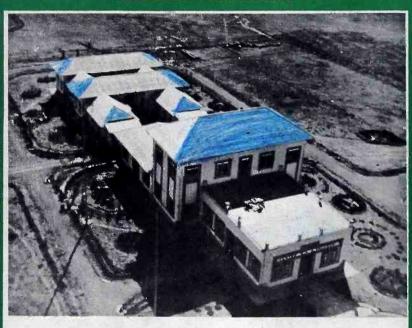


SEPTEMBER 1936



A Rare Photograph Showing
RADIO STATION AT AKAKI, NEAR ADDIS ABABA, ETHIOPIA



INTERNATIONAL DX'ERS ALLIANCE

DEDICATED TO THE LATE A. C. LYELL

NEW IDA GUILDS

CONTEST ANNOUNCEMENTS

DX AROUND THE WORLD

ACCURATE SHORT-WAVE LIST

BROADCAST STATION NEWS

ARGENTINA Corrected addresses: Radio Fenix, LR9, Talcahuano 1186, Buenos Aires; Radio Portena, LSL, Belgrano 1841, Buenos Aires; La Voz del Aire, LS9, Maipu 550, Buenos Aires.

AUSTRIA Graz (886kC), power decreased to

7.5kW (Stansfield).

AUSTRALIA 2DU, Dubbo, N.S.W., 1060kC, 100w is on the air .. 2NR, Northern Rivers Regional, Lawrence NSW, 700kC, 7 kW, is now relaying 2BL and 2FC on regular schedule.. 6GF, Kalgoorlie, WA, will be completed about January 1937 .. 6WA, Minding, WA, 560kC, 10kW, should start Reischssend operating in November, 1936 (GRDA, McCormick) Heilsber BULGARIA New-Zagora, on 1402kC, with 2kW (Stansfield)



Reischssender Konigsberg Heilsberg, Germany

Honorary board of nine governors representing all parts of Canada, with a system modeled after the BBC, will supplent the present Canadian Radio Commission, which has been existing for about four years Chilean stations now divided into zones: CA for northern,

CB for central, CC for southern and CD for extreme southern zone (LH)

C.R. Correct frequency of TIEP on BCB is 880kC (Gozen) New-Assiut, on 731kC, power unknown (Stansfield)
Correct frequency of ZJV, Suva (400w), is 920kC (McCormick)
New-Vasa Vassa, on 1420kC with 500 watts (Stansfield)
Radio Cote D'Azur (1276kC), power increased to 27kW (RS)
New 300kW, Long Wave station to be built at Zeesen. Entire EGYPT FIJI'S

FINLAND FRANCE

GERMANY plant will be underground with only the aerial tower visible (E.Radio)

ICELAND Reykjavik (208kC), 18kW, broadcasts weather forecasts in Icelandic, English and German at 6 am; is also on at 11sm and 3:10 p.m. Broadcasts last until 8 pm EST on Fridays and Saturdays. The call is "Octvarp Raykyaweek" (Egyptian Radio)

INDIA Four broadcasting stations will soon be completed in Hyder abad and several thousand receiving sets are being installed in villages throughout the state by the Nizam (Egyptian Radio)
N.Z. New 60kW national station at Wellington should be testing

in October or November. No frequency has been allotted the station yet. 2YA (570kC),5kW, will serve as an auxilliary. 2YC (840kC), will be used for commercial purposes. 2ZR, Nelson (920kC), 50w, back on the air. 2ZM, Gisborne (1150kC), increasing power to 250w. 2ZJ, Gisborne (980kC), increasing power to 500 watts. Under new radio set-up all B stations will receive power increase and C stations be used for advertising. Relay BC stations will be erected for all main towns (McCormick) Tromso to move to 282kC with power increase to

NORWAY Aalesund to move to 253kC with power increase to lokw (Stansfield) New CTIGE at Parede (1030kC), with 30kW will take air soon New station at Mayaguez, will operate on 1370kC, with 250w PORTUGAL

day power and 100w night power. Owned by Puerto Rico Advertising Co. Poste Bizertin at Bizerte, works on 1430kC daily from 6:15 to 7:30 a.m. and from 1 to 1:30 p.m. EST (Mercieca)

Servicio Oficial de difusion radio electrica of Montevideo URUĞUAY

is erecting a 50kW station, which will operate on 650kC (E.R.) New station will be erected at Carlsbad, New Mexico, to oper ate on 1210kC, with 100 watts. Changes authorized by the F.C.C: KSUN, Lowell, Ariz., 1200kC, increase day power to 250w.. WOL, Washington, D.C., will move to 1230kC, and increase power to 1kW.. WMEX, Boston, Mass., will move to 1470kC, increase night power to 5kW and day power to 5kW. WLW, Cincinnati, Ohio (700kC), will operate with 500kW at night using directional antenna. WLBF, Kansas City, Kans., 100w, to move to 1310kC. KWSC, Pullman, Wash., 1220kC, will increase day power to 5kW. KECA, Los Angeles 1430kC. Insugurated its new 5kW rutt on August 20.

III JUKU,	inaugurated its new	JKW XMC	r on August 20.	
EST		DX TIPS	PERIODS	EST
Weekly	Tues1-1:30am	1300kC	lkW Los Angeles, California	KFAC
1 *	Tues., 5: 35-6pm	9530kC	SW Schenectady, N.Y.	W2XAF
	Fri. 10:30 or 11pm	980kc	50 Pittsburgh, Pennsylvania	KDKA
Weekly	Sun.,1-1:15 am	930kC	100wCalgary, Alta, Canada	CFAC
	Sun.,1-1:15 am	6LOKC	50 Los Angeles, California	KFI
1000111		0400)	

DX AROUND THE WORLD

HAWAII: Reception conditions have been ideal this summer. It has been cool and very rainy, with little static, however KFI, KPO, KSL, KNX and KOA, our main coast standbys have not been coming in nearly as well as usual. On the other hand, reception of the high powered BCB stations in Australia and N.Z. is above the average. (Laurence Giddings).

and KOA, our main coast standbys have not been coming in healty as usual. On the other hand, reception of the high powered BCB stations in Australia and N.Z., is above the average. (Laurence Giddirgs).

WESTERN U.S.A: Still hearing a fair signal from 1YA and 4YA. Sometimes 3YA can be heard faintly and 2YA does a bit to liven things up occasionally. I got my best signal of the year from 4RK early in July

(Elwin Smith, Washington).

AUSTRALIA: Conditions poor on all bands. Japanese BCB stations are heard changing about and testing on new frequencies. Best orientals are: XGOA, MTCY and HS7PJ. Best short-wave stations have been WAXK (25m) and W2XAF near 8:30am, and Radio Coloniale from 12:45-3pm (EAT). Best 20m hams have been W2EUG, XE2OH, KALAN, G5NI, W3AHS, W9LD, W9BBU, W9LP, W8JSY, W9BJ, W4AH, W9RUK and W4DRC (Preece and Brown, SA; P. Geppert-P. Carrick, NSW

D.E.I: Reception of U.S.A.during this rainy season has been wonderful, but quite changeable at times. During the evening, I hear W3XAL (16m), W2XAD and W8XK (19m). Australian stations are good with VK3ME best. JVN is best Asiatic. Also hear KZRM and ZBW. RV15 is seldom heard, but RW59 comes in like a local, as does Zeesen, Pontoise, Deventry and PCJ/PHI. Best reception is from Daventry (Abderhalden, Moluccas Is)

GT.BRITAIN: Reception has been surprisingly good, especially South Americans. Static has been low and little fading. Stations best heard were: LR1,LR3-5-6-8-9,LS2-5-8-9,PRF3-4,PRH2-3-8; WCAU,WIOD,WBZ,WABC

and KFSD (Stansfield, Woking, England).

EASTERN CANADA: South Americans have been fine this summer. LR3-4-8 and 10 all have been heard Sunday mornings with late programs, which seem to come from night clubs. LS2, LR5 and LR8 can easily be distinguished on the hour by the striking of a big clock similiar to Big Ben. Have been hearing mystery Latin's on 1210 and 1260kC (Peters, N.S.)

EASTERN U.S.A: South Americans have been grand this summer, being at their best late Saturday nights or Sunday mornings. Several new Brazilians logged and reported include: PRD4 (250w), PRF4, PRD2 and PRH8. Argen tinians reported were: LS3-9-10 and LV5 and LT3. Also reported CX6 and HI8Q. Now have 28 SA's verified with several reports still out. Veriform LT3 says power is now lokw. TA's are beginning to show up with lYA, KGU-KGMB-KHBC, 3GI and 2BL heard so far (R.H. Tomlinson, New York)

THREE RARE CATCHES W KC
FJP, Noumes, New Caledonia 500 600
ZJV, Suva, Fiji Islands 400 920
Fiji Broadcasting Co.
PORT Moresby, Papua 100 1350
Amalgamated Wireless (A/sia),
47 York St,Sydney,Australia.

BEST VERI'S REPORTED RECENTLY

3XY, Melbourne, Australia. 600w.
Joel Armantrout, Fitzgerald, Ga.

JOVK, Hekodate, Japan. 500w.

Howard Eck, E. Lansing, Michigan.
LS9, Buenos Aires, Argentina. 6kW.
LS10, Buenos Aires, Argentina. 6kW.
Gleiwitz, Germany, 5000 watts.

R.H.Tomlinson, Port Chester, N.Y.

SUPREME BROADCAST DEGREE SUGGESTED R. Tomlinson, of Port Chester, N.Y. suggests a DBC (Doctor of Broadcast), be inaugurated as the highest broadcast band degree and similiar to the DSW on short-waves. At least 100 BCB veri's representing at least two from each continent would be necessary-- Ed.

THOMAS VS. AMLIE RECEPTION DUEL Details of the two-man contest between D. Thomas of Proctorville, Ohio, and O. Amlie of Philadelphia, for consecutive reception reports to VK6ME, of Perth, Australia, have just about been settled. Contest to cover months of Jan-Feb-March. All reports to be sent to IDA HQ for forwarding in one bunch. Listening period will cover same half hour each day and all reports will be forwarded not later than 9 a.m. of the same day. Interest on the outcome is running high, and John De-Myer has already offered a year subscription to the winner.

PUBLICITY COOPERATION SOLICITED Every IDA member who will aid Publicity Vice-Pres., Jas. Spalding, 3226 Virginia Ave, Louisville, Ky, to the extent of contacting your own local newspaper or radio station for a little IDA announcement, get in touch with Mr. Spalding at once and the announcement will be sent.

Subscription price \$1.25 per year anywhere.

