed mention of "R.Stepnik" (AEM).

8333v CLANDESTINE(Rumania) R.Port.Livre, PP, distorted, *2320-2350*(LM). 8404 CLANDESTINE Voice of Free South, man in AA, tlks, AA mx, chants 1953, anthem and s/off 2001* (LM). Saudi Arabian.

LIBYA Tripoli, AA mx and tlks at 2243 (DJ), AA nx and mx 2140 (AEM). Also chants arnd 0425 mid-Sept, but not lately (IM). 8630

Rel prgm w/ID 2330, good clarity (AEM), SS rel prgm 0000 (MRL). ALGERIA Algiers, native mx 2115, //9685 (AL), AA nx 2228-2245 9510 ALGERIA (KS), and chanting at 2350 (MRL).

9510 Vienna, GG to M-E to 2056*, NF ex-9765 (BP).

VENEZ R.Barquisimeto, good w/mx 1415(DF). 9505m, LA mx, IDs, anmts, TCs arnd 2215 (DS). 9510

MEXICO LV Amer. Latina, SS mx 1400-1500 (DF), exc w/SS ID 1831 9515 (DM), and clear IDs during SS drama arnd 2230 (MRL).

9515 ANKARA, N:E 2201 (ER). TURKEY

9515 URUGUAY R, Sarandi, SS nx, then cmtry, 0005 (MRL).

9520 PERU R.La Cronica, many IDs, Peruvian mx arnd 1120 (JF).

9520 RNE, exc 2345-0600 (JA, WH). SPAIN

9525 RSA, EE nx, cmtry, features 2100-2150 (BC, TDS), and at 2230 w/N:E and tlks in EE (JK).

AIR, EE ID 2200, into EE nx (ER).

9530 9530 LIBERIA VOA-Monrovia, EE ID 2259, into PP for Brazil. Good (JA).

9535t ANGOLA Em.Off., PP tlk, Afr rhythms arnd 0500 (ECS). 9535 SWITZ SBC, ID 1200, then tlk and nx (AL). Good in EE 9545 MEXICO LV Veracruz, local ads at 0100 (REW). Tentati SWITZ SBC, ID 1200, then tlk and nx (AL). Good in EE 0145 (JK). MEXICO LV Veracruz, local ads at 0100 (REW). Tentative, vy weak at 0330 w/SS songs (DF).

9550 Oslo, *0300 in mixed Norwegian and EE (REW). NORWAY

Ankara, N:E 2200 (KS).

9550a TURKEY 9553 EL SALV EL SALVADOR YSS in SS arnd 0340, hum on carrier (DF). Mx, many IDs arnd 0225 (ER).

9560 E.GERMANY RBI, exc in EE 0330-0415, //9725 (JA).

9560 RSA, N:E 0115, good lvl, exc at 0235 //6080,9695,11970(CW). S.AFR. 9562 R. Nacional, all eve w/mx, tlks, 0100 past 0330 (DF). Good

w/pops 0609 (DS), and w/ID amid mx at 0755 (ACM).

9570 CHILE R. Portales, hrd w/pop mx and an ID at 0600 (BS), SS mx, tlk and IDs arnd 0515-0600 t/out (RBO).

9570 NIGERIA R.TV Kaduna, AA mx from 2140 tune, N:E 2200, AA chants. 2215 close includes EE ID (ARN).

9576 EL SALVADOR YSV, Santa Ana, mx prgm at 1400, vy poor (DF).

9580 AUSTRALIA RA, EE to NA 1115-1215, usual programs (HSt, BC). At 2030, IDing as "Overseas svc of the . . b/c . . Now 9580

follows our . . in Hausa." Weak, rapid fades (HM). NICARAGUA R.Mar, here w/mx 1425, but not earlier at 1403 (DF). CHILE R.Pres.Balmaceda, hrd at 0500* 9/26 despite special EE DX 9581 9590

prgm that was supposed to take place (DF, RBO).

9605 DW, *0520 in AA, NF ex-9665 (BP). 9610 MAURITANIA Nouakchotte, AA call to prayer at 0800 (REW).

9610 USSR R. Vilnius prgm, EE to 2257 when Dw came on (GH).

ECUADOR HCJB, NF hrd w/Studio 70 at 0135 (BC). 9615

Havana, *0100 to NA, ex-9760, but HCJB RM (REW). 9620

E.GERMANY RBI, GG to LA 0045, PP 0130 (REW). 9620

YUGOSLAVIA Belgrade, EE 2200-2208v, then IS, FF 2215. Exc (JA). 9620

9645 AUSTRIA Vienna, *2300 w/IS, multi-lang ID, GG nx (ECS). NF ex-9690 (BP).

9645 NORWAY Oslo, Norwegian to Pac at 0540, NF ex-11735 (BP).

9650a BURUNDI Bujumbura, Afr mx, FF ID and nx 1930, positive IDs hrd as LV: de la Revolution. FF ID 1945, then off w/IS.Strong, no QRM(KS).

