

OCTOBER 1936



IDA REPRESENTATIVE D. R.D. WADIA
Opens the Finest Radio Sales Rooms in India at Bombay



INTERNATIONAL DX'ERS ALLIANCE

SHORT-WAVE NOTES

BROADCAST BAND DX TABLE

THE BRUCE AERIAL SYSTEM

ACCURATE SHORT-WAVE LIST

EUROPEAN BROADCAST STATIONS

EUROPEAN	BROADCASTING	STATIONS
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		EUROPEAN I			mg SI	TIONS	
KC/S	м.	STATION	KW	KC/S	м.	STATION	KW
153	1961	Ankara, Turkey	<u> </u>	648	463	Lyons, PTT, France	100
	-	Kaunas, Lithuania	7			Petrozavodsk, USSR.	10
160	1875	Hilversum, Holland	100	658	455.9	Cologne, Germany	100
		Brasov,Romania	150	668	449.1	North Regional,	
166	1807	Lahti,Finland	150	_		Great Britain	70
172	1744	Moscow, U.S.S.RI-	500	677	443.1	Sottens, Switzer-	
122	164ª	Radio Paris, France	80			land	100
185	1622	Istanbul,Turkey	5	686	437•3	Belgrade, Yugoslavi	1 a 2 1/3
1 P 7	1600	Irkoutsk, U.S.S.R.	20			Bodo, Norway	• 5
191	1571	Deutschlandsender,	_	695		Paris PTT, France	120
-		Germeny	60	704		Stockholm, Sweden	55
200	1500	Droitwich, G. Britain	n150	713		Rome, Italy -I-	50
50 ₈	1442	Minsk, U.S.S.R.	35	722	415.4	Kharkov, U.S.S.R	
	_	Reykjavik, Icaland	16		1 = = 1	Kiev, U.S.S.R.	_ 35
216	1389	Motala, Sweden	150	731	410.4	Seville, Spain	5.5
217	1379	Novosibrak, U.S.S.R				Assiut, Egypt	
224	1339	Warsaw, Poland -I-	120	-1 -	1 1	Tallinn, Estonia	20
232	1293	Luxembourg	120	740		Munich, Germany	100
		Leningrad, U.S.S.R.	100	749	400.5	Pori, Finland	1
ध्य	1250	Kalundborg, Denmark			^	Sortavala, Finland	
		Vienna, Austria	. • 5	75 ⁸		Katowice, Poland	12
253	1185	Aslesund, Norway	,10	767	\ 391.1	Scottish Regional	
256	1170	Tashkant, U.S.S.R.	25	,		Great Britain	50
260	1153	Oslo, Norway	60	776	3×6•6	Stalino, U.S.S.R.	10
271	1107	Moscow, U.S.S.R2-	100			Toulouse PTT,Fr.	120
2 ⁸ 2	1063	Tromso, Norway	10	_	_	Fredrikstad, Norwa	
283	1060	Tiflis, U.S.S.R.	35	785		Leipzig, Germany	120
340	882.3	Saratov, U.S.S.R.	10	795	377•4	Lwow, Poland	_16
347		Finmark, Norway	10	0-1		Barcelona, Spain	7•5
355	845.1	Rostov-on-Don, USSR		801+	373.1	West Regional,	-
359		Budapest, Hungary-2		0-1	- (0 (Great Britain	
375	800	Sverdlovdsk, USSR.	40	814		Milen, Italy	50
392	765	Banska-Bystrica,		823		Bucharest, Romania	12
_		Czechoslovakia	_ 15	832	<i>3</i> 60 . 6	Moscow, USSRL-	100
401	748		-100	01 -		Agen, France	.5
		Geneva, Switzerland		841		Berlin, Germany	100
413	72 6	Ostersund, Sweden	• 6	850 🔒	352.9	Bergen, Norway	1
		Voronezh, USSR.	10			Porsgrund, Norway	1
431	695	Oulu, Finland	1.2			Sofia, Bulgaria	1
519	578	Hamar, Norway	• 7	0	-1	Valencis, Spain	1
	- 0 -	Innsbruck, Austria	1	859	349.2	Strasbourg, France	
522	585	Tartu, Estonia	:5	0.00	-1- (Simferopol, USSR.	10
527	569.3	Viipuri, Finland	10	868		Poznan.Poland	16
536	559.7	Bolzano, Italy	10	877	342.1	London Regional,	50
		Wilno,Poland	16	001	0 (Great Britain	50
	-1 -			886	33H+6	Linz, Austria	15
546		Budapest, Hungary-I	-120	0		Graz, Austria	7:5
556	539•6	Beromunster,	_	895	335.2	Helsinki, Finland	10
_ ,		Switzerland	100	A = 1		Limoges, PTT, Franc	100
565	531	Athlone, I. F. S.	100	904		Hamburg, Germany	100
		Palarmo, Italy	3	913	32H. 6	Toulouse (Radio-	10
574		Stuttgart, Germany	100			Toulcuse)France	60
583	514.6	Madona, Latvia	50	922	325.4	Brno, Czechoslovak	0-1E 189%
		Alpes-Grenoble PTT		932		Brussels, Belgium-	Z~17
-64		Franc		941	31H H	Algiers, Algeria	1.2
586	512	Archangel, USSR.	10		^	Goteborg, Sweden	100
592		Vienna, Austria	100	950		Braslau Germany	100
601	499.2	Rabat, Morocco	25	959	312.8	Algiers, Algeria	40
		Sundsvall,Sweden	10			France	_ 60
610	491.8	Florence, Italy	20	68	309•9	Bordeaux-Sud-Oues	٠,٠
620	483.9	Brussels, Belgium-I	- 15		•	France	30 10
		Csiro,Egypt -I-	20			Odessa, U.S.S.R.	10
629	476.9	Trondelag, Norway	20	977	307.1	Northern Ireland	100
		Lisbon, For tugal	15			Regional, G. Brit.	100
638	470.2	Prague, Czechoslova	k120	979	306.4	Beziers,France	•4

K				The state of the s
986	304 • 3	Genoa, Italy 10	1276 235.1	Radio Cote d'Azur 27 Aberdeen Gt. Britain 1
COF	707 5	Torun, Poland 24	1207 2770	7 11001 40011911 111
995		Hilversum, Holland-2- 60 Bratislava, Czecho-	1001. 071.	
1004	290.0	slovakia 13	1274 271.0	Vorarlberg, Austria 5
1012	206.2	Midland Regional,	1303 230.2	R Klagenfürt, Austria 5 Vorarlberg, Austria 5 Denzig, Denzig 5
1019	2 70 - 2	Great Britain 70		Karlstad, Sweden . 25
}		Chernigov, U.S.S.R. 5	-)-2 55	Malmo, Sweden 2.5
1022	293.5	Cracow, Poland 2		Norrkoping, Sweden . 25
1	~// /	Barcelona, Spain 3		Trollhattan, Sweden .25
K	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Oviedo, Spain .7	1321 227.1	Magyarovar, Hungary 1,2
1031	291	Konigsberg, Germany 100	1330 225.6	Bremen, Germany 2
ľ.		Parede, Portugal 5		Kiel, Germany 2
1040	2 ²²	Rennes-Bretagne		Hanover, Germany 2
	-0	France 120	3 770 001	Stettin, Germany 2
1050	285.7	Scottish National,	1339 224	Montpelier,PTT, France 1.2
1050	002 7	Great Britain 50		Lodz, Poland 2
		Bari, Italy -I- 20 Tiraspol, U.S.S.R. 4	1 zl. 8 222. 4	Dublin, I. F. S.
1000	200.9	Tiraspol, U.S.S.R. 4 Radio-Cite, Paris, Fr. 8	174" 222.	5 Dublin, I.F.S5 Rjukan, Norway .15
1077	278.6	Bordeaux-Lafayette,		Salzburg, Austria 2
4 -0 : /	210	France 12		Tampere, Finland .7
1086	276.2	Falun, Sweden 2		Cairo, Egypt -25
	-,	Zagreb, Yugoslavia .7		Konigsberg, Germany-2- 2
1095	274	Vinnitsa, U.S.S.R. 10	1357 221.1	Notodden, Norway .15
		Madrid, Spain - EAJ7 5		Milan, Italy -2- 4
1104	271.7	Kuldiga, Latvia 50		Turin, Italy -22
[] <u>_</u>	. /	Naples, Italy 1.5	//	Bari, Italy -2- 2
1113	269.5	Radio Normandie,	1366 219.6	L'lle de France7
		Fecamp, France 10	1919 510.5	Besle, Switzerland .5 Berne, Switzerland .5
		Moravska-Ostrava, Czechoslovakia 11	1 7 8 1 0 1 6 . 8	Berne, Switzerland .5 Warsaw, Poland 2—
1100	267.1	Nyireghyhaza, Hungary 64		Radio Lyons, France 25
1122	201.4	Newcastle, G. Britain 1	1402 214	Stara-Zagora,
404		Alexandria, Egypt -I25		Bulgaria 2
1131	265.3	Horby, Sweden 10	1420 211.	3 Vaasa-Vasa, Finland .5
1140	263.2	Trieste, Italy 10	1429 209.9	9 Alexandria, Egypt-25
		Turin, Italy -I- 7		Turku, Finland 5
1149	261.1	London National, 20		Miskolc, Hungary 1.2
II.		North Regional, 20	1456 206	Eiffel Tower, Paris 5
		West National,	1465 204.8	Antwerp, Belgium .1
		Great Britain 20		Pecs, Hungary 1.2
		Kosice, Czechoslovakialo	11.71. 007 1	Courtrai, Eelgium .1
TTOY	257.1	Monte Ceneri, Switzerland 15	14/11 2030	5 Bournemouth, 1 Plymouth, G. Britain . 3
1176	055.1	Copenhagen, Denmark 10	11,87 201.7	7 Binche, Belgium .1
1125	253.0	Nice-Corse, France 60	1/192 201	Chatelineau, Belgium .1
1	2))-2	Kharkov, U.S.S.R2- 10	_4/2 20=	Wallonia, Belgium .1
1195	251	Cassel, Germany .5		Nimes, France . 7
1		Coblenz, Germany 2		Albacete, Spain .2
1		Frankfurt, Germany 25		Santiago, Spain .5
1		Freiburg-im-Breisgau 5	1500 200	Liege Experimental,
		Kaiserslautern .5		Radio-Cointe, Belgium. 1
1 1	0100	Trier, Germany 2		Pietersaari (Jacob-
1204	249.2	Prague, Czechoslovakia 5 Lille (Radio PTT Nord)		stadt), Finland 25 Wallonia, Seraing;
1277	641.7	France 60		Verbiers, Belgium .1
7 799	215.5	Radio-Marconi, Bologna,		Radio-Alcala, Spain .2
1 .22	64J*J	Italy 50	1530 196	Karlskrona, Sweden .2
		Narvik, Norway .3	1737 173	Liepaga, Latvia .1
1231	243.7	Gleiwitz, Germany 5	NOTE: Eur	opean broadcast stations
12/10	241.9	Cork, I.F.S. 1		in "World Radio".
1249	240.2	Saarbrucken, Germany 17	FRONT COV	ER PHOTOGRAPH Sitting
1258	238.5	Riga, Latvia 10	from left	to right, Mrs. Sethna, H.H.
		Rome, Italy -3- 1	The Mahar	aja of Limbi, Mrs. D. Wadia,
	22/ 2	San Sebastian, Spain 1	n. H. The Ma	aharaja of Morvi, D.R.D.
1267	236+8	Nurnberg, Germany 2	Wadia, Mr	s. Dinshaw. Behind L to R,
1276	255.1	Christiansand, Norway . 5	C. D. Setuni	y (VUB), Sgt. H. J. Dent.
III.				

BROADCAST STATION NEWS

AUSTRALIA 2NR, North Regional Station, Lawrence, N.S.W., 700kC, 72kW, is broadcasting a regular schedule. 3MB, Birchip, Vict., has moved to 1490 kC.. 4CA, Cairns, Qsld, 1470kC, 100 watts, is on the air.. 6AM, Northem, W.A. 980kC, has increased power to 2kW.. 6WA, Minding, W.A., 560kC, 10kW, will be testing soon.. 6WB, Katanning, W.A., 1070kC, 2kW, will be on the air soon. 6WB will relay the programs of 6ML and 6IX. (NZDXRA, Wignall).