International

Published Monthly Excepting July



Ax'ers Alliance

CHARLES A. MORRISON

VOLUMB 4

BLOOMINGTON, ILLINOIS, U. S. A.

мо. 8

EDITORIAL

Another DX season is with us. It is our hope to make this the great est IDA year yet. We are doing our utmost to make the IDA and the GC increasingly valuable, by the addition of new departments, more activities and more concise and accur ate news. Our Goal is to double membership enrollment this our season. This CAN BE DONE but it is necessary for EACH member to his or her part. Your co-operation and support can best be shown in these two ways: Enrolling of new IDA members and paying your subscription renewal promptly. The IDA is the world's only Honorary All-Wave Society. The IDA has members in 45 states of the U.S.A. as in 55 foreign countries. well as Why not explain the advantages of our International Good-Will DX Organization to your friends? We cordially solicit your co-operation throughout this season.

Charles A. Morrison, Fres.

GLOBE RADIO DX'ERS (Australia). Things are going satisfactorily here. We are averaging at least 3 new members each month. We have appointed "Teleradio" as our GRDA-IDA official organ for Australia, in appreciation of the generous space and headlines they have allotted us. Any matter pertaining to the Australian IDA should be referred to A. Preece, 61 Lipson St, Port Adelaide, South Australia.

REGINA JUBILEE - Chapter had a fair turn-out at August 9 meeting held at home of Robert Thompson.Wm Ansell gave an interesting talk on his recent visit to Calgary Foothills Chapter's Anniversary dinner. Plans were discussed for fall expansion and a permanent meeting place.

CALGARY FOOTHILLS- Chapter celebrated its first year of existence by holding a banquet at the York Hotel on August 3. Vice-President Wm. Ansell, from Regina, was the guest speaker. He presented prizes to the winners in the local S.W.

contest. Jim Mathews winner, receiv ed a splendid silver trophy, Jim Maguire second, a lovely cigarette box, Art MacLean third, a leather pocket book. The election of Chapter officers for the new year was also held, and Jim Maguire was reelected president and Art MacLean was re-elected Sect-Treas. A short address was given by Wilf Woods on the progress of the local Chapter and Carman Bradley spoke on IDA in general. Wm. Ansell concluded the evening with a fine address of encouragement to local members ... Calgary Chapter has temporarily disbanded for the summer and will hold the next meeting on Sept. 11.

NEW CHAPTERS: are in immediate prospect for San Francisco, Minneapolis, Detroit, Halifax, Honolulu and Essex County, Massachusetts. For any information pertaining to chapters, contact Lloyd Westmoreland, IDA General Chapters Secretary, 2664 Garnet St, Regina, Sask, Canada.

CHAPTER CHARTERS printed in hand some three-color combination of green, brown and black with gold seals are now in stock at the HQ of the General Chapters Secretary. Every IDA Chapter will want an official Charter.

GOLDEN GATE WORLD DX CONVENTION
-San Francisco-July-1939-

Plans are going rapidly shead in planning the international conven-Photos and information will soon be available for press use. It is hoped to have official Listening Fost shacks both in mountains and on the man-made islands in the bay, which will in contact with each other through The exhibit at the ham radio.. will include a col-World's Fair lection of prize veri's, first verifications and those from pioneer stations, exhibit of rare oriental and asiatic musical instruments, stamp collections acquired through dx'ing, photos of stations and DX posts, radio magazines, club organs and the very latest in receiving and transmitting equipment. For information about the convention, write the director, George G. Sholin 55 Lapidge St, San Francisco, Calif.

NEW IDA GUILDS

Several other activities so near ly parallel that of dx'ing that I believe the IDA can render greater service and prove of increased value to its members by officially recognizing these kindred activities as divisions of the IDA and striving to bring the adherents of these various activities, within the IDA, closer together in the spirit of mutual helpfulness and interest.

We wish to announce the impending formation of these units: IDA RADIO JOURNALISTS GUILD; IDA STAMP COLLECTORS GUILD; IDA AMATEURS

The IDA RADIO JOURNALISTS GUILD will be composed of the numerous well-known Radio columnists, editors and contributors that are members of the IDA. Only those active-ly engaged in one of the above cat egories will be eligible for the IRJG. The first organization step will be to have some journalist offer his services as temporary director of the unit to help in selecting a name, in making up a directory of those eligible for membership, securing permanent officials and other immediate de-Anyone willing to help in tails. this capacity let me know at once. Remember, In Union There is Strength

In the formation of the <u>IDA</u>
STAMP COLLECTORS GUILD, we first
went every member who is at all in
terested in this subject, to send
his name and address to us on a
Postal Card, together with any suggestions and if possible offers of
willingness to help in organizing
the unit.

In organizing the <u>IDA AMATEURS</u> <u>GUILD</u>, we want the name and address of every member having an amateur license, together with details as to your call, rig, etc. If willing to help in organization work, let us know.

Each one of these Guilds, altho sponsored by and affiliated with the IDA will retain their separate identities and run their own organizations and later on, we hope, issue their own Guild Organs.

These Units will not be featured in the Globe Circler in fairnessto those members who are dx'ers only. Suggestions will be most welcome.

IN MEMORIAM It is with very great sorrow we must record the passing of A. C. Lyell, General African Representative of IDA. Although 69 at the time of his death, he had the energy and enthusiasm of a youth. We are indebted to him for his activity organizing



and directing our IDA branch in South Africa.Mr. Lyell placed high in two IDA World DX Contests and possessed a most enviable log. In business, he has occupied a number of important Government positions. Our deepest sympathy to the intimate family of our member and friend, A.C. Lyell.

NEW N.Z. COMMEMORATIVE STAMPS

N.Z. is having a special stamp issue in October to commemorate the "All World Chamber of Commerce Conference". These will be on sale during October only, so IDA members wishing same, send 3% or 5% uncancelled U.S. stamps to L. McCormick 73 Baird St, Invercargill, N.Z. The stamp orders will be filled at the actual exchange rate of threepence for each 5% stamp. Send extra stamp for postage.

INTERNATIONAL DX CONTESTS

Separate World's Championship contests for BCB and SW dx ers are starting Sept.1, 1936, and closing on April 30, 1937. These contests are open to ANY DX'ER, whether belonging to the IDA or not. Send in your application at once together with 50% for each or either contest you may desire to enter to J. Dickenson, IDA Contests Director, P.O.Box 95, Regina, Sask, Canada. The awards in each contest will be well worth every effort put forth. but the exact list will not be div ulged until December. When your application is received you will be given a number, a rating and a complete set of rules. This contest is being supported by leading radio clubs and periodicals and will be the biggest event of this kind ever put on. We expect every member to send in his application and co-operate by doing his best.

WITH OUR MEMBERS



K.A.ABDERHALDEN

(Correspondence Corner) James A. Dunigan, 194 North St, New Britain, Connecticut, wishes to exchange SWL cards with other IDA members

Floyd Hammond, Pleasant St, Dexter, Maine, would like to correspond with members in Egypt, Africa, Palestine or Iraq, but will answer any foreign letters.

Leslie Wilson, Taranaki Club, New Plymouth, New Zealand, would like to obtain U.S.A. airmail and other stamps by exchange with U.S. members.

K. A. Abderhalden, c/o K. P. M. (Royal Packet Nav. Co.) Amboina, Molucas, D. E. I., would like information from other members relative to the printing or ob-IDA REPRESENTATIVE taining of QSL or SWL cards.

Mrs. Charles A. Morrison, 1018 N. Prairie St, Blooming MOLUCCAS ISLANDS ton, Illinois, wishes to exchange stamps, especially commemorative air mail or pictorial issues, with members in ALL foreign countries.

Log now stands at 80 countries verified. Have 17 or more veri's from each continent with Australia limiting me (DeMyer-Mich).. Latest veris here are Munich, Trieste, Cologne and TIPG (Goss-N.Y.).. On June 29, we added another dx'er to our family. An eight pound boy! (Jas. Spalding, Ky).. Received a very pretty card and album from LV1, San Juan, Argentina. Hope it is a veri: (E.Smith, Wash).. Latest veri's here are LS10, LS9,LT3, Gleiwitz and Brussels 2 (Tomlinson, N.Y.).. Made a trip down to Calgary and had a fine visit with Jim Maguire and other members of the Foothills Chapter (E. Manning, Edmonton) .. All members of the 2nd. IDA district please send me their verified BCB logs at once, as I want to put a revised honor roll for this district in the G.C. (Roy Myers, 4506 St. Elmo Drive, Los Angeles, Calif).. Have become a ham and have my own CW rig-WLEHH- on 3612 and 7224. Would appreciate reports or skeds (G. Magee, Birminghem, Ala).. Spent a recent Sat. nite with Dr. Kash, but we heard only PLP, JVN and LYA. DX was poor (Shanks, Tenn).. Taking a trip to Nfld. and Labrador on a selmon boat and will stop in Boston on the way back (Grant, NS). Now have 37 states and 18 foreign countries verified on 20m phone. Heard several Aussies and K6JLV/K6KKP (Pybus, England).. Have a special lamp warming cabinet made from a cigarette export case to keep tropical moisture from my set (Abderhalden Moluccas)



Left: E. H. Manning , Edmon ton, Alta. Right: J.Maguire, Calgary, Alta.



Raymond S. Swenson, Rockford, Illinois.



86 Foot Aerial Mast, of E. H. Manning, At Edmonton, Canada.

1936 / 1937 INTERNATIONAL DX CONTESTS
Sponsored by International Dx'ers Alliance, Bloomington, Illinois.
Short-Wave and Broadcast Contests Open to All Dx'ers.

STARTING, SEPT 1; at 12:01em your local time and ENDING, APRIL 30,1937, at 12 midnight your local time. Verifications post-marked earlier or later than these dates will not be accepted

OBJECT: To find the Broadcast Band and Short-Wave Champion Dx'ers of the World for the season 1936/1937. The winner in each case being that dx'er who receives the greatest total number of points upon veri's submitted to the Contest Judge. Broadcast Band veri's will be limited to stations from 540 to 1570kC inclusive and Short-wave veri's limited to stations operating from 5500 to 22000kC inclusive. No CW veri's will be counted.

ENTRANCE QUALIFICATIONS: OPEN TO ANY RADIO ENTHUSIAST IN THE WORLD. Members of all Radio Clubs are cordially invited to participate in the contests. Enroll at once by sending entrance fee of 50¢ for either or each contest you desire to enter to IDA Contests Director, James Dickenson, P.O.Box 95, Regina, Saskatchewan, Canada.

AWARDS: Will be made to Continental as well as International Champions and special awards may also be made. AWARDS OF EXCEPTIONAL MERIT will make the entrants efforts worth while. A list of awards will be announced in the December Globe Circler.

