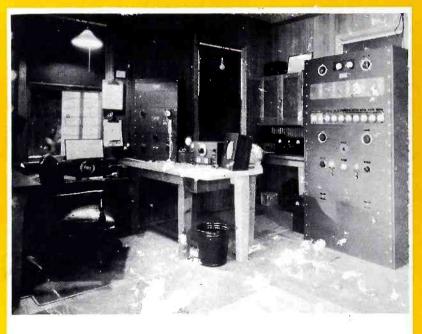


APRIL 1936



Transmitter Shack of a amous Amateur Radio-phone W2BSD

New Rochelle, New York



INTERNATIONAL DX'ERS ALLIANCE

SHORT-WAVE NEWS
RADIO JERUSALEM
DE-LUXE SHORT-WAVE LIST
NEW JAPANESE FREQUENCIES
BROADCAST STATION TUNING CHART

NEW JAPANESE FREQUENCIES -Akifusa Saito-

	-A.	Kliusa	Salto-	
NOTE:	Thes	e new	governmen	nt fre-
quenc	v allo	cations	will	be in
effec			the near	future
KC/S	CALL	LOCAT		WATTS
560	MTCY	Shink	yo (m)	
580				100000
	JFCK	Taich		1000
590	JOAK-1	*Tokyo		150000
600	JONG	*Miyaz		500
610	JOJK	Kanaz		3000
618.5	KZRM	Manil	a,P.I.	50000
630	JOKK	Okaya	ma	500
640	JODG	Hamam		500
650	JOUK	Akita		300
650 660	XGOA		ng,China	75000
470				
670	JOTK	Matsu		500
674	MTFY	Harbi		3000
680	JOVK	Hakod	ate	500
690	JOBK-1	Osaka		10000
700	JOCG	Asahi	gawa	300
710	JODK-2	Keijo	, Chosen	10000
720	JORK	Kochi	•	500
720	JFBK	Taina		1000
730	JOCK-1	Nagoy		10000
740	JOSK	Kokur		
740				1000
750	JFAK		ku (t)	10000
760	JQAK	Daire		500
770	JOHK	Senda		10000
780	JOPK	Shizu	oka	500
790	JOGK	Kumam	oto	10000
800	JOKG	*Kofu		500
810	JOIK	Sappo	ro	10000
830	JOFK	Hiros		10000
870	JOAK-2	*Tokyo	111110	
800			/\	150000
890	MTBY	Hoten		1000
890	JOLG	*Totto		500
910	JOL K	Fukuo!		500
920	J0QK	Niiga	ta	500
930	JOAG	Nagas	aki	500
940	JOBK-2	Osaka		10000
950	JONK	Nagan	0	500
970	JODK-2		, Chosen	10000
980	JOXK	Tokus		500
990	JOCK-2	Nagoy		10000
1000	JOBG	Maeba	snı	500
1020	JOFG	Fukui		300
1030	JB AK	Fusan	,Chosen	1 50
1 0 40	JOJG	*Yamag		500
1050	JOHG	Kagos)		500
1060	JOIG	Toyam		500
1070	JOOK	Kyoto	-	300
1080	JOOG	*Obihi	r o	500
		JON CO	nstructic	- 500
				n; (m)
Mangn	uokuo;	(t) Ta	lwan.	

APPOINTMENTS

FOREIGN REPRESENTATIVES:

EGYPT-Aram Ishkanian,21 Fouad St, Cairo, Egypt.

HAITI-C.Ricardo Widmaier, Jr.P.O. Box A-117, Port-au-Prince, Haiti. STATE MANAGERS:

MARYLAND-Wm. Rank, Box 41, Frostburg

Maryland. TENNESSEE-H.M. Weatherly, 600 Fairmount Blvd, Knoxville, Tennessee.

RADIO JERUSALEM

Above:

JERUSALEM BROADCASTING HOUSE

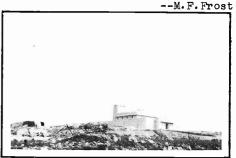
Below:

RADIO **JERUSALEM** TRANSMITTER BUILDING



Radio Jerusalem, the first broadcasting station in Palestine is on the sir. The frequency is 668kc, or wave-length of 449.1 meters, the as that occupied by same channel the British North Regional station Power is 20,000 watts.

mitter built by Marconi works. will include English, Programs Hebrew and Arabic, with music and news of the three nationalities.



(Photo on front Cover)

W2BSD, 183 Drake Ave, New Rochelle New York, is owned by radio pioneer Geo. C. Cannon, and operated by I.D.A member, Theo. M. Healy.

W2BSD, normally operated on 14.17 megacycles between 14 and 2200 G.M.T. Power about 1000 watts.

W2BSD is conducting research affecting short-wave reception and . desires the co-operation of every IDA member in listening for, and reporting on, the transmissions of W2BSD. Those reporting the signals of W2BSD will receive a photo, and schematic description of the station and blank log sheets for reporting upon future transmissions of the station. Here is a chance for foreign members to co-operate in a very worth-while scientific venture.

BROADCAST STATION NEWS

EUROPE

Austria The antenna of Radio Vienna, 592kC, 100kW, uses special reflectors, which makes it highly directional to the West (Mercieca) New 100kW station is to be erected at Vakarel, 25 miles Bulgaria from Sofia, during the year. Relay stations will be erected at Stara-Zagora in Central Bulgaria and at Varnas, or Burgas on the Black Sea.

New 100kW station under construction at Prague, will work on 1204kC. 120kW station to be built at Noutra and the <u>slovakia</u>

922kC, is to be raised to 40kW. power of Brno,

France PTT, station Nice-Corse, 1185kC, 60kW, uses the following call: "Ici Nice-Cote d' Azur, Station d'Etat". The former Radio Cote d' Azur transmitter, 1249kC, 800 watts is reported to have closed down... Muret, 776kC, 60kW, will be officially inaugurated on Easter Sunday ... Bordeaux-Lafayette PTT, 1077kC, 25kW, starts at 1:45 am EST, with boat siren repeated three times. Closes down with "Sur les Bords de la Garonne", at approximately 6P.M. EST.

Soviet government plans twenty new 100 to 150kW stations. (Yaounde. AFRICA

Cameroons French PTT will erect broadcast stations at Doula and-ASIA

It is reported that a new lookw station is to be erected China at Peilingmao, with relays at Nanking, Kalgan and Peking. (Mercieca)

Construction on the two new 150kW JOAK stations at Tokyo, is progressing satisfactorily. They will probably be completed shortly U.S.S.R. The new lokw station at Tcheliabinsk, 577kC, has been heard testing near 11 p.m. (Japan time), 6a.m.PST. (Saito)

AUSTRALASIA

Australia New station, LG, Longreach, Qlsd, to operate on 1100kC, with 300 watts power, will be on the air shortly (Preece) ... 6WA, Minding, W. Australia, 560kC, lokw, will not be completed until about July... 2AD, Armidale, N.S.W., 1080kC, is on the air.

New 60kW, 2YA, Wellington, may be completed this year. N.Z.

SOUTH AMERICA

100kW catholic station, Radio Anchista, has been inaugurated recently at Sao Paulo. Frequency not known as yet (Mercieca) NORTH AMERICA

CHNS, Halifax, N.S., lkW, now on 960kC. Canada

Cube CMCQ, 250 watts and CMOA, 150 watts, both of Havana, are now on 1420kc... CMBY, 150 watts and CMOK, 150 watts, both of Havana, are now on 1200kC ... CMCG, Havana, 250 watts, now on 680kC... CMCR, Havana, 150w, on 1200kc ... CMGG, havana, 250 watts, now on 1060kc ... CMBC, Havana, 1500 watts, now on 1460kc ... CMBC, Havana, 500 watts, now on 640kc ... CMCU, Havana, 150 watts, now on 1460kc ... D.R. New station, HIT, "La Voz de la RCA Victor", Apartado 1105, Ciudad Trujillo, operates on 1050kc, with 50 watts.

KHBC, Hilo, 1400kC, 250 watts, will be completed by about November, 1936.

XEAQ, Rosarito Beach, L.C., 1090kC, now using 1000 watts of Mexico power... XEW, Mexico, D.F., 50kW, reported on a new frequency of 740kC.

New stations authorized for: Redding, California, 1200kC, 100 watts; New Castle, Pennsylvania, 1420kC, 100 watts (Daytime); Pottsville, Pennsylvania, 580kC, 250 watts (Daytime) ... New frequency assignments: WILL, Urbana, Illinois, lkW, 580kC; WDZ, Tuscola, Illinois, 100 watts 1020kC... New power ratings: KFPY, Spokane, Washington, 890kC, 5kW day; WSPD, Toledo, Ohio, 1340kC, 5kW day; WJBC, Bloomington, Illinois, 1200kC, 250 watts day; WHBU, Anderson, Indiana, 1210kC, 250 watts day; WFBM, Indiana-polis, Indiana, 1250kC, 5kW day; KID, Idaho Falls, Idaho, 1320kC, 1kW day; WDBJ, Roanoke, Virginia, 930kC, 5kW day; KFDM, Beaumont, Texas, 560kC, 1kW day; KARK, Little Rock, Arkansas, 890kC, 500 watts day; WIBW, Topeka, Kans, 580kc, 5kW day.

DX TIPS PERIODS -EST--EST-Tues.,6:35-7pm Fri.,12-12:30am. Schenectady, N.Y. ED W2XAF 9530kC SW Weekly 1300kC lkW Los Angeles, California EJ KFAC Weekly Sat., 12-12:30am Sun., 12:30-12:45am 980kC 50 Pittsburg, Pennsylvania JS KDKA Weekly 640kC 50 Los Angeles, California FA KFI COMMENTATORS: ED-Darlington, EJ-Jones-Ellis, JS-Stokes, FA-Andrews

"The Globe Circler" Subscription price \$1.25 per year anywhere.

GLOBE CIRCLER

Ax'ers Alliance

CHARLES A. MORRISON

Published Monthly Excepting July

International

BLOOMINGTON, ILLINOIS, U. S. A.

NO. 4

I. D. A. CHAPTERS

ALPHA (Toledo) progressing satisfactorily, and extensive plans are being made for a flying start and great enlargement of membership starting with next DX season.

BETA (New York) going right shead with membership campaign, and have already added several new dx'ers. Through courtesy of Robt.Hertzberg of Wholesele Radio, announcements of all Beta Chapter meetings will be displayed on their bulletin board.

CELERY CITY (Kalamazoo) having regular meetings and have appointed J.Cooper, as permanent chairman.

DELTA (Lansing). Regular meeting was held at home of Charles Williams, on March 12. There was a good attendance, and all enjoyed a fine time.

REGINA JUBILEE (Regina). Only four attended Feb. 16 meeting, on account blizzard and 45 below zero weather Meeting of Mar. 1 was well attended. Final results of Inter-chapter DX contest with Calgary Foothills disclosed Calgary winning in the short-wave division, with 15850 to 6164 points, but Regina Jubilee the victor in the broadcast section with 2730 to 98 points. The leaders in the S. W. contest were McGuire 5512, Mathews 3507 and Johnson 2625, all of Calgary. The winners in the broadcast division were Westmoreland 1232, Dickenson 574 and Ansell 504, all of Regina. CALGARY FOOTHILLS (Calgary) held regular meeting with fine attendance. A constitution and By Laws. for the Chapter were drawn up and officially adopted. It was decided that all members using S.W.L.cards were to identify themselves as IDA members. Mr. Debitt, recently return ed from Radio School in Toronto, gave an interesting account of his experiences. A talk on Q.R.M. was given by Mr. Stunden of the Govt.

Dept. of Marine, and the Chapter was assured all possible co-opera-

tion in suppressing interference.

Calgary now has 17 local members.

JEWEL OF THE MEDITERRANEAN-Malta, are making great strides. Official Chapter reception report forms have been printed and a local column is being run in the "Malta Chronicle "about Chapter activities Meeting was held on Feb.ll, and ll members were present. It was all members decided to rent suitable meeting quarters, with local chapter dues to defray this expense. It was proposed that the Chapter acquire a Patterson PR16, and a World Globe for the club rooms. An especially bound edition of the "Radio Amateur Call Book" was presented to the Chapter by Mr. Mercieca. A general discussion of DX conditions wound up the meeting. The Chapter will meet the first week in each month.

Through the activity of M. Michaelson, Dr. Twomey and Robt. Green, a local Chapter in Minneapolia, Minn. has been assured.

CONTEST SUGGESTIONS

The most practical suggestions we have received for permanent annual contests, are furnished by R. T. Coales, of Southsea, England. plan is that each district having five or more members run an independent BCB and S. W. contest for a small cup as an annual reward. The contest would last for five months during the best DX season in particular locality. Each winner's record would then be forwarded to headquarters and the best allaround showing, in the opinion of would be given the the judges, title of IDA DX Champion, and hold permanent grand trophy for a period of one year. We would like to know your reaction to this plan How many would be interested in a Summer contest for reception of 20 meter foreign amateurs? If enough are willing to co-operate to make it worth while, we will be glad to work out details, so that the contest could start by May 15. Drop us a card on this matter at once, including your suggestions for rules and awards - Ed.

NEW I. D. A. MEMBERS

James F. Cooper, Kalamazoo, Michigan.
Ray English, Passaic, New Jersey.
Harold V. Corbett, Regina, Sask, CAN.
A. T. Yamamoto, Tokyo, JAPAN.
F. Bedsom, Bromley, Kent, ENGLAND.
C. M. Bolton, Detroit, Michigan.
C. J. Cole, Halifax, N. S., CANADA.
D. Young, Calgary, Alta, CANADA.
William Wehner, Regina, Sask, CANADA.
Robert Green, Minneapolis, Minn.
Don W. Reynolds, Newburgh, New York.
Mrs. Marie Dmitry, Essipoff, Great
Neck, L. I., New York.
Nicholas J. Hock, Newark, New Jersey.
Aram Ishkanian, Choubrah, Cairo.

EGYPT. Lieut-Col.W.C.Powers, Parris Island South Carolina.

Henry Tidd, Columbus, Georgia.
Kenneth E. Faiver, Lansing, Michigan.
Bernard Horne, Jackson, Michigan.
M. J. Miskow, Canmore, Alta, CANADA.
George Derosier, Dayville, Conn.
A. E. Flock, New Albany, Indiana.
George C. Akins, Willits, California.
George C. Splitt, Regina, Sask, CANADA
J. O. Calvin, Regina, Sask, CANADA.
A. D. Smith, Amherst, N. S., CANADA.
Oswald F. Schuette, Pres. Short-Wave
Institute of America, Washington,

D.C. W.Wallin, East Hartford, Conn. Sr.Ricardo Widmaier Jr., Port-au-Prince, HAITI, W.I.