NASWA-FRENDX 9650 CYPRUS BBC-Limassol, IS at *0340, into AA at 0345 (REW). GUINEA Conakry, strong w/revol. tlk arnd 0330 (ER, KS). S.AFR. SABC w/TC and Afrikaans nx at 0600 (REW). 9650 9650 THAILAND Bangkok hrd beneath VOA at 2355, pops and Thai mx(TLA). 9655 CUBA Havana, PP nx to Brazil at 0915, NF ex-11930 (BP). 9,655. PERU R. Nor Peruana, ID 0330 (REW). IRAQ Baghdad, hrd w/IS 2110, then FF mx. Good lvl, NF (ER). 9658 9660 ANGOLA Voz de Angola, PP tunes amid QRM and het, 0544 (DJ). Also Afr mx, PP tlk at 0600 (REW). 9660 AUSTRALIA Brisbane, w/horse racing at 0827 (GH). 9660 VENEZ R.Rumbos, chimes and LA mx 0940 (AEM), anmt to 0503*(WJS). 9670 PORTUGAL Ibra Radio via RTE, fair in EE sermon at 1930 (AAM). 9675 BRAZIL R. Diario da Manha, agriculture prgm 0830 (GH). R.del Pacifico, hrd w/rel prgm at *1135 (TDS). 9675 ALGERIA Algiers, good w/ID and AA chants at 1740 (ER), 9685 9685 TAIWAN VOFC, strong in Jap at 0924, //7131. Het QRM (BBy). ARGENTINA R. Nacional, EE 0340 (MRL), SS mx and ID 0426 (AAM). 9690 BRAZIL R.Rio Mar, PP songs mixed w/RSA at 0145 (DF). Tentative, 9695 apparently political speech in PP at 0056 (AAM).
BULGARIA Sofia, EE nx, folk mx, 0000-0020 (HMS), EE ID 0423(CW). 9700 9705 R. Maua, hrd w/sports prgm at 2130 (MAF). 9710a GABON Libreville, seemingly NF, Afr and other mx and IDs, 2019-2030, then FF cmtry. Great reception, better than 4777 (KS). CONGO RTVC-Brazzaville, Fr tlk, ID 2025 (LM), ID, songs, 2113(ER) 9715 9715 NETH ANT. RN, N:E, mx at 0500-0620* (WH). ETHIOPIA ETLF, IS, then EE/FF/Amharic ID at 0325 (REW). 9725 9730 R. Farroupilha, PP tlks 0135, ID. Strong, on past 0330(DF). BRAZIL 9745 R.Cultura, exc level w/sports at 0145 (DF). BRAZIL 9755 IRAQ Baghdad, N:E 2010, to 2020*. NF ex-9745 (BP). R.Occidente, So tlk, pops, IDs at 1201. Listed 9750 (SPD). VENEZ 9770m HAITI 4VEH, vy poor w/SS rel prgm at 2255 (DS). 97.80 ALBANIA Tirana, EE tlk hrd 0017, to 0027* (BC). CLANDESTINE R.Liberation, in Viet 1045-1232, seems //14993v(LM). 9838 UNID Man w/all AA prgm of EE pops, off abruptly 2030, hrd only 9880 one time (ECS). 9920 N.VIETNAM Hanoi, all Viet 1100, good w/nx (ECS). 9920 Fair, in EE/FF/oriental lang, 1040-1100, no ID hrd (DC). UNID R. Liberation hrd in EE 1055, nx by M&W, fantastic sig (ECS). 9935 INT'L WATERS RNI, C&W mx 0000, nx at 0100 (WJP). 9987.5 UNID "1940, on 9/20 & 9/22 hrd inaudible signal here. Carrier wave depression the only thing noticeable"(ECS). C'mon . . (Ed) 9991.5 CLANDESTINE VOFUNK, tlk in Khmere, mx, 1150, //10079(LM). 10080 CLANDESTINE VOFUNK, tlks at fair level, 1135 (DJ). 10120v CLANDESTINE R.Liberation, tlks, Asian mx, 1005-1232 fade (LM). 10140 UNID Asian, good at 1145 w/vocals, other tunes (DJ). 10175 Asian xmtr, poor in Asian lang arnd 1148 (DJ). UNID 10245 CLANDESTINE R.Liberation, hrd going off at 1154 (DJ). 10723 Presumed China Press Agency, dictation 1014 (GH). 11301-35t CLANDESTINE VoChinese Comm Party believed the one here, barely audible during jamming breaks, 1100-1139* (LM). 11323.5t INDONESIA R. Angkatan Udara, Indo tlks, pop mx, 1115-1230(LM). N.KOREA Pyongyang, HS drama 0627 (GH). Tentative, mx, tlks, 2130-0030, very unstable (LM). 11414 China Press, *1100, ID, tlk, "East Is Red" (LM). CHINA 11510 CLANDESTINE R. Portugal Livre, nx 1918, ID 1927, tlk to 1955 f/out or close (ER). IS 1929, then all tlks. Bad jamming (KS). E.PAK Dacca listed by Tatsfield, 71/2 kw, EE at 2040 (ECS). 11671 11672 Karachi, N:E 1945, agn 2030, then lang (HMS, JA, BBy). W.PAK MONACO TWR, *1828 in EE, into Armenian. Not 11705 (WJS). 11700