BRAZIL PRE3, Rio de Janeiro, 1220kC, lokw, signs off nightly at 9pm EST (Saturdays at midnight), with the organ selection, "Beautiful Ohio Waltz" (R. Stansfield) (oble.

FRANCE A powerful new national station will be erected at Gren-JAPAN All Japanese BC stations assumed their new frequencies on July 1,1936 (Saito)

POLAND The power of stations Wilno, 536kC, and Lwow, 795kC, will be

50kW each very soon.

TUNISIA Tunis, will have a new 20kW station on 877kC shortly.

U.S.A. New station will be erected at Eau Claire, Wisconsin, to operate on 1050kC, with 250 watts (daytime) power. WEXP changed to WBLK, Clarksburg, West Virginia, 1370kC, 100 watts.

U.S.S.R. A very strong signal on 585kC is interfering with JOAK-1 on 580kC. The station uses Russian language, is as strong as MTCY on 560kC and is believed to be in Khabarovsk. Who can identify? (Saito)

		ENGLISH TRANSMISSIONS S	PONSORED BY THE I.B.C
KC/S	М•	STATION	TIME (E.S.T.)
232	1293	Luxembourg, Luxembourg.	Sunday, 4:30-8:30,5:30-7pm.
			Weekdays, 3:15-5am, 1:15-2:15pm.
527	569	Radio Ljubljana, Yugoslavi	a Sunday, 5:30-6pm.
959	312.8	Radio Ljubljana, Yugoslavi Poste Parisien, Paris,	Sunday, 1-2pm, 5:30-6:30pm.
• • • •		France	Weekdays, 5: 30-6pm.
1113	269.5	Radio Normandie, Fecamp,	Sunday, 3-6: 30am, 9am-2: 30pm, 5-8pm
		France	Weekdays, 5: 30-6pm.
			Thursday, 9: 30am-1pm, 7-2pm.
1276	235.1	Radio Cote D'Azur, France	Sunday, 5: 30-8pm.

BROADCAST BAND WORLD DX CHART

FREQ	CALL	GAEPN	FREQ	CALL	GAEPN	FREQ CALL	GAEPN
182	Radio-Paris	<u>L</u> .	859	Strasbourg	• 3	1070 LR1	1
200	Droitwich	1	860	XEMO	2	1077 Bordeaux	32
590	WEEI	3	860	WABC	2	1080 WBT	2
650	lya	4	866	PRA6	3	1095 Madrid	23
660	WEAF	3 ·	870	JOAK2	2	llóó WPG	2
668	NR	3	870	LR6	2	lllo WRVA	3
670	JFAK	2	877	LR	3	1113 Normandie	11
68o	KPO	3 .	880	CMQ	3	1130 KSL	3
700	2NR	4	895	PRF3	3	1149 nn-wn-Ln	3
700	WLW	3 2	904	Hamburg	3	1150 WHAM	3
710	WOR	2	910	CRCM	2	1170 WCAU	
710	7NT	2	910	XENT	, 1	1180 WINS	2 -
720	3YA	3	913	Toulouse	4	1185 Nice-Corse	22
730	CKAC	3	920	CMX	2	1190 LS2	2
730	LAJ	3 .	920	J O QK	4	1195 Frankfurt	. 2
730	5CL	4	923	PRF4	2	1213 Lille	44
760	WJZ	3	930	CHNS	2 2	1220 PRE3	2
770	JOHK	2	950	LR3		1230 WNAC	1
776	Toulouse	13	959	P• P•	3	1230 LS8	2 *
790	4YA	4	960	XEAW	1	1240 CJCB	2
795 800	Barcelona	3.	970	J O BG	4	1240 WKAQ	3
800	4QG	4	990	WBZ	2	1250 KFOX	3
804	WIR	3	1000	W HO	2	1276 Cote d' Azu	
810	JOCK1	2	1010	WHN	2	NOTE: BCB statio	ns best
820	WHAS	3	1017	PRB9	2	heard at present	:G-GMT.
P30	KOA	2	1030	LR9	2	A-AST; E-EST; P-RS	T; N-NZT
830	LR5	2		CTÍGL	1	Signal strength:	1-R8/9;
830	3GI	43	1040	WTIC	1	2-R6/7;3-R4/5;4-	R2/3A11
840	CRCT	2	1040	Rennes	4	values are appro	

	D	ΙS	TRICT	H O N	O R	k O L	LS		
DISTRICT -4-									nkfort.
C.H.Long	21X	Mo.		2ZW,3B0,5					
				DK1, JOJK,					
H.Gustafson	8x	Ill.	2GZ,JOPK	,CTlGL,EA	J7,EAJ]	.5,IlTO	, Mun!	ich,Çol	ogne,
Ray Swenson	4X	Ill.	JOBK2, Re	nnes, PRB9	,LR3.		a		
C.R. Anderson		Iowa	3TO, JOCK	YV3RC.	List		'n		
DISTRICT -6-	Mich	n,Ind	,Ohio,Ky,	Va, W. Va, P	enna, N.	Y.,Del	,Md,	N. J.	***
David Thomas	19X	Ohio							
			KZRC,G6B	M,2BD,1YX	, VUO, ZE	W, Huiz	en, W	arsaw, M	oscow,
			Droitwic						
R. Tomlinson	13X	N. Y.	HAL2,CE6	2,CX34,HA	E2, Toul	ouse-M	furet	,Lille,	Nice,
			Dresden,	Konigsber	g (1348	Kosi, (ce,L	s8,LR2,	LT3.* *
Ray Lewis	lox	0hio	LV1, TIC,	5DN, EAJ41	,JOBK2,	JFAK, 8	WMC,	Palermo	, Naples
			Merseill						sberg.
Howard Eck	8x	Mich	3KZ,PRA6	,JOCG,Inn	sbruck,	Stetti	n,Fre	eiberg,	JÓVK,
C. Wyborski	7 X	Penn	HJ3ABD, C	X14, TIRC,	TIRCA, Y	NlGG, L	S6,C	racow.	
Don Reynolds	ĹΧ	N. Y.	Eiffel T	ower, Riga	, Monte	Ceneri	, HJ44	ABK.	
Carl Lord	3X	Ohio	NN,SN,Su	isse Romen	nde.				
John DeMyer	2X	Mich	JOPK JQA	Κ.					進
I.Beitman	1X	Ohio	PRAR.	I.Go	odeve	1X Mi	.ch	1ZM.	
R. Hough	1X	N.Y.	OAX.	S.Ste	eele	1X Oh	iο	JOAK2.	
DISTRICT -5-	Tenr	n, N. C	.,S.C.,Mi	ss.,Ga.,A	la.,Flo	rida.			
John Shanks	29X	Tenn	2CH, 2FC,	2GB, 2GZ, 2	HD, 2SM,	3AR, 21	B.3H	A. 3KZ, 3	LO, 3YA,
	•		LZW, LBH,	5AD, 5CK, 50	$\mathtt{CL}, \mathtt{7NT},$	ŹZL, JO	AKĺ,:	IÍĠE,ÍÍI	MI, LBK.
			IlTO.IlT	Ŕ,Berlin-	regel.É	lamburg	.Bor	deaux .Re	ennes.
Guy Bigbee	2X	Ge∙		roc, LU7.	- /	_			
Marvin Dixon	1X	N.C.			Armant	rout	1X (Ga. 3X	Y
									JA 118 23,
T C T			UA	TTPS PER	ZG O I				50x 4

EST		DX T	IPS PE	RIODS	~ % ~ *
Weekly	Tues,1-1:30am	1300kC	lkW	Los Angeles, California	KFAC
Weekly	Tues,5:35-6pm	9530kC	S.W.	Schenectady, New York	W2XAF
Weekly	Fri.,11-11:30pm	980kC	50k W	Pittsburgh, Pennsylvania *	w8xk
Weekly	Sun.,1-1:15am	930kC	100w	Calgary,Alta,Canada	CFAC
Weekly	Sun.,1-1:15am	640kc	50kW	Los Angeles, Celifornia	KFI

TRANS-ATLANTICS AFPEAR EARLY The first TA station Radio Normendie (1113kC), was heard August 24, between 7:30 and 8pm AST, which is the earliest in the season I've ever heard an European station. BBC stations on 1149kC are coming through at about 6:45pm AST. They sign off at 7pm AST with Big Ben. PTT (776), is times Toulouse even better than Radio Normandie. Both CTIGL and EAJ7 are good until their sign-off at 7:45pm AST. Long Wave stations Droitwich, Radio-Peris and Deutschlandsender are be ing heard at 6:30pm AST. West Regional, Nice-Corse and Bordeaux have also all been logged this season.

(E.L.Peters, Westport, Nova Scotia)
The TA's started out with a bang
here on Sept 1.Radio Normandie was
excellent from 6:45 to 7pm EST.
Frankfort was R5/6, Hamburg was R4
to R5.EAJ1 and EAJ7 were good. Also
had LR, Lyons (1393), Toulouse (913)
and 776) all excellent between 6
and 7pm EST.Cote d'Azur (1276) is
coming in great now. One evening
Fordeaux (1077), Nice-Corse (1185)
and Nurnberg were all about an R7

between 6 and 6:30pm EST. Some TP's have been heard through heavy static, 3GI and lYA being the best. SA's have dropped out of the picture for the time being.

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

TRANS-PACIFIC RECEPTION

Australians and New Zealanders are heard best between 2 and 3:15 am PST, on Sunday mornings. 7NT (710), 3YA (720) and 3GI (830) are the best with traces of 2NR, 5CL, LYA, and LQG being heard. The Japanese stations are heard almost every morning from 2:30 to 5am PST, with JFAK (670), JOHK (770), JOCKI (810), JOAKI (870), and JOQK (920), best heard.

(W.Russell DuCette, Seattle, Wash.)

NEW ZEALAND REPORTS

Latest loggings here are 2DU, 2NR, 3YB, VUC, VPB, MTFY and ZVJ. LTO, 3YB, OGNC, XERA and WIND. The Japanese stations on their new channels are good. Also logged VK-3HK. Have bad power noise at times (Ernest M. Niven, Dunedin, N. Z.)

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Ax'ers Alliance

CHARLES A. MORRISON EDITOR

VOLUME 4

BLOOMINGTON, ILLINOIS. U. S. A.

NO. 9

ALPHA (Toledo), held first meeting of season in Park Shelter House on Sept.19. ALPHA challenged DELTA Chapter at Lansing to an inter-chapter DX contest, based on mileage. Worthwhile prizes will be awarded. An inter-chapter membership contest is also being considered, the losers to provide a banquet for the winners.

DELTA (Lansing), held first meeting of what they expect to make a banner year on September 15.

EPSILON (London), has been going strong right through the summer. One of the highlights of the summer was a visit by chapter members to "Radio Olympia". The local short wave contest is progressing with enthusiasm. Ward has a QSL from K6-KDX and Simms one from VK2BC.Caulfield now has a set going and reports on the Spanish stations for He is receiving COCX (11.65) daily.. The chapter plans to start publication of the British Globe Circler again. Subscription will be 3/6 per year.A.G.Ward,237 Court Rd Eltham, London S.E.9, will act as Editor and R. M. Kiley as printer. News should be in Mr. Ward's hand later than the 20th of month. Chapter meetings are the last Tuesday in each month at 45 Essex St., Strand, London W.C.2. Any members or other dx'ers residin London, or visiting that city, will be welcome at the meetings.. EPSILON plans to engage in membership contest with chapter in New York City, said contest to get under way October 1.

GLOBE RADIO DX'ERS (Australia), added several more members in membership contest, which is being vigorously backed by "Teleradio", official publication of the GRDA. Teleradio has furnished a printers cut to the GRDA and are paying for having dodgers printed advertising the GRDA and their publication. The IDA-GRDA is deeply indebted their interest and Teleradio for support.. Thanks also to VK 3JE. VK2KV,VK3RI,VK5HR,VK3HF and VK3AC for the special broadcasts dedicat ed to the IDA-GRDA. Arthur Preece of 61 Lipson St., Adelaide, South Australia, is Australian General-IDA Representative in charge of all IDA-GRDA activities there.