RULES IN BRIEF: (Detailed rules, number and handicap rating will be to each entrant upon registration).

1- Veri's must bear words confirm, verify or some similiar expression.
2- Envelopes or wrappers in which veri's were received must accompany veri's when sent to judge. NO VERI'S WILL BE COUNTED that do not have sufficient postage for their return.
3- Date of reception must be stated upon verification.
4- No BCB veri's will be counted that are from stations operating on a

4- No BCB veri's will be counted that are from stations operating on a chain hook-up or relayed by a short-wave station, unless some definite means of identifying that particular local station was given. The same applies to short-wave stations operating in a chain hook-up.

5- If veri' enumerates the names of more than one station the specific one received must be so stated. Short-wave veri's stating more than one frequency must specify definitely which frequency was the one received 6- No card verifications or courtesy cards will be counted unless eligible under the above rulings. No short-wave courtesy cards from Daventry, England, will be counted.

7- The opinion of the judge and his associates willbe absolutely final

Scoring of Veri's: Each BCB veri' will be given an initial point rating of 10 points; each SW veri' an initial point rating of 5 points. Broad cast band veri's will be further eligible to additional points depending upon the distance and power of the station according to a fixed scale. Each short-wave veri' will be eligible for additional points depending upon distance of station according to a fixed scale. Each month the total number of points of each entrant will be compiled and be multiplied by the geographical handicap rating of that particular entrant for the total score of each contestant at that time.

NEW I.D.A. MEMBERS

A.Tyers, Brisbane, AUSTRALIA C.R.Longrigan, Terang, AUSTRALIA Rene Renaud, Oran, Algeria, AFRICA. L.M.Desmares, Santiago, CHILE. Mrs.Grace Belknap, Passaic, N.J. Leslie Wilson, New Plymouth, N.Z. George F. Smalley, Honolulu, HAWAII. APPOINTMENTS

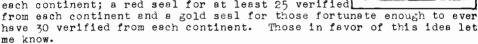
FRENCH GENERAL REPRESENTATIVE.
Ch.Guilbert, 35, Rue de I'Ecluse,
Deauville (Calvados), France.
SOUTH AFRICAN GENERAL REPRESENT,
Lindsay Young, 193, Venice Road, Durban, Natal, Union of South Africa.

STATE MANAGER,
New York-Edward Goss, Brooklyn.

Short-Wave News

On Sunday, Sept. 20, at 3 p.m. EST, all of the major broadcasting systems of the world will be linked to gether in one gigantic broadcast. Practically all of the powerful short-wave stations will be used to broadcast a program of American Folk music. which is to be the first in a series of world broadcasts, arr anged by the IBU. The second will be in February and of a broadcast of the Tango carnival at consist Buenos Aires.

DSW Degrees have been conferred upon Messrs. John Deibe and Edward Goss. To further classify Doctor's of SW it has been suggested we issue printed seals to stick on the DSW degree as follows: a green seal to signify a minimum of 20 stations verified from each continent; a red seal for at least 25 verified



The Serberlands Indies Broadcasting Company Ltd.

NIROM

Congratulations to Joe Miller, of Brooklyn, New York, for receiving one of the handsome short-wave trophies given each month by S.W. Craft. We want short-wave news while it is sizzling hot. Do not hesitate to send us a short letter or postal when you hear a new station, change in frequency or unusual reception. Regular monthly short-wave reports should be in by the 17 of the month. Write on one side of page only, double space lines, divide items into continents and always state time used. Items of most importance are: new stations: frequency or schedule

changes; commercial schedule tips; addresses, identifying signals, station photos and unusual receptions. Number of stars denotes importance of item. Four stars highest rating. How good a reporter are you?

(E.S.T.) NORTH AMERICA-CENTRAL AMERICA (Megacycles used) ALASKA KIJW, 2.912, Shearwater Bay, 50w and KIJX, 2.912, Kodiak, 50w, have contact at 12:15am. KAED, 2.616, Angoon, works KAEP, 3.002, Ten akee, at midnight and works WXA, 2.60h, Juneau, at 12:45am. KIJB, 2.99h, Cape Pole, has schedules at 11:30pm.1:30 and 2:30am (*** Welcott)

VEIIN.14.288, aboard Schooner Bowdoin in Bay of Fundy, is be CANADA

ing heard irregularly.

TIEP, San Jose, has been operating on 6.673mc, quite consistently (* Oxrieder) * TIGPH, San Jose, is now operating very close to 5.82mc (Oxrieder) ** TIPG, San Jose, "La Voz de la Victor", has moved to 9.55mc, where he is heard nightly (Graham) ** TILNRH, approx. 9.685, Heredia, owned and operated by A. Cespedes Marin, is on the air again

from 7 to 10 and 11:30pm to midnight (Gozen, koberts, Oxrieder, Marin)

<u>CUBA</u>

<u>COCQ</u>, approx. 9.746, Havana, Cuba, relays <u>CMQ</u> from 7am to 1am

the next day (* Ansell, Graham, Thomas, Balbi, Oxrieder, Roberts, Gozen) **

New station-<u>COCX</u>, Havana, Cuba, announces frequency of 11.65mc, but heard
on 12.165 at present, works amateurs near midnight (Oxrieder, Kiesling, Balbi, Peters) COCX heard on new frequency of 11.55mc on August 22 (CAM)

D.R. HI3C, La Romana, has again moved, this time to approximately 6.725mc (Oxrieder) * HILV, Trujillo, has moved to 6.475mc (Oxrieder) * HI8Q, Trujillo City, is now using name, "La Voz de los Muchachos" (Oxrieder) * HIL, Trujillo City, has been operating on 6.492mc (Oxrieder) ** New station HIN, near 6.25mc, announcing as "Voice of the Dominican Farty", Trujillo City, heard Aug. 13 (Oxrieder) * HIX, 6.131 and 12.132, Trujillo City, operates Sun. 7:40-10:40am, weekdays 12:10 to 1:10 and 1:40 to 5:40 pm, Tues and Fri 8:10 to 10:10pm (Stark, CSWRC)

GUATEMALA TGWA, 9.45mc, relays TGW, Guatamala City, from 8 to 10 and 11 to 12midnight and to 5am on Sunday mornings (Kiesling, Murphy, Oxrieder)

HAWAII Hawaii Calls program, Mondays 11:30pm to midnight is now being transmitted by KKP, 16.03, Kahuku (* F. Andrews) * KKP, using call K6XO, 16.03, Kahuku, often calls JFZC, SS. Chehibu Maru, 13.3 or 17.7mc, near midnight (Walcott)

HAITI HH2S, Port-au-Prince, is drifting between 5.91 and 5.92mc (Oxrieder) ** New station HH3NW, Port-au-Prince, is near 6.35mc. Announce ments in French and English (Oxrieder) * HH3W, Port-su-Prince, has moved to 9.64mc (Oxrieder)

MEXICO XEFT, Verseruz, is now on about 9.505mc (* Roberts. XEWI, Mexico D. F., although listing frequencies of 5.89, 11.95 and 11.90 is apparently only using the last frequency (Graham, Stark, Oxrieder, CAM)

NICARAGUA YNLF, Le Voz de Nicaragua, Managua, has moved to 9.63mc (RO)

U.S.A. KMUP, aboard Schooner, "Wander Bird", on trip around world uses frequency of 6.21mc (* ARRL) ** WOEH, aboard Douglas Airplane, on flight from Los Angeles to Siberia via Nome, Alaska, uses frequencies: 4797.5, 6.425, 8.655 and 12.862mc. Contacts WKP 6.95, WQP 13.9, KEC 5.62 KKL 15.475 and KEI 9.49mc (FCC) * Chicago traffic Dept.using WBPU 1.96 aboard a TWA airliner to direct Chicago traffic on Sunday nights. Also broadcast to motorists on WBBM,770kC, at 7-7:15pm (Radio News Bureau) * W2XF,42 to 56 and 60 to 86mc, New York City, owned by NBC, will increase power to 12kW (FCC) * <u>W2XGB</u>, Press Wireless Inc., Hicksville, L.I., New York, now testing irregularly on 17.3lmc (World Radio) * <u>W2XMN</u>, L1.6, 86.5 and 11lmc, owned by Edwin H. Armstrong, will use a power of Lokw. (FCC) * <u>W3XAL</u>, 6.1, Boundbrook, N.J., now transmitting programs to Latin America at 7 to 8pm, Mondays, Wednesdeys and Saturdays (Sholin, NBC) * W6BGH, 11.2, contacts foreign amateur stations from midnight to 11em Sundays (Mellonger) * WOYAA 4.00 day mornings (McWenamy) * W9XAA, 6.08, 11.83 and 17.78, Chicago, Ill., has received permit to increase power to 5kW (FCC) .. SOUTH AMERICA..

ARGENTINA LSN, 9. 89, Buenos Aires, is on Thursdays at 6pm (Kiesling) * LRX, 9.66, Buenos Aires, operates daily from 8 to 9pm (Graham, Gozen) * LUSCZ 14.07, LUSAB 14.11, LUSAP 14.3, LULBH Amateurs heard best 6-9pm: 14.45mc (Ballard, Miller)

Best heard emateurs between 6-9pm: PY1EQ 14.1, PYZET 14.05

PY7AA 14.285 and PY2CK 14.35 (* Ballard, Miller)

VP3BG, Georgetown, has moved to about 6.3mc.. VP3MR, George-B.GUIANA town, has moved to about 6.2mc (Thomas-Barbados)

between 7 and 9pm: CEIBC 14.075 and Best heard amateurs

CETAR 14.14 (Ballard)

HJ1ABB, Barranquilla, is being heard on 9.57mc irregularly COLOMBIA * HJIABE, Cartagena, on approximately 9.5mc, operates from about 7 to as late as 10 or llpm (Oxrieder, Graham, Balbi, Murphy) * HJ-1ABG, Emisore Atlantico, Barranquille, is now on 6.037mc (Oxrieder) * HJ-<u>labj</u>, Le Voz de Santa Marta, Santa Márta, is now operating near 6.018mc (Oxrieder) <u>HJlabj</u> signs off at 10:30pm (Gozen) * <u>HJ2ABC</u>, Cucuta, is roving around between 9.5%3 and 9.59mc (Gozen) There is a about 9.575mc between DJA and GSC I think is HJ3ABC (Shanks) * HJ3ABD, Bogota, is operating on its assigned frequency of 6.05mc at present (Ox rieder) * HJ3ABF, Bogota, is now operating on approximately 9.59mc, having moved from 6.17 (R.B.Ox.) * A station announcing as "La Voz de Catia" on 6.135mc, is believed to be HJLABD moved from the 5.77mc frequency (Oxrieder) * HJLABP, Medellin, is now operating on 6.02 mc, with 1000 watts power (Oxrieder) (Graham)

ECUADOR HCK, Quito, has moved to 3.75mc, and is operating Mondays.

from R:30 to 10:30pm (* Graham)

PERU A station using the call the "Voice of Peru", presumably an amateur being heard on lime irregularly at 6pm (Kiesling) * OALR 11.12 heard at 12:23am (Ballard)

VENEZUELA YV3RC, Caracas, is operating on 6.155 to 6.157mc (* Oxrieder

.. EUROPE..