NASWA-FRENDX NOVEMBER 1971 11705 NHK, EE at 1650 (TLA). Stockholm, EE "Sunday Magazine" at 0330 (JK). 11705 VR, EE to Philippines at *2230 (REW). 11705 VATICAN ARGENTINA RAE, EE fair 2300-2350, ancng //9690,6090 (JA). INDIA AIR, no strain in EE, native mx, 0045-0100 (ARN). 11710 11710 11710 N.CALEDONIA Noumea, on early 0530 for sports (REW), and vy good w/pops and tlks at 0615 (TLA). 11715 AUSTRIA Vienna, GG, orch marches at 2055, NF ex-11790 (BP). 11715 "Saut ul'al Assifa" in AA over Algiers xmtr, 1830-CLANDESTINE 1845, //9510. Algiers FF prgm just before it. ?? (AEM). This is is the Voice of the Storm prgm by El Fath a(Ed). BRAZIL R. Nac. Brasilia, ID 0132, then nx headlines (ARN). Also 11720 ID hrd 1033 after Peking s/off 1030 (BP). INDONESIA Djakarta, EE, maybe mx cmtry, 1905, then pops (AEM). 11720 11729 CLANDESTINE VoMalayan Revol, *1059 in CC, tiks, revol mx, seemingly into Malay at 1120. //15789 (LM). 11735 BRAZIL R.Cl.de Goiania, poor w/LA mx under Havana, 0015 (AEM). 11765 BRAZIL Rdif.S.P., PP tlks arnd 0135 (TDS) and 0150 (DF). R. Guaiba, w/games or races at 0100 (TDS). 11785 BRAZIL NETH ANT. TWR, AA sermon 0505, NF ex-11820 (BP). 11785 11790 AFGHANISTAN Kabul, in EE, ID 1807, then local mx (AEM). 11795 R.Nac.Rio, local mx 0151 (TDS), in PP arnd 0200 (DF). BRAZIL 11795 ETHIOPIA ETLF, lang IDs 0252, drums, into FF 0300. EE ID hrd 0330 (RBO, TDS). 11795v INDONESIA Djakarta, ID, chimes, TC, nx, 1200 (TDS), AA nx hrd daily 1300 (DM). IDs, nx, mx arnd 1500 (JDT), nx, ID 1500 (TDS). BRAZIL R.Globo, PP 0158 (DF), pops at 0920 (BP).
INDIA Delhi, mx to 1400, then R.Newsreel. Good (DM). 11805 11810 11815 NETH ANT. TWR, EE rel prgm to FE, 0030-0130 (WJP, REW, ACM). MOZAMBIQUE L. Marques, PP at 0417 tune, hrd past 0500 (DF). 11819 Stockholm, good in EE 0045-0100 (LM, HMS), poor 0200(DF). Papeete, island mx 0345 (AL), FF 0500, //15170 (DS). 11825 SWEDEN 11825 TAHITI CEYLON VOA-Colombo poor-fair at 1500 s/on in Hindi (TLA). HAITI 4VEJ, full EE ID 1100, then rel prgm, rarely hrd in Aus 11835 11835 HAITI (BP). ID, fqys and lite mx, 2327 (TLA). Omdurman, TC, AA nx 0330 (REW), past 0500 (DF). Anthem, 11835 ID at 2100*(BP). Tentative, AA chants 0500, tik of Omdurman(ER). 11835 URUGUAY R.El Espectador, some pops, rather poor(AEM). Time?Ed. 11850 Ejura, strong w/drum IS at *2000-2100*(JK, ACM). Hrd on 11848.2 at this time, drifting a bit (DF). 11855 PHILIPPINES FEBC, vy good in RR w/clas.mx, 1715 (TLA), ID hrd 1800 but then not hrd (AEM). SAUDI ARABIA Djeddah, N:E 1945, into AA 2000. Vy weak (WJS). 11855 11865 R.Cl. Pernambuco, strong w/ads, 2340 (AEM), and w/mx, ads 0130-0140, many mentions of R. Tupi, so maybe relaying (ARN). 11866v CONGO Lubumbashi, 0425 w/Congo mx, vernac, FF (DF). Fair w/FF nx 0440 (TLA). Hrd w/drums, anthem *0353, anmt, then variety(Ed). ANGOLA Em. Oficial, PP talk on Luanda hrd 0800 (REW). 11875 BELGIUM RTB, FF 0040, EE 0045, NF ex-15230 (BP). 11875 NICARAGUA R.Nac, ID 0027 (ER), baseball 0215 (MRL). Gongs, ID, 11875 nx. 2200 (BP), ID and mx 2235 (WJP), mx and comls, 2350-0030(AEM). R.Splendid, enthusiastic ads in dialect at 1028 (GH). 11880 ARGENTINA MEXICO R.Tricolor, strong but irregular, hrd w/ads, mx at 2050 11880 (ARN), also 2120, arnd late September (REW). Ankara, IS 0350, HS prgm 0356 (REW, BP), past 0500(DF). 11880 TURKEY 11900t TUNISIA Tunis, good, lang tlks, M-E mx, 1535.No ID hrd (TLA). IVORY COAST Abidjan, good w/mostly mx to 2400* (ACM). PHILIPPINES FEBC, into Malay after 1230 EE ID (DS). EE "Manila 11920 11920