REGINA JUBILEE (Regina) - Following are the results of the local DX contests for past season: Short-Wave- Ansell 9449, Newton 4556, West moreland 2028, Hodges Sr.1739, Dickenson 1139, Johnston 1029, Thompson 861, Corbett 791, Hodges Jr.588, Wehner 504; Broadcast Band-Westmoreland 1827, Dickenson 1428, Ansell-518, Newton 368, Johnston 334, Corbett 334 and Hodges Sr.334. REGINA has started regular meetings again and is all set to make this the best season yet. It is rumored that CALGARY FOOTHILLS intends to give Jubilee a good race for top notch honors this year.

<u>CALGARY FOOTHILLS</u> (Calgary), have held first meeting of new year and have launched into a vigorous mem-

bership drive.

BETA (New York) will have a few surprises to pull this seeson and are getting an early start, not only to trim their British cousins but to bid for top honors. For information on BETA chapter, contact Ed.Goss,812 Prospect Pl, Brooklyn.

LOS ANGELES: All members in L.A. area wishing to see a local DX chapter started again, and who will support it, kindly write to IDA HQ at once.



LEADING MICHIGAN DX FRS CONFER Left to Right are: Homer Hughes of Lansing, C. M. Bolton of Detroit, John DeMyer of Lansing, Michigan, Irving Goodeve of Kalamazoo and Howard Eck of East Lansing, Michigan. It is with sadness we must record the passing of Ed. Wetton of Sydney, Australia, former IDA Rep. for N.S.W. Although an invalid for many years, Mr. Wetton was an ardent dx'er and always cheerful, enthusiastic and energetic—

IDA STAMP GUILD: The following members have already pledged their support and wish to correspond with other stamp enthusiasts: Jas. T. Spalding, 531 Warwick Ave., Louisville, Ky; L.C. McCormick, 73 Baird St., Invercargill, N.Z.; J.J. Barlow, 2803 Woolsey St, Berkeley, Calif; A. J. Paul, Rt. 2, Box 279, Austin, Texas; R. Schofield, Stamp Window Ltd., Missoula, Mont; Elwin Smith, Harrah, Mrs.C.Morrison, 1018 North Wash: Prairie St., Bloomington, Ill... plan features of unusual interest our stamp collecting members and wish all interested in this hobby to contact IDA HQ at once.

Write Walter Mischek, of So. Norwalk, Conn. for information concerning the Beson Stamp Exchange Club. Membership, including magazine subscription only \$1.00 per year.

IDA AMATEURA GÜILD: We wish to compile a directory of all IDA mem bers, who are amateurs, at once. Send details concerning your rig to Hugh Compton, W6MKW, Box 752, San Diego, Calif. Hugh was formerly W6-AUB, KDLK, WBD, WBE, KFFU, KITX, KDTG, KDTJ, KODR and KERJ.

VK2ZE,8 Kooba St., Leeton,N.S.W., Australia, operates on 1380kC, with 25 watts.J.H. Woodman is the op. The station is on Sundays at 7:30am EST. VK2ZE will dedicate several programs to the IDA.

INTERNATIONAL DX CONTESTS Entries are beginning to pour in International BCB and SW for the Contests being sponsored by IDA to determine Champion Dx'ers for 1936 -1927 season. Send in your entry fee of 50¢ at once to IDA Contests Director, J. Dickenson, Box 95, Regina Canada. A registration number, handrating and detailed rules icap will be furnished each entrant. few back copies of the September still available Globe Circler are giving full information on the con These contests are open to tests. DX'ER, whether belonging to ANY the IDA or not. This contest is being supported by leading Radio Clubs and periodicals and will be the biggest event of this kind ever staged. Awards will be well worth every effort expended on the contest, and the list of prizes will be published in December. The sooner you enter the better are your chances for victory. We EXPECT EVERY IDA MEMBER to get behind the contests, BOOST THEM, ADVERTISE THEM, and most important of all, ENTER THEM. ENTER TODAY!

The proposed VK6ME reception duel between members Amlie and Thomas has been definitely cancelled.

Ray LaRocque, BCB Dx Editor of All-Wave Radio Magazine, 135 Highland St., Worcester, Mass., will be glad to furnish any member data on the BCB Contest being sponsored by the above named publication.

A tri-state, Washington, Oregon and Idaho, DX Contest is proposed by W.Russell DuCette, of 314 Union St, Seattle, Washington. All members in these states contect Mr. DuCette. Such a contest would be in connect ion with the International DX Contests and each entrant would also be expected to enter the major contests and send in registration fee to Contests Director Dickenson

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

Convention Director, George C. Sholin of 55 Lapidge St, San Francisco California, states Mr. Leland W. Cutler, President of the Golden Gate International Exposition has expressed his interest in the DX Con vention to be held in connection with the Exposition.

Beautiful four-color official Exposition stickers 1-5/8" X 21" perforated sheets of 20 stamps each are now available. Cost to IDA members or other interested dx'ers will be about 35¢ per 100. Write to Mr. Sholin and tell him how many you would like to order. As soon as sufficient orders have been guaran teed Mr. Sholin will be able place a blanket order for stickers -We believe every member will want to start advertising the DX Conven tion and Exposition by placing the stickers on your envelopes.

TDA two-color letterheads on Hammermill bond,70 per 100 or \$1.25 per 200 sheets post-paid in the United States or Canada. Add few cents extra for foreign postage.

Robt.B. Hammersley, 73 Bond St., Galt, Ontario, Canada, would like to exchange SWL cards with other I.D.A. members.

Members of 6th District- Please send in a list of your veri's as you receive them to 545 Baker St., Lansing, Mich., or to your State Manager (J. DeMyer) .. New veri's reported: LT3. Strasbourg (R. Tomlinson-NY); Strasbourg (Ray Lewis, Ohio); Strasbourg (E. Goss, NY); Strasbourg Bordeaux, Milan, Turin, Maroc, Alger, LR1, LR3, LRL (C. Forestieri, NYC); Strasbourg (R. Swenson-Ill) LR1,3GI,TIPG (J.Brauner-NY).. Account heavy QRM from electric fans have not used receiver more than six or seven days this summer (L. Miller-Ill) .. Congrats: to Joe Miller of Beta Chapt. Brooklyn, NY, for being appointed new S.W Editor for Short Wave Craft. G. Sholin of San Francisco, Calif, is doing some more FB stories for All-Wave Radio.. Lets all drop a line to R. Stockdale, 731 Elberon Ave, Zanesville, Ohio, for many months.. Have added a Miller two-stage preselector to my equipment, which works very fine (Smith, Calif). Am testing a new V type doublet 85' long and 100' above

ground, running E-W, which really brings them in (J.Maguire-Alta). Herman Koschmidder, of Bloomington, Ill., dx'er & stamp collector, now has a wife to help twist the dials, while it is rumored Mike Michelson, of Mpls, Minn will be taking the leap before long. Howard Eck, of Lansing, Mich., is vacationing in Canada. Dave Thomas of Proctorville, Ohio will take in the World's Series in NYC. J.Spelding, Louisville, Ky, has landed fine WPA position.



IDA N.Y. STATE MANAGER EDWARD GOSS BROOKLYN, NEW YORK





IDA MEMBER ROY CATTELL CHIEF OP. S.S. MAYAN, AT CRISTOBAL, CANAL -ZONE



LISTENING POST OF, CARL FORESTIERI -THE BRONX OWL-



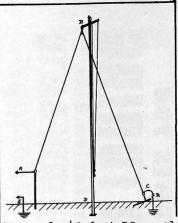
RUDOLPH KURE CINCINNATI,OHIO Above (Listening Post)

THE BRUCE AERIAL SYSTEM

(Data from African Radio Announcer)

The Bruce Aerial System, which was tested by the Technicians of the African Radio Announcer, was found to be exceptionally efficient on the short-wave bands from 13 The increase in signal 51 meters. strength for the Bruce System over an ordinary horizontal, inclined or vertical single wire type was as follows:- On the 16 meter band signals 3 to 4 times strong. On the 19 meter band signals twice as loud. On the 25 meter band signals twice On the 31 meter band signals alas loud. most twice as loud. The 19 meter band showed a slight increase in signal strength.

Ordinary aerial wire can be used but it is important to connect the aerial to the right point on the aerial coil of the receiver. When you have completed the new large feet; AD equals DC equals aerial tune in a 16 meter station and try the aerial on different points of the large feet; AD equals DC equals the aerial on different points of the large feet; AD equals DC equals the aerial on different points of the large feet; AD equals DC equals the aerial on different points of the large feet; AD equals DC equals the aerial on different points of the large feet; AD equals DC equals large feet; AD equals serial coil until the best position is 400 ohms non-inductive re-If on your receiver the grid bias sistance. found. to the grid of the first tube passes thru



the aerial coil, you should put a .001 mfd condenser in series with the aerial so that grid bias cannot ground via the 400 ohm resistance at the far end of the aerial system. In cases where the aerial coil is only coupled capacitatively or inductively to a secondary coil, which feeds the grid of the first tube, the aerial can be connected direct to the coil. If you find it difficult to tap directly to your serial coil aerial to the ordinary aerial terminal, but a you may connect the variable condenser of say .0001 mfd should be connected in series with the aerial so that your aerial can be permanently tuned to the best position.

The lead-in from the inclined portion of the aerial to your receiver

should be as short as possible.

The Bruce Aerial is directional and should point towards the direct-

ion from which most stations are expected to be received.

The Aerial can easily be hauled up and down from the top of the mast by attaching it to crosspiece which is in turn fastened to a pulley for raising or lowering it as illustrated.

The 400 ohm resistance should be connected between one end of aerial and a metal plate or some other device for grounding, which is buried at this point. The strain from the aerial should of course not be borne by the resistance but should be attached directly to the ground via an insulator.

we will be pleased to learn how this aerial works out for you- Ed.

NEW I. D. A. MEMBERS

Mrs. Ida P.Rogers, Dearborn, Mo. Jacques Gaujal, l Avenue de la Republique, Beziers (Herault, FRANCE Mrs. Inna Marr, Radio Center, Moscow U.S.S.R Royal Bailey, Pacific Palisades, Cal

David Hutchinson, Manchester, Conn. David E. Evans, Staff T.S. M. V. Manoora, Australian Ports, AUSTRALIA. L.G. Mackie, Mt. Isa Mines Ltd., Mount Isa, Queensland, AUSTRALIA.

Mrs.L.H.Clifford, Box 25, Thursday Island, Queensland, AUSTRALIA. Arthur Green, East Liverpool, Ohio. Thaddeus L. Grabek, Niagara Falls, NY Kenneth Young, 412 Walnut Street Erie Pennsylvania.

Erwin L. Frost, Superior, Wisconsin. Glenn Watt, Chanute, Kansas. Fred Dear, Calgary, Alta, Canada.

James Dunyak, Phoenixville, Penna.

APPOINTMENTS FAD SHORT WAVE DIRECTOR
A.E. MacLean, 1640 Tenth Ave, West, Calgary, Alta, Canada.

STATE MANAGER.

Edward Goss, 812 Prospect Place, Brooklyn, New York. ****



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precisely built, radio-musical instrument that will thrill you with its marvelous super performance...glorious achievement, a highly perfected, crystal-clear "concert" realism ... and magnificent foreign reception. The Dual

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CIRMS THENTES SOUTH (LESS TUBES 74 ADVANCED 1937 FEATURES This Super DeLuxe Midwest is so powerful,

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Town

State

Short-Wave News

7:30-8sm EST. MACAO, CHINA. 9.67mc 7:30-8sm EST. MACAO, CHINA. 9.67mc OCT 12, MONDAY IDA PROGRAM CON OCT 16, FRIDAY See Note CON NOTE: Special program of a troop "Braga-Zinho" using native instruments and a girl singer. Send reports to J. Estrela. Government Broadcasting Station CQN, Post Office Bldg, Macao.