Ruysselede is to have new short-wave transmitter with a power of 80,000 watts. Zone transmissions will be used for various perts of the world (** F. Andrews) * Best amateurs ere: ONLAP 14.015, ON4VK 14.09, ONLHC 14.1. Heard best 7-9pm (Ballard, Sholin, Schmeichel). New station OLR, Radio Podebrady, Prague, Czechoslovakia,

SLOVAKIA made initial broadcast on July 24, and has been testing irregularly since, on 6.115, 11.76 and 15.23mc. Also authorized to operate on 21.45, 15.32, 11.975, 11.745, 9.504 and 6.01mc. Power is 34kW and directional antennas are used. Programs have consisted of recordings and announcements in English and Czech. Power is tremendous. English, Kiesling, Black, Murphy, Graham, Ansell, Gozen, Andrews, Chavez, Oxrieder, Balbi, Peters, Hyde, Morrison)

The two new 100kW Govt. short-wave stations are expected to be in operation by the end of 1936 (** Graham, Craft) * Present schedule

Exclusive meu wests to consume no more current than ordinary 7-tube radios and to operate on voltages as low as 80 volts. age consumption 50%... enables 18 and 16-tube Mideature cuts radio watthis exclusive Finger tip tuning is made possible with the Midwest Automatic Push Button Tuning System. Doubles radio enjoyment.

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This Super DeLuxe Midwest is so powerful, hat it brings in distant foreign stations with adjacent to powerful locals. Scores of mar-

Canadian, police, amateur, commercial, airplane and ship broadcasts. . . to the

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PROGRAM EXPANDER

of Pontoise stations: TPA2 15.2h3,1-1:Loam, h:55-loam; TFA3 11.885, 1 to 1:Loam, 1:55-lam and 11:15-5pm; TPAL 11.71, 5:15-7pm and 7pm to 12m (PTT) * TPAL is actually on 11.71Lmc (Morrison) * Amateurs heard best: FPPT 11.11, F811 11.28, F8XN 11.125, FRMG 11.365.

GERMANY Germany's new short-wave center now completed, the largest

in the world, has twenty-one beam aerials. It will now be possible for Zeesen to send out programs to six zones on six different wave lengths simultaneously (** RMA) * Calls to be used for regular zone transmissions are: DJA 9.56, DJB 15.2, DJC 6.02 winter channel, DJD 11.77, DJE-17.76, DJL 15.11, DJN 9.54, DJQ 15.28 and DJK 15.34 (RRG) ** N.A. zone program will also be transmitted by DJL 15.11 from 8 to 10am daily, starting with September 1.

SVIKI, 15mc, Athens, reported heard 3-7pm (Radio News)

TFJ, 12.235, Reykjavik, now on Sundays from 1:40 to 2:30pm New commercial station TFM, 15.74, Reykjavik, will soon be (Hyde) ** working GBC, Rugby, England (Roberts)

Rome's "Mail Bag" is broadcast by 2ROh. 11.01, on Mondays. from about 7:15 to 7:30pm (* RMA) ** IQA, 14.72, Rome, calls Tokio at

2am almost daily (Graham)

LITHUANIA Amateur LY1J, 11mc, Hipodromo 11, Kaunas-Sanciai, sends out

very attractive QSL card in answer to SWL reports (* Deibe)

New LKJl, 9.53, Jeloy, will be operating this month from 6 Beam transmissions will be made and announcements in both NORWAY to llpm. English and Norweigan. Other frequencies authorized are: 6.13, 6.99, 9.54 and 9.57. Direct reports to Olav Midttum, Short-Wave Station, Osio

Norway (** Graham, Sholin, Roberts, Andrews)

SWEDEN New station SM5SX,11.705, owned by Royal Technical University of Stockholm, is now operating daily from 10am to 50m and to North and South America on Wednesdays from 5 to 6pm. SM5SX relays the Swedish National programs and announcements are made in English, Spanish, French, German and Swedish. SM5SX also works as an amateur on a frequency of 11:3111. Power of transmitter is 300 watts (*** Goodeve, Sholin, CSWRC, World Redio)

HBH 18.45 and HBO 11.38 (* Roberts) Swiss commercial phone stations are: HBF 19.54, HBJ 14.54, SWITZER-LAND Miller) ,15.0L, Moscow, works RWJ,12.19, Alma-Ata, near 6am (Joe-U.S.S.R. VATICAN Radio Vaticano, HVJ, 15.12, Vatican City, Italy, is to have a

new and much more powerful transmitter. CITY

..AFRICA.. ALGERIA TYA2, 9.04, Paris, France, relays the PTT news to Radio Alger at 2-3am and 12:30-1:30pm daily (** Flieber-Alger) ** The S.S. Ville d' Alger, 9.815mc, phones TYB, 9.075mc, Mon/Wed 3-3:45am, Tues/Sat at 7:30am and 11:30am; phones TYAZ, 9.04, Fri/Sun 10am. Ship plies between Alger and Marseilles, France. Fower is 300 watts (Plieber-Alger)

According to Egyptian Radio CR6AA, Lobito, 7.10mc, operates ANGOLA on Wednesdays and Saturdays from 3:30 to 5:30pm. English is occasionally used in announcements. Power is 500 watts and address Estacao Radio Difusora $\underline{\text{CR}6AA}$, Caixa Postal 11^{2} , Lotito, Fortuguese West Africa.

CANARIAS New station "Radio Tenerife", 10.715mc, Tenerife, is operating daily at 3pm, 5pm and 6pm. Announcements are made in Spanish, German, French and English on the Spanish situation. It is obviously owned by the insurgents, as all news is from the Rebel headquarters of General Franco.Occasionally music is radiated and the station closes down with the Spanish anthemn (*** J. Mercieca, Malta)

IUC, Addis Abebs, 11.955, is testing with Rome at 3-4pm.

MADAGASCAR FIU, 6.01, Tananarive, operates daily from 9:30 or 9:15 to 10:15em, closing down with the La Marseilles (** A.R.A.) CNR, Rabat, is generally used for commercial telephony only cut recently has been heard broadcasting Arabic music on Sundays, between 3 and 5pm, utilizing its 8.035mc frequency (** Egyptian Radio)
TUNISIA New station "Tunis Experimental", 7.265mc, is operating is operating

from 6 to Sam and noon to 2pm daily (*** Plieber-Alger)
UNION OF ZSS,18.89, Capetown, is being heard irregularly on the Pac S.AFRICA ific coast around 7:10em PST (** Andrews) * ZTJ, 6.097, Johannesburg, situated just ten miles from the Maraisborg gold reef, operates daily from 11:45pm to 12:30am, 3:15 to 7am, 9 to 11:15am, 11:45am to 4pm and on Saturdays to 4:45pm. (** African Radio Announcer * Amateur ZS12, HF side American phone band, heard 2-2:30am (J. Miller)

SPECIAL IDA PROGRAM FROM CQN, MACAO

OCT 12, MONDAY 12:30-1pm GMT.
OCT 12, MONDAY 7:30-8am EST. MACAO, CHINA 9.66 or 9.7mc CQN
Address reports to J. Estrela, Chief of Radio Station, Government Broadcasting station CQN, Post Office Building, Macao.

AUSTRALIA VJ1, 8.63, Cloncurry, is on the air every Friday at Lam (** Graham) * Pedal transmitters are used for communication between Brassert & Co. prospectors at Koolan Island and those at Port Hedland (W.A.W.N.) * VK2ME,9.59,Sydney,sked for Sept: Sundays,12:30-2:30,4:30-8:30am and 9:30-11:30am ** New schedule of VK5LR,9.58,Melbourne,is weekdays 3:30-8:30am, Sundays 3-7:30am and Fridays 10:30pm-Sat 3am (W.A.Wireless News) ** VK5LR is testing each Friday at 3am with VK8SC, the Flying Doctor station at Port Hedland (W.A.Wireless News) * VK3ME, Melbourne, is actually being received on 9.495mc. Sked is weekdays from 4-7am (Oxrieder) ** VK6ME, new station of Amalgamated Wireless, (Asia),Ltd.,will shortly take the air on 9.59mc. Transmitter,which has a power of 300-400 watts is located at Applecross and the studios at Perth,West Australia (Tune In) ** Amateur phone VK6MW,owned by W.A. Weston,54 Stirling Highway,Nedlands,W.Australia,says he is only VK6 on 20 meter phone (DeMyer) ** VK9MI,aboard the S.S.Kanimbla,power of 250 watts,transmits irregularly on 6.02 and 11.71mc (McCormick)

CEYLON Radio Colombo, 6.16, Colombo, closes down at 11:30am (Wignall The new 35kW Govt.S.W. center at Nanking is now under construction (** Graham, Woo, Andrews) ** XGOX, Nanking, has moved to 8.62mc and operates daily from 6:30 to 8:40am, Sundays 7:30 to 9:30am (Sholin, Andrews) ** XOJ, 15.785, Shanghai, contacts San Francisco near 6:30am.