Calling" 1245-1315 (HS), Korean 2145, Indonesian 2200 (BP).

NASWA-FRENDX NCVEMBER 1971 11925 Kuwait, ending EE to Eur 2100. NF (BP). KUWAIT SPAIN RNE, N: E 0100 (BC), to 0245* to NA, //6140 (RD). 11925 UZBEK Tashkent, N:E 1203, cmtry to 1219 (WJS). 11925 SEYCHELLES FEBA, M-E tlking, rel songs 1725. EE ID 1725 (ECS). 11935. 11940 SINGAPORE RS, vy poor w/pips, N:E at 1530 (DM). BRAZIL R.Min. Educ ending EE/FF "Mx to the Wrld" 2253, asking 11950 for rpts, ancng //5990,9770. Thin modulation. See 6/71 FS (ARN). Also w/clas.mx, ID 0305 (TDS). LIBERIA ELWA, Sun rel prgm 0600-0800 (JA), ID 0630 (DS). 11950 11955 LEBANON Beirut, to NA 0130-0400 (REW). Hrd w/N:E 0227 (LM), AA before that (MRL). 11975 GRENADA VIBS, DJ and info show at Oloo (REW). 11990. CZECH Prague, EE 1730 to Eur (JA), to Afr (DF). 12080v CLANDESTINE R. Euzkadi, SS 2130, later in EE (AEM) (EE is usually last few minutes of the prgm, when they have it -- Ed). 12111, hrd to 2106*, also w/EE, //13249v (LM). CLANDESTINE R. Esp. Indep, IS, ID 1930(KS), SS nx 1901 (ER). 12140 ICELAND Reykjavik Radio hrd w/nx(?) and tlks 1214-1300, then 12176 returned to use as point-to-point stn (LM). 14993v CLANDESTINE R.Liberation, in Viet 1403-1515, unstable(LM). Eur DXer has rovd QSL for this fqy, so it is them (RWP). N.VIETNAM Hanoi, EE prgm w/"Bring em Home" song to 1327 (MRL).
BRAZIL R.Rural, agn active, ID 2331, off 2332. Vy strong (ARN).
CEYLON Colombo, *Oloo in EE (REW). 0205-0250 w/IDs, ads, pops, 15008 15105 15120 request for rpts to POB 574, Colombo(LM). N:E 1045, itrs (BBy). 15125 KUWAIT Kuwait, AA nx 2100, ID, anthem to 2115*, ex-15150 (BP). SPAIN RNE, into SS nx at *2200 (JA, DM). 15145 15150 N.KOREA Pyongyang, Korean 0030 (REW), IS 0100, into SS (ER). 15155 PHILIPPINES VOA-Poro(listed), good w/CC tlk at 1615 (TLA). CHINA Peking, EE to NA at *0100, //15080 (REW). 15165 15165 DENMARK RD, EE ID 1329, then Danish (WJS). Same at 1729, and 1200 (JA). 15170 LIBERIA ELWA, FF rel prgm 2005 (ER), in lang arnd 2200 (DJ), and in EE to 2230* (RD). Also AA tlks and mx to 2303* (AL). 15170 TAHITI Papeete, FF 0300, mx 0330 (ACM, WH). EE "Rpt frm FF Polynesia" 0400-0415 Tues (REW). Into Tahit. at 1655 (TDS). 15175 PHILIPPINES VOA-Tinang, N:E 2220, features. Fair, fading (CSW). 15180 ETLF, nx at 1331 (WJS). Lang?--Ed. ETHIOPIA 15190 CONGO ORTF-Brazzaville, EE at 2015-2030 (DF). 15195 TURKEY Ankara, GG to 2130, then FF (BP). Fair in EE, 2200 (HMS). 15200 NIGERIA VON, EE 0700 (WH), N:E, cmtry 1542 (TLA), and 1535(TDS). 15230 Vienna, FF nx to 1855, NF ex-15325 (BP). AUSTRIA 15245 CONGO Kinshasa, strong w/ID, FF nx 2300 (AEM).Mx, anmts, 0305(MRL). PHILIPPINES VOA-Tinang(listed), CC tlk 1620, //15345 (TLA). 15250 15255 NHK, good in Jap and EE at 1200, //17990,9595 (HSt). PINES R. Veritas, *1000 in Thai, ex-15310 (BF). JAPAN 15315 PHILIPPINES 15345 Kuwait, fair w/EE mx, nx 1830 and after (HMS, MRL). KUWAIT CANARY IS. RNE, hrd at 0245 w/SS pop mx (MRL). 15365 15390-410 ALGERIA Saut Al-Asifah over Algiers, often good in AA at 1830-1929 (LM). See 11715 (Ed). 15420t ALGERIA Algiers, good, M-E mx, no anmts hrd, 1604-1700 (JDT). Also hrd to 1700*. BBC Tatsfield says is Algiers (SPD). 15420 BBC-Limassol, tlks at 1720 (AL), Somali tlks 1810 (TLA). CYPRUS VATICAN VR, EE still here 0050, //5995,9615,11725 (REV). GREECE NHBI, IS and anthem *1727, good sigs (DJ). AUSTRALIA Perth, N:E, wx arnd 0435 (TDS). 15420 15425 15425 15430 KOREA VoFK, Korean to NA at *0200 (REW), SS tlk to 0300, then N:E. Vy weak (WJS). EE hrd 0317 (GH), also hrd arnd 0915 (AEM). PHILIPPINES FEBC, EE tlk at 1310 (IM), also w/rel tlk at 1615 15440