D. H. Henderson, Wheeling, W. Virginia. Theo. Healy, W2BSD, New Rochelle, N. Y. Pierre Gouaze, Limoux (Aude) FRANCE. Herman S. Rappaport, Brooklyn, N. Y. Relph Gozen, Yonkers, New York. Robert D. Wade, Amarillo, Texas. Julius Orosz, Cleveland, Ohio.

DIST. MEMBERSHIP CONTEST STANDINGS
Dist-1 (North West US-Canada) 60
Dist-6 (East Central States) 48
Dist-2 (Pacific States) 42
Dist-7 (North East US-Canada) 28
Dist-4 (W.Central States) 15
Dist-5 (Dixie States) 11
Dist-42 (England) 9
Dist-97 (Australia) 8

I.D.A. DEGREE CANDIDATES TA DEGREE (Trans-Atlantic Degree) Don W. Reynolds, Newburgh, New York. Edw. Goss. Brooklyn, New York. Joel Armantrout.Fitzgerald,Ga. WW DEGREE (World-wide Degree) Edw. Goss, Brooklyn, New York. TP DEGREE (Trans-Pacific Degree) Edw. Goss, Brooklyn, New York. Don W.Reynolds, Newburgh, New York SA DEGREE (South America Degree) Irwin Beitman, Elyria, Ohio. Alan Walker, Princeton, New Jersey Edw. Goss, Brooklyn, New York.

BEST VERI'S REPORTED RECENTLY Bordeaux-Lafayette, France, 25kW. HAL, Budapest, Hungary. 120kW Roy Myers, Los Angeles, California. LIP, Ipswich, Australia. 50 watts. 4TO, Townsville, Australia. 200 watt Warren Reichardt, Reading, Mass. WK, Warwick, Australia. 50 watts. 7LA, Launceston, Tasmania. 300 watts. Lloyd Westmoreland, Regina, Canada. CX34, Montevideo, Uruguay. 500 watts R.H. Tomlinson, Port Chester, N.Y. JFAK, Taihoku, Taiwan. 10kW. Ray Lewis, Toledo, Ohio. <u> VOAS</u>,St.John's,Nfld. 100 watts. CHNC, New Carlisle, Que., 500 watts. 500 watts. WCAP, Asbury Park, N. J. WCSC, Charleston, S. C. 500 watts. W.K. Walton, Sennen S.O., Éngland. Radio Normandie, Fecamp, France. 10kW Madona, Latvia. 50kW. Akifusa Saito, Kumamoto, Japan.

IDA PRESIDENT OFFERED APPOINTMENT The British Long Distance Listeners' Club, sponsored by 'Wireless Magazine', of London, England, and whose Secretary is IDA member, Hend W. Priwin, has honored the President of the I.D.A. by offering him an appointment as Honorary Vice-President of this organization.

J.Maguire and A.MacLean of Calgary have started a weekly DX period on CFAC,930kC,100w,Sundays,1:30am EST

THE W.R.R.L. FORGES AHEAD That famous scientific body, the World-wide Radio Research League, of London, England, with which the I.D.A. is affiliated has now insur urated its own official publication, "Ralph Stranger's Science Re-This brilliant publication is edited monthly by Bernard Jones Publications, Ltd., Chansitor House, 37/38 Chancery Lane, London W. C. 2., England. The annual subscription price is 13/6 (approx. \$3.40). This subscription magazine is devoted to science in all of its branches, and the articles are extremely practical and in teresting. Much valuable data on radio development is also fully covered. It's Science Editor, Ralph Stranger, honorary life member the I.D.A., has kindly offered the IDA one page each month in Science Review devoted to IDA activities. In reciprocation, we EXPECT every IDA member to co-operate with the W.R.R.L. in every way possible, and for those interested in 8 useful science magazine, we recommend "Ralph Stranger's Science Review".

						TOTO CALL DOD CO
FREQ	CALL	PST	CST .	EST	GMT	FREQ CALL PST CST EST GMT
570	2YA	1-3	3-5	4-6	1 1	1090 CX28 D-21
625	TIGP			D-22		1100 WPG 1-5
648	Lyons			2-230	1	1100 7LA 1-6
650	<u>lya</u>	1-3	3 - 5	4-6	_ /	1110 2UW 1-6
660	WEAF				1-6	1110 <u>LS5</u> D-21
670	LSL			D-21		1113 Fecamp 2-3
670	200			4-6		1120 4BC 1-6 5-6
710	WOR				1-5	
710	7NT		4 − 5	4-6		1150 <u>LR8</u> D-21
720	3YA	1-3	3-5	4-6		1153 YV7RMO
740	2BL	'		5-6		1170 WCAU 1-6
750	KGU	22-1	24-3	1-4		1170 4TO 1-5
760	WJZ				1-5	1180 3KZ 1-6
770	3LO			5 - 6		1190 2CH 1-6
790	LYA	1-3	3− 5	4-6		1190 LS2 D-20 D-21 1-230
790	LRIO			D-20		1210 TGW (Sun1-4 2-5 5-6
RÍO	CX14			D-223	0	1230 2NC 1-6
830	LR5			D-21	11-2	1230 WNAC 1-6
830	3GÍ		3 - 5	5-6		1240 WKAQ 24-2
850	ćx16		, ,	Ď-22		1240 3TR 1-6
860	WABC			_ ~~	1-6	1270 LS9 D-21
870	LR6			D-21	1-2	1280 PRG3
900	3MA	1-4		- ~		1290 WNEL
923	PRFL	- 4	D-20	D-21	1-2	1320 KGMB 22-1:30 1-430
95ó	LR3		D-20	D-21	1-2	1350 3GL 1-6
960	5 DN	1-6	2 20	2 2-	- ~	1410 WAAB 2-5
990	LRL	- ~		D-22	1	1500 3AK 5-6
990	WBZ			2 22	1-6	1)00 Jiii) 0
1005	HJ3AB	н			- ~	NOTE: This table shows at a glance
1017		;;	D-20	D-21	1-2	exactly what BCB stations are be-
-			D-20	D-21	1-3	ing received, at present, in your
	CMCY			D 00	1 7	own time zone. The 24-hour clock
	PRF6			D-22		is used, and numerals indicate the
エロカラ	PRH8					
1070	TDI	D-10	D-21	D 00	1-3	best approximate tuning period for
1070		D-19	リーにエ	D-22	+-	each station. D- stands for dusk,
	PYG2	D-19		150 7		or sunset, your local time. Best
	Borde	вux.		150-3		bets are underlined.
1080	MR.L.	1 1			1-5	

WORLD WIDE BROADCAST CALENDAR

	E.S.T. KC/S KW LOCATION	CLUB CALL
Apr. 5	Sun. 4-5 s.m. 1210 .05 Aklavik, N.W.T., Canada.	CDXR CJCU
- •	Address Dr. J. A. Urquhart, Dept. of Interior, Aklavik, NWT	,Canada.
	Aklavik is only a few miles from the Arctic Ocean.	
Apr. 9	Thur, 3-5 a.m. 1010 .5 Regina, Sask, Canada.	IDA CHWC
	Broadcast sponsored by Regina Jubilee Chapt, various	members
	of which will take part. Reports from every member so	olicited
Apr.19	Sun. 3-4 a.m. 1430 1 Los Angeles, California	ALL KECA
•	World-wide DX broadcast with Frank Andrews at the Mil	ke.

DX TIPS. NOTES AND QUERIES

Feb.23, brought the most remarkable TP reception since Spring of 1933 about 30 stations were logged, all coming in with crystal clearness (H. Diedrich-Ill)... First two and last week in January saw best recept on this winter, and best TA signals above 1000kC since 1933 (R. Stansfield, England)... On Feb.22, from 7 to 10 pm PST, I recorded a most remarkable QSA5/R9 reception of LR1, Radio El Mundo (E. Smith, Washington)... Am hearing a strange Frenchman on 1125kC, between 7 and 10 pm EST. Think the first two letters are HH-. Interval signal of four chime notes, in two parts, starting low and working up in tone (R. Tomlinson, N.Y.)... Long Wave stations have been coming in fine here: Droitwich, 200kC, signs off at 7pm EST; Radio Paris, 182kC, off at 7:30pm, and Reykjavik, Iceland, 208kC, off at 6pm EST (E. Peters, N.S.).. The mystery Spanish station on 1055kC, is definitely PRHA, Rio de Janeiro, Brazil.

WITH OUR MEMBERS

(Correspondence Corner)

J. E. A. Sanderson, Musselburgh, Dunedin, S.2., N.Z., wishes to exchange SWL QSL cards with other members.

T.E.Lowe.28 Allenby Rd, Cadishead, M/c England, wishes to correspond with mem bers in Canada, Cuba, S. America, Mexico. B.A. Meserve, 564 Westbrook St, S. Portland. Maine, wishes to exchange any num ber of stamps up to 50 with members. Rudolph Kure, 367 Amezon Ave, Clifton, Cincinnati, Ohio, would like to buy a used Scott radio cabinet.



-Dxling in Comfort-R. T. Coale's, Southsea, England

I heard Jerusalem after NR closed down one night (Stansfield-England) ... Reception here is excellent on both BCB and SW. KFI is R9 always. I use a McMurdo Silver WW9 and a new 20-tube Lincoln (de Roo-Hawaii) ... Have a new Zenith. It has a fine tone, ample selectivity, low noise level, and perfect AVC. Can tune in Chicago stations all day long (Peters-N.S.) ... IlRO, Rome, gave us a good-will broadcast on Feb. 21, at 10:30 pm GMT. F. Crowder said it was quite good (Gaunt-England) ... The more powerful S.A. stations are beginning to constitute a real menace to domestic US reception, with most of the large U.S. stations either heterodyned, or blotted out about one week out of three the year around (Bell-Penna) ... Amalgamated Wireless of Australia has notified O. Amlie, of Philadelphia, that no other dx'er has ever turned in such a fine record of reception on VK2ME.VK3ME ... Prince Vinh San, Isle de la Reunion, would like to contact American amateurs. He has a Xmtr on 7 and 1 mc, with 10 watts output. He is on the air 16 to 22 GMT daily (<u>Jordan</u>-Penna) ... I use a Scott 23-tube, with a three-stage pre-selector. I prefer a good inverted L aerial. Mine is 65 feet in the air. Ground is 24 copper rods 1 in dismeter, a radiator, and old range boiler buried 10 feet deep (Horne-Mich.) ... I am in the Palestine Police Force. All our cars are fully radio equipped. I am hoping to start the first ham shack in Palestine (Frost-Palestine) ... We expect to have a new Collins 30FXC Xmtr by March 11, and will be on ten meters. We will have about 100 watts more output. W2IXY will always (D. Hall, 1642 York Ave, N. Y. C.) be the "Voice of the IDA" veri's here are Nice PTT, Madona, Bratislava, P.P., Fecamp, Bangkok, Breslau KPO and KNX. Radio Delhi, 882kC, heard at 1-2am J.S.T. No American or European stations heard now (Saito-Japan)... I now have at least 17 SW veri's from each of the major continents (H.J.Dent-India)... Best U.S. short-wave stations here are W2XAD, W2XAF, W8XK, W2XL and W3XAL (Ishkanian-Egypt) ... Latest veri's are IlMI, IlTO, LR1, LR4, YV2RC and HIZ. Aussies are getting better (Windisch-Ohio) ... Latest veri's here are TIPG, WIXAL, TG2Z, OXY, FTLAJ, EalBS, G5PT, YV6RV, VQ7LO, G6GO, COCD and OER2 (Trapani, Bonici, Preziosi, Mercie

ca-MALTA CHAPTER).



-A WELL EQUIPPED DX CORNER-Art MacLean,Calgary,Alta,Canada



-K.A.ABDERHALDEN AND FAMILY-Amboina, Moluccas, D. E. I.

RADIO EL MUNDO

To the right we have the Master Control Desk, of "RADIO EI MUNDO", the finest and most powerful station in the Southern Hemisphere...

MORE REPRESENTATIVES
HONG KONG-Miguel A.Riv
era,P.O.Box 4/1,2O.
HAWAII-Leo A.J.de Roo,
177 S.Queen St.,
Honolulu.

HONORARY LIFE MEMBER Relph Stranger, Sec. of W.R.R.L., London.

W.R.R.L., London. BROADCAST STATIONS IN PERU (Miguel A.Rivera) OAXLA Ploke 1500w Radio Nacional, Lima. OAXLB 1200kC 250w Radio Grellaud, Lima. OAXLC 1300kC 1000w Radio Dusa, Lima OAXLE 960kC 200w Radio Goicochea, Lima. OAXLF 10ºOkC 50w Radio Castellano, Lima. 0AX4H 1050kC Radio Davila, Lima. OAXLI 1100kC Radio Internacional, Lima. OAXLL 1250kC 100w Radio Miraflores,Lima. OAXLM 1450kC Radio Sucre, Lima. OAXLN 1020kC 100w Radio Gilco, Lima. OAX4P ... Radiodifusora -. . .

EXPANSION OF B. B. C. (Ronald A.Stansfield)

Andina, Huancayo, Junin.

North Irish Regional, 977kC, at Lisburn takes the air on March 20. North Scottish Regional, probably 1013kC, is under construction at Burghill, Perthshire, but far from finished. Both are described as more powerful than the present regionals, which is vague, but 70kW is the minimum. Sites have been sel ected for the North East Regional at Bewclay, near Newcastle, and the small relay at Beaumaris, Isle of Anglesey.

Meanwhile the power of the other Regionals is being increased. North and midland Regnls. already use 70 kW and the power of the other Regionals, London, Scottish and West are gradually being increased so that an ultimate power of 100 kW may be realised for each.



PACIFIC LISTENING POST (George C. Sholin)

Veri' received from LR1, Radio El Mundo. WKAQ and WNEL heard fair ly good on their frequency checks. Best Zedders in order are: 3YA,720kC; LYA,750kC; LYA,650kC; 2YA,570-kC; heard best at 3 a.m. FST.