HERE AND THERE: Tests by the Zenith Radio Corp. prove that an ordinary doublet has five times the signal strength at right angles to the direction of S.W. signals that it has pointed directly at the station. .. If you can't get a close enough reading on your S. W. dial, try using a magnifying glass or a microscope.. W. S. Paley, Fres. of the Columbia Broadcasting System has established a permanent annual award to be presented to the amateur who has contributed most usefully to the American people in research, technical development or operating achievement.

. Kindly report any important bit of short-wave news at once. Regular monthly short-wave reports should be in this office by the 17th. Write side page only, double space lines, divide items into continents and always state time used. Items in relative order of importance are: new stations; frequency or schedule changes; identifying signals; commercial schedule tips; addresses, station photos and unusual receptions. Number of stars denotes importance of item. Four stars is highest rating given. How many four-star items (****) can you turn in?

(E.S.T.) NORTH AMERICA-CENTRAL AMERICA (Megacycles used) CGO, 4.505, Ocean Falls, B.C., with woman at mike, heard call-CANADA

ing Vancouver at 11:15pm EST (* Sholin)

TIPG, San Jose, is being heard on 6.41mc only at present (Ox rieder) ** TI4NRH, The Voice of C.R., Heredia, owned by A. Cespedes Marin on 9.67mc, transmits from 9-10pm and 11:30-midnight daily. Power is 200 watts. Identification signals include triple call of cuckoo, a rugle call and the call in code. Send 5¢ U.S. stamp for reply in form of a FB veri! 7½ by 12½" suitable for framing (Oxrieder, Roberts, CSWRC)

CUBA Address of COCQ, 9.746, is F.O.Box 1373, Havana. Slogen is "RCA Victor La CASA de las Medias" (R.N.) ** COCX, Casa Lavin, Edificio-Calles, Oficio y Obrapia, Havana, heard anywhere from 11.10 to 11.65, has settled on 11.43mc for the present. Power 2kW. Announces in Spanish and English and has a set of gongs. Transmits from 5pm to 10pm or later (Graham, Oxrieder, Andrews, Sholin, Gozen, Deibe, Balbi, Forestieri, Roberts) ** Mystery Cuban with gong identification heard on 8.8mc, near 8:30pm

EST. Call sounds like CMRE or CMRX (Graham, Johnson)

D.R. HIG, 6.29, G as in Galveston, Trujillo City, broadcasts irregularly as late as llpm (Roberts) ** HIN,N for Normandie or for Nebrasks, Voice of the Dominican Political Party, Trujillo City, D.R. four-note identification signal and makes announcements in English, Spanish and French. Power is 750 watts. Transmits on 11.20mc from 11:40am-1:40pm and 4:40-5:40pm; on 6.245mc from 7:10 to 9:10pm (Putnam. Oxrieder, Petton, Metzger, Grehem, Koberts, Morrison) ** HIX, Trujillo, is using a new frequency of 6.3 hmc since Sept 15 (Oxrieder) * HIIA, A for America, La Voz del Yaque, Santiago de los Caballeros, 6.19mc, transmits from 10:40sm-1:40pm and 6:40-9:40pm, Sundays 7:40-9:40pm. Chimes simi-Signs off with "All Hands" (CSWRC) * HI3C, La Romana lar to NBC used. has moved slightly to 6.73mc (Oxrieder) * HIRA, Trujillo, is operating near 6.477mc (Oxrieder) * HIRQ, La Voz de Los Muchachos, Trujillo City, reported on 6.38mc (Roberts), but reported on 6.21mc by Oxrieder.

HH3NW, listed on 6.35mc, is supposed to be on 6.135mc, accord ing to statement of owner, IDA member G. Ricardo Widnaier, who also owns HH3W of Port-au-Prince... HH2T, Port-au-Prince, heard on 11.57mc, broad-

casting program from 8:30-9pm (Twomey)

Program dedicated to a different western state each week is being transmitted to CBS on Thursdays at 12:30-lam by KKH, 7.52 and KIO, 11.68mc (** McWarren, Balbi, Ambrosius) * K6XO, 16.03, Kahuku, calls JFZC, 13.24, S.S. Chichibu Maru at 4:45 and 9:25pm (Sholin)

VRR4,11.595,Stoney Hill, works WNC, 15.06, Hislesh, at 10am

and 5pm and irregularly (Graham)

MEXICO XEWI, 11.9, Mexico D.F. transmits a special program for

European listeners, Sundays from midnight to 3:30am (** Graham)

teur XE2HF, issues a fine QSL card 7 X 10" in size (Chas.Miller)

NICARAGUA YNLF, Managua, is operating at present on 9.66mc (*Oxrieder)

** YNLGC, La Voz de los Lagos, heard on 6.58mc near 10:15pm (CSWRC)

TRINIDAD New station believed to be at Port-of-Spain reported on

approximately 10.35mc between 6 and 8pm (NRC)

U.S.A. The Empire State Bldg (NYC), television transmitter is undergoing alterations, probably to prepare for 450 line scanning (** Bragdon) ** F.C.C. has added following frequencies for experiment— (** Bragdon) ** F.C.C. has added following frequencies for experimental purposes: 38.9,39.1,39.3,39.5,39.7,39.9,40.8 and hl.lmc. (FCC) **
FCC has granted WNC additional frequency of 9.355mc. WNC, 15.055,
Hisleah, Florida, calls following stations at 9:45em: HPF, 14.485, Panama
City; TIU, 14.485, Cartago, C. R.; YNA, 14.485, Managua, Nicaragua; HRF,
14.485, Tegucigal pa, Honduras; HRL5, 14.485, La Lima, Honduras; YSJ, 13.41;
San Salvador; WCT, 13.41, San Juan, P.R.; HII, 14.93, Trujillo City; VRR,
11.595, Stoney Hill, Jamaica; HJE, 14.93, Bogota, Colombia and HJAZ, 14.93,
Barranquilla, Colombia (Gozen) *** WOEH, has been installed aboard Airaraft NC223V (KHAIR) owned by H. P. Husbar for filtsh around World YSJ, 13.41 craft NC223Y (KHAIR), owned by H.R. Hughes, for flight around World. Main frequencies will be 4797.5, 6.425, 8.655, 12.862 communication , WQW, WQP and WQH will act as contact stations (FCC) WKP 17.31mc. New apex station $\underline{W3XEY}$, 31.6mc, 100 watts heard relaying \underline{WFBR} of Beltimore (Roberts) ** New general experimental station $\underline{W4XAD}$, owned by University of Florida at Gainesville granted license by FCC.

-SOUTH AMERICA-ARGENTINA LSN, 9.89, Buenos Aires, broadcasts Thursdays at 6pm (* Earl Roberts) * Best amateurs at present, 6:30-8pm: LUIDJ, 14.29; LU2HN, 14.28 LU7VP, 14.09 and LU7MB 14.06mc (Roberts)

New amateur CPlAA, llmc,50 watts, located at La Paz, being

heard near 7:45pm (Goodeve, DeMyer)

Best amateurs heard 6-8pm: PY2AR 14.4, PY2BA 14.122, PY2CA

14.06, PY2CK 14.09, PY2CM 14.09, PY2CU 14.38 and PY7BB 14.035mc.

B.GUIANA VP3MR, Georgetown, although announcing frequency as 6.01, is actually on 5.997mc. Sked is 4:45-9pm EST (** Oxrieder, Thomas) ** VP-3BG, Georgetown, announces frequency as 6.13mc. Also transmits on amateur frequencies of 14.13 and 14.3mc, 6-9pm EST (Thomas, Roberts)

CED at Antofagasta is on 10.225mc, with about the same sked as CEC, Santiago, whom it contacts (* Oxrieder) * Amateur stations heard between 7:30 and 9:30pm and also around 2-3am: CEIBC 11.07, CE3AC

14.09, CE3AG 14.4, CE3DG 14.38, CE3EM 14.38 and CE3QJ 14.295.

COLOMBIA New station, Rediodifusors Colombians, La Voz de Armenia, Armenia, heard Sept 11,12 and 13, heterodyning W2XAF and transmitting on frequency of 9.531 to 9.533mc. Spanish announcements only (** Oxrieder, Morrison, Futnam) * HJlABB, Barranquilla, now on aprrox. 6.132mc (Oxrie-* HJ1ABG Barranquilla, is heard at times on frequency of 6.0425mc (Oxrieder) * HJlABE, Cartagena, 9.5mc, is again broadcasting DX programs Monday nights from 9:30-10:30pm (CSWRC) * HJIABP, 9.616, Cartagena, has been signing off at 10:15pm (Forestieri) * HJ2ABC, La Voz de Cucuta, Cucuta, and not HJ3ABF, as reported last month, is the station wandering around from 9.588 to 9.597mc (Oxrieder) * HJ2ABD, Bucaramanga, after a long silence is again being heard near 5.987mc (Oxrieder) 6.17, Bogota, usually haterodyned by XEXA until llpm (Oxrieder) *HJ2ABX, 6.122, Bogota, is reported on the air Sunday nights also (Horne) 4ABA, 11.71, Medellin, transmits from 11:30am-1:30pm only at present (Horne) * HJLABD, La Voz de Catia, Medellin, is very unstable, but is being heard in the vicinity of 5.93 at present (Oxrieder) Medellin, has moved to 6.0975, his assigned frequency (Oxrieder) * Best heard amateurs are: HK1Z, HK3AP 14.35 and HK3JA 14.03.

ECUADOR HC2CW, Guayaquil, being heard near 8.2mc recently. Is usually

on the air from lopm to llpm or later (Oxrieder) ** New amateur HCLETC located at Bolivar Theater, Quito, is on 14.075, irregularly between 11pm Operator is an American named Sandy (Goodeve, DeMyer, Stark) *

New amateur HCIKCS, 14mc, being heard near 10pm (Roberts)

OALAA, 14.265, is no longer on the air (Roberts) * Amateur,

OALAI, A-America, I-Italy, limc, being heard near 6pm (hoberts)

VENEZUELA YV2RC, Radio Caracas, 5.8mc, transmits daily 1:15-9pm, Sundays 8:30-11:30am and 3:30-9pm * Best heard amateurs at present are: YV5AA 14.135, YV5AM 14.062, and YV5AA 14.16mc, all heard between 5:15 and 6:45pm (Hock, Roberts)

EUROPE

Amateurs best heard 6-7:30pm: ONLVK 14.1 and ONLCH 14.14mc BELGIUM OLR, 15.23 (on 11.76 and 6.115 irreg), Czechoslovak Broad-CZECHO-SLOVAKIA casting Corp. Prague, is transmitting 4-6am, llam-lpm daily; 2:25-4:35pm To North America, Monday and Thursday 9-11pm. Interval signal is great cathedral bells. Deep pitched hum on carrier. Announcement, "Here is Prague". English news at 1:15pm. Woman makes station calls in English (** Metzger, Caldwell, Duncan, Levison, Peters,

Roberts, Guilbert, Graham, Morrison, Putnam) London television station located in Alexandra Palace, atop 300-foot hill, has started experimental transmissions using both the Baird and Marconi systems. Sight frequency 45mc, sound frequency 41.5mc. Emitron instantaneous television cameras are used for scanning (Stansfield,BBC) * G8 is not a regular amateur zone but used by newly licen-

sed hams with a maximum of 10 watts input (Campbell) * Amateurs, G6HW, 14.13, G6VX 14.08, and G6CW 14.12 are being heard from 6-7pm.

FRANCE The new French Govt. S.W. transmitters will probably not be completed before the first of the year. FYD, a French phone on 13mc. was heard testing at 11:30pm (* Chas.Miller)

GERMANY

DJR, 15.34, broadcasts for Brazil and Chile at 4:50pm.

Sundays DZC, 10.29, transmits to Argentina at about 8:45pm; DZE, 12.13 and DJL, 15.11, transmit to Mexico from 9:15 to 9:45pm (* Roberts) DJL, 15.11, transmits to North America 8-9am daily.