NASWA-FRENDX ending w/organ mx and s/off at 1630* (AL). 15445 LIBERIA VOA-Monrovia, poor w/special N:E at 1800 (DM). 15450 BRAZIL R. Nac. Brasilia, bossa nova, TC, wx, 0030, //11720(REW). 15500 COLOMBIA ENTEL stn HJB relaying R. Nacional at many times, such as 2101 w/ID, time (GH). Also hrd arnd 2330. Some distortion(ARN). 15505 Sverdlovsk (listed), mx 0345, bad RTTY QRM (TDS). 15520 Peking, 0100 w/N:E and cmtry (TDS). 15789 CLANDESTINE VoMalayan Revol, CC, Malay and Tamil tlks, revol mx, IDs, 1100-1300, 1315-1500, 2230-0000, //11729 (LM). UNID Asian stn in lang, tlks, mx, vy weak and fluttery, 15870 0105-0130 fade out (LM). 16373 CHINA China Fress Agency hrd w/dictation speed nx in CC at 1230. Also on 16435 at 1240, but weak; 17221 w/ID 1241, and best there; and 17504, weak at 1255 (LM). WINB, anthem, N:E 1700 (TLA), rel prgms to 1958* (WJS). 17720 17775 Oslo, Norwegian to Aus-Jap-NZ 0805, NF ex-17800 (BP). NORWAY 17795 ITALY RAI, IS, ID 1458, then nx in lang (JDT). BBC-Tebrau, WS N:E hrd 0000 (REW). 17860 MALAYSIA 21480 RSA, *1656, nx in Dutch 1701 (WH). PORTUGAL Lisbon, PP 0935, also hrd on 21700,21735 (BP). PP 21495 pops 1645 w/VOA on both sides (TLA), good w/EE pops, 1855 (TLA). 21520 SWITZ SBC, GG to Afr 0605. This band is improving (BP). 21550 ENGLAND BBC, FF nx and cmtry hrd 1840 (TLA). 21595 CANADA CBC, vy good w/N:E to Eur 1635 (TLA), EE to Afr at 1900, into FF at 1915 (CW). E.PAK Dacca, special N:E 0910, into lang 0915. Formerly s/off 21685 0900 (BP). 21690 GRENADA WIBS, EE mx hrd already at 2035 (ER). 21695 W.PAK Karachi, EE ID at *0845, but ancng as 21710. Is new svc for China and Japan (BP). PORTUGAL Lisbon, PP pops to Guinea, Brazil, 1630, //15125(TLA). SWITZ SBC, *1315 in EE to FE (BP). 21700 21725 21730 NORWAY Oslo, Norwegian and EE ID at 1830*, good sig (TLA). And hrd w/N:E, exc sig, 1802 (JDT). 25790 RSA, hrd w/clas.mx at 1430, //21535 (REW). S.AFR. Thanks as usual to this month's reporters . . . AAM Albert A.Miller, Jr, Ohio/HRO500 HSt Howard Stevens, Mich/DX150A ACM Anthony C. Marks, Oregon/SX190 John Alcock, Fla/SX43 JA AEM A.E. Martin, England/51J2