F.INDO - New station FIC3?, Salgon, being heard on 11.7mc, near 8-9:35

CHINA am. Station announces as "Ici Radio Salgon" (*** Belbi). Al-

so reported on a frequency of 11.76mc (Andrews)

HONG KONG Amateur VS (AQ), operates on 1h. 302mc, with a power input of 60 watts. The address is Stanley Conway, R. A. F. Base, Kei Tak, Kowloon, Hong Kong, Hong Kong Colony, China (** DeMyer, Roberts)

JAPAN JVA, 18.91, Nezaki, tests with recordings occasionally from 10:30pm-lam (* Roberts) * News bulletins in English are broadcast by

JVH, 14.6mc, nightly near 12:40am (RMA)

JARVIS Amateur K6GNW, with U.S. Dept. of Commerce Airways Expedition, ISLAND stationed there, operates on 7.114 and 14.229mc (** ARRL)

ISLAND

JAVA

The NIROM plan to erect a powerful short-wave outlet for their Eastern (native) network at Bandoeng (** Hardeman). NIROM is now verifying all correct reports on their stations which are accompanied by an IRC Coupon. The veri' is a handsome folder containing photos and much information on the stations. This plan has gone in effect as a re sult of the special request of IDA Rep. Herdeman. Address all reports to NIROM (Nederlandsch-Indische Radio Omroep Mastschappy), Konigsplein West 5,Batavia-Centrum, Java (*** Hardeman) *** New station PLH, 15.15, Bandoeng, Java, heard with NIROM program from about 5-loam (Andrews, Balbi) ** PMH, 6.72, Bandoeng, being heard from 5:30 to loam (Britting) ** PLE, 18.83, Bandoeng, is testing irregularly from 11:30pm-lam (Balbi)

PALESTINE Jerusalem now transmitting in Arabic and English on a fre-

quency of 11.89mc (*** African Radio Announcer)

P.I. The most powerful short-wave station in the Far East is be ing planned by the owners of KZRM, if the government subsidy continues (** RMA) ** KBB, P.71, Manile, is testing frequently and verify reports. Address is F.J.O'Classen, Radio Station KBB, Box All, Manile, P.I. (Myers) * KTR, 10.91, Manile, is testing irregularly from 8 to llam (Britting)

SIAM Address of HS8PJ is Post and Telegraph Dept., Engineer I/C-Lt.Col. Phra Aram, Experimental Radio Broadcasting station HS8PJ, Saladeng, Bangkok, Siam. Station is operating at present as follows: Mondays 8-10am on 10.95 or 15.6mc, occasionally noon to 2pm also; Thursdays 8-10am on 9.35mc. Power is 5kW and reports are solicited (** Balbi, Britting, Sholin, Andrews)

TAHITI FORAA, owned by S.M. Henderson, Radio Club, Papeete, is reported on 7.1, and 7.89mc. Station operates Fri llpm-mid. (** W.A.W.N.)

U.S.S.R. RVU,17:115, Vladivostok, may be heard phoning Moscow during the early morning hours according to the Quixote Radio Club.

NEW CALEDONIA Noumea, 8.73mc, testing (* NZSWC).

SHORT-WAVE BROADCASTING STATIONS

NOTE: SYMBOL	S: New :	station	ns-N; Changes in fre	equency-F; Changes in
schedule-S;	Changes	in fr	equency and schedule	e-C; Frequency calibration
according to	Oxried	er-IDA	Frequency Bureau-B	Exact frequency in
	table fi	requenc	cy-D; Commercial sta	ations-P: Experimental-E.
DIAL METERS	<u>MEGS</u> 22.305	CALL	STATION Pughar England	TIME E.S.T.
P13.45	21.54	W8XK	Rugby, England. Pittsburgh, Penna.	Works New York. 5:45-9am.
13.94	21.52	W2XE	Wayne, New Jersey.	6:30-noon. 13M
13.97	21.47	GSH	Daventry, England.	6-8:45, 9-11:30am.(6:30am
P14.97	20.04	OPL	Leopoldville,Congo	Works ORG 9:45am,4:30-
<u>P</u> 15.02	19.98	KAX.		Works KWU at 9:20pm & irr
P15.28	19.63	VQG4	Nairobi, Kenya.	Works GAD at 8 and 9:25am
P15.50	19.345	PMA	Bandoeng, Java.	Phones 6-9:15am.
<u>P</u> 15.62	19.20	ORG		OPL 9:45am, 4:30-6:30am.
P15.80 P15.86	18.97	GAQ JVA	Rugby, England.	Works ZSS at 8 and 10am.
P15.87	18.91 18.89	ZSS	Nazaki, Japan. Capetown, S. Africa.	Tests 10:30pm-lam irreg. Works GAQ at 8 and 10am.
P15.93	18.82	PLE	Bandoeng, Java.	KWU 6:55pm,11:30pm-lam ir
P16.10	18.62	GAU	Rugby, England.	Works VWY at 8am.
P16.23	18.48	HBH	Geneva, Switzerland	Experimental.
P16.34	18.34	WLA	Lawrenceville, N.J.	
P16.38	18.304	GAS	Rugby, England.	Works WLA, Lawrenceville.
<u>P</u> 16.39	18,296			Works DFB at 9:20am.
P16.49	18.18	CGA	Drummondville, Que.	Works Rugby mornings.
16.86	17.79	GSG	Daventry, England.	6-8:45,9-N'n,3:40-5:45pm.
16.87 16.88	17.78 17.77	PHI	Boundbrook, N.J. 'Huizen, Holland.	8am-4pm. 7:30-9:30am, Sun 1-2pm.6M
16.89	17.75	DJE	Zeesen, Germany.	12:05-5:15, 5:55-11am.
P16.91	17.74	HSP	Bangkok, Siam.	Works JVG around 4:30pm.
P17.11	17.52	DFB	Nauen, Germany.	Works YVR around 9:20am.
P17.15	17.48	$\Lambda \% \lambda$	Kirkee, India.	Works GAU at 8am.
P17.51 P17.55 P18.48	17.12	W00	Ocean Gate, N.J.	Works ships.
P17.55	17.08	GBC	Rugby, England.	Works ships.
P18.49	16.27 16.24	WLK KTO	Lawrenceville, N.J.	JVB 6:30-7pm; KWU 7:30-8pm
P16.51	16.20	FZR3	Saigon F. Indo-Chin	a works FTK at 9 and 10am.
P18.61	16.12	IRY	Rome, Italy.	Phones irregularly (1130p
<u> </u>	16.03	KKP	Kahuku, Hawaii.	Works KWO 1:30-7pm, Mon at
P18.89	15.88	FTK	Ste.Assise,France	Works FZR3 at 9 and 10am
P18.90	15.86	JAD	Nazaki, Japan.	Works KWU; XOJ at 8:45-9pm
P19.00	15.785 15.74		Shanghai, China.	Works JVD near 9pm.
P19.06	15.66	$_{ m JVE}$	Reykjavik, Iceland. Nazaki, Japan.	Contacts GBC, Rugby. Works PLE 7:30-8pm.
Pi9.21	15.62	JVF	Nazaki, Japan.	Works KWU.XOJ etc.
P19.23	15.60			Mondays 8-10am irreg.
P19.23	15.60 15.415	KWO	Dixon, California.	Works KKP and Manila.
19.52	15.37	HAS3	Budapest, Hungary.	Sunday 9-10am.
<u>\$19.56</u>	15.34	DJR	Zeesen, Germany.	8-10am to C.A.
19.57 19.60	15.33	GSP	Schenectady, N.Y.	10am-3:45pm.
19.62	15.31 15.29	LRU	Daventry, England. Buenos Aires, Argen	6-8pm.
si9.63	15.28	DJQ	Zeesen, Germany.	7:15-11am, 4:50-10:45pm.
<u>——19.64</u>	15.27	₩2XE	Wayne, New Jersey.	Noon-5pm.
19.67	15.25	WlXAL		Irreg.on this frequency.
<u></u>	15.243		Pontoise, France.	1-1:40am, 4:55-10am. 19M
$\frac{\text{N19.70}}{\text{1000}}$	15.23	OLR	Prague, Czechosloval	kla testing.
19.71	15.22	PCJ	Eindhoven, Holland.	Sun 7:30-8:30a, Tu 3-6, 11a
19.72	15.21	W8xk	Pittsburgh, Penna.	to lpm, Wed 7-llpm. 9am-7pm.(Sun 11:10a-12:20
<u>si</u> 9.74	15.20	DJB	Zeesen, Germany.	12:05-5:15, 5:55-11am
19.76	15.18	GS0	Daventry, England.	12:15-3:40pm.
19.76	15.18	RV 96	Moscow, U.S.S.R.	Sunday 1-2pm.
N19.85	15.15	PLH	Bandoeng, Java.	5:30-10:30am.
<u>\$</u> 19.82	15.14	GSF	Daventry, England.	9am-N'n, 3:40-5:45pm, 9-11p
19.84	15.12	HVJ	Vatican City, Italy	10:30-10:45am. (Su 6-8am.)
19 • 85	15.11	DJL	Zeesen, Germany.	12-2,8-10am,11:35-4:30pm,
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15.07
15.055
      19.91
<u>P19.92</u>
P20.03
                          RKI
                                  Moscow.U.S.S.R.
                                                          Sunday 10-11am.
                                                          Works C.A. & S.A. daily.
                          WNC
                                  Hialeah, Florida.
                 <del>填.98</del>
4.97
                                                          Works DFB 7am etc.
                          KAY
                                  Manila Philippines
                                                          Su 12:30-8,10a-4:30p,M/W
        20.04
                          LZA
                                  Sofia, Bulgaria.
                                                          F/S 5-7am.Tu/Thur 1-3pm.
                14.93
14.74
14.72
14.665
      P20.08
                          HJB
                                  Bogota.Colombia.
                                                          Works WNC
      P20.35
P20.38
P20.45
                                                          Works JVH, IQA etc.
                          IRG
                                  Massaua, Eritrea.
                                                          Works JVH at 2am: IRG etc.
                          IQA
                                  Rome, Italy.
                                                          Works JVH early mornings.
                          DFD
                                  Nauen, Germany.
                 14.60
                                                          Europe 2-8am, daily 12-1am
      P20.55
                          JVH
                                  Nazaki Japan.
                                                          Mon/Thur 4-5pm etc.
                 14.535
14.50
14.485
14.46
14.44
                                  Geneva, Switzerland Experimental to U.S.A.
      P20.64
                          HBJ
      ₱20.69
                          TIU/HPF/TGF Central America all work WNC days.
      P20.71
                          HRL5
                                  La Lima, Honduras.
                                                          Works WNC days.
       <u>Ē</u>20.75
                                                          Irregularly.
                          DZH
                                  Zeesen . Germany .
      P20.78
                          GBW
                                  Rugby, England.
                                                          Works Lawrenceville days.
      E21.57
                 13.90
13.81
                          WQP
                                                          Experimental. (-lpm.
                                  Rocky Point, N.Y.
                                                          Works GBB 9:30-10am, 12:30
                          SUZ
                                  Cairo, Egypt.
                 13.745
                                  Drummondville, Que.
      ₽21.81
                          CGA2
                                                          Works Rugby etc.
                 13.636
13.585
13.41
                          SPW
                                                          Mon/Wed/Fri 11:30a-12:30p
        22.00
                                  Babice, Poland.
                                                          Works SUZ and CGA2 days.
       P22.08
                         GBB
                                  Rugby, England.
      P22.37
P22.42
                                                          Works WNC days.
                          WCT
                                  San Juan, P.R.
                 13.38
13.35
13.285
                          IDU
                                                          Phones IRY/IQA days.
                                  Asmara, Eritrea.
      P22.48
                          YVQ
                                  Maracay, Venezuela. Works WNC days.
                          CGA3
      P22.58
                                  Drummondville, Que. Works ships and Rugby.
                 13.075
12.862
        22.94
                          VPD
                                  Suva, Fiji's.
                                                          12:35-1:30am ex.Sundays.
      E23.36
P23.36
P23.39
P23.45
P23.47
                          WOEH
                                  Enroute to Siberia See notes.
                 12.84
                                                          Works ships.
                                                                                      (am.
                          OOW
                                  Ocean Gate, N.J.
                 12.83
                                                          Works Paris Sun 7:30-9:30
                          CNR
                                  Rabat, Morocco.
                 12.80
12.78
12.40
                          TAC
                                  Coltano, Italy.
                                                          Works Italian ships.
                          GBC
                                  Rugby, England.
                                                          Works ships days.
      P24.21
P24.48
                                  Norden, Germany.
                          DAF
                                                          Works ships days.
                 12.25
12.235
                          TYB
                                                          Irreg.
                                 Paris, France.
      24.52
24.53
E24.73
E24.92
                          TEJ
                                  Reykjavik, Iceland.
                                                          Sundays 1:40-2:30pm.
                 12.232
                         HIX
                                 Trujillo City, D.R.
                                                          Irregular on this freq.
                 12.13
                          DZE
                                  Zeesen, Germany.
                                                          Irregular.
                 12.03
12.00
                          HBO
                                 Geneva, Switzerland
                                                          Irregular. (Wed 9-10am.
        25.00
25.09
                          RNE
                                 Moscow, U.S.S.R.
                                                           3-6pm, Sun 6-8:45,10-11am
                 11.955
11.95
11.90
11.89
                          IUC
                                  Addis Abeba, Ethiopia testing with Rome 3-4pm
      E25.08