HOLLAND Present sked of PCJ, Eindhoven is: On 15.22mc, Tuesday 4:30 to 6am to Australia and N.Z; Wednesday 8 to 11am to Asia; On 9.59mc, Sunday 2-3pm to Africa, Tuesday 1:30-3pm to Africa and Wednesday, 7 to 10pm to North America. Sked of PHI, Huizen, 17.77mc is: Mon, Thurs, Friday and Saturday 8-llam and Sunday 7-10am (** Laul, Patton, RMA)

HUNGARY A new station on 13.685, using cell HAT has been heard test

ing in the evenings on the Pacific coast (J.W.Partner)

I.F.S. ITALY A new amateur EIRG, 14.025mc, heard at 6pm (* Roberts) (chel. IlIT, 14.35 and IlKS, 13.36, heard between lOpm-lam (Schmei-NORWAY New LKJl, 9.53, Jeloy, will be testing shortly (* Herz)

New station, CSW, National Broadcasting Station of Fortugal at Lisbon, 9.55mc, is broadcasting frequently up to 6pm. Relays the national program of Portugal (*** Oxrieder, Hutchinson) * CTIAA, Radio

Coloniale, Lisbon, decidedly unstable in frequency, is now on 9.664 (RO) SWEDEN Amateur SM5SX, 14.344, is being heard 6-8pm (Goodeve. Miller Spanish mystery station, announcing "This is Spain", on 7.23 mc, transmits news bulletins in English and Spanish irregularly from 7:45 to 8:15pm (** Oxrieder) * Spanish emateurs are using the 7mc band

principally, at present from 2 to 7pm (Guilbert) ** War news is given over EAQ, 9.86, in several languages, including English at 9:15pm (Laul) SWITZER- HBO, Geneva, 11.402, transmits League of Nations bulletins to LAND Australia, Mondays from 12:30 to 1:30am (** Balbi, Ambrosius) New frequencies of commercial stations: HBF 18.45, HBJ 14.535, HBO 11.402 (All-Wave Radio)

<u>U.S.S.R. RAN, Moscow, now on 9.6mc, transmits daily 6-7pm in Spanish,</u> 7 to 7:30pm in English and Sun, Wed and Fri 7:30 to Apm in German (Ox-

rieder, Sholin, Peters) * RRR, Khabarovsk, 15.95mc, heard calling Moscow at 7:45em. RVU, Vladivostok, 17.01, calling RRR at 6:15em. RIO now on 10.16 -AFRICA -Miller <u>FVA</u>, 8. 963, Alger, works <u>TYA2</u>, 9. 037, regularly at 1:30am (C.

CANARIAS EHZ, 10.37, El Tablero, broadcasts news in French, Spanish, German and English between 2:40 and 3:10pm and 6 and 8pm (** Oxrieder, Guilbert) ** EDX, Las Palmas, Gran Canarias, 10.74mc, has been playing phonograph records and reading Spanish news bulletins near 9:30pm. Says "attencion, attencion", before announcing (Oxrieder)

SUZ, 13.81, Cairo, calls GBB, Rugby, 13.595, at llam (* J. Miller) Watch for the following hams between 3 and 6pm: SUICH, 14.31, SUIKG 14.04, <u>Sulrk 14.275, Sulsg 14.4, Su5nk 14.06, Su8ma 14.1</u> (** J.Miller, Messer, Peters, Goodeve, Roberts)

ETHIOPIA IUC, 11.955 and IUB 7.62, of Addis Abeba, are testing with speech and music with IBR, 14.36, Rome, Italy. The Addis Abeba stations have been reconstructed and now use a power of lokw (Egyptian Radio)

VQG,19.63, Nairobi, heard working GAD, Rugby, 19.48, st 8-9am and 9:12am (** Chas.Miller)

MOROCCO CNR, 12.83, Rabat, works Paris at 11:15am and 4-5pm (C.Miller)

SO. AFRICA ZSS, 18.89, Capetown, works GAU, Rugby, 18.62, at 6:30am (Miller -ASIA-AUSTRALASIA-

AUSTRALIA A new short-wave station located at Brisbane, will soon be testing from 3 to 4am on 13.955mc (** Teleradio) * VK3ME, 9.495, Melbourne, is transmitting irregularly from 2-3am. VK6ME, Perth, may not be on the air for some time yet ** VK8SC, The Flying Doctor, station at Port Hedland, 6.96mc, operates Sundays from 4:30-5am (Wignell, Sholin) * VJI, Cloncurry, 8.63mc, now uses call VKRXT (W.A.W.N.) ** VK9MI, aboard * Vol. Cloncurry, 0.65mc, now uses call VKAXT (W.A.W.N.) ** VK9MI, aboard the S.S. Kanimbla, 6.01 and 11.712mc, power 250 watts, transmits daily from 6-6:30am. Call is given as 9MI by a lady announcer. Address reports to McIlwraith and McEacharn, Bridge St., Sydney, N.S.W. * Amateurs reported between 3 and 9am: VK2AZ 14.015, VK6MW 14.03, VK4DB 14.035, VK2OG 14.04, VK2QR 14.07, VK3ZZ 14.07, VK3HL 14.08, VK3HQ 14.08, VK2DI 14.1, VK2BK 14.1, VK2ABD 14.15, VK2AG 14.28, VK2CG 14.29, VK2ADA 14.3, VK2WR 14.31. QRA of VK2ABD is C.C.Galbreith, 77 Drumalbyne Rd, Sidnew NSW (Stark Goodeve DeMyen Schmeichel) new NSW (Stark, Goodeve, DeMyer, Schmeichel)

PNI, Makassar, 8.775, heard phoning Java at 5:30am (C. Miller) CEYLON Colombo, reported on 6.01 and 6.05, being heard from 8:30 to 10am irregularly. Announcements are very infrequent (** Stansfield,TI) CHINA XGOX, 6.82mc, Nenking, heard 6:30-8:30am (Sun to 9:30am). (*Sholin,Balbi) * XOJ,15.785, Shanghai, contacts JVD or JVF between 8pm

and midnight (J.Miller) * XGM, 17.65, Shanghai works GBA at 6:17am (JM). VPD2, new lkW Xmtr. at Suva, came on the air Aug. 23. Transmits FIJI'S

on a frequency of 9.548mc, from 5:30 to 7:10am. Signs off with "Song of the Islands" (*** Kiesling, DeMyer, Sholin, Balbi, Goodeve, Stark, Roberts) New amateur, VS2AK, 14.04, Kuala Lumpur, heard 6:20am (DeMyer) F.M.S. Amateurs, OM2BC and OM2RX, Agana, both on approximately GUAM

14.212mc, are being heard from 2-3:30am (** Sholin, Roberts)

INDO-CHINA A station announcing as Indo-China is being heard on 11.73mc, between 7 and 9:30 a.m. on Pacific coast (Craft)

JAPAN The regular Overseas Broadcasting Schedule has been inaugurated as follows: To Europe, 2-3pm daily, JVP, JVN, JVH, JVA (one or more will be used); To S.A. and Atlantic coast of N.A., 1-5pm daily, JVN, JVH or JVA; To Malay and Java, 9-loam daily, JVN, JVH or JVA; To Pacific coast of N.A. and Hawaii, Midnight to lam daily, JVN or JVH. As soon as the new 50kW short-wave transmitter at Nazaki is completed, which will be sometime this fall, the following official frequencies will be used for all Overseas Broadcasts: <u>JZH</u> 6.095, <u>JZI</u> 9.535, <u>JZJ</u> 11.8, <u>JZK</u> 15.16, <u>JZL</u> 17.785, <u>JZM</u> 21.52mc (**** Akifusa Saito, Jumamoto, Japan) **

JZB 10.96, Shinkio, Manchukuo, works JVO, 10.375, Nazaki, at 5:26am (J.Miller) JZB is on Saturdays at 10:50pm (J.Miller)

JAVA PMA, 19.345 and PLE, 18.83, are broadcasting Sundays between 7-8am (** CSWRC) * YDC, 15, 15, Bandoeng, is being heard widely from 4:30 to 10:30am (J. Miller, Hock, DeMyer) * PMH, 6.72, Bandoeng, is heard with excellent volume from 5:30 to loam EST, on the Pacific coast, with the native Javanese programs (Sholin) * PLV, 9.415 and YBG, 10.43, phone near 5:36am (J.Miller) ** The NIROM network programs heard in the U.S.A. in clude -a Children's Half Hour at 6:25am, followed by the Mayfair dance orchestra and the news in Dutch at 7:25em (F. Andrews) * The smaller orcnestra and the news in Dutch at (:25em (F.Andrews) * The smaller Javanese stations heard from time to time include: PMY,5.14, Bandoeng; YDL2,4.81,Solo; YDC2,3.47,Batavia; YDL3,3.45,Solo; YDL5,3.21,Djokjakarta; YDG3,3.15,Batavia; YDO4,3.17,Soerabaja; YDG7,3.3,Batavia; YDK3,2.91,Semarang; YDV2,3.33,Banderjermasin,Borneo (Tune In) * Amateurs reported 6:30-8em: PK1MK, 45 watts, 14.09, Batavia; PK1MV,14.075 and PK1PK, 14.04mc (Sholin, Schmeichel, DeMyer)

CQN, Macoa, officially announces its frequency as 9.675mc, al-MACAO though actually it is reported almost anywhere on the 31-meter band.

KAZ, 9.99, Manila, heard phoning at 5:30am (* Joe Miller) * KAIBH, 14.24; KAIME, 14.14 and KAIVH Amateurs reported from 3-llam:

14.12 (YL operator), (Sholin).

HSAPJ, Bangkok, is reported on 19.02mc, Mondays 8-10am by Rene Plieber in Algeria. Usually broadcasts on 10.955mc. HSRPJ transmits on 8.35mc, Thursdays from 8-10am. According to the Chief Engineer of the station there is no Siamese station HSH (** Plieber, NRC) * HSP, Bangkok, 17.74mc, heard calling Berlin at 5:47am (Schmeichel).

The new Javanese station is YDC, 15.15, Bandoeng, STOP PRESS NEWS: Transmissions experimental only. (*** Hardeman-NIROM) Power is 3kW. CR6AA, Lobito, Angola, is now on 9.66mc, Wed/Sat 3:45 to 5:30pm EST.

SHORT-WAVE BROADCASTING STATIONS NOTE: Commercial stations shown in September G.C. SYMBOLS: No New