A few of the Japanese stations heard here are: JOAK,500;JOTK,625; JODG,635; JOCG,655; JFAK,670;JOKK,700;JOJK,710; JOSK,735; JOBK1,750; JOHK,770;JOPK,780; JOGK,790;JOCK1,700;JOJK,830; JOFK,850; JOAK,870; JODK1,900;JOQK,920; JONK,900;JOXK,980;JOFG,900;JOHG,1050;JOCK2,1175. I also hear one on 600kC, but have not identified it as JOVK or JOLK. The best time for Facific coast listeners to log these stations is from 4 a.m. PST until sign-off between 4:30 and 5 a.m., at which time the call is given in English. Be sure and note the exact time of the sign-off.

Any members wishing an Esperanto grammar, send 5¢ in U.S. stamps, or if in a foreign country, twice the rate of one first-class letter in stamps, to G.C. Sholin, 55 Lapidge St San Francisco, California, U.S.A.

THANKS TO "EGYPTIAN RADIO"

That famous publication, "Egyptian Radio, official organ of Egyptian State Broadcasting, Cairo, has kindly reserved a space in its columns for weekly notes concerning the I.D.A., is vigorously backing the formation of an Egyptian Chapter of the I.D.A., and has thrown its offices open for DX meetings. Such a splendid interest in the welfare of its listener-readers is indicative of the rapid strides that radio is making in the land of the Pharoahs.

Short-Wave News

SPECIAL IDA PROGRAM

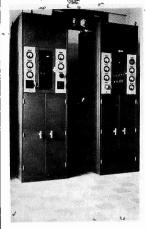
6.12mc XEFT. Sun. 11:30pm-12 mid. Apr.12, Address reports to Sr.J.R.Lopez,XEFT, Av.In dependencia 28, Veracruz, Mexico.

DSW degrees have been conferred upon G.P.Burdett, of Monze, N. Rhodesia, Africa, and L. Henderson

of Fort Worth, Texas.

The more important new international S.W. prefixes are: OZ Denmark, OX Greenland; CN8 Mor-occo; VP B. Honduras, VP3 B. Guiana, VP4 Tobago and Trinidad, VP5 Jamaica, VP6 Barbados, VP7 Bahamas, VP9 Bermuda; VQ1 Zanzibar, VQ2 N.Rhodesia, VQ3 Tanganyika, VQ4 Kenya, VQ5 Uganda; VS1 Malay Straights, VS2 F.M.S; VS4 Sarawak and N.Borneo, VS6 Hong Kong, VS7 Ceylon; ZC1 Transjordania, ZC6 Palestine; VR2 Fijis; ZB1 Malta, ZB2 Gibraltar.

In making up your short wave reports, which should be in not later than the 17th of the month, write on one side of the page only, double space lines, divide items into continents and always state time used. Important items are new BUENAVENTURA, COLOMBIA frequency or schedule changes, com- (Courtesy Edw. Nogales)



RADIO HJU LA VOZ DEL PACIFICO mercial schedule tips, addresses, identifying signals and unusual receptions. Number of stars denotes importance of item. Four stars is the highest ranking. See how many four star items you can turn in- Ed.

NORTH AMERICA-CENTRAL AMERICA (Megacycles used) NOTE: In giving ham information, we give calls, frequencies, and times heard, as reported. These may be subject to slight discrepancies- Ed. TI2FG 14.132 10:40em K6BAZ 14.245 11:00pm HAMS: VP6MO 14.245 11:15pm NY2AE 14.150 7pm-lam VP9R 14.020 7am VP7NC 14.165 7am К6LJB 14.245 11рт HI5X 14.090 TI 3AV 14.140 VP6F0 14.190 ilpm YNIOP 14.273 Early am VP4TB 14.125 7:30pm TIZAE 14.132 8am K6CMC 14.190 llpm-lam VP5AC 14.290 7-8am K7VH 14.242 10-11pm NX2Z 14.393 6-9pm K6MVV 28.1.92 6-9pm

WXE, Anchorage-5.995, calls WVD-8.9, almost nightly at 11:30-

12:30am (* Schmeichel)

BÉRMUDA ZFD, Hamilton-10.335, works WNB, N.Y.-10.675mc, every afternoon in scrambled speech, but intelligible sign-off at 8:10-8:15pm.

CANADA CFU, Rossland BC-5.705, has discontinued news broadcast but work CZCX, Lake Athabasca, on same frequency at about 8:30pm (* Savage)... CJRO, Winnipeg, is on 6.15mc, not 6.144, as listed in GC (Eikenberry)... CHNX (VE9HX), Halifax, NS, is relaying CHNS on 6.135mc at present (Siddle).. VEOCA, Calgary-6.03, is using only 30 watts at present (Smith).

TILANRH, Heredia, on the air again, approx. 9.7mc, daily 5:30 to C.R. 6: 30pm and Sundays to 7pm. Power is 150 watts (* Swenson) * TI5HH, The Voice of San Ramon, San Ramon-5.92, testing after midnight (Ansell).

New Govt.regulations limit SW stations to twelve in number, and minimum power must be 1000 watts (RMA) * New, CO 9DT, Santiago, P.O.

and minimum power must be 1000 watts (RMA) * New, CO9DT, Santiago, P.O. Box 954,12.27mc, relaying CMKD and asking for reports 5-6pm (Horne) (We still believe this to be a harmonic of COKG-Ed)

D.R. HIT, La Voz de la RCA Victor, Apartado 1105, Trujillo City, 6.63mc, 200 watts, operates daily 12:10-1:40, and 6:10 to 8:40pm.DX program Saturday 10:40pm. Relays HIT on 1050kC (50w) (Shanks, Cole, Messer, Patton, Miller). New sked.of HITA, La Voz del Yaque, Trujillo City-6.185 mc, 11:40am-1:40pm, 7:40-9:40pm daily. Power is 50 watts (Sholin-Patton) * HI3C, La Voz del Rio Dulce, La Romana-6.9, on from 6 to 7:30pm daily (Patton, Schmeichel, Deibe, Sweetland). HI4V, La Voz de Marina, Trujillo City, is being heard on 6.48mc now (Smith) * HI5N, La Voz del Almacen, 6.15mc, is at Santiago de Los Caballeros. Heard 6-7pm (Schmeichel) ** New, HI7P, Trujillo City, 6.8mc, heard from 7 to 8:15pm... HI9B, Apartado 95, Santiago de los Caballeros-6.045, heard best 7-9pm (CSWRC)

GREENLAND Reception reports to NX2Z (OX2Z), Hophstetter-14.393, can be

GREENLAND Reception reports to NX2Z (OX2Z), Hophstetter-14.393, can be sent to "Experimenting Danish Radioamateurs, Box 79, Copenhagen, Denmark.

New, YSJ, San Salvador-8.195, heard testing preparatory to being put into regular service on Feb.29. (Sr.Rivas ***) EL SAL-VADOR GUATEMALA TGIX, Guatemala City-9.15, announcing as TGW, and relaying programs of TGW has been heard early Sunday mornings. and through the week irregularly in the evening hours (Botkin, Weatherley).

HONDURAS HRD, La Voz de Atlantida, La Ceiba, Honduras-6.235, is a new station on nightly from 8 to 11pm, and 1 to 11pm on Sunday. HRD which has a power of 200 watts is heard with excellent strength Dr. Tulio Cas teneda is the owner (** Laul, Schmeichel, Miller, Weatherley, Smith, Rivas, Roberts, Ansell, CSWRC).

The commercial station on 9.4mc that phones Merida is XDR. Mexico D.F. Sometimes they relay broadcasts announcing as "Radio Nacio nal de Mexico" (** Siddle).. New station XEDQ, Guadalajara, 9.52mc, reported as relaying XED (Roberts). Sked of XEFT, La Voz de Veracruz-6.12mc, is llam-4pm daily, Mon to Fri 7:30pm to mid, Sat. 6:30-mid, Sun. 9pm to midnight. Power is only 20 watts (XEFT) ** XLC, aboard presedential train, now located at Nuevo Laredo, works XBJQ and W2BSD around 5pm on a frequency of 8.9mc (Green)

PANAMA New, HP5K, La Voz de la Victor, Apartado 33, Colon-6.005, re-lays HP50 on 1440kC, daily 8:30-10am, 1-2 and 7-10pm (Zimmerman, E.S. **) NICARAGUA New, YNLAT, La Voz del Mombacho, Leonidas A. Tenorio, Apartado 17, Granada, on 7.5 mc, is broadcasting from 9 to 10pm daily. Also works as amateur, using call YNZLT on 7.1. Power is 15 watts (Stokes-Ansell **) * YNLF, Managua, is now on 5.77, using call "La Voz del Nicaragua". Heard at 9:30pm (Schmeichel) * YNVA, Ruben Dario, Managua, is now on 8.59, from

7:45 to 10:15pm daily, except Sunday (X.DX, Nicolassy).

<u>U.S.A.</u> <u>KKL</u>, Bolinas, 15.475, phones Hawaii, c-9:30pm. <u>KWU</u>, Dixon, 15.355, calls <u>KTO</u>, 16.24, and <u>KAX-19.98</u> at c:20pm, and <u>JVD</u>, Nazaki-15.86, at 9:30pm (Hock) * RCA Xmtr WOEH, now aboard a plane in Alaska for spec ial relays to NBC through KEE-7.715, KEI-9.49 and KWE-15.43. Heard over Juneau on 12.86mc, Mar. 10,2pm (Calgary Chapt-**) heard on Mar. 7,9:1,5pm, and Mar. 8, 3pm (Cox **) * WOIA, aboard the Adventurer, will transmit on 5.53 and 12.285mc, while on around the world cruise (koberts) * WNC, Hia leah, Florida-15.055, contacts CA and SA phones at 9:1:5em, and 5:1:5pm (Roberts).. NBC granted television frequency of 177mc.. Lecture course "Modern Radio", continues on WIXAL-6.04, Mondays 7-8pm * WIXAV, Quincy, Mass, 100 watts, granted license to operate on 61.5mc. W2XIS, New York, N.Y. granted license to operate on 31.6, 35.6, 30.6, and lilmc with 100 watts * New schedule for WZXAD, Schenectady-15.33.10am-2pm, daily. New schedule for W2XAF, Schenectady-9.53, 4pm to midnight daily (Darlington) .. W9XAA, Chicago, Ill, is now broadcasting on 11.83mc, daily to 7:30pm.

SOUTH AMERICA HK1Z 14.00 HK1Z 14.10 7pm HK1ABM 14.116 5-6pm 7pm PY2BA 8-9:30pm 14.13 PY2BD 14.015 14.25 OALAA Sunday am OALR 14.45

ARGENTINA LRU, Buenos Aires-15.29, has been testing irregularly 6-7pm, and LRX, Buenos Aires-9.5%, has been testing irregularly A-9:30pm. Both stations should assume regular schedules soon (Belbi, Schmeichel, English X.DX, Deibe, Sholin) * LSM, Buenos Aires-19.135, calls DHO, Berlin-20.02, daily at 10am (Schmeichel).

BRAZIL PRF5, Rio de Janeiro-9.501, broadcasts deily except Sunday 4:45 to 5:45pm. Last 15 minutes is devoted to foreign languages: on Mon day, English; Tuesdays, Esperanto; Wednesdays, German; Thursday, Italian; Friday, Spanish; Saturday, French. For verification send reports to the Department de Propaganda, Avenida Presidente Wilson 305, Rio de Janeiro.

BR.GUIANA VP3MR, The Voice of Guiana, The British Guiana Broadcasting Co, Luckies Chambers, Georgetown-7.08, 150 watts, broadcast daily 1:15 to

8:45pm, Sundays 7:45am to 10:15am. Have attractive QSL card (VP3MR *)

CHILE CEC, Compania Internacional de Radio, Casilla 16-D, Santiago, 10.67mc, 2kW, has government news in Spanish daily, except Sat, Sun, 7 to 7:15pm, and music on Thurs/Sun 8:30 to 9 pm. CB960, Difusora Pilot, Casilla 1342, Santiago-9.6, 400 watts, on daily from 11am-1pm, 9 to llpm. CB615, Radio Service, Desmeras y Co.ltda., Casilla 761, Santiago-6.15, on daily from llam-lpm, and 7-lopm. Power 500 watts (** Rivas, X.DX, Schmeichel, Botkin, Hernandez-Chile)

COLOMBIA HJU, La Voz del Pacifico, National R.R., Buenaventura, lkW, is now on 9.51mc, Mon, Wed, Fri. Noon-2pm, and 8-11pm. (** Cattell-MS Chimu Denzler, Shanks, Walmsley, Green, Patton, Westmoreland, Balbi, Smith, Siddle,

Bigbee, Ansell, Sholin, Schmeichel) * HJB, Bogota, heard on 7.49mc, from 9 to 9:45pm Saturday (X.DX) * HJlABE, La Voz de los Laboratorios Fuentes, Cartagena, will soon have its new lkw Collins Xmtr on 9.5mc. The old Xmtr will be used on 1250kC (CSWRC). HJ1ABD, Cartagena-7.281, is now off the air (CSWRC) ** New, HJIABP, Radio Cartagena, 9.6, is on the air and broadcasting daily from 8-11:30pm. Send reports to Apartado 37 (Ansell, Twomey, Belbi, Schmeichel, Hall, Weatherley, Hall, X. DX) * HJ3ABD, Colombia Broadcasting, Bogota, has moved to 6.05mc, and is on from 7-11pm daily (Laul, Schmeichel, Siddle, Celgary Chapt). HJ3ABF, Bogota, heard on 6.15mc to 12:15am (Horne) ** New, HJ3ABK, La Voz de Colombia, Bogota, 6.12mc, 7-10:30pm. Nine chimes as Interval signal (Shanks, Schmeichel, Weatherley, Deibe) ** HJ4ABF, Radio Philco, Medellin-6.135, relays HJhABQ from 8 to 11 pm daily (Roberts, CSWRC).

ECUADOR HCJB, Voice of the Andes, Quito, has been heard testing on a new frequency of 9.64mc at 9:15pm (* Hock) * El Prado, Riobamba, is now broadcasting on 7.125mc, Thur, 9:20 to 11:40pm (Schmeichel) ** New, HClTQ, 6.74mc, inaugurated Feb.16, works Sundays 5:14 to 7:14pm (CSWRC) * New schedule of HCZET, Apartado 824, Guayaquil-4.6, is Wed.and Sat. from 8:19 to 10:19pm (CSWRC).

OAXLJ, Radio Internacional, Lima-6mc, is on daily from PERU New: 7 to llpm (** Rivera-Hong Kong) ** New: Radio Chicleyo, owned by Eduard Piarmettei, Teatro Dos de Mayo, Chicleyo, broadcasts on 8.3mc (Rivers) *A powerful long and short wave station was surposed to have been open-

ed in Cusco in January. No details available (Rivers).