F25.21

N25.23

F25.24

S25.29

-25.36

-25.36

-25.40
                          KKQ.
                                                          Experimental.
                                  Bolinas, Calif.
                          XEWI
                                 Mexico D.F.
                                                          8pm-midnight irregular.
                                  Jerusalem, Palestine testing irregularly.
                 11.885
                                                          1-1:40,1:55-4,11:15a-5pm.
                          TPA3
                                  Pontoise, France.
                 11.87
                          w8xk
101
                                 Pittsburgh, Penna.
                                                           7-10pm.
                 11.86
                          YDB
                                                          11:30pm-3am, Sat 8pm-Sun-
                                  Sourabaya, Java.
                 11.85
                          DJP
                                  Zeesen, Germany.
                 11.83
                                                          5-10pm.
                          W2XE
109
                                 Wayne, New Jersey.
                                                          Sunday 9am-lam Mondays 25M
                 11.83
                          W9XAA
                                 Chicago, Illinois.
                                                          6:43am-5:30pm,6-6:20pm,
Mon/Wed/Fri 6:20-7:30pm.
                 11.81
                          2R04
                                 Rome, Italy.
      <sup>-</sup>25.43
-25.49
N25.51
-25.53
                 11.79
11.77
11.76
11.75
                          WlXAL Boston, Mass.
                                                          5:30-6:30pm, Sun 3:30-7pm.
                          DJD
                                                          11:35-4:30pm,4:50-10:45pm
                                  Zeesen, Germany.
                                 Prague, Czechoslovakia testing irregularly.
Daventry, England. 12:15-2:15am, 12:15-3:25pm
                          OLR
                          GSD
                                                           6-8pm.
                11.72 CJRX
11.714 TPA4
11.705 SM5S:
11.70 F1C3
11.55 COCX
11.50 PMK
11.495 VIZ3
11.187 XM10
      25.60
F25.61
N25.63
N25.64
N25.97
08
                                 Winnipeg, Canada.
                                                          7-12m, S 4pm-la, Su 3-9:30p
10
                                 Pontoise, France.
                                                          5:15-7, 7:15pm-midnight.
                          SM5SX
                                                          10am-5pm, Wed 5-6pm.
8-9:35am irreg.
Testing in evenings.
                                 Stockholm, Sweden.
                          FIC3?
COÇX
                                 Saigon, Indo-China,
Havana, Cuba,
      <sup>9</sup>26.09
                                  Bandoeng, Java.
                                                          6:30-llam irreg.
      P26.11
P26.80
                                                          Works CGA4 irreg.
                                 Fiskville, Austral.
                                 Merida, Yuca, Mexico Works XDR 5-7pm irreg.
      E27.27
                 11.00
                          XBJQ
                                 Mexico D.F.
                                                          Experimental irreg.
       27.27
                 11.00
                          PLP
                                 Bandoeng, Java.
                                                          5:30-11am.
      P27.27
                          ZLT4
                 11.00
                                 Wellington, N.Z.
                                                          Works VLJ 1:30-3:30am.
       27.39
                 10.955 HS8PJ
                                 Bangkok, Slam.
                                                          Monday 8-10am, N'n-2pm irr
      P27.50
                 10.91
                                 Manila, Philippines Works Dixon 8-llam irreg.
                          KTR
```

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Works KTR at 10am irreg.
1:50-7:40am, Tu/F 2-3p irr
          10.84
                   KWV
P27.68
                            Dixon, California
 27.93
          10.74
                   JVM
                            Nazaki, Japan.
          10.715
10.675
10.67
                                                   3, 5 and 6pm.
Works ZFD afternoons.
N28.00
                            Tenerife, Canarias
P28.09
                   WNB
                            Lawrenceville, N.J
                                                   7-7:15pm.
Tu/F 2-3pm irreg.
\overline{P}28.12
                   CEC
                            Santiago, Chile.
          10.66
<u>s</u>28.14
                   JVN
                            Nazaki, Japan.
          10.53
10.52
10.42
P28.47
                                                   Works JVO early mornings.
                            Taihoku, Taiwan.
                   JIB
P28.77
P28.77
                            Sydney, Australia. Works GBP 2-4:20am.
                   VLK
                                                   Works Dixon 9:20-10:30am.
                   XGW
                            Shanghai, China.
          10.42
10.43
10.38
10.375
10.335
10.335
                                                   Works PLV 5:30-6:30am.
                   YBG
                            Medan, Sumatra.
E28.90
P28.91
E28.98
                            Rocky Point, N.Y.
                                                   Experimental.
                   WCG
                            Nazaki, Japan.
                                                   Works TDE and JIB.
                   JVO
                   LSX
                            Buenos Aires, Arg.
                                                   Experimental irregular.
                            Hamilton, Bermuda. Works WNB until 8:15pm.
F29.01
                   ZFD
                            Ruysselede, Belgium, 1:30-3pm.
 29.04
                   ORK
E29.15
_29.24
                                                   Experimental.
                   DZC
                            Zeesen, Germany.
          10.26
                   PMN
                            Bandoeng, Java.
                                                    5:30-10am to Sumatra.
P29.50
P29.50
P29.84
P29.84
          10.20
                            Rio de Janeiro, Br Works B.A. & CEC 6-7pm.
                   PSH
                                                   Works RNE/RIR mid-2am.
          10.17
                   RIO
                            Bakou, U.S.S.R.
          10.135
10.055
                   OPM
                            Leopoldville, Congo Works ORK early mornings
                                                    Afternoons 3:30-5pm.
                   SUV
                            Cairo . Egypt .
          10.042
                                                    Experimental (Dixon 10am.
E29.87
                   DZB
                            Zeesen, Germany.
           9 • 9 9
9 • 89
                            Manila, Philippines Relays KZRM 5-7am, Works
P30.01
                   KAZ
E30.47
                            Buenos Aires, Arg. Thurs at 6pm.
                   LSN3
            9.86
                                                    5:15-9:30pm.Sat 1-3pm.
                   EAQ
                            Madrid, Spain.
            9.84
                            Kemikawa-Cho, Japan works irreg at night.
                   JYS
            9.76
                            Sydney, Australia. Works ZLT4 mid.-1:30am.
P30.75
                   VLJ
           B30.78
                                                    Relays CMQ 7am to 1am.
                   COCQ
                            Havana, Cuba.
                                                    7-10pm, 11:30pm-midnight.
N30.98
                   TI4NRH Heredia, C.R.
E31.01
                   DZA
                            Zeesen, Germany.
                                                    Experimental.
                   CQN
                                                    Mon/Fri 7-8:30am.
 31.04
                            Macao, Macao.
<u>s</u>ź1.06
                                                    8-9pm.
                   LRX
                            Buenos Aires, Arg.
                                                    Tues/Thur/Sat 3-6pm.
  31.09
                            Lisbon, Portugal.
                   CTIAA
  31.12
                   YDB
                            Soerabaja, Java.
                                                    5:30-11am.
            9.64
                            Port-au-Prince, Haiti, 1-2, 7-8:30pm.
B31.12
                   HH3W
            9.635 2R03 Rome, Italy.
9.63 YNLF Managua, Nicaragu
9.616 HJIABP Cartagena, Colom.
                                                    Tues/Thur/Sat 6:20-7:45pm
 31.13
                            Managua, Nicaragua 6:15-9:45pm.
Cartagena, Colom. llam-lpm, 5-11pm, Sun 5-8pm
Panama City, Panama 11:45-1:15pm, 7-10pm.
B31.15
  31.20-
 31.23
31.25
            9.605
                   HP5J
                            Santiago, Chile. llam-lpm, 9-llpm. Geneva, Switzerland Sat 5:30-6:15pm.
            9.60
                    CB9 60
 31.27
31.28
            9 • 59 5
9 • 59
9 • 59
9 • 59
                   HBL
                            Eindhoven, Holland. Sun 7-8pm, Wed 7-10pm.
                   PCJ
  31.28
                    VK6ME
                            Perth, W. Australia will be operating soon.
                                                    12:30-2:30,4:30-8:30 and 9:30-11:30am Sündays only
  31.28
                    VK2ME
                             Sydney, Australia.
            11am-7pm, Sun 11am-6pm. 31M
  31.28
                   W3XAU
                             Philadelphia, Penn
F31.28
                   HJ3ABF
                                                    7-11pm except Sundays.
                            Bogota, Colombia.
                   GSC
                                                    6-8 and 9-11pm.(Fr 10:30p
                             Daventry, England.
51.32
531.34
531.35
731.35
F31.35
                                                    3:30-8:30am, Sun 3-7:30am, 6-10pm ex.Sunday.
                    VK3LR
                             Melbourne.Austr.
                   HJ2ABC
                            Cucuta, Colombia.
                   WlXK
                             Springfield, Mass.
                                                    6am-mid., Sun 7am-midnight
                                                    Heard testing here.
                   HJlABB Barranquilla, Col.
                                                    Su 1-2:30am, Tu/Sa 11:30am
                   VUB
                             Bombay, India.
                                                    12:05-5:15am,4:50-10:45pm
                   DJA
                             Zeesen, Germany.
F31.41
-31.45
-31.45
                                                    6-11:15pm.
                   TIPG
                             San Jose, C.R.
                                                    12:05-5:15am,4:50-10:45pm
                   DJN
                             Zeesen, Germany.
                    CB9 54
                                                    Will be operating shortly
                             Santiago, Chile.
            źī.48
                   W2XAF
                             Schenectady, N.Y.
                                                    4pm-midnight.
N31.48
                   LKJl
                             Jeloy, Norway.