JDT John D. Tuchscherer, Wisc/HQ100A Alfred Lisanti, N.Y./SPR4 JF John Fisher, Ont/Wnghs 636XO ARN A.R. Niblack, Ind/Hu200, SX100 JKJoey Kennedy, La/Crngie 6-band BBy Bob Bundy, Caroline Is/SPR4, SB310 KS Kenneth Schnur, N.Y./HQ180 Bob Carlsen, Ohio/Star Roamer BC LMLarry Magne, Pa/R4B BPBob Padula, Australia/CR100 MAF Marlin A. Field, Mich/SX100 BS Bill Sparks, Calif/R4B MRL M.R.Leonhardt, Ind/SB310 CSW Chas.S. Wackerman, Md/HQ100C Ron Bruns, Mo/DX150A RBO R.B.Odlin II, Wash/R4B CW Corky Webb, Texas/SPR4 DC Dave Curvin, Texas/HQ180A RDRich D'Angelo, N.Y. DF Dan Ferguson, W. Va/SB310 REW Rohd. E. Wood, La/SS-IBS, SPR4, R530 RWP Rchd.W.Perry, Ill/S85, GD125Q DJ Danny Jamison, Ky/51J3, R390, 75S1 DMDoug McClellan, N.M./GR64 SPD Steven P.d'Adolf, Mass/R530 Dillard Stone, Texas/S77A TDS T.D.Smith, Texas/BC779B ECS Edw.C.Shaw, Va/SX190,SX71 TLA Terry Lee Adkins, Calif/SW4A Evan Rosen, N.Y./SX133 TW Tom Williamson, Ont/HQ180 ERWes Huggins, N.C./NC46 GHGlenn Hauser, Texas/Hal60 WJP wm.J.Plum, N.J./WR 600 GLD Gerry L.Dexter, Wisc/HQ180, R4B WJS Wm.J.Schultz, Pa/SW4A Hank Michalenka, R.I./R4B

HMS Hank M.Slade, Mass/HQ180A

Jerry Berg, Mass/SB310

GOOD DX and 73 -- JERRY BERG

Last Minit News/Tips ..