VENEZUELA The name of YVZRC-5.8, has been changed from Broadcasting Caracas, to Radio Caracas. YV7RMO heard just to the low frequency side of YVZRC. They seem to be on Saturdays to about 7:15pm (Walmsley) EUROPE

	E01(01 H				
EA2BT 14.014 6-8pm	F8LZ 14.10 7-8pm	LZlA	14.27	11:30pm	
CT1CB 14.02 7:40pm	EA3ER 14.112 7-8pm	G2DL	14.3		- 1
F8WK 14.02 5am	LAIG 14.115 3:30pm	G6FS	14.3		ļ
EA3AA 14.03 7-8pm	EI2J 14.11 Sa.7-9am	G5CV	14.31	5-7pm	- [
PAORP 14.065 Sa.3-4pm	G5PT 14.124 Su. 9am	PAOFB	14.325	12:15am	ŀ
G5J0 14.067 6-7pm	FALL 14.19 llam	G6CW	14.31	5-7pm	٠.
ONLPA 14.07 1pm	F3IM 14.23 Noon	F8nh	14.33	7:20am	ı
G6LK 14.08 8-11pm	LA2Z 14.26 Su.7-11am		14.33	6:50pm	
G6G0 14.09 Su.5-7pm	CT1BY 14.26 6-8pm	G6XS	14.392		
EI6F 14.10 5:30-6pm	CT1BG 14.27 7-8pm	F3DN_	14.4		
A TOTAL TOTA	7 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	A A 2 -	Lla a maa	ا محسله ا	~ ~

CT2AJ, Ponta Delgada-umc, being heard with a good signal on AZORES Saturdays from about 6:30-7:15pm. Signs with National Anthem (Miller) OER2, Vienna-6.072, best heard Saturdays 5-6pm (*Schmeichel AUSTRIA J.Miller) heard for about 20 minutes after they come on at 9am EST(EP)

BULGARIA New, LZA, Radio Garata, Sofia-lh. 97, testing with recordings Sundays llam-noon. Various languages used (** Carr-Gregg, Trapani).

ZECHO- The new station for Prague will operate on 21.45, 15.32, SLOVAKIA 15.23, 11.875, 11.76, 11.745, 9.5, 6.115 and 6.055mc (J.S) NGLAND British Summer Time (BST) starts April 19. GSK, 26.1mc, is CZECHO-ENGLAND

a new Daventry channel that may be used this Summer (Frost).

FRANCE Site has just been chosen at Montlucon, department of Allier, 225 miles south of Paris, for the long anticipated new Radio Coloniale (** Guilbert) * Newly assigned official calls for Pontoise are: TPA2 15.24mc, TPA3 11.88mc and TPA4 11.71mc (X.DX,Carr-Gregg,Stokes) * Present Pontoise broadcasting schedules are TPA3 2-5am, TPA2 5:55-11am, TPA3 11:15em-3pm, TPA3 3-6:05pm, TPA4 6:15-10:15pm, TPA4 10:45pm-lam. (Guilbert) * TYB, Paris-12.25, also carries Pontoise English news sked. from 7-7:15am on Tues/Thur/Sat (X.DX) * TYA2, Pontoise-9.037, phones FVA Alger, Algeria - 8.96, 3:30-5pm (Schmeichel) * WHO is the French mystery station on 11.85 heard commencing operations at 2em regularly (Ansell) * A few Ste.Assise, France, commercial schedules are: FTA, 14.612, noon to 2:30pm, with F. Indo-China and S. America; FTK, 15.88, 3-7am, 8:30am-noon, 2:30pm, with F. Indo-China and S. America; with F.Indo-China; FTH, 10.936, 3-7am, 8:30am-noon, with Egypt; FTM, 19.35-mc, 8:30am-2:30pm, with South America (J.Miller)

GERMANY After April 1st, Zeesen transmissions to N. A. will be as follows: DJD-11.77 and DJC-6.02, 4:50-10:45pm, and also DJM-6.079,7:30 to 9:30pm. Other schedule changes are: For Africa: DJP,11.855, noon to 2pm, and DJO,11.795,3-4:55pm; For South Asia: - DJL,15.11,6:30-8am; For East Asia: - DJE,17.76, 8:05-llam (RRG) * DGH, Nauen-10.44, heard, calling Cairo at 3:30am (Sholin) * DAF, Norden-17.27, heard at 9:47am.

HOLLAND PCJ, Eindhoven-9.59, redisting Sunday programs to N.A., C.A. at 7-8pm; to Africa at 1-2pm; to Asia 7:30-8:30am; to D.E.I. 8:45 to 9:45am (Carr-Gregg, D. DX, CSWRC *) * PCJ will have new 60kW Xmtr shortly and PHI will have improved serial system (WR) * PHI, Huizen, will change to summer frequency of 17.77mc, April 26, and operate 7:30-10:30am (X.DX ** PIlJ, Dordrecht, 7.08mc, are on Sundays ll:10am-12:10pm (Carr-Gregg) ICELAND Sunday l:40-2pm transmissions from TFJ, Reykjavik-12.235,

temporarily suspended on account of power shortage. I TALY An unidentified Rome transmitter on 11.72mc, has been heard calling Asmara,and testing (* WR) * It is reported a new 50kW shortwave transmitter will be erected at Bologna (RMA).. 2R03-9.635, broadcast to IR4, Buenos Aires, now takes place Mon/Fri 5:15-5:50pm (X.DX).. IAC, Coltano-17.75, heard at 8:30 and loam (Schmeichel, J.Miller).. IAC, Coltano-12.795, phones Asmara daily at llam (Mercieca).. IAC, Coltano-

8.515, heard celling ICK AT Lam (Schmeichel)

NORWAY

LKJ1, Jeloy-9.53, being heard Sundays at 3am (* Carr-Gregg)

The new Jeloy transmitter will not be completed until late this year

POLAND

SPW, Warsaw-13.636, apparently has not inaugurated its has not inaugurated its

announced thrice weekly schedule yet (IDA) CTIAA, Lisbon-9.66, are now using summer schedule of Tues,

Thur, Saturday 3-6pm (* X.DX)

SPÁIN The experimental station listed last month 6.62mc, is owned by Philips Iberica, S.A.E. Paseo De I testing on ខន Las Delicias 71, Madrid, Spain. The tests are now concluded (* English)

HB9B, Berne-14.4, is now radiating daily from 5 SWITZERto 6 am. LAND (** Mercieca) * HBL-9.595 and HBP-7.707, are radiating special programs to N.A. first Monday of each month 6:30-7:30pm (* X.DX)

HVJ-15.12, transmits to Africa, Saturdays 10-10:05em (X.DX) VATICAN-HVJ also heard with tests for F. I. at 5-7am (Carr-Gregg) The power of RNE, Moscow-12. will shortly be doubled (RMA), 15.104mc, heard phoning RKK 12.27, at midnight (Moore) * RAU, Tashkent, RIO, Baku-10.17, phones other Soviet stations nightly midnight-2em (X.DX Miller) * RIM, Tashkent-15.25, phones almost deily at loam (Smith) * RIR Tiflis-10.08, phones deily from 10-llam (Moore) * RKI, Moscow, is now using frequency of 15.083mc for special Sunday transmissions to U. S. A. (Cole) * RKI, Moscow-15.04, tests with RNE-12, or RKH-14.99, quite frequently between 7 and 10am (X.DX) also head around midnight frequently (Smith) * RNE, Moscow-12, now on Sundays 6-8:40 and 10-11am, daily from 3-6pm (X.DX-Moore) News heard from RNE at 11:20pm (Michaelson)

AUSTRALASTA-ASTA						
VK2AK 13.99	2-4am	VK2AP 14.09	2am	VK2BQ	14.265	330-740am
VK2GU 11.00	345-7am	PK1MX 14.09	730-9am		14.27	
VK2AZ 14.00	445-7em	VK7JB 14.10	Sun am			230-7am
VK2RB 14.00	5:15am	VK3AC 14.10	330-7am		14.35	
VK2UC 14.01	7am	KA1ME 14.10	10:15am	VKŹMF	14.36	7:20em
VK2LZ 14.025	3-7am	VS6AR 14.14	930-1030	e m	T /-	1
VK3KX 14.07	4:45am	VK30C 14.20	3:30am	VK2AF	14.40	640-7:45am
VK2NY 14.08		VK2QN 14.25	<u>Ц</u> ц0-7ат	VU2BG	14.40	7-9am
AUSTRALIA 1	<u>/LK</u> -Sydney-	10.52, phones	GBP,Rugb y	-10.77,	irregul	arly at 2am

ATTO ME AT A STA ... A STA

4am and 4:20am (* J.Miller) CELEBES

PNI, Macassar, 8.775, heard Sunday at 4:05am (* J. Miller) VPB, Colombo-6.160, heard late on Sunday night (* Jones) CEYLON

CQN, Macao-9.54, reported heard weakly around 7:30am on Mon day and Friday ** VS6AR, Amateur in Hong Kong, 500 watts, is heard from about 7:30-9am, near 1/1.01, or 1/1.1/mc (Schmeichel, Calgary Chapt.) *** New station, XGOX, Nanking-9.5mc, power 100 watts, tests at Ram. Station was completed first week in February (Rivera-Hong Kong) ** XGO, Shanghai -7.58, is broadcasting musical programs daily from 7:30am on (Tune In) *** Radio telephone service between Shanghai and Tokyo was inaugurated on Feb. 15. The Shanghai station is XOJ-15.785mc. It contacts JVD, Nazaki-15.86, and occasionally JVF-15.628 (Rivers-Hong Kong) * ZBW, Hong-Kong-A.75, is best heard in Eastern U.S.A.at 6:30-A:30am (Schmeichel) F.M.S. Latest reports indicate that the correct frequency of ZHJ,

Penang, is 6.08, the schedule 6:40 to 8:40am, except Sunday. The correct schedule of VPD, Suva-13.075, is 12:37 to 1:30em FIJI'S deily except Sunday. Volume is good, but quality poor (*Horne, Sholin &)
F.INDO- F31CD, reported testing on 9.52mc between 6 and 6:30pm (JS) <u>CHINA</u> FZR3, Seigon-16.2mc, calls <u>FTK-15.88</u>, daily at 9am (Schmei-

chel) FZR3 also heard calling FTK at 10-10:15am (* Roberts) * FZS3,Sai

gon-IR.31mc, calls Paris at 4:30 am (J.Miller)

INDIA VWY, Kirkee-17.42, heard contacting GAU, Rugby-18.62, at Pam. $\overline{\text{JAPAN}}$ $\overline{\text{JVF}}$, Nezaki-7.51, was still in use with $\overline{\text{JVN}}$ -10.66, for the East Americar overseas broadcast Mon/Thur h-5pm, throughout March, but JVM-10.74 will probably radiate with JVN for this period during April. . The Japanese mystery station on c.84mc,is JYS, of Kemikawa-Cho, Chiba Ken, testing with a new transmitter, which it is reported will radiate 500kW when completed. JYS has been heard as early as 11:40pm, and as late as 2:45 am playing Japanese phonograph records, and announcing in Japanese (** Moore, Savage, Michaelson, Cox, Calgary Chapt, Sholin, Smith, -McMonamy) ** JVD, Nazaki-15.86, is now being used in place of <u>JVE</u>, or <u>JVF</u> to work Dixon, Calif. stations. JVD also works some weak oriental station on 15.77mc, around Cpm (Smith- the weak oriental is undoubtedly XOJ-Ed)... JVL, Nazaki-11.66, seems to have its carrier on almost constantly (Smith) * JVO, Nazaki-10.375, heard calling TDE-10.065, at 5:15am (E.S.)

PMA, Bandoeng-19.35, seems to be only Java station on Tues, broadcast at 10am (* Purkey) PMA heard Sunday at 7:30am (J.Miller) PLE, Bandoeng-18.83, heard phoning KWU, 15.355 at 7:50pm (J.Miller) ** New Java stations relaying YDB, Sourabaya-9. 64, irregularly from 5:30 to PLP, Bandoeng-11mc; FLQ, Bandoeng-10.67 and Sourabaya No. 2 10am are: (may be PLO) on 11.49mc (Calgary Chapt, Schmeichel, CSWRC) * PLP, Bandoeng -llmc, plays American recordings frequently between 9 and 10am, and then signs off with "A Perfect Day" (Ansell) * PLV, Bandoeng-9. 115, contacts

Dixon daily at shortly before 10am (Smith) -chel) MANCHUKUO TDE, Kanjoshi-10.065, calls <u>JVO</u>, Nazaki, 10.375, at 5am (Schmei ZLT, Wellington-llmc, phones VLJ, Sydney-9.76mc, mid.-12:30am KBB, Manila-8.71mc, heard calling GMBJ at 4:55am (* Sholin)

New station, HSRPJ (Saladeng) Bangkok-10.955mc, also 10.17 at times, transmits Mondays from 8 to 10 am with 10kW power. Reports are welcome and should be sent to the Manager, Broadcasting Service, Post & Telegraph Department, Bangkok, Sism (*** Rivera-Hong Kong)

TAIWAN JIB, Tyureki-10.535, phones Nazaki almost continuously until 9am. Heard best at 2 to 3 am (* Sholin, Belbi)

RTZ, Novasibirsk-7.275, is being heard phoning with RIM-12.875, at 7am (** Schmeichel) * Fred Filgrim, Oakland, Calif. claims to have received a veri' from RV15 via the All Union Radio Committee. Foreign Bureau, Petrovka 12, Moscow, U.S.S.K. (Mrs.Inna Marr recently stated that her bureau did not verify for RV15 -Ed)

	AFRICA		
SUISG 7.15 2pm	EA8AF 11.02	7:30pm SU1RK	114.20
FPAW 7.25 7:40an		11:00pm	1点。33
FT4AJ 7.35 3:35pm		ZUSX	14.30
SUIGP 7.40 3:25pm	EA8AA 14.12	7:30pm	7

FVA, Alger-8.963, being heard irregularly phoning

TYA2, Faris-9.037mc, between 3:30 and 5pm (** Schmeichel)

BEL.CONGO OPL, Leopoldville, 20.04mc, heard calling ORG-10.2, at 9:47am. Amateur EARAF, 1/1.02mc, is owned by Juan Vall, P.O.Box 299, Santa Cruz de Tenerife, Canary Islands (Deibe)

Thore Bostron, Engineer in Charge, Radio Station, Akaki, Addis Abeba, Ethiopia, reports that the majority of reports for supposed <u>ETA</u>, on 18.27mc, are actually reports of the Italian stations in Eritrea working on the same channel. The Akaki stations are used mainly for tel egraphic communication with London (** Moore, Sholin, Morrison) Aircraft transmitter ETIKD reported in the last Globe Circler was destroyed at the Addis Abeba sirport, according to Mr. Moss, of England.