NOTE: Comme	rcial st	tations	shown in Septembe	r G.C. SYMBOLS: N- New
stations; F	- Change	es in i	requency; S- Chang	es in schedule; C- Changes
in irequenc	y and so	cueante	; B- Frequency cal	ibrations according to 0x-
rieder- IDA	Frequer	icy Bur	eau: D- Unstable f	requency.
DIAL METER		CALL	STATION	TIME E.S.T.
<u></u>		W8XK	Pittsburgh, Penna.	6:45-10am.
<u>\\$</u> 13.94	21.52	W2XE	Wayne, New Jersey.	
N13.94		JZM	Nazaki, Japan.	Will be on the air shortly
13.97	21.47	GSH	Daventry England.	6-8:45, 9-11:30am.
16.86	17.79	GSG	Daventry, England.	6-8:45,9-N'n,3:40-5:45pm.
N16.87	17.785	JZL	Nazaki, Japan.	Will be on the air shortly
<u></u> <u>s</u> 16.87	17.78	W3XAL	Boundbrook, N.J.	Uem-bom
<u>s</u> 16.88	17.77	PĤI	Huizen, Holland.	M,Th,F,Sa 8-11am,Sun 7-10a
16.89	17.77 17.76	DJE	Zeesen Germany.	12:05-5:15,5:55-11am.
18.71	16.03	KKP	Kahuku Hawaii.	Tu 12:30-lam. Thur 1:30-2am
19.52	15.37	HAS3	Budapest Hungary	Sunday 0 10 - 2am
<u>s</u> 19.56	15.3	DJR	Zeesen, Germany.	Sunday 9-10am.
19.57	15.34 15.33 15.31 15.29		Schenectady, N.Y.	8-9am to Central America.
19.60	15 21	GSP		10am-3:45pm.
19.62	15.00		Daventry, England.	
si9.63	15.28	LRU	Buenos Aires, Arg.	7am-3:45pm.(pm to S.A.
- B10 (I	15 27	DJQ	Zeesen, Germany.	8:15-11am,6-8am,4:50-10:45
S19 • 64	15.27	W2XE	Wayne, New Jersey.	1-6pm.
<u> \$19.68</u>	15.243		Pontoise, France.	2-2:40am, 5:55-11am. 19M
<u>s</u> 19.70	15.23	OLR	Prague, Czecho-	4-6am, 11am-1pm, 2:25-4:35pm
	35.00		slovakia.	Mon/Thur 9-11pm to N.A.
<u></u>	15.22	PÇJ	Eindhoven, Holland	Tu 4:30-6am. Wed. 8-11am.
S19.72	15.21	w8xx	Pittsburgh, Penna.	10am-8pm.(-10:45pm to N.A.
S19.74	15.20	\mathtt{DJB}	Zeesen, Germany.	12:05-5:15,5:55-11am,4:50
19.76	15.18	GSO	Daventry, England.	12:15-3:40pm.
19.76 19.76	15.18	RV96	Moscow, U.S.S.R.	Sunday 1-2pm. to N.A.
N19.79 N19.80	15.16	JZK	Nazaki, Japan.	Will be on the air shortly
N19.80	15,15	YDC	Bandoeng, Java.	5:30-10:30am.
19.82	15.14	GSF	Daventry England	9am-N'n,3:40-5:45pm,9-11pm
			za tonor y jungrand.	Jamen Habbarathan 14 Juma Jerribu
1 179 OTT	15.12	HV-I	Vatican City Ttoly	r 10.20-10.4 E
19.84 S19.85	15.12 15.11	DJT. HVJ	vatican City, Italy	y 10:30-10:45am.
S19 .85	15.12	DJI.	Vatican City, Italy Zeesen, Germany.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am
S19.85	15.11	DJI.	Vatican City, Italy Zeesen, Germany.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A.,Sundays 6-8am.
S19.85 19.91	15.11 15.07	DJI. RKI	Zeesen, Germany. Moscow, U.S.S.R.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A.,Sundays 6-8am. Sunday 10-11am.
S19.85	15.11	DJI.	Vatican City, Italy Zeesen, Germany.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W
S19 • 85 19 • 91 20 • 04	15.11 15.07 14.97	DJL RKI LZA	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgaria.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm.
S19.85 19.91	15.11 15.07	DJI. RKI	Zeesen, Germany. Moscow, U.S.S.R.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm.
\$19.85 19.91 20.04 \$20.55	15.11 15.07 14.97 14.60	DJL RKI LZA JVH	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgaria.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg.
\$19.85 19.91 20.04 \$20.55	15.11 15.07 14.97 14.60 13.635	DJL. RKI LZA JVH SPW	Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon.Wed.Fri 11:30am-12:30pm
\$19.85 19.91 20.04 \$20.55 22.00 \$N23.01	15.11 15.07 14.97 14.60 13.635 13.04	DJL RKI LZA JVH SPW HC2FA	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon.Wed.Fri 11:30am-12:30pm
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52	15.11 15.07 14.97 14.60 13.635 13.04 12.235	DJL RKI LZA JVH SPW HC2FA	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00	DJL RKI LZA JVH SPW HC2FA TFJ RNE	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm. (6-7am
\$19.85 19.91 20.04 \$20.55 22.00 \$N23.01 24.52 25.00 25.09	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955	DJL RKI LZA JVH SPW HC2FA TFJ RNE	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R.	y 10:30-10:45am. Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon,Wed,Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm. Sun 6-7.10-11am.Wed
\$19.85 19.91 20.04 \$20.55 22.00 \$13.01 24.52 25.00 25.09 \$25.21	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.90	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI	Moscow, U.S.S.R. Sofia, Bulgaria. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30pm Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed) 1a tests with Rome 3-4pm.
\$19.85 19.91 20.04 \$20.55 22.00 \$25.01 24.52 25.00 25.00 25.21 \$25.24	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.90	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon,Wed,Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am,Wed ita tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am.
\$19.85 19.91 20.04 \$20.55 22.00 \$25.01 24.52 25.00 25.00 25.21 \$25.24	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8, 10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed) ia tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am. 2-2:40am, 2:55-5,12:15-6pm.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.00 \$25.21 \$25.24 \$25.27	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.90 11.885 11.87	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-1am, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed) ia tests with Rome 3-4pm. 8pm-mid., Sun. mid-3:30am. 2-2:40am, 2:55-5,12:15-6pm. 8-11pm.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.21 \$25.24 \$25.27 25.29 \$25.36	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.90 11.885 11.87 11.86	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed) ia tests with Rome 3-4pm. 8pm-mid., Sun. 13:30am. 2-2:40am, 2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am, Sat 8pm-Sun 3a
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.21 \$25.24 \$25.27 25.29 \$25.36	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.885 11.887 11.886 11.83	DJL RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethion Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne. New Jersev.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30pm Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed) ia tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am. 2-2:40am, 2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am, Sat 8pm-Sun 3a 6-11pm.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.21 \$25.24 \$25.27 25.29 \$25.36	15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.885 11.87 11.86 11.83	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethion Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed is tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am. 2-2:40am, 2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am, Sat 8pm-Sun 3a 6-11pm. Sunday 9am-lam.
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\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.29 \$25.27 25.36 25.40 \$25.42 \$25.44 \$25.43	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.87 11.86 11.83 11.81 11.80 11.79 11.76 11.75	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA 2ROL JZJ W1XAL DJD OLR GSD	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgaria. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethior Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois. Rome, Italy. Nazaki, Japan. Boston, Mass. Zeesen, Germany. Prague, Czechoslova Daventry, England.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8, 10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed is tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am. 2-2:40am,2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am, Sat 8pm-Sun 3a 6-11pm. 11:30pm-3am, Sat 8pm-Sun 3a 6-11pm. Sunday 9am-lam. 25M 6:43am-5:30pm, 6-6:20pm, 6:43am-5:30pm, 6-6:20pm, 6:20-7:30pm Will be on the air shortly 4:30-5pm, Sun 9:45-11am, 2:30-4pm, Wed 4-5pm. 11:35-4:30pm, 4:50-10:45pm kia testing irregularly. 2:15-4:15am,12:15-3:25pm, 6-8pm.
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\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.21 \$25.24 \$25.29 \$25.36 25.40 \$25.40 \$25.43 \$25.43 \$25.43 \$25.49 \$25.53 \$25.58 \$25.60	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.955 11.87 11.88 11.83 11.81 11.80 11.79 11.76 11.75 11.75	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA 2R04 JZJ W1XAL DJD OLR GSD F31CD CJRX	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois. Rome, Italy. Nazaki, Japan. Boston, Mass. Zeesen, Germany. Prague, Czechoslova Daventry, England. Saigon, F. Indo-Chin	Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon,Wed,Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am,Wed ia tests with Rome 3-4pm. 8pm-mid., Sun.mid-3:30am. 2-2:40am,2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am,Sat 8pm-Sun 3a 6-11pm. 11:30pm-3am,Sat 8pm-Sun 3a 6-11pm. 25M 6:43am-5:30pm,6-6:20pm, 6:420-7:30pm Will be on the air shortly 4:30-5pm,Sun 9:45-11am, 2:30-4pm, Wed 4-5pm. 11:35-4:30pm, 4:50-10:45pm kia testing irregularly. 2:15-4:15am,12:15-3:25pm, 6-8pm. a Signs off 9:30am.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.24 \$25.27 \$25.24 \$25.27 \$25.36 25.40 \$25.40 \$25.40 \$25.45 \$25.45 \$25.45 \$25.45 \$25.60 \$25.60 \$25.60	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.885 11.87 11.86 11.83 11.81 11.80 11.79 11.76 11.75 11.75	DJI. RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA 2RO4 JZJ W1XAL DJD OLR GSD F31CD CJRX TPA4	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois. Rome, Italy. Nazaki, Japan. Boston, Mass. Zeesen, Germany. Prague, Czechoslova Daventry, England. Saigon, F. Indo-Chin Winnipeg, Canada. Pontoise. France.	Mid-2am, 11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm, M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon, Wed, Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am, Wed is tests with Rome 3-4pm. 8pm-mid., Sun. mid-3:30am. 2-2:40am, 2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am, Sat 8pm-Sun 3a 6-11pm. Sunday 9am-lam. 6:43am-5:30pm, 6-6:20pm, 6:20-7:30pm Will be on the air shortly 4:30-5pm, Sun 9:45-11am, 2:30-4pm, Wed 4-5pm. 11:35-4:30pm, 4:50-10:45pm kia testing irregularly. 2:15-4:15am, 12:15-3:25pm, 6-8pm. a Signs off 9:30am. 7-12m, S 4pm-1a, Su 3-9:30pm
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.21 \$25.27 25.29 \$25.27 25.36 25.40 \$25.42 \$25.43 \$25.45 \$25.45 \$25.45 \$25.61 \$25.661 \$25.62	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.885 11.87 11.88 11.83 11.81 11.80 11.79 11.76 11.75 11.75 11.75 11.72 11.714 11.712	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA 2ROU JZJ W1XAL DJD OLR GSD F31CD CJRX TPA4 VK9MI	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois. Rome, Italy. Nazaki, Japan. Boston, Mass. Zeesen, Germany. Prague, Czechoslova Daventry, England. Saigon, F. Indo-Chin Winnipeg, Canada. Pontoise, France. S.S. Kanimbla.	Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon,Wed,Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am,Wed Dia tests with Rome 3-4pm. 8pm-mid.,Sun.mid-3:30am. 2-2:40am,2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am,Sat 8pm-Sun)a 6-11pm. Sunday 9am-lam. 6:43am-5:30pm,6-6:20pm, 6:20-7:30pm Will be on the air shortly 4:30-5pm,Sun 9:45-11am, 2:30-4pm, Wed 4-5pm. 11:35-4:30pm, 4:50-10:45pm kia testing irregularly. 2:15-4:15am,12:15-3:25pm, 6-8pm. a Signs off 9:30am. 7-12m,S 4pm-1a,Su 3-9:30pm 6:15-8, 8:15pm-1am.
\$19.85 19.91 20.04 \$20.55 22.00 \$23.01 24.52 25.00 25.09 \$25.24 \$25.27 \$25.24 \$25.27 \$25.36 25.40 \$25.40 \$25.40 \$25.45 \$25.45 \$25.45 \$25.45 \$25.60 \$25.60 \$25.60	15.11 15.07 14.97 14.60 13.635 13.04 12.235 12.00 11.885 11.87 11.88 11.83 11.81 11.80 11.79 11.76 11.75 11.75 11.75 11.72 11.714 11.712	RKI LZA JVH SPW HC2FA TFJ RNE IUC XEWI TPA3 W8XK YDB W2XE W9XAA 2ROU JZJ W1XAL DJD OLR GSD F31CD CJRX TPA4 VK9MI	Vatican City, Italy Zeesen, Germany. Moscow, U.S.S.R. Sofia, Bulgariz. Nazaki, Japan. Babice, Poland. Guayaquil, Ecuador Reykjavik, Iceland Moscow, U.S.S.R. Addis Abeba, Ethiop Mexico D.F. Pontoise, France. Pittsburgh, Penna. Sourabaja, Java. Wayne, New Jersey. Chicago, Illinois. Rome, Italy. Nazaki, Japan. Boston, Mass. Zeesen, Germany. Prague, Czechoslova Daventry, England. Saigon, F. Indo-Chin Winnipeg, Canada. Pontoise, France. S.S. Kanimbla.	Mid-2am,11:35-4:30pm;8-9am to N.A., Sundays 6-8am. Sunday 10-11am. Su 12:30-8,10am-4:30pm,M/W F/S 5-7am, Tu/Thur 1-3pm. 12-lam, Mon/Thur 4-5pm, Tues/Fri 2-3pm and irreg. Mon,Wed,Fri 11:30am-12:30p Monday 8-10pm. Sundays 1:40-2:30pm.(6-7am 3-6pm, Sun 6-7,10-11am,Wed ia tests with Rome 3-4pm. 8pm-mid.,Sun.mid-3:30am. 2-2:40am,2:55-5,12:15-6pm. 8-11pm. 11:30pm-3am,Sat 8pm-Sun 3a 6-11pm. 11:30pm-3am,Sat 8pm-Sun 3a 6-11pm. 25M 6:43am-5:30pm,6-6:20pm, 6:20-7:30pm Will be on the air shortly 4:30-5pm,Sun 9:45-11am, 2:30-4pm, Wed 4-5pm. 11:35-4:30pm, 4:50-10:45pm kia testing irregularly. 2:15-4:15am,12:15-3:25pm, 6-8pm. a Signs off 9:30am. 7-12m,S 4pm-1a,Su 3-9:30pm