FLASHSHEET FLASHSHEET

Last Minit News/Tips

Al. Niblack-Editor, 420 Shelby Street Vincennes, Ind. 47591 Deadline 23rd of Month ANGOLA 11876V noted Sund S/on 0550, preceeded by IS 0545, not as sked as per WRIH, then full anthem and ID, "Aqui Portugal", in PP. (Iarry Magne, Penn.) (Is Radio Angola) ARGENTINA 11880 R. Splendid, 2245-2255, native music, including an ID, SS(Al Niblack, AUSTRIA 6255.25 Schulungessender des Osterreichischen Bundesheeres, Vienna, noted from 0500-815, GG, pops, many clear IDs by M. (End of FLASH) (Larry Magne) AUSTRALIA New fqy of 11840 noted in EE // 11765 at 0815 from Darwin. (Larry Magne) BOLIVIA 4832A R. Grigota 0604 vocal/organ music then LA music; IDs 0605-0610. (John Tuchscherer, Wisc.)...4876.1 La Cruz del Sur, 1030 Aymara prgm.10/1(Bill Berghammer.N.Y.) BRAZIL 11950 0100-0200, vy possibly R. Min. Educacao, M&W anners. (Ed Insinger, N. J.)
BULGARIA 15309A R. Sefia 1700-1800 in AA, not often reported. (Bill Berghammer) CAMEROON 4972.5 R. Yaounde right now till 2300 S/off, extended sked, big lvl(Ralph Perry CANADA 6080 CFKX Vancouver, listed .Olkw, with football rebroadcast off parent / Ill.) station CKWX MW. Weak sig, this low power one seldom reported. (Rich Heggs, Canada) CHN AFRICAN REP 5038V Bengui is currently being heard with good signals 2200-2304 S/off in FF with ID. (Mark Konen, Wisc) (No doubt but this one has increased power, Editor) CHAD 4904 RTV Chad observed at 0430 with FF talk, UTE QRM. (Bill Berghammer) CHILE LV de Chile 9689, noted 0320-0340, M&W annors, pops, SS ID. (Larry Magne) CHINA(PR) More thawing at RP. Now have weekly "Listeners! Letterbox" show; to ECNA Wed morn/evening 1230, 0030, 0130, 0230, 0330; to WCNA Wed evening 0330 and 0430. (Larry Magne)...15060 Radio Peking confirmed my report with a proper QSL photo card, also date, though omitted the time. (Bill Schultz, Penn.) COLOMBIA (FLASH) A new station, Radio Super, 6065.3, logged 9/26, from 0400 with tropical music, time checks, many IDs with strong sig. (Ernie Behr, Canada)...6141V Ia Voz de Cali, ex 6195, 0530 SS ID. (Bill Berghammer) COMORO IS (FLASHES) (T) ORTF, 10/15, OM & YL definitely in FF, vocal & instr music, though bad ARO QRM, till 0430 fade out. (Ed Shaw, Va.) ... Both Ger Dexter, Wisc., and Don Jensen, Wisc., report letter QSLs received promptly for reports, 7260. DOMINICAN REP R. Antillas, 4962A, from 0008 tune with LA music, good lvl, two IDs. (John Tuchscherer)...R. Antillas recently reactivated on 4962.3V, 1115 SS(Bill Berghammer) ECUADOR 4771 R. Cenit noted from 0409-0433 S/off, native SS, 7 IDs(John Tuchscherer) REYPT (UAR) R. Cairo in EE from 2145-2258, 9805, to Europe, QRM free. (Ed Insinger) ETHTOPIA 11910 RVOG from 1919 with unique music, FF & EE IDs, to W. Africa, (John Tuchscherer) ... 9588V (TENT) Believed the new 31M R. Ethiopia outlet here 1800 native, probably Amharic 10/17. Believe Mogadishu is currently on 9592, 1700. (Bill Berghammer) GALAPAGOS IS(FOUADOR) 6270 LV de Galapagos, 0050, heard in all SS, OM & YL talking till 0100, followed by choir music; in the mud by 0115. (Ed Shaw) GREECE (FLASH) 6045 FBS, 10/15, noted 0440, definite IS, followed by HS. (Ed Shaw) INDIA 9525 AIR Aligarh, recently new, noted 1800 with EE GOS news to Europe, 10/17; Signal imroves rather quickly. (Bill Berghammer) INDONESIA (FLASH) R. Angkatan Udara heard for the first time, finally 3 at 1128 on 11323, weak sigs, prgm of pops. Peking slop de 11330 causing QRM. (Dan Jamison, Ky.) ... RRI Possibly Manokwari, West Irian, on 6279, at 1156, 10/11, with tunes, mixing with R. Peking, causing listening to be quite messy. (Dan Jamison) ISRAEL Kol Yisrael, new 9685, from 0400 RR, QRM de Moscow to NA. (Ernie Behr) LIBERIA ELWA, 15095, noted S/on 1615 in AA, fair lvl, 10/7. (August Balbi, Calif.) KOREA(N) R. Pyongyang, 9514, EE 1330; at 1400 anne I hour EE. This 10/15(August Balbi) ...4772 Pyongyang presumed, 10/10, W spking Korean w/applause, 33333(Glenn Nauser, Tex.) ...6290 Pyongyang list, 0730, with Korean talk, though a bit early. (Glonn Hauser) MALI R. Mali, 17722, heard 10/12, 1620 FE ID, talk and African music, 1635 FE news, 1641 S/off with anthem. Better than Paris, 17720; anned 17725, (Emie Behr) NORWAY 17825 R. Norway 1900-2030, Norwegian to ECNA, 10/17. (Bill Berghammer) PERU 4995 R. Andina with lively music from 1048 tune, clear ID 1050 ... R. del Pacifico, 4975, light music, an ID at 0426, SS, (credit both to John Tuchschever) PLEASE TURN TO OVERLEAD

SAHARA(SP) (TENT) 7232 R. Sahara was heard at 0754 with AA and ocassional annots but no apparent ID, Reception quality was some pain, some strain lvl. (Mark Konen)
SEMCHELLES 11935 FEBA in AA after 1800 S/on; EE ID and prgming at 1830; on 10/13,
fair to good lvl. (August Balbi)...FEBA, 11935, 1800-1900 S/off noted with strongest sigs ever, 20 over Sugar 9 lvl, with Back to God Prgm, and musical prgm. Requests reports. (Rich Heggs)

SINGAPORE R. Singapore on 5047 not 5050, past few days, EE news 1400,10/15(August 50 AFRICA 4875 0415, with Afrikaans talk, 10/7. (Bill Berghammer)...25790 / Balbi) R. RSA 1200-1300, FF to Africa, a new time this quarter, 10/17. (Bill Berghammer) SPAIN RNE, Madrid, 9520, annoing as, "Centro Emisor de Nobeljas", 0000-0605 S/off, SS to C. America, not // any other fqy; SS prgm on 9360, 11775, 15145, annod as