                                                    6-11pm.
N31.48
31.51
51.55
F31.55
F31.57
31.58
B31.60
F31.73
                                                    6-7:30pm, Sun/Wd/Fr 6-8pm.
12:15-2:15am, 12:15-5:45pm
                   RAN
                             Moscow, U.S.S.R.
                   GSB
                             Daventry, England.
                                                    Mon/Wed/Fri N'n-2,8-11pm.
                   HJU
                             Buenaventura, Col.
                    HC2JSB Guayaquil, Ecuador
                                                    6:19-11:19pm ex.Sunday.
            9.505
9.50
9.495
                   XEFT
                             Veracruz, Mexico.
                                                    Evenings irreg.
                    HJlABE Cartagena, Colom.
                                                    7:30-9pm except Sundays.
                   VK3ME
                                                    4-7am except Sundays.
                             Melbourne, Austr.
                    TGWA
                                                    8-10, llpm-mid, to 5am Sun.
                             Guatemala, Guat.
            9.45
                    WES
                             Rocky Point, N.Y.
                                                    Experimental
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6-10am, 4-10pm or later.
 31.80
          9.428 coch
                            Havana, Cuba.
P31.84
                                                     Works Dixon near 10am
          9.415 PLV
                            Bandoeng, Java.
E31.92
          9.40
                            Mexico D.F.
                                                     Works XAM, XFA2 5-7pm irr.
                  XDR
N32.09
P32.33
P32.70
32.88
          9.35
                                                     Thurs 8-10am
                  HS8PJ
                            Bangkok, Siam,
                                                     Works CGA4 4-6pm & SUV.
                  GCB
                            Rugby, England.
                            Lawrenceville, N.J.
                                                     Works GCB.
                  WNA
          9.17
                                                     Sunday 6-7pm.(1:30pm. Works FVA 2-3am, 12:30-
          9.125 HAT4
                            Budapest, Hungary.
          9.04
8.963
₱33•17
                  TYA2
                            Pontoise, France.
                                                     Works TYA2 2-3a,12:30pm.
P33.47
                            Alger, Algeria.
                  FVA
P33.413.64
P33.44.66
P33.44.66
P33.44.66
          8.948 HCJB
8.75 ZBW
8.71 KBB
8.665 CO9JQ
                                                     7-11:30pm ex.Monday.
                            Quito, Ecuador.
                            Hong Kong, China.
Manila, Philippines
                                                     4-10am.
                                                     Irregular.
                                                     8-9pm etc.
                            Camaguey, Cuba.
                                                     Fridays at 4am.
          8.63
8.62
                            Cloncurry, Austr.
                                                                                  (am
                   VJI
                                                     6:30-8:40am.Sun 7:30-9:30
                  XGOX
                            Nanking, China.
75.69
P37.15
                                                     8-11pm ex.Sunday.
          8.404 HC2CW
                            Guayaquil, Ecuador.
                                                     Works FVA.
          8.075
                  TYB
                            Pontoise, France.
                                                     Sun 3-5pm and irreg. Fri 11pm-midnight.
P37.33
D38.02
          8.035
                  CNR
                            Rabat, Morocco.
          7.89
7.797
7.715
                  FO8AA
                            Papeete. Tahiti.
 38.47
                            Geneva, Switzerland Sat 5:30-6:15pm.
                  HBP
E38.86
                            Bolinas, California Works KKH.
                  KEE
          7.52
7.51
7.38
7.265
<u>F</u>39.87
                                                     Works Bolinas irreg.
                  KKH
                            Kahuku, Hawaii.
 39.92
40.65
                  JVP
                            Nazaki, Japan.
                                                     Irreg.
                  XECR
                                                     Sunday 7-8pm.
                            Mexico D.F.
N41.30
                            Tunis, Tunisia.
                                                     6-8am and noon-2pm.
          7.18
                                                     Wed/Sat 2:45-4:45pm.
                  CR6AA
                            Lobito, Angola.
D+2.25
          7.10
                  FO8AA
                            Papeete, Tahiti.
                                                     Fri llpm-midnight.
E42.40
D42.80
          7.08
                  PIlJ
                            Dordrecht, Holland.
                                                     Sunday 11:10am-12:10pm.(P
          7.01 EA8AB
6.996 PZH
6.895 HCFTC
6.78 HIH
                            Tenerife, Canarias. Mon/Wed/Fri/Sat 3:15-4:15
 12.97
143.51
144.25
                            Paramaribo, D. Guiana Mon/Wed/Fri 5:40-9:40pm.
                                                     Thurs 8:19-10:49pm.
                            Quito, Ecuador.
                            San Pedro, D.R.
                                                     7:40-9:10pm ex.Sundays.
          6.74
 44.51
                                                     Sunday 5:14-7:14pm.
                  HC1TQ
                            Quito, Ecuador.
国4·57
国4·57
N4·64
                                                     6:10-7:40pm.
          6.725 HI3C
                            La Romana, D.R.
          6.725 WQO
6.72 PMH
6.673 TIE
                            Rocky Point, N.Y.
                                                     Experimental.
                                                     5:30-10am.
7-10:30pm_ex.Sundays.(11p
                            Bandoeng, Java.
B山·96
B<sub>4</sub>5·22
45:25
B<sub>4</sub>5·29
                            San Jose, C.R.
                  TIEP
                                                     Sun 5:45-7:45p, Tu 9:20-
          6.635 HC2RL
6.63 HIT
6.625 PRADO
                            Guayaquil, Ecuador.
                            Trujillo City, D.R.
                                                     12:10-1:40pm,5:40-8:40pm.
                            Riobamba, Ecuador.
                                                     Thurs 9:20-11:40pm.
          6.625 PRADO
6.60 XFA2 Veracruz, Mexico.
6.555 HI4D Trujillo City, D.R.
6.55 TIRCC San Jose, C.R.
6.545 YV11RB Bolivar, Venezuela.
6.52 YV6RV Valencia, Venezuela.
6.475 HI4V Trujillo City, D.R.
6.475 HI4V Trujillo City, D.R.
P45.76
-45.80
-45.84
-46.01
                                                     Works XDR and XAM.
                                                     4:40-7:40pm ex.Sunday.
                            Trujillo City, D.R.
                                                     N'n-2, 6-7pm, Thur 6-11pm.
                                                     5:30-9:30pm.
                            Valencia, Venezuela
                                                     5:40-7:40pm ex.Sunday.
B46.21
                            Trujillo City, D.R.
朝6.34
46.51
46.70
                                                     5:10-6:40pm ex.Sunday.
                            Trujillo City, D.R.
           6.45 HISA
6.425 VE9AS
                                                     5:40-7:40pm ex.Sunday.
                            Trujillo City, D.R.
                                                     Thurs 10:30pm-1:30am.
                            Fredericton, N.B.
 46.70
46.70
           6.425
                  OAXLK
                            Lima, Peru.
                                                     7 p.m. daily.
           6.425
                  W2XGB
                            Hicksville.L.I.
                                                     Testing 8-10pm irreg.
 46.69
46.73
46.80
           6.425 W3XL
                            Boundbrook, N.J.
                                                     NBC Experimental.
           6.42
                                                     6:10-8:10pm ex.Sunday.
                  HILS
                            Puerto Pleta, D.R.
           6.41
                  TIPG
                            San Jose, C.R.
                                                     See 9.55mc.
 46.88
           6.40
                  YV9 RC
                            El Valle, Venezuela 5:30-9:30pm ex. Sunday.
 47.02
           6.38
                  YV4RC
                            Caracas, Venezuela. llam-lpm, 5:30-9:30pm ex S.
          6.357 HRP1
6.35 HH3M
6.31 HIZ
6.30 YV121
 47.20
                            San Pedro Sula, Hon 7-9pm ex. Sunday.
N47.24
                  HH3NW
                            Port-au-Prince, Haiti testing in evenings.
□47.5
□47.62
                  HIZ Trujillo City, D.R. 5:10-7:40pm ex. Sundays. YV12RM Maracay, Venezuela. 6-10pm except Sundays.
           6.30 VP3BG
6.282 CO9WR
D47.62
                            Georgetown, B. Guiana
 47.76
                            Sancti Spiritus, Cuba N'n-1,4-6,9-11pm.
           6.28
 47.77
                            Trujillo City, D.R. 8:10-9:40p, T/F 6:40-8:10pm
                  HIG
           6.25
                            Matanzas, Cuba.
Trujillo City, D.R.
 48.00
                   CO5RY
                                                     7-9pm.
M148.00
           6.25
                   HIN
                                                     Operating in evenings.
           6.235
 48.11
                  HRD
                            La Ceiba, Honduras
                                                     Sun lpm-lam, daily 8-llpm.
 48.15
           6.23
                   OAXLG
                            Lima, Peru.
                                                     7-11pm, Wed 6-11pm.
                            Georgetovn, B.Guiana 4:45-8:45pm, Sun 7:45-10am
 48.39
           6.20
                   VP3MR
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10:40a-2:40p,6:40-9:40pm
 48.47
                6.19
6.17
                            HILA
                                          Santiago, D.R.
                                          Mexico D.F.
                                                                                8-8:30am, 6-11:15pm
                            XEXA
                6.17
6.16
 48.62
48.70
                                                                                7-10pm ex.Sunday.
                            HJ2ABA
                                          Tunja, Colombia.
                                                                                 Signs off at 11:30am.
                                          Colombo, Ceylon.
                                          Colombo, Ceylon.
Caracas, Venezuela
Santiago, Chile
Winnipeg, Canada.
Santiago, Cuba.
Santiago, Cuba.
Sepam, llam-2pm, 5-9pm.
Bulawayo, S. Rhodesia Tu/F 12:15-3:15p, M llam-2pm, M llam-2
B48.73
48.78
48.78
48.81
                6.156 YV3RC
                6.15
                            CB615
                            CJRO
                6.147
                            COKG
  48.81
                6.147
                            ZEB
                                                                                N'n, Th 10am-N'n, S 3:30-6p
                6.145 HJ4ABU Pereira, Colombia.