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11.63
                                                   Tu 12:30-lam, Th 1:30-2am,
                   KIO
                           Kahuku, Hawaii
D26.25
N26.60
          11.43
11.28
                   COCX
                                                    5-10pm irreg.
                           Havana, Cuba.
                                                   11:40am-1:40pm,4:40-5:40p
                   HIN
                           Trujillo City, D.R.
                                                   Relays NIROM 5:30-11am.
 27.27
          11.00
                   PLP
                           Bandoeng, Java.
27 · 39

$27 · 93

$27 · 93

$28 · 12
                                                   Monday 8-10am irreg.
Tu/Fri 2-3pm and irreg.
          10.955 HS8PJ Bangkok, Siam.
10.74 JVM Nazaki, Japan.
          10.74
                           Las Palmas, Canarias 9:30-10:15pm.
                   EDX
                                                    7-7:15pm.
                   CEC
                           Santiago, Chile.
                                                   4-7:40am, Mon/Thur 4-5pm.
528.14
          10.66
                   JVN
                           Nazaki, Japan.
          10.37
10.35
10.33
N28.93
S28.98
                                                    2:40-3:10pm, 6-8pm irreg
                           El Tablero, Canarias
                   EHZ
                           Buenos Aires, Argen 8-9pm irreg.
                   LSX
                           Ruysselede, Belgium 2:30-4pm.
S29.04
                   ORK
529.24
                           Bandoeng, Java.
                                                    5:30-llam to Sumatra.
                   PMN
           9.89
9.86
30.32
530.43
                           Buenos Aires, Argen Thursdays at 6pm.
                   LSN3
           9.86 EAQ
9.746 COCQ
9.74 CSW
9.67 TI4NI
9.666 CQN
9.666 LRX
9.66 LRX
9.65 YDB
9.65 YDB
9.64 HH3W
9.635 2RO3
9.605 HP51
                   EAQ
                           Madrid, Spain.
                                                    5:15-10pm, Sat 1-3pm.
30.78
□30.80
                           Havana, Cuba.
                                                    Relays CMQ 7am to lam.
                   CSW Lisbon, Portugal. TI4NRH Heredia, C.R.
                                                    Sign-off at 6pm.
                                                   9-10pm, 11:30pm-midnight.
Mon/Fri 7-8:30am.
F31.02
31.04
B31.05
                           Macao, Macao.
                   CTIAA Lisbon, Portugal.
                                                    Tues, Thurs, Sat 3-6pm.
                           Buenos Aires, Argen
                                                    8-9pm.
                                                    6:15-9:45pm.
D31.06
                           Managua, Nicaragua.
F31.09
B31.12
                                                    5:30-11am.
                           Sourabaja, Java.
                           Port-au-Prince, Haiti, 1-2, 7-8:30pm.
31.13
                           Rome, Italy.
B31.20
                   HJlABP Cartagena.Colom.
                                                   "llam-lpm,5-llpm,Sun 5-8pm
 31.23
                                                   11:45-1:15pm, 7-10pm.(8pm
           9.605
                   HP5J
                           Panama City, Panama
F31.25
            9.60
                                                    6-7:30pm; Su, Wed, Fri 7:30-
                   RAN
                           Moscow, U.S.S.R.
 31.25
31.27
           9.60
                           Santiago, Chile. llam-lpm, 9-11pm.
Geneva, Switzerland Sat 5:30-6:15pm.
                   CB960 Santiago, Chile.
           9 • 59 59 • 59 • 59 • 59
                   HBL
                   PCJ Eindhoven, Holland. Sun 7-8pm, Wed 7-10pm.
VK6ME Perth, W. Australia. (Sun 2-3pm, Tues 1:30-3pm.
 31.28
 31.28
 31.28
                   VK2ME Sydney, Australia.
                                                    Sundays 12:30-2:30,4:30-
                                                    8:30 and 9:30-11:30am.
           9 • 59
9 • 58
9 • 58
                                                    Noon-8pm, Sun N'n-7pm 31M
 31.28
                   W3XAU Philadelphia, Penna
万31.28
                   HJ2ABC Cucuta, Colombia.
                                                    6-10pm, except Sundays.
 31.32
                   GSC
                                                    6-8pm and 9-11pm. (Fr 10pm
                           Daventry, England.
31.32
31.35
31.36
31.36
                   VK3LR Melbourne, Austr.
                                                    3:30-8:30am, Sun 3-7:30am.
           Wlxk
                           Springfield, Mass.
                                                    6am-mid., Sun 7am-midnight
                                                    Su 1-2:30am, Tu/Sat 11:30a
                   VUB
                           Bombay, India.
                           Zeesen, Germany.
                                                    12:05-5:15am,4:50-10:45pm
                   DJA
                           Lisbon, Portugal.
                   CSW
                                                    Heard here near 6pm.
 31.45
                   DJN
                           Zeesen, Germany.
                                                    12:05-5:15am, 4:50-10:45pm
N31.45
                   VPD2
                           Suva, Fiji's.
                                                    5:30-7:10am except Sunday
           9.54
31.45
N31.46
                   CB954 Santiago, Chile.
                                                   Will be operating shortly
           9 • 535
9 • 533
9 • 53
9 • 51
                   JZI
                           Nazaki, Japan.
                                                   Will be on the air soon.
N31.47
                           Armenia, Colombia.
                                                    Testing in evenings.
 31.48
                   W2XAF Schenectady, N.Y.
                                                    6-llpm.
31.55
31.55
N31.55
31.57
                   GSB
                                                    2:15-4:15am, 12:15-5:45pm.
                           Daventry, England.
           9.51
9.51
                                                    Mon/Wed/Fri N'n-2,8-11pm.
                   HJU
                           Buenaventura, Col.
                   HC2JSB Guayaquil, Ecuador
                                                    6-11pm except Sundays.
           9.505 XEFT
9.50 HJ1A
                           Veracruz.Mexico.
                                                    Evenings irreg.(10:30pm.
                   HJlABE Cartagena, Colom.
                                                    7:30-9pm Ex.Sun, Mon 9:30-
31.58
B31.60
            9.50
                   PRF5
                                                    4:45-5:45pm ex.Sundey.
                           Rio de Janeiro, Brz
           9 495
9 45
9 428
                   VK3ME
                                                    4-7am ex.Sun, 2-3am irreg
                           Melbourne, Austr.
31.73
531.80
                   TGWA
                           Guatemala, Guat.
                                                    8-10,11pm-mid, to 5am Sun.
                                                    7am-mid, Sun 8-9,11:30am-
1:30pm, 6-9pm.
                   COCH
                           Havana, Cuba.
S31.84
            9.415 PLV
                           Bandoeng, Java.
                                                    Tu, Th, Sa 10-10:30am.
           9.125 HAT4
8.948 HCJB
8.75 ZBW
8.665 CO9J
 32.88
                           Budapest, Hungary.
                                                    Sunday 6-7pm.
 33 • 53
34 • 26
                                                    7-11:30pm ex.Monday.
                           Quito, Ecuador.
                           Hong Kong, China.
                                                    4-10am.
 34.66
                   CO9JQ Camaguey, Cuba.
                                                    8-9pm and irreg in Even.
 34.76
           8.63
                   VK8XT
                           Cloncurry, Austr.
                                                    Fridays at 4am.
B36.59
           8.20
                   HC2CW
                           Guayaquil, Ecuador.
                                                    8-11pm except Sundays.
           7.89
                           Papeete, Tahiti. Friday llpm-midnight. Geneva, Switzerland Saturday 5:30-6:15pm.
                   FO8AA Papeete Tahiti.
           7.797
-38·4<u>7</u>
                   HBP
           7.52
                                                    Thurs 1:30-2am & irreg.
539.87
                   KKH
                           Kahuku, Hawaii.
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7.51
7.38
7.265
  39.92
40.65
                     JVP
                               Nazaki, Japan.
                                                           Irregular.
                     XECR
                                                           Sunday 7-8pm.
                               Mexico D.F.
  41.30
                                                           6-8am and noon-2pm.
                               Tunis, Tunisia.
                                                          7:45-8:15pm irregular.(pm Mon/Wed/Fri/Sat 3:15-4:15 Wed/Sat 3:45-5:30pm.
            7.23
 N41.49
                               Madrid, Spain.
            7.211 EA8AB
 F41.60
                               Tenerife, Canarias.
            9.66 CR6AA
7.10 F08AA
6.996 PZH
6.96 VK8SC
6.895 HCETC
031.06
D42.25
                               Lobito, Angola.
                               Papeete, Tahiti. Fri llpm-midnight.
Paramaribo, D. Guiana Mon/Wed/Fri 5:40-9:40pm.
Port Hedland, Australia Sundays 4:30-5am.
142.97
N43.10
S43.51
F43.99
                               Quito, Ecuador.
                                                           Thurs 8-10:30pm
            6.82
                     XGO X
                               Nanking, China
                                                           6:30-8:40am, Sun 7:30-930a
            6.80
6.78
6.74
                     HI7P
                               Trujillo City, D.R.
 [44:25
                     HIH
                               San Pedro, D.R.
                                                           7:40-9:10pm ex.Sundays.
京山。51
P山。58
F山。60
                                                           Sunday 5-7pm.
6:10-7:40pm.
                     HC1TQ
                               Quito, Ecuador.
            6.73 HI3C
6.727 PMH
6.673 TIEP
6.635 HC2RL
6.63 HIT
6.625 PRADO
                               La Romana, D.R.
                                                          5:30-ilam.
7-10:30pm ex.Sundays.
                               Bandoeng, Java.
B44.96
B45.25
B45.25
B45.76
45.80
45.84
                               San Jose, C.R.
Guayaquil, Ecuador.
                                                           Sun 5:30-7:30p, Tu 9-11pm
                               Trujillo City,D.R.
                                                           12:10-1:40pm, 5:40-8:40pm.
            6.625 PRADO
6.555 HI4D
6.555 TIRO
6.545 YV11H
6.52 YV6RV
6.492 HIL
6.477 HI8A
6.475 HI4V
6.425 VE9AS
6.425 WAXL
6.425 HI1S
                               Riobamba, Ecuador.
                                                           Thursday 9-11pm.
                                                          4:40-7:40pm ex.Sunday.
                               Trujillo City, D.R.
                     TIRCC
                               San Jose, C.R.
                                                           N'n-2, 6-7, Thur 6-11pm.
                    YVllRB Bolivar, Venezuela.
                     YV6RV
                               Valencia, Venezuela
                                                           5:30-9:30pm.
B46.21
                               Trujillo City,D\R.
                                                           5:40-7:40pm ex.Sundays.
B46.32
B46.34
46.70
                               Trujillo City, D.R.
                                                           5:40-7:40pm ex.Sundays.
                               Trujillo City, D.R.
                                                           5:10-6:40pm ex.Sundays.
                     VE9AS
                               Fredericton, N.B.
                                                           Thurs 10:30pm-1:30am.
                     OAX4K
                               Lima, Peru.
                                                           7pm daily.
                                                                                          49M
 46.69
46.73
46.80
                               Boundbrook, N.J.
                                                          NBC Experimental.
            6.42
6.41
                     HILS
                               Puerto Plata, D.R.
                                                           6:10-8:10pm ex.Sundays.
                               San Jose, C.R. 6-11:30pm
El Valle, Venezuela 5:30-9:30pm ex. Sunday.
                    TIPG
 46.88
            6.40
                    YV9 RC
  47.02
            6.38
                     YV4RC
                               Caracas, Venezuela. llam-lpm, 5:30-9:30pm ex S
 -47.20
-47.24
            6.357
6.35
6.34
                               San Pedro Sula, Hon 7-9pm ex. Sunday.
                    HRP1
                               Port-au-Prince, Haiti testing in evenings. Trujillo City, D.R. Tues/Fri 8:10-10:10pm.
                     HH3NW
與7·32
47·54
[47·62
                     HIX
            6.31
6.30
6.282
                               Trujillo City, D.R. 5:10-7:40pm ex. Sundays. Maracay, Venezuela. 6-10pm except Sundays.
                    HIZ
                     YV12RM
 47.76
47.77
                    CO9WR
                               Sancti Spiritus, Cuba N'n-1,4-6,9-11pm.
            6.28
                     HIG
                               Trujillo City, D.R. 8:10-9:40pm, T/F 6:40-8:10
Γ48.oo
            6.25
                                                          7-9pm.
                     CO5RY
                               Matanzas, Cuba.
T48.00
            6.25
                     YV 5RJ
                               Caracas, Venezuela. Will be on the air soon.
C48.04
            6.245 HIN
                               Trujillo City,D.R.
                                                          7:10-9:10pm .
1548.08
            6.24
                               Trujillo City, D.R. 4:40-8:40pm.
                    HI80
48.11
48.15
48.47
            6.235 HRD
6.23 OAX
                               La Ceiba, Honduras. 8-11pm, Sun 1pm-1am.
Lima, Peru. 7-11pm, Wed 6-11pm.
Santiago, D.R. 10:40-1:40p, 6:40-9:40pm.
                     DAX4G
                    HILA
            6.171 XEXA
                               Mexico D.F.
                                                          8-8:30am, 6-11:15pm.
 48.61
            6.17
                    HJ3ABF
                               Bogota, Colombia.
                                                          7-11pm except Sundays.
148.62
            6.17
                    HJ2ABA Tunja, Colombia.
                                                          7-10pm except Sundays.
            6.156 YV3RC
6.15 CB615
6.15 CJRO
B48.73
                                                          3:30-10pm.
llam-lpm, 7-10pm.(10:30pm
7-mid,Sat 4pm-lam,S 3pm-
+48.78
+48.78
+48.81
                               Caracas, Venezuela.
                               Santiago, Chile.
                               Winnipeg, Canada.
            6.147
                               Santiago, Cuba. 8-9am, llam-2pm, 5-9pm.
Bulawayo, S. Rhodesia Tu/F 12:15-3:15p, M llam-
                    COKG
48.81
            6.147
                    ZEB
                                                          N'n, Th 10am-N'n, S 3:30-6p
 48.82
            6.145 HJ4ABU Pereira, Colombia.
                                                          7-8pm except Sundays.
T48.86
            6.140 W8XK
                              Pittsburgh, Penna.
                                                          11pm-2am.
T48.89
            6.137 CR7AA
                              Laurenco Marques.
                                                          12:45-3pm, Sun 8-10:30am.
以8.93
以8.93
            6.132 CHNX Halifax, N.S., Canada, relays CHNS.
6.132 HJIABB Barranquilla, Colom 6-10pm except Sundays.
48.94
            6.13
                    ZGE
                              Kuala Lumpur, FMS.
                                                          Sun/Tues/Fri. 6:40-8:40am.
48.94
            6.13
                    COCD
                              Havana, Cuba.
                                                          llam-12 mim, Sun 5-11pm.
F48.94
            6.13 VP3BG Georgetown, B.Gui
6.122 HJ3ABX Bogota, Colombia.
                               Georgetown, B. Guiana
49.01
                                                          6-11:30pm.
<u>4</u>9.01
            6.122 OAX4P
                              Lima, Peru.
                                                          Noon-lpm. 9-11pm.
 49.02
            6.12
                    W2XE
                              Wayne, New Jersey.
                                                          10-11pm.
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	_1	19	.02	6.12	$\mathbf{X}\mathbf{E}\mathbf{F}\mathbf{T}$	Veracruz, Mexico.	7:30-midnight.
		į9.	•06	6.115	OLR	Prague, Czechosloval	cia testing irregularly.
		19	.11	6.109		Calcutta, India.	Sat 9:35pm-Sun 2:05am, Sun
	_			•		•	7:05-10:35,dly 1:35a-1120
	-1	49	.11	6.108	HJLABB	Manizales, Colombia	8-10pm except Sundays.
			.18	6.10	W3XAL	Boundbrook, N.J.	Mon/Wed/Sat 5pm-lam.
			.18	6.10	W9XF	Chicago, Illinois.	Su/T/Th/F 8pm-lam, Mon, Wed
				-	•	•	Sat 1-2am.
	\vdash_l	٠9.	.18	6.10		Seville, Morocco.	Testing irregularly.
	В	Ò.	.20	6.097	нјцаве	Medellin, Colombia.	7:30-10:30pm.
	-1	۱9.	20	6.097		Johannesburg, S. Afr	11:45-12:30am,3:15-7am;9-
	Г			- , ,		3,	11:15am, 11:45-4pm.
	N	١9.	.22	6.095	JZH	Nazaki, Japan.	Will be on the air soon.
	S	<u>ۇ،</u>	.26	6.09	CFCX	Bowmanville,Ont.	5-11pm, Sun 2-11pm.
	Fl	9٠	26	6.09		Belgrade, Yugoslavia	2-3:45am,7-8:30am,11:30a
	\neg_1	ıģ.	.26 .30	6.085	2RO1	Rome, Italy.	(to 4:45pm daily.
	-1	9	.30		HJ5ABD		7-10pm.
	\vdash_L	įģ.	·33		VQ7LO	Nairobi, Kenya.	5:45-6:15am ex.Sat/Sun &
	٦	<u>ί</u>	34	6.08	HP5F	Colon, Panama.	7-10:30pm ex.Sundays.
	3	<u>ر</u>	34	6.08	W9XAA	Chicago, Illinois.	6:30-8:30am, 5pm-midnight
	-J	ίς.	• 34	6.08	ZHJ	Penang, S.S.	6:40-8:40am ex.Sundays.
			42	6.072		Vienna, Austria,	9am-5pm ex.Sun, Sat 9am-6p
			42	6.07		Maracaibo, Venezuela	
			46	6.065	HJLABH	Manizales, Colombia	6-7:45pm.
			.50	6.06	OXY	Skamlebaek, Denmark	
			50	6.06	W3XAU	Philadelphia, Penna	
	हा	٠ć	50	6.06	W8XAL	Cincinnati, Ohio.	7:30-8pm, llpm-1:30am.
		+/ (•) •	0.00			Sun 8am-8pm, 11pm-1:30am.
	R)	O	• 59	6.05	HJZARD	Bogota, Colombia.	7-11:30pm.
	F	6	. 59	6.05	110)1122	Colombo, Ceylon.	8:30-10am irreg.
	٦Ī	ľά	63	6.045	нт9в	Santiago, D.R.	llam-9pm, Sun 12:15-1:15am
	ΗĪ	19	67	6.04	wДхв	Miami, Florida.	Temporarily off the air.
	ŀĴ	íá	67		WIXAL	Boston, Mass.	Sun 3-9pm, Mon-Fri 7-9pm.
	Ρį	á	69	6.037	HJIABG	Barranquilla, Col.	6:30-10pm ex.Sundays.
			.7í	6.035	нјцавс	Ibague, Colombia.	8-10pm ex.Sundays.
	-ĵ	10	75	6.03	HP 5B	Panama City, Panama	
	-ĵ	ر ا	75	6.03	VE9CA	Calgary, Canada.	7pm-lam.
	-ĵ	iα'	77	6.028		Pernambuco, Brazil.	2:30-8:30pm.
	R)	íá	77 77		НЈ4АВР	Medellin, Colombia.	7-11pm ex.Sundays.
	B	آم'	83	6.02	XEUW	Veracruz, Mexico.	10pm-lam.
			85	6.018		Singapore, S.S.	Sat 10:40pm-1:10am, Mon/Wd
		-/	• • •	0.010	~	O~boro, 5.5.	Thur 5:40-8:10am.
	ᆈ	O	.85	6.018	H.T1 A B.T	Santa Marta, Colom.	6-10pm.
	Ħ	16	88	6.015	HTAII	Santiago, D.R.	4:40-9:40pm, ex. Sundays.
_	Ť	<u>الم</u>	91	6.012	HJZARH	Bogota, Colombia.	4-11pm, Sunday 4-9pm.
1	ฐโ	19	91 92	6.01	COCO	Hayana, Cuba	7:55am-10nm-
1	1		9 1	78 /7			7:55am-10pm