Arganda site. (Ernie Behr)

SWEDEN 6175 R. Stockholm 0038 on new fqy, in EE to USA, 10/14, fair lvl. (John Banta, N. Y.)...new 21505, 1415, R. Stockholm, EE to USA, good lvl, 10/14. (John Banta)
...RS noted with initial transmission on new 6175 10/13(GMT date) from 0030-0100 S/off,
EE. Is also on 21505 from 1400-1430 EE to ECNA; and 6175 from 0200-0230 ECNA, EE.(Larry Magne)

VATICAN VR current sked: 0030 SS; 0050 EE; 0010 FF, S/off 0125, 10/15. On 5995 //

9615 // 11725. (August Balbi)

VENEZUETA (TENT) Unid LA just moved here with ID seemingly given at 0800, 10/15, sounding like R. Sucre in Cumana, 6065.7V. (Bill Berghammer) (See Colombia, R. Super, 6065.3, first page this FS, Editor)...3324.7 R. Monagas, 0545 SS ID, "...canal 960", 44444, 10/17. (Bill Berghammer)

VIETNAM(N) Hanoi HS, 7416, at fine lvl around 1235 with Orienval music, YL anner.

(Ralph Perry)

TURKEY 11880 R. Ankara relaying Turkish HS 1545, 10/17, new fqy, replacing 15160 at

this time, and 9515 at 0400. (Bill Berghammer)

UGANDA 5026 R. Uganda with EE at 0345, 10/16, though DR splatter. (Bill Berghammer)
... (Bill, how about giving us the English ID used by this station? Thanks, Editor)
USSR 4850 Tashkent, Uzbek SSR, 10/10, 1253 in RR(?), 1300 ID, music. (Glenn Hauser)
... 5015 Arkhangelsk, RSFSR(EUR), 0430 cultural prgm, 10/16. (Bill Berghammer)
YEMEN R. Sanaa, 5805A, S/on at 0300A; CM with slow unaccompanied AA chants; weak
lvl with a het. (Mark Konen; Ralph Perry)

CLANDESTINES Per letter from Victor G., Ceylon: R. Bangla Desh now MW 830 only, no SW since around May. Seems to be 50-100Kw, AIR transmitter and is jammed from easterly W. Pakistan. Partial sked is 0120 and 0710 EE, 1330-1400 Bengali, 1400-1430 EE,

and after 1430 in Hindi. (Larry Magne)

VOICE OF THE PATRIOTIC MILITIMEN'S FRONT (TENT) This one may possibly ID as, "Day la tieng noi cua mat tran dan quon ai quan;" though ID not noted, just observed from references. This station heard at 1053 here in Kentucky, on 9429 kcs plus a few cycles, at low lyl, with fluttery sigs, past 1100, with talks and music; a beacon type tone on fqy makes for strain listening, this 10/11. (Dan Jamison)

HARMONIC LISTENING (Via Glenn Hauser) COLOMBIA 2880 HJEK, R. Tulua, Tulua, 0306 tuno, 0530 Caracol plug, various local annots; 0344ID as, "R. Tulua de Caracol(2x1440); also noted at 1100...GUATEMALA 2860 TGAG, R. Huchuetenango, 10/8, weak lyl; by 0340 was much better with ads, 0345 "musica guatemalteca", prgm ending; presented by a compania de transporte, ID; not audible at all on fundamental 1430 kcs, 33322...TGMS, 2898, with ID as, "R. Nacional Mazatenango", listed for 1450, so must be slightly off fqy. 0315 music, 0320 3 chimes, routine S/off giving date, ID, wishing, "paz y bien". Followed by anthem, 0323 off.

SEPTEMBER 1971

SUNSPOT COUNT AS FURNISHED BY THE ZURICH OBSERVATORY, 10-4-71. 1-22, 2-18, 3-24, 4-25, 5-41, 6-71, 7-74, 8-55, 9-47, 10-21, 11-16, 12-27, 13-43, 14-58, 15-68, 16-59, 17-70, 18-74, 19-65, 20-53, 21-56, 22-69, 23-62, 24-30, 25-30, 26-25, 27-38, 29-61, 30-69.

MEAN-47.5 - PREDICTIONS OCT-54, NOV-52, DEC-50, JAN-48, FER-47, MAR-45(Grady Ferguson, ACKNOWLEDGEMENT: Thanks to so many reporters who supplied so much material for / N. C. this month's FS. Technical inquiries may be addressed to this dept., please include SASE. Dan Jamison, currently of Ft. Knox, Ky., visited with us recently one Sunday. A most pleasant time for both of us. Phone last minute items to 882-3976.73, AL