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**Guide to
Broadcasting
Stations
1956 - 57**



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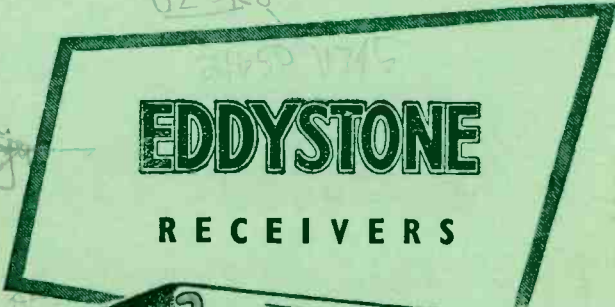
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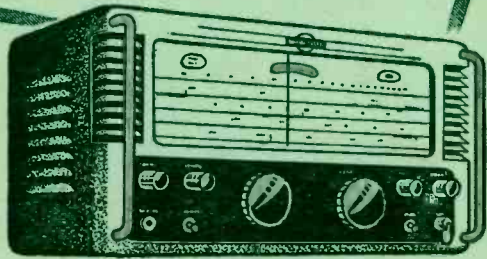
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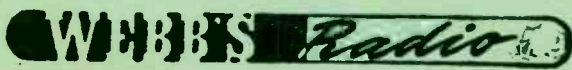
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12-11

Guide to Broadcasting Stations

1956-57

COMPILED BY THE STAFF OF
"WIRELESS WORLD"

Society for Bulgarian Friendships

27 Jan 1956
H. Birch
London W1

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A "Wireless World" Publication

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Introduction

←

EVERY endeavour has been made to minimize errors in the thousands of entries in this ninth edition and we are indebted to the B.B.C. for once again allowing us to check the information, which is obtained from many sources, against frequency measurements made at the Tatsfield Station.

The list of short-wave stations covers the whole world, but the medium- and long-wave list includes only those stations within the European Broadcasting Area, which, for the purpose of frequency allocation, is bounded on the West by a line extending from the North Pole along meridian 10°W to its intersection with parallel 72°N , thence by great circle arc to the point of intersection of meridian 50°W and parallel 40°N , and thence by a line leading to the point of intersection of meridian 40°W and parallel 30°N ; on the South by parallel 30°N ; and on the East by meridian 40°E . It therefore includes the western part of the U.S.S.R. and the territories bordering on the Mediterranean Sea, but those parts of Arabia and Saudi Arabia which come within this area were excluded from the Copenhagen Plan which was drawn up in 1948.

Although of mainly academic interest to listeners in this country details of continental v.h.f. sound and television broadcasting stations are included.

*Dorset House,
London, S.E.1.*

THE EDITOR,
Wireless World

July, 1956

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Long- and Medium-wave European Stations

The Copenhagen Plan (1948) provided for the operation of European long-wave and medium-wave broadcasting stations in 9-kc/s channels. As will be seen from the first column in the following table there are 15 channels in the long-wave band (150-285 kc/s), 121 in the medium-wave band (525-1605 kc/s) and 3 intermediate channels, marked X1-X3. Many stations are, however, operating on frequencies not allocated to their countries under the Plan ; particulars of these stations are italicized. Some stations provided for in the Plan are not yet using the frequencies allocated ; these are marked † in the power column. Stations operating on the international common frequencies (1484 and 1594) are included in the geographical list only. Where a country is operating a number of very low-power stations—not necessarily synchronized—on the same frequency the abbreviation " L.P. stations " is used. Frequencies used only during either the day or night are indicated respectively by D or N.

A list of abbreviations will be found on page 76.

Chan.	kc/s	Metres	kW	Station and Country	
—	151	1,987	50	Hamburg (N.D.R.)	Germany (W.)
			—	Moscow, Russia	U.S.S.R.
1	155	1,935	10	Tromso	Norway
			150	Brasov	Rumania
2	164	1,829	250	Allouis	France
3	173	1,734	500	Koenigswusterhausen	Germany (E.)
X			1,000	Munich (V.o.A.)	Germany (W.)
			500	Moscow, Russia	U.S.S.R.
4	182	1,648	100	Reykjavik	Iceland
			10	Lulea	Sweden
			120	Ankara	Turkey
—	185	1,622	100	Koenigswusterhausen	Germany (E.)
			400	Felsberg	Germany (W.) Saarland
5	191	1,571	150	Motala	Sweden
X	200	1,500	400	Droitwich, Worcs.	Great Britain
			—	Moscow, Russia	U.S.S.R.
7	209	1,435	150	Kiev, Ukraine	U.S.S.R.
8	218	1,376	200	Oslo	Norway
9	227	1,322	200	Warsaw	Poland
X	233	1,288	150	Luxembourg	Luxembourg
10	236	1,271	100	Leningrad, Russia	U.S.S.R.
11	245	1,224	150	Kalundborg	Denmark
12	254	1,181	200	Lahti	Finland
			—	Voronezh, Russia	U.S.S.R.
13	263	1,141	20	Koenigswusterhausen	Germany (E.)
			100	Leningrad, Russia	U.S.S.R.
14	272	1,103	200	Uherske Hradiste	Czechoslovakia
15	281	1,067	100	Minsk, Byelorussia	U.S.S.R.
—	385	779	100	Kharkov, Ukraine	U.S.S.R.
—	400	750	—	Minsk, Byelorussia	U.S.S.R.
X1	420	714.3	10	Ostersund	Sweden