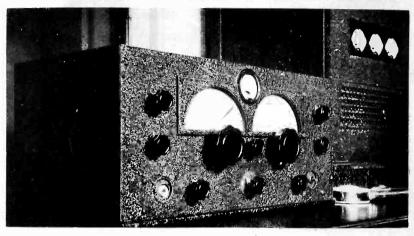
"Believe it or not" Robert L. Ripley and Bangkok, Siam, Temple Dancers.

ONE DIME

INTERNATIONAL DX'ERS ALLIANCE

SHORT-WAVE COMMERCIAL STATION LIST
W2XAF/IDA CHRISTMAS PROGRAM
BUILDING AN 86 FOOT AERIAL MAST
DX AROUND THE WORLD
SHORT-WAVE STATION NOTES
CHINA-JAPAN BROADCAST STATIONS

RME-69 SINGLE SIGNAL SUPER



A TYPICAL RME-69 RECEIVER INSTALLATION.

PAR RILL DARMINITARE MATTER ADDRESS DELAM

* R.F. signal to a mi selectiphone ovolt al silver over en calibra used followed in control Manual careful	RME-69	SINGLE	SIGNAL	SUPER	
				000	. : 4
				Arthur I	
		9			
	A TYPICA	L RME-69 RECEIVER	INSTALLATION.		
A	N IDEAL SET FO WHO WISHE	R THE DISCRIM S THE ULTIMAT			
to a miselection phone of volt also silver over endalibrate used for level incontrol Manual	to noise leve inimum ivity control, or CW signals, bsolute contacts on a ntire range of ated accuratel or maximum res indicator cali l Head phon gain control. lly treated fo	Optional crys for knife-e Maximum se Built in coi 11 switches 550 to 32000 y in megacycl onation of R. brated in R's e jack Opt	tal filter, was deep selectivins it ivity bell arrangement arrangement. Band spreakCo Regular es Sepa F. circuits and DB's Gional beat of VC control e.	with variable ty on either tow one micro with wiping ad continuous tuning dial arate trimmer Carrier W beat pitch scillator All elements	
48.15	6.23 OAX4G	Lima, Peru.	7-11pm,	Wed 6-11pm.	-
48.47 48.61 48.62 48.62 848.78 48.78 48.81 48.81	6.171 XEXA 6.17 HJ3ABF 6.17 HJ2ABA 6.156 YV3RC 6.15 CB615 6.15 CJRO 6.147 COKG	Santiago, D.R. Mexico D.F. Bogota, Colomb: Curja, Colomb: Caracas, Venezi Santiago, Chilo Winnipeg, Canac Santiago, Cuba Bulawayo, S.Rho	10:40-1 8-8:30a ia. 7-11pm ia. 7-10pm uela. 3:30-10 e. 11am-1p da. 7-mid,S 8-9am,1 odesia Tu/F 1	:40p,6:40-9:4 m, 6-11:15pm. except Sunday except Sunday pm. 7-10pm.(10 at 4pm-1am,S 1am-2pm, 5-9p 2:15-3:15p,M	s. s. :30pm- m. llam
			N'n Th	10am-N'n,S 3:	
48.82 48.86 48.89 B48.93 B48.93 48.94 48.94 F48.94	6.137 CR7AA 16.132 CHNX 16.132 HJ1ABB 16.13 ZGE 16.13 COCD 1	Pittsburgh,Pen Laurenco Marqu Halifax,N.S.,(nna. llpm-2a les. 12:45-3 Canada, relay Colom 6-10pm FMS. Sun/Tue llam-12	pm, Sun 8-10: s CHNS.	• 30am s• 40am