KENYA Short-wave telephone service from London to Kenya was officially inaugurated on March 6. The Kenya end of this service will

be VQGL, Nairobi-19.63mc. This station may be heard near 7:25am (W.R.)

MADAGASCAR FIU, Tananarive-5.692, heard several times between 6 and 7 am F.S.T. They do not use call letters, and sign off with the playing

of the "Marseilles" at 7am (Purkey)

MOZAMBIQUE CR7AA, Laurenco Marques-6.137, is on daily 12:45-3pm, and Sunday 8-10:30am. Transmitter is a Collins #300-BA, 300 watts output. Address reports to Gremio dos Radio Filos da Colonia de Moczmbique, P.O.Box 594, Laurenco Marques, Portuguese, East Africa (* L.M. Young). SO.AFRICA ZTJ, Johannesburg-6.097, heard 8:45-9:30pm PST (Balbi)

SHORT-WAVE BROADCASTING STATIONS

TATAT	MEDMEDS	MEGS	CATT	ያጥ ለ ጥፓ ለ ጥያ	титите пом
DIRD	METERS	MEGS	CALL	STATION	TIME E.S.T.
	8.42	35.60	HOXIG	Los Angeles, Calif.	Relays KGFJ continously_
	9 • 48 9 • 48	31.60 31.60	#2XDV	New York City, N.Y.	Relays WABC 5-10pm. Ultra
	9.48	31.60	W9XPD	St.Louis, Missouri.	Relays KSD Ram-12 mid.
	11.49	26.10	GSK	Daventry, England.	For Summer day time use.
	13.45	22.90	GBU	Rugby, England.	Works New York.
	13.92	21.54	MRXK	Pittsburg, Penna.	7-9am.
	13.93	21.53 21.52	GSJ	Daventry, England.	6-8:45am.
	13.94	21.52	W2XE	Wayne, New Jersey.	7:30-1lam.
	14.00	21.41	WKK	Lawrenceville, N.J.	Works PSA noon.
	-14.00				WOLKS I DE HOOH.
	14.23	21.07	PSA	Rio de Janeiro, Braz.	Works WKK at noon. (6:30am
	14.97	20.04	\mathtt{OPL}	Leopoldville, Congo.	Works ORG 9:45am,4:30-
	14.98	20.02	DHO	Nauen, Germany.	Works S.A. mornings.
	15.02		. KAX	Manila, Phillipines.	Works KWU at 9:20pm & irr
	-17.00	10 67	1		Works had at y. Zopii w III
	15.28	19,63	VQG4		Works Rugby at 7:25em.
	15.46	19.355	FTM	Ste.Assise,France.	Works S.A. 8:30am-2:30pm.
-	15.50	19.345	PMA	Bandoeng, Java, D.E.I.	7-8am and irreg.
	15.57 15.62	19.27	PPU		Works FTM mornings.
	・デビ・25	16.2			OPT Oal Family 70 (70
	17.00	19.2	ORG	Ruysselede, belgium.	OPL 9:45am, 4:30-6:30am.
	15.68	19.12	LSM	Buenos Aires, Argen.	Works DHO at 10am.
	15.87	18.89	ZSS	Capetown, S. Africa.	Works Rugby 7-9am irreg.
	15.93	18.82	PLE	Bandoeng, Java.	JVE 7:30pm; KWU at 7:50pm
	15.93 16.06	18.67	OCI	Lima, Peru.	Calls PPU at 7am.
-	70.00	10.00		District Front	
	16.10	18,62	GAU	Rugby, England.	Works VVY at 8am.
	16.23	18.48	$_{\mathrm{HBH}}$	Geneva, Switzerland.	Experimental.
	16.25	بلبا. 18	HJY	Bogota, Colombia.	Works CEC, LSR and OCI day
	16.34	18.34	WLA	Lawrenceville, N.J.	
		10.54			Works GAS.
	16.38	18.31	FZS3	Saigon, F. Indo-China.	Works FTM at 4:30am.
	16.38	18.304	GAS	Rugby, England.	Works WLA days.
	16.39	18.296	YVR	Maracay, Venezuela.	Works DFB about 9:20am.
	16.42	18.27	ETA	Addis Abeba, Ethiopia	
	16 10			Description of the control of the co	W
	16.49	18.18	CGA		Works Rugby mornings.
	16.75	<u> 18.</u> 115	LSY3	Monte Grande, Argen.	Worke Rocky Point inner
				1101100 GI C.11GO 1-1 GOII 6	Works Rocky Point irreg.
	16.86	17.79	GSG		4-8:45. 9-10:15am.
	16.56 16.86 16.87	17.79	GSG	Daventry, England.	5-8:45, 9-10:15am.
	16.87	17.79 17.78	GSG W3XAL	Daventry, England. Boundbrook, N.J.	6-8:45, 9-10:15am. 8:30am-4pm.
	16.87 16.89	17.79 17.78 17.76	GSG W3XAL W2XE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey.	6-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm.
	16.87 16.89 16.89	17.79 17.78 17.76 17.76	GSG W3XAL W2XE DJE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany.	6-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia.
	16.87 16.89 16.89 16.91	17.79 17.78 17.76 17.76	GSG W3XAL W2XE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey.	6-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am.
	16.87 16.89 16.89 16.91	17.79 17.78 17.76 17.76	GSG W3XAL W2XE DJE HSP	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam.	6-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am.
	16.87 16.89 16.89 16.91 17.11	17.79 17.78 17.76 17.76	GSG W3XAL W2XE DJE HSP DFB	Daventry, England. Boundbrook, N. J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany.	6-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am.
	16.87 16.89 16.89 16.91 17.11	17.79 17.78 17.76 17.76 17.74 17.52 17.48	GSG W3XAL W2XE DJE HSP DFB VWY	Daventry, England. Boundbrook, N. J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am.
	16.87 16.89 16.91 17.11 17.15 17.51	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.12	GSG W3XAL W2XE DJE HSP DFB VWY W00	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships.
	16.87 16.89 16.91 17.11 17.15 17.51	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.12 17.08	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC	Daventry, England. Boundbrook, N. J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am.
	16.87 16.89 16.91 17.11 17.15 17.51	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.12 17.08	GSG W3XAL W2XE DJE HSP DFB VWY W00	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships.
	16.87 16.89 16.89 16.91 17.11 17.15 17.51 17.55 18.48	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.12 17.08 16.27	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm
	16.87 16.89 16.89 17.11 17.15 17.51 17.55 18.48	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.08 16.27 16.21	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KTO	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works hips. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,-
	16.87 16.89 16.91 17.15 17.55 17.55 18.49 18.51	17.79 17.78 17.76 17.76 17.74 17.52 17.48 17.08 17.08 16.27 16.20	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KTO FZR3	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm; kWU 7:30-8,- Works FTK at 9, and 10am.
	16.87 16.89 16.91 17.15 17.55 17.55 18.49 18.51	17.79 17.78 17.76 17.74 17.52 17.48 17.12 17.08 17.12 17.08 16.20 16.12	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KTO FZR3 IRY	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly.
	16.87 16.89 16.91 17.11 17.55 18.49 18.61 18.61	17.79 17.78 17.76 17.76 17.74 17.52 17.42 17.12 17.08 16.27 16.20 16.03	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KTO FZR3 IRY KKP	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm.
	16.87 16.89 16.91 17.11 17.55 18.49 18.61 18.61	17.79 17.78 17.76 17.76 17.75 17.52 17.42 17.08 17.10 16.20 16.10 16.10 16.10	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KTO FZR3 IRY	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm.
	16.87 16.89 16.91 17.11 17.55 18.49 18.61 18.61 18.89	17.79 17.78 17.76 17.76 17.75 17.52 17.42 17.08 17.10 16.20 16.10 16.10 16.10	GSG W3XAL W2XE DJE HSP UWY W00 GBC WIK KTO FZR3 IRY KKP	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am.
	16.87 16.89 16.91 17.15 17.55 18.49 18.67 18.89 18.67 18.89 18.67	17.79 17.78 17.76 17.74 17.52 17.48 17.48 17.02 16.20 16.20 16.08 15.86	GSG W3XAL W2XE DJE HSP UPB WYY W00 GBC WLK KTO FZR3 IRY KKP FTK JVD	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p
	16.87 16.89 17.15 17.15 17.55 18.49 18.61 18.61 18.90 19.06	17.79 17.78 17.76 17.74 17.42 17.42 17.42 17.42 17.42 17.42 16.21 16.21 16.23 16.88 15.78	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC W1LK KT0 FZR3 IRY KKP JVD XOJ	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm.
	16.87 16.89 16.89 17.15 17.15 17.55 18.49 18.67 18.67 18.90 18.90 19.16	17.79 17.78 17.74 17.74 17.42 17.42 17.42 17.42 17.42 17.42 17.62 16.12 16.88 15.86 15.86 15.86 15.86	GSG W3 XAL W2 XE DJE HSP HSP W00 GBC WLK KT0 FZR3 IRY KKP FTK JVD XOJ JVE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm; kWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm.
	16.87 16.89 16.89 17.15 17.55 18.45 18.67 18.67 18.67 18.90 18.90 19.12	17.79 17.78 17.74 17.74 17.42 17.42 17.42 17.42 17.42 17.42 17.42 16.22 16.88 15.86 15.86 15.66 15.66	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC W1LK KT0 FZR3 IRY KKP JVD XOJ	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm; kWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm.
	16.87 16.89 16.89 17.15 17.55 18.45 18.67 18.67 18.67 18.90 18.90 19.12	17.79 17.78 17.74 17.74 17.42 17.42 17.42 17.42 17.42 17.42 17.42 16.22 16.88 15.86 15.86 15.66 15.66	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK TO FZR3 IRY KKP FTK JVD XOJ JVE JVF	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Nazaki, Japan. Nazaki, Japan.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm; kWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU,XOJ irregularly
	16.87 16.89 17.15 17.55 17.55 18.49 18.61 18.61 18.90 19.12 19.44	17.79 17.78 17.74 17.74 17.42 17.42 17.42 17.42 17.42 17.42 17.42 16.22 16.88 15.86 15.86 15.66 15.66	GSG W3XAL W2XE DJE HSP WWY W00 GBC WLKTO FZR3 IRY KKP FTK JVD JVE JVF KWE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Nazaki, Japan. Bolinas, California.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KW0 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Has been working WOEH.
	16.87 16.89 16.89 17.15 17.55 18.49 11.51 18.67 18.90 19.44 19.44 19.45	17.79 17.78 17.76 17.74 17.42 17.42 17.42 17.42 17.42 17.42 17.42 16.88 16.88 15.66 15.42 15.42 15.42	GSG W3XAL W2XE DJE HSP OFB VWY W00 GBC WLK TO F2R3 IAY KKP FTK JVD JVE JVE KWE KW0	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Nazaki, Japan. Bolinas, California. Dixon, California.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works KWU; Works XOJ at 9p Works KWU; XOJ irregularly Has been working WOEH. Works KKP and Manila.
	16.87 16.89 17.15158 17.15158 18.69 17.15158 18.67 19.066 19.19 19.19 19.19 19.19	17.79 17.7866 177.7428 177.7428 177.428 177.428 177.622 10888 155.6442 155.6442 155.6442 155.6442 155.6442 155.6442	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK KT0 FZR3 IRY KKP FTK JVD JVE JVE KW0 HAS3	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Nazaki, Japan. Bolinas, California. Dixon, California. Budapest, Hungary.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Vorks JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Works KWU, XOJ irregularly Has been working WOEH. Works KKP and Nanila. Sunday 9-10am.
	16.87 16.89 17.15158 17.15158 18.69 17.15158 18.67 19.066 19.19 19.19 19.19 19.19	17.79 77.77.79 17.77.79 17.77.79 17.77.17	GSG W3XAL W2XE DJE HSP OFB VWY W00 GBC WLK TO F2R3 IAY KKP FTK JVD JVE JVE KWE KW0	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Nazaki, Japan. Bolinas, California. Dixon, California.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Vorks JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Works KWU, XOJ irregularly Has been working WOEH. Works KKP and Nanila. Sunday 9-10am.
	16.87 16.89 17.15158 17.15158 18.69 17.15158 18.67 19.066 19.19 19.19 19.19 19.19	17.79 77.77.79 17.77.79 17.77.79 17.77.17	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC GBC FZR3 IRY KKT0 FZR3 IRY KKP JVD XOJ JVE KWE KWO HAS3	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE
	16.87 16.89 17.15158 17.15158 18.69 17.15158 18.67 19.066 19.19 19.19 19.19 19.19	17.798664 17.77.754282874 17.77.17.17.17.17.17.17.17.17.17.17.17.1	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC WLK KTO FZR3 IRY KKP FTK JVD XOJ JVE JVE KW0 HAS3 KWU DJR	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm;KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD,KKP,KTO,KAX,PLE 1:30-3:30am to S.Asia.
	16.899 117.1515889911515188.4567890666144523557	17.79 78.66 17.77.79 17.77.17 17.17.17 17.17.10 11.10 11.10 11.15 11.15 11.15 11.15 11.15 11.15 11.15 11.15 11.15	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK TO FZR3 IRY KKP FTK JVD XOJ JVE JVF KWE HAS3 KWU UJR W2XAD	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWU 1:30 to 7pm. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works PLE 7:30-8pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm.
	16.87 16.89 17.15 17.55 18.45 18.45 18.45 18.90 12.44 18.90 19.45 19.55	17.79 78.66 17.77.54 17.77.54 17.77.17.17 17.17.17 11.16.66 11.15	GSG W3XAL W2XE DJE HSP HSP W00 GBC WLK T0 F2R3 IRY KXP FTK JVD XOJ JVE KWE KW0 HAS3 KWU DJR W2XAD LRU	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KW0 1:30 to 7pm. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Has been working WOEH. Works KWU, XOJ irregularly Has been working WOEH. Works KWP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr
	16.887 16.8891 17.17.558 17.17.78.445 18.89066 11.5558 18.99066 11.19066 11	17.77.7982828742828742828287454282874542828745555555555	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK T0 F2R3 IRY KKP FTK JVD JVF KWE KW0 HAS3 KWU HAS3 KWU DJQ	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KW0 1:30 to 7pm. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Has been working WOEH. Works KWU, XOJ irregularly Has been working WOEH. Works KWP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr
	16.899 17.15158 17.17.178.4451 117.1718.4451 118.89906614452 119.19919919919919991999199919999999999	17.77.7982828742828742828742828742828742828742828766644333332221088876664433333222108887666443333222108886862327543987	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC WLKTO FZR3 IRY KKP FTK JVD JVF KWE KW0 HAS3 KWU HAS3 KWU DJQ	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KW0 1:30 to 7pm. Works FZR3 at 9 and 10am. Works KWU; Works XOJ at 9p Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU, XOJ irregularly Has been working WOEH. Works KWP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia.19
	16.899 17.15158 17.17.178.4451 117.1718.4451 118.89906614452 119.19919919919919991999199919999999999	17.77.7982828742828742828742828742828742828742828766644333332221088876664433333222108887666443333222108886862327543987	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC KTO FZR3 IRY KKP JVD XOJ JVE KWE KWO HAS3 KWU DJR W2 XAD LRU W2 XE	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Dixon, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schemectady, N.Y. Buenos Aires, Argen. Zeesen, Germany. Wayne, New Jersey.	4-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 16 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia.19
	16.899 117.171.5589 117.171.88.4561 118.89901 119.55589 118.89901 119.5555723466	17.77.77.541.0221.0888.766.443.73.73.222.221.0888.7666.443.73.73.72.222.221.0888.7666.443.73.73.72.222.222.22.22.22.22.22.22.22.22.22.2	GSG W3 XAL W2 XE DJE HSP DFB VWY W00 GBC WLK TO FZR3 IRY KKP JVD JVE JVE KW0 HAS3 KWU DJR W2 XAD LRU DJQ W2 XE GSI	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Dixon, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen. Zeesen, Germany. Wayne, New Jersey. Daventry, England.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works JVR around 9:20am. Works GAU about 8am. Works ships. Works Rugby days.(&9:20pm JVB.6:30-7pm;KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWU 1:30 to 7pm. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works PLE 7:30-8pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD,KKP,KTO,KAX,PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia.19 1-3pm, relays WABC. 12:15-2:15pm.
	16.6.8.91 16.6.8.91 17.7.5.5.4.4.5.6.7.8.9.0.1.2.4.4.5.2.5.5.5.6.6.6.6.6.7.1.9.9.6.6.6.7.1.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9	17.77.77.102210886766232754398766111555555555555555555555555555555555	GSG W3 XAL W2 XE DJE HSP HSP WYY W00 GBC WLK TO FZR3 IRY KYP FTK KYD JVE JVF KW0 HAS3 KWU DJR W2 XAD LRU DJQ W2 XE GSI W1 XAI	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Dixon, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen. Zeesen, Germany. Wayne, New Jersey. Daventry, England. Boston, Mass.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia. 19 1-3pm, relays WABC. 12:15-2:15pm. Irregular on this frequen
	16.66.891 17.77.888.990 11.55.445.67.890 12.445.235.72.344.67.71.17.17.17.888.900 12.445.235.72.344.67.71.17.17.17.17.17.17.19.19.19.19.19.19.19.19.19.19.19.19.19.	17.77.77.102210887.664433332222227.77.77.17.1111111111111111111	GSG W3XAL W2XE DJE HSP DFB VWY W00 GBC WLK TO FZR3 IRY KKP FTK JVD XOJ JVE HAS3 KWU DJR W2XAD LRU DJR W2XAD LRU DJQ W2XE RIM	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen. Zeesen, Germany. Wayne, New Jersey. Daventry, England. Boston, Mass. Tashkent, U.S.S.R.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works WU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia.19 1-3pm, relays WABC. 12:15-2:15pm. Irregular on this frequen Phones at 10am irreg.
	16.6.8.91 16.6.8.91 17.7.5.5.4.4.5.6.7.8.9.0.1.2.4.4.5.2.5.5.5.6.6.6.6.6.7.1.9.9.6.6.6.7.1.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9.9	17.77.77.102210886766232754398766111555555555555555555555555555555555	GSG W3 XAL W2 XE DJE HSP HSP WYY W00 GBC WLK TO FZR3 IRY KYP FTK KYD JVE JVF KW0 HAS3 KWU DJR W2 XAD LRU DJQ W2 XE GSI W1 XAI	Daventry, England. Boundbrook, N.J. Wayne, New Jersey. Zeesen, Germany. Bangkok, Siam. Nauen, Germany. Kirkee, India. Ocean Gate, N.J. Rugby, England. Lawrenceville, N.J. Manila, Phillipines. Saigon, F. Indo-China. Rome, Italy. Kahuku, Hawaii. Ste. Assise, France. Nazaki, Japan. Shanghai, China. Nazaki, Japan. Bolinas, California. Dixon, California. Budapest, Hungary. Dixon, California. Zeesen, Germany. Schenectady, N.Y. Buenos Aires, Argen. Zeesen, Germany. Wayne, New Jersey. Daventry, England. Boston, Mass.	K-8:45, 9-10:15am. 8:30am-4pm. 11am-1pm. 8:05-11am to East Asia. Works JVG around 4:30am. Works YVR around 9:20am. Works GAU about 8am. Works ships. Works ships. Works Rugby days.(&9:20pm JVB. 6:30-7pm; KWU 7:30-8,- Works FTK at 9, and 10am. Works Asmara irregularly. Works KWO 1:30 to 7pm. Works FZR3 at 9 and 10am. Works JVD about 9pm. Works JVD about 9pm. Works KWU,XOJ irregularly Has been working WOEH. Works KKP and Manila. Sunday 9-10am. Works JVD, KKP, KTO, KAX, PLE 1:30-3:30am to S.Asia. 10am-2pm. Tests late afternoons irr 12:30-3am to East Asia. 19 1-3pm, relays WABC. 12:15-2:15pm. Irregular on this frequen
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19.71
19.72
19.74
19.76
19.82
                                                                               Tues.3-6, Wed.7:10-11:10am
                                      Eindhoven, Holland.
              15.22
                           PCJ
                                                                               9am to 7om relays NBC.
              15.21
                           178XIC
                                      Pittsburg, Penna.
             15.20
15.18
15.14
                                                                               3:50-11am to South Asia.
                           DJB
                                      Zeesen, Germany.
                                                                               Experimental.
                           GSO
                                      Daventry, England.
                                      Daventry, Ingland.
                                                                               9am to noon.
                           GSF
             15.14
15.12
15.11
                                                                               Experimental.
                           GS2
                                      Daventry, England.
ĩý. ċ4
                                                                               10:30-10:45am, Sat 10am.
                           EVJ.
                                      Vatican City, Italy.
                                                                               6:30-8am to South Asia. Works RKK after midnight.
īģ.
      55
                                       Zeesen, Germany.
                           DJL
19.P5
              15.104
                                      Tashkent, U.S.S.R.
                           RAU
             15.04
15.05
15.05
15.04
15.05
15.04
19.89
                                      Moscow, U.S.S.R.
                                                                               Works WQP Sunday am.
                           RKI
                                                                               Works CA & SA daily.
19.92
                           THIC
                                      Hialeah, Florida.