X

Chan.	kc/s	Metres	kW	Station and Country
X2	433	693	15	Oulu Finland
—	517	580	0.05	Hermagor Austria
X3	520	576.9	8	Innsbruck Austria
			—	5 L.P. Stations Austria
			1	Joensuu Finland
			5	Beeskow-Sarnow Germany (E.)
			2	Brunswick (N.D.R.) Germany (W.)
			5	Nueremburg (B.R.) Germany (W.)
			—	3 L.P. Stations (B.R.) Germany (W.)
			1	Hamar Norway
X 1	529	567.1	—	Berlin-Koepenick Germany (East)
			(150)	Beromuenster Switzerland
X 2	539	556.6	(135)	Budapest Hungary
X 3	548	547.4	(100)	Munich (A.F.N.) Germany (West)
			(150)	Moscow, Russia (N) U.S.S.R.
			(150)	Odessa, Ukraine (D) U.S.S.R.
4	557	538.6	20	Cairo Egypt
			(100)	Helsinki Finland
			20	Potsdam Germany (East)
			0.05	Guarda Portugal
			—	Timisoara Rumania
			50	Monte Ceneri Switzerland
X X 5	566	530	(100)	Athlone Eire
			20	Berlin (R.F.B.) Germany (West)
			25	Caltanissetta Italy
			—	Voronezh, Russia U.S.S.R.
—	572	524.5	1	Khartoum Sudan
6	575	521.7	(120)	Leipzig Germany (East)
			(300)	Stuttgart (S.D.R.) Germany (West)
			50	Tel-Aviv Israel
			(100)	Riga, Latvia U.S.S.R.
7	584	513.7	7	Klagenfurt Austria
			10	Salzburg Austria
			(100)	Vienna Austria
			1	Paris France
			(120)	Madrid Spain ✓ 52
8	593	505.9	20	Sofia Bulgaria
			(100)	Frankfurt (H.R.) Germany (West)
			20	Hoher Meissner (H.R.) Germany (W.)
			(150)	Sundsvall Sweden
			1.25	Tangier Tangier
9	602	498.3	(100)	Lyons France
			—	Karlmarxstadt Germany (East)
			2	Damascus Syria
			—	Nicosia Cyprus
			0.05	Greifenburg, Kaernten Austria
			20	Berlin-Grunau Germany (East)
			10	Nueremberg (A.F.N.) Germany (W.)
			5	Eidar Iceland
			(140)	Meknes French Morocco
			20	Krasnodar, Russia U.S.S.R.
			(100)	Petrozavodsk, Finno-Karelia U.S.S.R.
			20	Sarajevo Yugoslavia

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Chan.	kc/s	Metres	kW	Station and Country
11	620	483.9	0.025	Bad-Aussee Austria
			0.1	Eisenerz Austria
			150	Brussels Belgium +
			50	Cairo Egypt
			†	Moalatya Turkey
—	622	482.2	0.1	Gorki, Russia U.S.S.R.
			—	Radentheim Austria
12	629	476.9	25	Dornbirn Austria
			25	Innsbruck Austria
			0.05	Kitzbuehel Austria
			100	Vigra Norway
13	638	470.2	20	Tunis Tunisia
			120	Prague Czechoslovakia +
			7.5	Limassol Cyprus
14	647	463.7	5	Seville Spain
			1	Lages Azores
			150	Crowborough, Sussex Great Britain +
			150	Daventry, Northants. Great Britain +
—	652	460.1	—	Sync. Network Great Britain +
			100	Simferopol, Russia U.S.S.R.
			1	Tel-Aviv Israel
—	655	458	10	Grafenwohr (A.F.N.) Germany (W.)
			5	Greifswald Germany (East)
15	656	457.3	20	Bolzano Italy
			80	Florence Italy
			80	Naples Italy
			35	Turin Italy
			20	Venice Italy
			150	Murmansk, Russia U.S.S.R.
			5	Kaiserslautern (A.F.N.) Germany (W.)
			5	Athens Greece
			0.7	Hoefn Iceland
			50	Lisbon Portugal
50	Damascus Syria			
17	674	445.1	150	Kaunas, Lithuania (D) U.S.S.R.
			150	Rennes France +
			10	Bodo Norway
			—	Chernovtsy, Ukraine U.S.S.R.
—	677	443.1	20	Jerusalem Jordan
			100	Berlin (R.I.A.S.) Germany (West)
18	683	439.2	15	Madrid Spain
			150	Belgrade Yugoslavia
			—	Suhl Germany (East)
19	688	433.5	20	5 L.P. Stations Austria
			10	Nicosia Cyprus
			2	Cromer, Norfolk Great Britain +
			150	Moorside Edge, Yorks. Great Britain +
			2	Whitehaven, Cumberland Great Britain +
20	701	428	20	Corunna Spain
			100	Banska Bystrica Czechoslovakia
			30	Bratislava Czechoslovakia
			2	Hradec-Kralove Czechoslovakia
			2	Kosice Czechoslovakia
			2	Liberec Czechoslovakia