                                                                                 7-8pm except Sunday.
 48.82
                6.140 W8XK
                                          Pittsburgh, Penna.
  48.86
                                                                                 10pm-lam.
                6.137 CR7AA Laurenco, Mozambique 12:45-3pm, Sun 8-10:36.135 HJ4ABD Medellin, Colombia. 8-llpm except Sundays. 6.134 CHNX Halifax, NS, Canada. Relays CHNS.
                                                                                  12:45-3pm, Sun 8-10:30am
  48.89
F48.90
  48.91
48.93
                                                                                Tues/Fri 8:10-10:10pm.
                6.132 HIX
                                           Trujillo City, D.R.
                6.13 ZGE Kuala Lumpur, FMS.
6.13 COCD Havana, Cuba.
6.128 HJIABB Barranquilla, Col.
                                                                                 Sun/Tues/Fri 6:40-8:40am.
  48.94
                                           Kuala Lumpur, FMS.
-48.94
548.95
                                                                                 llam-12 mid., Sun 5-11pm.
                                                                                 8-10pm except Sundays.
                6.122 HJ3ABX Bogota, Colombia.
                                                                                 6-11:30pm except Sundays.
  49.01
                 6.122 OAX4P
                                                                                 Noon-lpm,9-llpm.
  49.01
                                           Lima, Peru.
  Ί9.02
                                           Wayne, New Jersey.
                                                                                 9-10pm.
                 6.12
                            W2XF
                                                                                 7:30-mid. See 9.505mc.
  49.02
                 6.12
                            XEFT
                                           Veracruz, Mexico.
                 6.12
                                           Panama City, Panama
  49.02
                            HP 5Z
                 6.115
                            OLR
                                           Prague, Czechoslovakia testing irregularly.
N49.06
                                                                                 Sat 9:35pm-Sun 2:05am, Sun
  49.11
                 6.109
                            VUC
                                           Calcutta.India.
                                                                                 7:05-10:35,dly 1:35a-1120
                 6.108 нј4авв
                                                                                 8-10pm except Sundays.
                                           Manizales.Colombia
  49.11
  49.18
                                                                                 Mon/Wed/Sat 4pm-midnight.
                 6.10
                            W3XAL
                                           Boundbrook, N.J.
                                                                                 Su/T/Th/F 8pm-lam, M/W/S
  49.18
                 6.10
                            W9XF
                                           Chicago, Illinois.
                                                                                 7am-7pm,10pm-12:30am.
                                                                                 Testing irregularly.
11:45-12:30a,3:15-7am,9-
                 6.10
  49.18
                                           Seville . Morocco.
                                           Johannesburg, S. Afr
 549.20
                 6.097 ZTJ
                                                                                 11:15am, 11:45-4pm.
  49.25
49.26
                                                                                 7:30-10:30pm.
                 6.092 HJ4ABE Medellin, Colombia.
                                           Bowmanville,Ont. 4:30-10:30pm,Sun N'n-8pm. Belgrade,Yugoslavia 2-3:45am,7-8:30a,11:30am Rome,Italy. (to 4:45pm daily.
                 6.09
                             CPCX
 BL19.26
                 6.09
  49.27
                 6.085 2R01
                                           Rome, Italy.
                                                                                 7-10pm.
  49.27
                 6.085
                             HJ5ABD Cali, Colombia.
  49.034442
49.034442
49.034442
                                                                                 5:45-6:15am ex.Sat/Sun et 7-10:30pm ex.Sundays.
                 6.082 VQ7L0
                                           Nairobi, Kenya.
                 6.08
                             HP5F
                                           Colon, Panama.
                 6.08
                                           Chicago, Illinois.
                                                                                  6:30am-midnight ex.Sunday
                             W9 XAA
                                           Penang, F.M.S.
La Paz, Bolivia.
                                                                                  6:40-8:40am ex.Sundays.
                 6.08
                             ZHJ
                                                                                 8-9:30pm.
                 6.08
                             CP5
                                                                                 9am-5pm Ex.Sun, Sat 9am-6p
                 6.072
                             OEŔ2
                                           Vienna, Austria.
                 6.07
                             YV7RMO Maracaibo, Venezuela.
                                                                                       Testing.
   49.42
                 6.065
                             HJ4ABH Manizales, Colombia
                                                                                 6-7:45pm.
   49 •46
  49.50
49.50
                 6.06
                             OXY
                                           Skamlebaek, Denmark
                                                                                 1-6:30pm, Sun llam-7pm.
                 6.06
6.06
                             W3XAU
                                                                                 7-10pm.
                                           Philadelphia, Penna
                             LAX8W
                                                                                  6:30am-7pm, 10pm-12:30am.
                                           Cincinnati, Ohio.
                                                                                  Sun 7am-7pm, 10pm-12:30am
 _49.55
B49.59
_49.63
_49.67
                 6.055
                             XEUW
                                                                                 7-12mid.
                                           Veracruz, Mexico.
                 6.05
6.045
                                                                                 7-11:30pm.
                             HJ3ABD Bogota, Colombia.
                             HI9B
                                           Santiago, D.R.
                                                                                 11am-9pm, Sun 12:15-1:15am
                 6.04
                                                                                 N'n-2:30pm, Sun/Tues/Thur
                             W4XB
                                           Miami, Florida.
                                                                                 9:15-10:30p,M/W/F/S/ 8:30
Tues/Thur 7-9pm.
-49.65
B49.69
-49.71
-49.75
-49.77
B49.77
B49.85
                 6.04
                             MAXIM
                                           Boston, Mass.
                 6.037
6.035
6.03
                             HJlABG Barranquilla, Col.
                                                                                  6:30-10pm except Sundays.
                             HJ4ABC Ibague, Colombia.
                                                                                  8-10pm except Sundays.
                             HP5B
                                           Panama City, Panama
                                                                                 8-10:30pm.
                 6.03
                             VE9 CA
                                           Calgary, Canada.
                                                                                 9am-midnight.
                 6.028 PRA8
                                                                                  2:30-8:30pm.
                                           Pernambuco, Brazil
                 6.028 HJ4ABP Medellin, Colombia.
                                                                                 7-11pm except Sundays.
                                                                                  Sat 10:40pm-1:10am, Mon/Wd
                 6.018 ZHI
                                           Singapore, S.S.
                                                                                  Thur 5:40-8:10am.
 B49.85
                 6.018 HJ1ABJ Santa Marta, Col.
                                                                                  6-10pm.
  49.88
                                                                                  5:40-7:40pm.
                 6.015 HI3U
                                           Santiago, D.R.
   49.91
                 6.012 HJ3ABH Bogota, Colombia.
                                                                                 4-11pm, Sunday 4-9pm.
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49.92	6.01	COCO	Havana, Cuba.	7:55am-7pm, Sun 8-10pm.
49.92	6.01	CJCX	Sydney, NS, Canada.	Will soon be in operation
	6.01	FIU	Tananarive, Madagaso	car 4-4:45am,9:45-10:15am.
	6.005	CFCX	Montreal, Canada.	7am-midnight, Sun 8am-10p
49.95			Panama City, Panama	8:30-10am, 1-2, 7-10pm.
50.00	6.00	XEBŢ	Mexico D.F.	10am-1:15am.
50.00	6.00	ОАХДЈ	Lima, Peru.	7-11pm.
		HJ5ABD	Cali, Colombia.	7-10pm except Sunday.
50.26		HVJ	Vatican City, Italy	2-2:15pm, Sunday 5-5:15pm.
50 . 29	5 . 966	H Jl ABC	Quibdo,Colombia.	5-6pm, Sunday 3-5pm.
50.42	5.95	HJN	Bogota, Colombia.	8:30-10:30pm ex.Sunday.
50.51	5•94.	TG2X	Guatemala, Guatemala	Mon/Wed/Sat 9-10:30pm.
50.72	5.914	HH2S	Port-au-Prince, Hait	:i 7:30-9:30pm ex.Sunday.
	5.91	YV15RV	Valencia, Venezuela,	will be in operation soon
50 . 86	5.899	YV8RB	Barquisimeto, Venez.	.5:30-9:30pm ex.Sunday.
F50.93	5.89 5.875	XEWI	Mexico D.F.	See 11.9mc.
51.07	5.875	HRN	Tegucigalpa, Hon.	6:30-8, 8:30-10pm (ex.Sun
51.16	5.863	HI1J	San Pedro, D.R.	11:40a-1:40p, 6:10-8:40p-
	5.85	YV5RMO	Maracaibo, Venez.	8:30-9:30a, llam-N'n, 4:30-
	•	•	•	9:30pm ex.Sundays.
	5.82	TIGPH	San Jose, C.R.	N'n-2pm, 7-11pm ex.Sunday
51.72	5.80	YV2RC	Caracas, Venezuela.	5:15-9:30pm.
51.72	5.80	ZEC	Salisbury, S. Rhodes	ia Tu/F 12:15-3:15pm,M-11a
				Nn, Th 10am-Nn, Su 3:30-6am.
51.90	5.78	оах4р	Lima, Peru.	Wed/Sat 9-11:30pm.
52,45	5.72	YV10RSC	San Cristobal, Ven	5:30-midnight ex.Sundays.
<u>\$</u> 52.51	5.713	TGS	Guatemala, Guatemala	a Sun/Wed/Th 6-9pm
58.03	5.17	PMY	Bandoeng, Java.	4:30-10:30am,5:30-7:30pm.
	4.60	HC2ET	Guayaquil, Ecuador.	
70.65	1.25	RV15	Khabarovsk, U.S.S.R	llpm-11:30am.
	3.04	YDA	Tandjongpriok, Java	

AWORLD TIME CLOCK

Can be SET at ANY Time

Zone - In ANY City or

Country

Instantly Tells Corresponding
Time In Every Other Time
Zone "Around the World"

Actual size is 5½ inches high 4½ inches wide

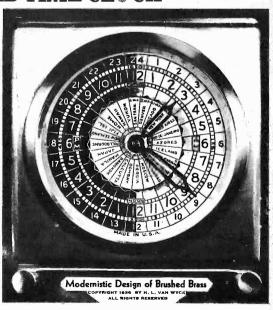
Convex Crystal

Indicates Minutes-Quarter Hours
Has A. M. and P. M. divided Dial

RETAIL PRICE

\$3.95

Postage extra in foreign countries. Weight 2 lb



THE SKY PILOT ORGANIZATION, PEARLRIVER, NEW YORK

UNITED STATES OF AMERICA