19-95
19-95
                                      Moscow, U.S.S.R.
                                                                               Works RNE/RKH 7-10am irr
                           RKI
                                                                               Experimental.
                           10QG
                                      Rocky Point, N.Y.
                                       Menila, Phillipines.
                                                                               Works DFB 7am etc.
20.03
                           KAY
                                                                               Sunday llam-noon.
50.08
50.04
              14.97
                           LZŁ
                                       Sofia, Bulgaria.
             14.91
14.91
14.74
14.665
                                                                               Works WMC.
                            BJB.
                                      Bogota, Colombia.
20.12
                                                                               Works JIA and HSP.
                            JVG
                                      Nazaki, Japan.
                                                                               Vorks JVH 5-7am irreg.
Vorks JVH 2am irreg.
20.35
20.45
                                      Massaua, Eritrea.
                            IRG
                           DFD
                                      Nauen, Germany.
             小约2
20.50
                                                                               Works JVH 6-7am. (& S.A.
                                       Rone, Italy.
                            IOA
                                                                               H'n-2:30pm works I.China-
                                       Ste. Assise France.
                           FTA
              14.60
                                                                               Vorks Europe 2-8am irreg.
                            JVH
                                       Mazaki, Japan.
             14.50 3VA
14.535 118J
14.50 TTU/3
14.485 HRL5
14.46 DZH
                                       Geneva, Switzerland.
                                                                               Experimental to U.S.A.
20.79
20.71
20.75
20.79
20.82
                           TIU/HPF/TOF Central America all work WNC days.
                                                                               Works "MC days.
                                      La Lima, Honduras.
                                                                               Moon to 2pm irreg.
                                       Zeesen, Germany.
              14.14
                                                                               Vorks Lawrenceville days
                                       Rugby, England.
                           GB'''
                                                                               Emerimental.
              14.41
                           DIP
                                       Zeesen, Gormany.
20.83
              14.40
                           HE9B
                                       Borne, Switzerland.
                                                                                5-6am daily
20.83
              14.50
                                                   14.00--
                                       21.43
                                                                               Amateurs.
                           t.o
21.57
              13.90
13.81
                                       Rocky Point, N.Y.
                                                                               Experimental. (-lpm.
                           WOP
                                                                               Works GEB 9:30-10am, 12:30
                                       Cairo, Egypt.
                            SUZ
              13.745
13.645
13.585
13.41
                           047.2
                                       Drum nondville, Quebec Phone.
                                                                               M/W/F 11:30am-12:30pm.
                           SPW
22.00
                                       Babice, Poland.
22.08
                                                                               Works SUZ and CGA2 days.
                           GBB
                                       Rugby, England.
22.37
22.42
                                       San Juan, Puerto Rico works WNC.
                           WCT
              13.35
13.25
13.25
                                                                               Phones IRY/IQA llam irreg
                            IDU
                                       Asmara, Eritrea.
22.48
                                       .irracay, Venezuela.
                                                                               Works WNC days.
                            \Delta \Delta C
22.58
                                       Drummondville, Quebec Works ships and Rugby.
                           CGA3
              13.075
12.862
                                                                               12:37-1:30am dly ex.Sun.
                           VPD
                                       Suva, Fiji's.
22.9416
23.33.442
23.33.442
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24
                                       In Alaska at present Yorks K"E, KEE and KEI.
                           WOEH
                                                                               "orks ships days. (9:30am.
              15.84
                           7700
                                       Ocean Gate, M.J.
              12.83
                                                                               Works Paris Sun.7:30-
                            CMR
                                       Rabat, Morocco.
              12.80
12.86
                            IAC
                                       Coltano, Italy.
                                                                               Works ships days.
                            GBC
                                       Rugby, England.
                                                                               Works ships days.
                                       Horden, Germany.
              12.40
                            DAF
                                                                               Works ships days.
                                       Moscow, U.S.S.R.
              12.27
                                                                               Works RAU after midnight.
                            RKK
21. ILE
              12.25
                                                                               Tues/Thur/Sat 7-8am irres
                            TYB
                                       Faris, France.
              12.235
2/1.52
2/1.73
2/1.92
                           TFJ
                                       Peykjavik, Iceland.
                                                                                Sun 1:40-2pm, GBC 6am & 9a
                            DZE
                                       Zeesen, Germany.
                                                                               7-9pm irregularly.
              12.03
                                       Gom m, Switzerland.
                            H<sub>B</sub>0
                                                                                Experimental.
25.00
25.09
                                                                                3-6pm; Sun 6-8:40,10-11am.
              12.00
                            RME
                                       Mosh, T. U.S.S.R.
              11.955
11.95
                            ETB
                                       Addis Abeba, Ethiopia Very irregular.
 <u> 25.08</u>
                            KKQ
                                       Eolinas, California.
                                                                                Evenings irregularly.
              11.88
25.23
25.27
25.29
                                                                                2-5am,11:15am-6:05pm.
                            TPAS
                                       Pontoise, France.
              11.87
                                                                                5-7pm.
                            w8xk
                                       Pittsburg, Penna.
              11.86
                            GSE
                                       Daventry, England.
                                                                                10:15am to noon.
25.25.40
25.368
25.368
25.40
25.40
25.40
25.40
              11.85
                            DJP
                                       Zeesen, Germany.
                                                                                Noon to 2pm to Africa.
              11.83
                                                                                3 to 10pm.(off at 7:30pm.
                            W2XE
                                       Tayne, New Jersey.
              11.83
                            W9XAA Chicago, Illinois.
                                                                                Irregular, usually signs_
              11.82
                            GSE!
                                       Daventry, England.
                                                                                12:15-2:15 am daily
              11.81
                                                                                8:15-9,9:15-11am,N'n-1pm.
                            2R04
                                       Rome, Italy.
25 40
25 43
25 43
              11.81
                                                                                6:30-10:30pm except Sun.
                            HJ4ABA Medellin, Colombia.
              11.79
                                                                                3-4:55pm to Africa. (6:30p
                            DJO
                                       Zeesen, Germany.
                                                                                Sun 3:30-5pm, Dly 5:30-
11:35am-4:20pm; 4:50pm to
10:45 pm to North America
                            WlXAL Boston, Mass.
 25.51
              11.77
                            DJD
                                       Zeeser, Germany.
 25.53
              11.75
                            GSD
                                       Daventry, England.
                                                                                12:15-5:45,6-8,10-11pm.
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.25.57
          11.73
                   PHI
                             Huizen, Holland.
                                                            8:30-11:30am Ex.Tues/Wed:
                                                            (Will go to 17.77,Apr 26.
7-12pm,S 4pm-la,Su 5-9:30
6:15-10:15,10:45-lam.
25.60
25.63
25.68
          11.72
                    CJRX
                             Winnipeg, Canada.
          11.71
                    TPAL
                             Pontoise, France.
          11.68
                    KIO
                             Kahuku, Hawaii.
                                                            Works KKQ and GMBJ.
25.69
25.71
25.87
          11.67
11.66
                                                            Works LSX irreg.
                    PPQ.
                             Rio de Janeiro.
                             Nazaki, Japan.
                     JVL
                                                            Works JIA, JIB, JIC.
          11.595 VRR4
11.54 XGR
11.495 VIZ3
                             Stoney Hill, Jamaica
                                                            Works WNC (irregularly.
                                                            Works Rugby 3:30-4:30am-
Works CGA4 irreg.
26.00
                             Shanghai, China.
26.11
                             Fiskville, Australia
                                                            5:30-llam Sun.& Irreg. Works XDR 5-7pm irreg.
26.11
          11.49
                    PLO?
                             Bandoeng, Java
26.80
          11.187
                             Merida, Yuca, Mexico.
Mexico D.F.
                    XAM
                                                            Experimental irreg.
          11.00
27.27
                     XBJQ
27.27
           11.00
                    PLP
                             Bandoeng, Java.
                                                            Sun.5:30-10am & irreg.
                                                            Works VLJ mid.-1:30am.
27.27
                     ZLT4
          11.00
                             Wellington, N.Z.
          10.955
10.936
10.91
10.84
27 • 39
27 • 44
                                                            Monday 8-10am. (10kW)
                    HS8PJ
                             Bangkok, Siam.
                    FTH
                                                            8:30am-noon with Egypt.
                             Ste.Assise, France.
27.50
27.68
27.86
                                                            Works KWV at 10am irreg. Works KTR at 10am irreg.
                    KMR
                             Manila, Phillipines.
                    KWV
                             Dixon, California.
                                                            Works VLK 2-4:20am
          10.77
                     GBP
                             Rugby, England.
          10.74
10.675
10.67
10.67
                                                            M/Th 4-5pm, Tu/F 2-3pm.
27.93
28.09
                     JVM
                             Nazaki, Japan.
                                                            Works ZFD afternoons.
                    WNB
                             Lawrenceville, N.J.
                                                            7-7:15pm, Thur/Sun 8:30-9p
Sun 5:30-10am & irreg.
12-1am, Mon/Thur 4-5pm,
28.12
                     CEC
                             Santiago, Chile.
28.12
28.14
                     PLQ
                             Bandoeng, Java.
                             Nazaki, Japan.
                     JVN
                                                            5:20-11pm, 1:50-7:40am.
          10.61
28.28
                    WEA
                             Rocky Point, N.Y.
                                                            Experimental.
          10.53
10.52
10.42
28.47
                     JIB
                             Taihoku, Taiwan.
                                                            Works JVO 2-9am.Best 2-3.
28.50
28.77
28.76
                                                            Works GBP 2-4:20am.
                             Sydney, Australia.
                     VLK
                             Shanghai, China.
                     XGW
                                                            Works Tokyo nights.
          10.43
                                                            Works Java 4:30 & 6am.
                     YBG
                             Medan, Sumatra.
          10.43 YBG
10.38 WCG
10.375 JVO
10.35 LSX
10.335 ZFD
10.33 ORK
10.29 DIK
28.90
28.91
                                                            Experimental.
                             Rocky Point, N.Y.
                                                            Works TDE at 5:15am.
                             Nazaki, Japan.
28.98
                             Buenos Aires, Argen.
                                                            Experimental irreg.
29.01
                                                            Works WNB until 8:15pm.
                             Hamilton, Bermuda.
29.04
                             Ruysselede, Belgium.
                                                            2:30-4pm to Bel.Congo.
29.15
                             Nauen, Germany.
                                                            Experimental.
29.24
          10.26
                    PMN
                                                            5:30-10am to Sumatra.
                             Bandoeng, Java.
29.50
29.50
          10.20
                    PSH
                                                            Works B.A. & CEC 6-7pm.
                             Rio de Janeiro.
           10.17
                    RIO
                              Bakeu, U.S.S.R.
                                                            Works RNE/RIR mid-2am.
29.74
29.74
29.80
          10.17
                                                            Monday 8-10am.
RIO 12-2am; 10-11am.
                    HS8PJ
                             Bangkok, Siam.
                             Tiflis, U.S.S.R."
          10.08
                     RIR
                                                            Works JVO at 5:15am.
          10.065 TDE
                             Kanjoshi, Manchukuo.
          10.055 SUV
10.042 DZB
29.84
                                                            GAA 3:30pm, DGU 4:30-5pm&
                             Cairo, Egypt.
29.87
                             Zeesen, Germany.
                                                            2-4pm irregular.
            9.89
9.87
                             Manila, Phillipines.
30.01
                    KAZ
                                                            Works Dixon 10-10:45am.
30.32
30.40
                    LSN3
                             Buenos Aires, Argen.
                                                            Works New York.
                    MON
                             Lawrenceville, N.J.
                                                            Works GCW afternoons.
30.47
30.47
30.59
            9.86
                                                            5:15-9:30pm, Sat N'n-2pm.
Testing 11:45pm-2:45am ir
                    EAQ
                             Madrid, Spain.
            9.84
                     JYS
                             Kemikawa-Cho, Japan.
            9.80
9.76
                     GOW
                                                            Works WON afternoons.
                              Rugby, England.
                     VLJ Sydney, Australia.
TI4NRH Heredia, Costa Rica.
                                                            Works ZLT4 mid.-1:30am.
30.93
31.01
31.05
            <del>9.70?</del>
9.675
                                                            5:30-6:30pm, Sunday to 7pm
Tests 5-7pm irreg.
                     DZÁ
                     DZA Zeesen, Germany.
CT1AA Lisbon, Portugal.
                                                            Tests 5-(pm irreg.
Tues/Thur/Sat 3-6pm.
5:30-10am;Sat to 11:30am.
Testing here 9:15pm irr.
2:30-5,6-6:15pm;M/W/Fr
6-9pm,Mon/Fri 5:15-5:50pm
2-3pm; 7-8:15pm.
11:45-1:15pm,7-10:30pm.31
            9.66
31.10
31.10
31.13
            9.64
                     YDB
                             Sourabaya, Java.
            9.64
                     HCJB
                              Quito, Ecuador.
            9.635 2Ro3
                             Rome, Italy.
31.20
            9.615 HH3W
                             Port-au-Prince, Haiti
                     HP5J Panama City, Panama.
HJ1ABP Cartagena, Colombia.
31.22
            9.61
                                                            11:40-1:10pm, 1-10.00pm.

8-11:30pm.

11am-1pm, 9-11pm.

Sat.,5:30-6:15pm.

Sun,7:30-8:30,8:45-9:45am

1-2pm, 7-8pm to N.A.

Sun,1-3,5-9,9:30-11:30am.

Noon-8pm, Sunday N'n-7pm.
31.25
31.25
            9.60
            9.60
                     CB9 60 Santiago, Chile.
            9 • 59 5
9 • 59
31.27
                    HBL
                             Geneva, Switzerland.
31.28
                     PCJ
                              Eindhoven, Holland.
 31.28
            9 • 59
9 • 59
                     VK2ME Sydney, Australia.
31.28
                     W3XAU Philadelphia, Penna.
```

77 77 0 50	T DV	Buenos Aires, Argen	Testing evenings irreg.
31.31 9.58 31.32 9.58 31.32 9.58 31.35 9.57 31.36 9.565	LR X GSC	Daventry, England.	4:15-5:45,6-8,10-11pm.
21.22 9.58	VK3LR	Melbourne, Australia.	3:30-7:30am except Sunday
21 35 9 57	WlXK	Springfield, Mass.	6am-mid., Sun 8am-lam.
31.35 9.57 31.36 9.565	VUB	Bombay, India.	Su 12:30-1:30pm, Th/Sat
J Jr.Jo J.Joj	****	29 y v	11:30am-12:30pm, Mon 1rr.
31.38 9.56	DJA	Zeesen, Germany.	12:30-3:50am, 4:50-10:45p
		•	8:05-llam to East Asia.
—— 31 . 45 9 . 54	DJN	Zeesen, Germany.	12:30-3am, 3:50-11am, 4:50
(*		to 10:45pm to C.A.
31.45 9.54 31.48 9.53	CQN	Macao, China.	Mon/Wed/Fri to 8:30am.
31.48 9.53 31.48 9.53	W2XAF	Schmectady, $N.Y.$	4pm to midnight.
31.48 9.55	LKJ1	Jeloy, Norway.	5-8am, llam-6pm, Su 3-8am.
71.51 9.52 71.51 9.52 71.55 9.51 71.55 9.51 71.58 9.501	F31CD	Saigon, F. Indo-China.	Testing 6-7pm irreg.
31.51 9.52	XEFT	Veracruz, Mexico.	Heard testing here. 12:15-2:15am,12:15-5:45p
31.55 3.55	GSB	Daventry, England.	Mon/Wed/Fri.N'n-2,8-11p
1 3+·53 3·5+1	HJU PRF5	Rio de Janeiro, Braz.	4:45-5:45pm.
21.58 0.50	TILLABE	Cartagena, Colombia.	Testing in evenings.
31.58 9.50 31.58 9.50 31.61 9.49	XGO X	Nanking, China	Tests at 8am.
21.61 2.10	VK3NE		4-7am except Sunday.
31.58 9.50 31.58 9.50 31.61 9.49 31.61 9.49	KEI	Bolinas, California.	Contacts WOEH etc.
31.68 9.47	WET	Rocky Point, N.Y.	Experimental.
31.73 9.45		Guatemala.Guatemala.	Sun 2-5am; Evenings irreg
31.80 9.428	TG1X COCH	Havana, Cuba.	10-N'n,4-6,9-10pm.
31.84 9.415	PLV	Bandoeng, Java.	Works Dixon near 10am.
31.92 9.40	XDR	Mexico.D.F.	Works XAM, XFA2 5-7pm irr
<u> </u>	CGA4	Drummondville, Quebec	Works GCB 4-6pm etc.
32,26 9,30	YNGU	Managua, Nicaragua.	12:45-2:15,6:15-(:15pm.
32.26 9.30 32.33 9.28	GCB	Rugby, England.	Works CGA4 4-6pm & SUV.
32.70 9.17	Vi.IV	Lawrenceville, N.J.	Works London.
32.70 9.168	YVR-	Maracay, Venezuela.	Relays YV2RC irreg.
32.33 9.28 32.70 9.17 32.70 9.168 32.85 9.05 33.17 9.04 33.30 9.01 33.47 8.95 33.50 8.95 33.47 8.775 34.19 8.775 34.19 8.775	HAT4	Budapest, Hungary.	Sunday 6-7pm. GBC 5-5:30am.
33.15 9.05	TFK	Reykjavik, Iceland.	Works FVA X X X 0 - 5 pm
33.17 9.04	TYA2	Pontoise, France.	Works FVA 3:30-5pm. Tues 12:30-lam with KKH
33.30 9.01 33.47 8.963	KEJ	Bolinas, California. Alger, Algeria.	Works TYA2 3:30-5pm.
33.50 8.95	WEL	Rocky Point, N.Y.	Experimental.
33.71 8.90	WVD	Seattle Washington.	Works WXE 11:30pm-12:30a
34.19 8.775		Macassar, Celebes.	Works Bandoeng 4-5am.
	нсјв	Quito, Ecuador.	Wed., 7-9:30pm.
<u> </u>	ZBW	Hong Kong, China.	4-10am.
: zh hh 8 71	KBB	Manila, Phillipines	Works GMBJ 4-8am irreg.
34.66 8.669	CO9JQ	Camaguey, Cuba.	8-9pm & irregular.
34.92 8.59	$XM\Lambda V$	Managua, Nicaragua.	7:45-10:15pm except Sun.
	HC2CW	Guayaquil, Ecuador.	8-11pm,
36.61 8.195		San Salvador, El Salv	
36.63 8.19	XEME	Merida, Yuca, Mexico.	10am-lpm, 6-llpm.
36.65 8.185		Rio de Janeiro, Braz. Manila, Phillipines.	Phone & irreg.programs. Works Dixon 9:30-10:30am
36.95 8.12	KTP	Guayaquil, Ecuador.	9:20a-2:20pm, 6:20-11:20p
38.47 7.797		Geneva, Switzerland.	Sat. 5:30-6:15pm.
38.86 7.71		Bolinas, California.	Works KKH and WOEH.
39 37 7 62	ETD	Addis Abeba Ethiopia	
39.37 7.62 39.40 7.61 39.70 7.56 39.74 7.55	KWX	Dixon, California.	Phones.
39.70 7.56	EA8AB	Tenerife, Canarias.	Mon/Wed/Fri.3:30-4:30pm.
39.74 7.55	TI8WS	Puntarenas, C.R.	
39.87 7.52	KKH	Kahuku, Hawaii.	Tues 12:30-lam,10-12p ir
39.87 7.52 39.92 7.51	JVP	Nazaki, Japan.	Mon/Th 4-5, Tu/Fri 2-3pm.
40.00 7.50	YNLAT	Granada, Nicaragua.	9-10pm.
40.54 (.40	WEM	Rocky Point, N.Y.	Experimental.
40.65 7.38	XECR	Mexico D.F.	Sunday 6-8:15pm.
41.15 7.29	HILJ	San P de Macoris, DR	12:10-2:40pm,6:10-8:10pm
41.55 7.22 41.80 7.18	VP3BG	Georgetown, B. Guiana.	W-2/0-1-0-1-5 1 15
41.80 7.18	CR6AA		Wed/Sat 2:45-4:45pm.
42.11 7.129	5 PRADO	El Riobamba, Ecuador.	
42.13 7.12	ינועני	Papeete, Tahiti.	Tues/Fri llpm-midnight.
42.25 7.10	HKE	Bogota, Colombia.	Tues/Sat 8-9pm.
b and a second	-		

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7.08
42.40
                  VP3MR
                            Georgetown, B. Guiana 4:45-8:45pm, Sun 7:45-10am
42.40
                  PIĹJ
                            Dordrecht, Holland.
                                                       Sunday, 11:10am-12:10pm.
          6.935 WEB
                            Rocky Point, N.Y.
                                                       Works Paris.
43.48
          6.90
                  HI3C
                            La Romana, D.R.
                                                       6-7:30pm.
                                                                              (3-4am.
山。12
          6.81
                            San Pedro, D.R.
                  HIH
                                                       Tues/Fri 12:15-2pm, Sun-
          6.80
                            Quito, Ecuador.
Trujillo City, D.R.
                                                       8:30-10:30pm except Sun.
                  HCETC
44.12
          6.80
                  HI7P
                                                       Heard from 7 to 8:15pm.
          6.75
6.74
44.44
                                                       4-7:40am irreg.
Sunday,5:15-7:14pm.
                  JVT
                            Nazaki, Japan.
44.51
                  HClTQ
                            Quito, Ecuador.
          6.725
6.71
6.672
6.66
6.63
<u>山。57</u>
山。71
山。96
                            Rocky Point, N.Y.
                 WQO
                                                       Experimental.
                           San Jose, C.R.
Maracay, Venezuela.
Guayaquil, Ecuador
                  TIEP
                                                        7-10pm except Sundays.
                  YVQ.
                                                       Evenings irregular.
445555588018
                                                       Sun 5:45-7:45p, Tu 9:20-11
                  HC2RL
                            Trujillo City, D.R. Riobamba, Ecuador.
                  HIT
                                                       12:10-1:40pm,6:10-8:40pm.
                                                       Thur 9:20-11:40pm.
                  PRADO
          6.60
                  XFA2
                            Veracruz, Mexico.
                                                       Works XDR and XAM.(S to 8
          6.55
6.55
6.51
6.49
                                                       N'n-2pm, 6-7pm, Thur 6-11pm
4:40-7:40pm except Sunday
                  TIRCC
                            San Jose, C.R.
                  HI4D
                            Trujillo City, D.R.
                                                       5:30-9:30pm.
5:30-7:40pm daily.
7-10pm except Sunday.
                  YV ČRV
                            Valencia, Venezuela
46.08
                  HIL
                            Trujillo City, D.R.
                  HJ5ABD Cali, Colombia.
HI4V Trujillo City,
46.23
         6.49 HJ\ABD Call, Colombia.
6.48 HI\U Trujillo City, D.
6.451 HJ\ABC Ibague, Colombia.
6.44 HJABB Barranquilla, Col
6.43 HILS Puerto Plata, D.R
6.425 VE9AS Fredericton, N.B.
6.415 W3XL Boundbrook, N.J.
6.41 TIPG San Jose, C.R.
46.30
46.51
46.60
                            Trujillo City, D.R.
                                                        6-8pm.
                                                       8-10pm except Sunday.
                  HJ1ABB Barranquilla, Colom.
                                                       6-10pm, Sat to 12pm.
46.66
46.70
46.69
                                                       5:40-7:40pm daily.
                            Puerto Plata, D.R.
                                                       Thur 10:30pm-1:30am.
                            Fredericton, N.B.
                                                       N.B.C. experimental.
46.80
                                                       6-11:15pm.
46.95
          6.39
                  HI3U
                            Santiago d.L.C. DR.
                                                       5:40-7:40pm.
47.02
                  YVLRC
                            Caracas, Venezuela.
                                                       llam-lpm,5-10pm ex.Sunday
          6.357 HRP1
6.31 HIZ
6.30 YV121
6.28 HIG
47.20
                            San Pedro Sula, Hon.
                                                       7-9pm except Sunday.
47.50
                            Trujillo City, D.R.
                                                       5-7:30pm except Sunday.
                  YV12RW Waracay, Venezuela.
                                                       5:30-8:30pm except Sunday
47.77
47.85
48.11
                                                       6:10-9:10pm.
                           Trujillo City, D.R.
          6.27
                  CO9WR
                            Sancti Spiritus, Cuba 4-6, 9-11pm.
          6.235 HRD
                                                       8-11pm, Sunday 1-11pm,
                           La Ceiba, Honduras.
48.15
48.23
          6.23
                  OAXLG
                            Lima, Peru
                                                       7-10:30pm,Wed.to 11:30pm.
          6.22
                  HJ2ABA Tunja, Colombia.
                                                       8-10pm.
48.50
48.50
48.62
48.70
          6.185 HILA
                                                       11:40-1:40pm,7:40-9:40pm.
                            Trujillo City, D.R.
          6.185 XEXA
                                                       8-8:30am, 6-11:15pm.
                           Mexico D.F.
          6.17
6.16
                  HJ3ABF Bogota, Colombia,
                                                       7-11pm except Sunday.
                  VPB
                            Colombo, Ceylon.
                                                       Testing irregular.
48.78
48.78
48.78
48.78
48.78
48.78
48.86
         06.1555555554475
                  CB615
                            Santiago, Chile.
Caracas, Venezuela.
                                                       llam-lpm, 7-10pm.
                                                       3:30-10pm. (-10:30pm.
7-mid,Sat 4pm-1am,Sun 5-
                  YV3RC
                  CJRO
                           Winnipeg, Canada.
                  HI5N
                                                        6-7am, N'n-2pm, 6-9:30pm.
                           Trujillo City, D.R.
                                                       7:14am-12:24pm.
8-9am,11am-2pm,5-11pm.
                  CSL
                            Lisbon, Portugal.
                  COKG
                            Santiago, Cuba.
                 HJ5ABC Cali, Colombia.
                                                       7-10pm.
48.86
                                                       7pm to midnight.
12:45-3pm, Sun 8-10:30am.
                 W8xk
                            Pittsburgh, Penna.
                  CR7AA
                           Laurenco, Mozambique
         6.135
6.135
6.13
6.13
48.90
                 HJLABP Medellin, Colombia.
                                                       8-llpm.
48.9944
48.9944
49.002
                  CHNX (VE9HX)Halifax, N.S.
                                                       Relaying CHNS irregular. Sun/Tues/Fri 6:40-8:40am.
                            Kuala Lumpur, F.M.S.
                  ZGE
                  COCD
                            Havana, Cuba.
                                                       llam-12pm, Sun 5-11pm.
                  TGXA
                            Guatemala, Guatemala
                                                       6pm to midnight irreg.
          6.12
                                                       Tu 1:15-3:15p,F,10-10:45a
                  ZEB
                            Bulawayo, S. Rhodesia
          6.12
                  HJ3ABX Bogota, Colombia.
                                                       6-11:30pm.
          6.12
6.12
49.02
                                                       10-11pm.(-12pm, Sun 9-12pm
11am-4pm,7:30-12pm, Sa 630
                  W2XE
                           Wayne, New Jersey.
49.02
                  XEFT
                            Veracruz, Mexico.
49.10
          6.11
                  GSL
                                                       2:30-4pm.
                           Daventry, England.
                                                       8-10pm.(irreg,Sat 11:35pm
2:06-3:06am,8:06-11:06am-
49.10
          6.11
                  HJ4ABB Manizales, Colombia.
49.10
          6.11
                           Calcutta, India.
                  VUC
49.18
                                                       Mon/Wed/Sat 5pm-12:45am.
          6,10
                  W3XAL
                            Boundbrook, N.J.
49.18
                  ₩9XF
                                                       Sun/Tues/Thur/Fr 9pm-2am.
          6.10
                            Chicago, Illinois.
49.20
49.26
          6.097
                                                       11:45-12:30am, 3:30-7am et 5:30-11:30pm, Sun 3-11:30p Tests 5:15-5:45pm irreg.
                  ZTJ
                            Johannesburg, S. Afr.
          6.09
                  CRCX
                            Bowmanville, Ontario
49.27
          6.085 2R01
                           Rome, Italy.
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149.344
49.344
49.344
499.449
499.45
499.45
                                                              5:45-6:15am ex.Sat/Sun et
11:45am-1:15pm,7-10:30pm.
            6.081 VQ7L0
                               Nairobi, Kenya, Afr.
            6.08
                    HP 5F
                               Colon, Panama.
                                                              9-11am,6-9pm.
            6.08
                               Pereira, Colombia.
                                                              8-9:30pm.
            6.08
                               La Paz, Bolivia.
                     CP5
                               Zeesen, Germany.
                                                              7:30-9:30pm to N.A.
            6.079 DJM
                                                             9am-5pm, Sat 9am-6pm.
6-7:30pm, Sun 1:45pm-lam.
6-7:45pn.
            6.072 OER2
                               Vienna, Austria.
            6.07
                               Vancouver, B.C. (2w)
                     VE9CS
            6.065 HJ4ABH Manizales, Colombia.
 49.50
49.50
49.50
                                                              1-6:30pm, Sun llam-7pm.
8-11pm, (-8pm, 11p-1:30am.
            6.06
                               Skamleback, Denmark.
                     OXY
                    UAXEW
LAX8W
            6.06
                               Philadelphia, Penna.
                                                              6:30am-8pm,11pm-2am;Su 8a
7-12pm,Sun 2-3, 4-5am.
            6.06
                               Cincinnati, Ohio.
 49.55
            6.055 XEUW
                               Veracruz, Mexico.
                                                              7-11pm.
            6.05
                    HJ3ABD Bogota, Colombia.
 6-8pm.
            6.05
                     GSA
                               Daventry, England.
            6.045 HI9B
                                                              llam-9pm, Sun 12:15-1:15am
                               Trujillo City, D.R.
                                                              N'n-2pm,5:30-mid,Sat 2-6a
            6.04
                    WLXB
                               Miami, Florida.
                                                              6:30-10pm except Sunday.
Tu/Th 7:30-9:30p, Su 6-8pm
            6,04
6,04
                    HJ1ABG Barranquilla, Colom.
                    ULIXAL
                               Boston, Mass.
                               Panama City Panama
                                                              8-10:30pm.
            6.03
                    HP5B
            6.03 VE9C
6.028 PRA8
                                                             9am-midnight.
                     VE9CA
                               Calgary, Alta, Canada
                               Tananarive, Hadagascar Heard recently 9-10am.

Singapore, F. M.S.

Mariantinght.

4-4:45pm, 6-8pm.(-pm.

11:35am-4:20pm,4:50-10:45

4-11pm,Sun 4-9pm.(Sun-130)

4-7,8-10pm,Sat 11:30pm-

Tananarive, Hadagascar Heard recently 9-10am.

Singapore, F. M.S.

Mon/Wed/Thur 6-8:30am.etc
            6.02
                    DJC
            6.015 HJ3ABH Bogota, Colombia.
            6.01
                     COCO
            6.01
                    FIU
 49.90
            6.01
                     ZHI
 49.95
49.95
            6.005 VE9DN
6.005 HP5K
                               Drummondville, Que.
                                                              Sat 11pm-midnight.
                               Panama City, Panama
                                                              8:30-10am,1-2,7-10pm.
 49.95
            6.005 HJ1ABJ Santa Marta, Colomb.
                                                              6-10pm, Sundays at 7am.
- 50.00
- 50.00
- 50.00
                                                              10am-1:15am.
            6.00
                    XEBT
                               Mexico D.F.
                     OAX4J
                                                              7-11pm.(-am,11am-noon.
            6.00
                               Lima, Peru.
                               Salisbury, S. Rhodesia. Tu 1:15-3:15p, Fr 10-1045
            6.00
                    ZEC
            6.00
                    TGWA
                               Guatemala, Guatemala 9pm-midnight ex. Sunday.
                                                             Irregular at present.
Works WVD 11:30pm-1:30am.
7:30-9:30pm.(10:10pm.
4:40-5:40pm,Tu/Fr 8:10-
 50.00
            6.00
                    RV59
                               Moscow, U.S.S.R.
 50.04
50.17
50.18
50.25
50.26
           5.995 WXE
5.98 HJ2
5.98 HIX
                               Anchorage, Alaska.
                    HJ2ABD Bucaramanga, Colom.
                               Trujillo Čity, D.R.
           5.97 HJZABC Cucuta, Colombia.
5.97 XEVI Mexico, D.F.
5.966 HJJABC Quibdo, Colombia.
5.95 HJN Bogota, Colombia.
5.94 TG2X Guatemala, Guatem
5.93 HJLABE Medellin, Colombi
                                                              6:30-9pm irreg.
                                                              8pm-midnight.
                                                              2-2:15pm, Sunday 5-5:15am
                               Vatican City, Italy.
 50.29
                                                              5-6pm, Sunday 3-5pm.
 50.42
50.51
                                                              8:30-10:30pm except Sun.
                                                             4-6,9-10:30pm except Sun.
                               Guatemala, Guatemala
 50.59
50.68
            5.93
5.91
                    HJ4ABE Medellin, Colombia.
                                                              7-10:30pm.
           5.91 HH2S
5.90 YVERI
5.89 JIC
5.885 HCK
5.865 HRN
5.865 YV5RI
5.85 TDD
5.85 TDD
5.85 TV2RI
5.79 JVU
5.78 OAXLI
5.77 YNLF
5.77 YNLF
5.77 TS
5.77 TYNLF
5.77 YVLF
                                                               7:30-9:30pm except Sun.
                    HH2S
                               Port-au-Prince, Haiti
 50.85
                    YV8RB
                                                             5:30-9:30pm.
                               Barquisimeto, Venez.
50.09775
50.99775
51.28
                               Taihoku, Taiwan. Works Tokyo around 7:30am Quito, Ecuador. 8:45-10:45pm, Mon/Fri. Tegucigalpa, Honduras, 6:30-8,8:30-10pm.
                               San Pedro, D.R.
                                                              11:40am-1:40pm, 6:10-8:40p
                    YV5RMO Maracaibo, Venezuela
                                                              5:50-9:50pm except Sunday
                               Lawrenceville, N.J.
                                                              Phones evenings irreg.
 51.46
                               Kanjoshi, Manchukuo
                                                              Works JVU 6-7am irreg.
 51.52
51.72
51.81
51.90
                    TIGPH
                               San Jose, C.R. Caracas, Venezuela.
                                                              7-10pm except Sunday.
                    YV2RC
                                                              5:15-9:30pm.
                                                              Works TDD 6-7am irreg.
                               Nazaki, Japan.
                    OAX4D
                               Lima, Peru.
                                                              Wed/Sat 9-11:30pm.
 51.99
                    HJ4ABD Medellin, Colombia.
                                                              8-11pm except Sunday.
 51.99
52.26
52.32
                               Managua, Nicaragua.
                                                              7-12.0m.
                               Guatemala, Guatemala Wed/Thur/Sun 6-9pm.
                                                              Works JIC at 7:30am irrej
                               Nazaki,Japan.
           5.72
5.705
5.525
 52.45
52.59
                    YV10RSC San Cristobal, Venea, 5:30-midnight except Sun
                                                             Works CZCX near 8:30pm.
                    CFU
                               Rossland, B.C.
 54.30
58.03
65.22
                    TI5HH
                               San Ramon, C.R.
                                                             Testing around midnight.
           5.17
                                                             4:30-10:30am,5:30-7:30pm.
8:19-10:19pm,Wed/Sat.
                    PMY
                               Bandoeng, Java.
            4.60
                    HC2ET
                               Guayaquil, Ecuador.
 70.65
            4.25
                    RV15
                               Khabarovsk, U.S.S.R. 1:30-11:30am.
 74.96
                               Ponta Delgada, Azores Wed/Sat 5-7pm.
           4.00
                    CT2AJ
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