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Chan.	kc/s	Metres	kW	Station and Country
(20)	(701)	(428)	140	Meknes French Morocco
			5	Aachen (W.D.R.) Germany (West)
			2	Herford (N.D.R.) Germany (West)
			2	Norden (N.D.R.) Germany (West)
			20	Finnmark Norway
			150	Istanbul Turkey
X 21	710	422.5	100	Marseilles France
			2	Aleppo Syria
			150	Stalino, Ukraine U.S.S.R.
			20	Tartu, Estonia (D) U.S.S.R.
22	719	417.2	33	Munich (R.F.E.) Germany (West)
			15	Lisbon Portugal
			†	Damas Syria
23	728	412.1	25	Klagenfurt Austria
			220	Schwerin Germany (East)
			150	Athens Greece
24	737	407	20	Berlin (R.I.A.S.) Germany (West)
			40	Hof (R.I.A.S.) Germany (West)
			5	Akureyri Iceland
			20	Jerusalem Israel
			50	Warsaw Poland
			20	Barcelona Spain
—	742	404.3	—	Erfurt Germany (East)
x 25	746	402.1	120	Hilversum Netherlands †
—	747	401.6	20	Aleppo Syria
26	755	397.3	20	Kuopio Finland
			2	Siegen (W.D.R.) Germany (West)
			10	Oporto Portugal
			50	Timisoara Rumania
27	764	392.6	150	Sottens Switzerland
			100	Rostov-on-Don, Russia U.S.S.R.
28	773	388.1	—	4 L.P. Stations Austria
			50	Cairo Egypt
			5	Valencia Spain
			2	Malmberget Sweden
			150	Stockholm Sweden
29	782	383.6	300	Burg Germany (East)
			120	Berlin (R.I.A.S.) Germany (West)
			100	Oporto-Miramar Portugal
			100	Kiev, Ukraine U.S.S.R.
			1	Vatican City Vatican City
x 30	791	379.2	100	Limoges France
			50	Salonika (V.O.A.) Greece
x 31	800	375	100	Munich (B.R.) Germany (West)
			1	Wheelus Field (A.F.N.) Libya
			0.25	Regua Portugal
			5	Seville Spain
			100	Leningrad, Russia U.S.S.R.
x 32	809	370.8	100	Burghead, Moray Great Britain †
			2	Dumfries Great Britain
			5	Redmoss, Aberdeen. Great Britain
			100	Westerglen, Stirling. Great Britain
			10	Barcelona Spain
			33	Skoplje Yugoslavia

Chan.	kc/s	Metres	kW	Station and Country	
33	818	366.7	0.25	Casablanca	French Morocco
			0.25	Oujda	French Morocco
34	827	362.8	100	Warsaw	Poland
			10	Trieste	Trieste
			100	Sofia	Bulgaria
			1.5	Baden Baden (S.W.F.)	Germany (W.)
			40	Freiburg (S.W.F.)	Germany (W.)
			3	Kaiserslautern (S.W.F.)	Germany (W.)
			1	Koblenz (S.W.F.)	Germany (W.)
			1	Sigmaringen (S.W.F.)	Germany (W.)
35	836	358.9	1	Trier (S.W.F.)	Germany (W.)
			5	Tetuan	Spanish Morocco
			0.2	Helsinki	Finland
			10	Ylivieska	Finland
			150	Nancy	France †
			20	Beirut	Lebanon
			2	Huelva	Spain
			100	Kharkov, Ukraine	U.S.S.R.
			150	Rome	Italy
			36	845	355
150	Bucharest	Rumania			
37	854	351.3	—	Barcelona	Spain
			7.5	Madrid	Spain
			150	Paris	France
38	863	347.6	150	Frankfurt (A.F.N.)	Germany (West)
			135	Budapest	Hungary
39	872	344	30	Zaragoza	Spain
			150	Moscow, Russia (N)	U.S.S.R.
40	881	340.5	0.05	Gmund, Kaernten	Austria
			100	Berlin	Germany (East)
			8	Penmon, Anglesey	Great Britain
			5	Towyn, Merioneth.	Great Britain
			100	Washford, Somerset	Great Britain
			2	Wrexham, Denbigh.	Great Britain
			1	Benghazi (B.F.N.)	Libya
			20	Titograd	Yugoslavia
			50	Algiers	Algeria
			15	Linz	Austria
41	890	337.1	—	2 L.P. Stations	Austria
			20	Bergen	Norway
			20	Kristiansand	Norway
			20	Trondheim	Norway
			100	Ouchgorod, Ukraine	U.S.S.R.
			150	Milan	Italy
			—	Burg	Germany (East)
			—	Brookmans Park, London	Great Britain †
42	899	333.7	—	Oradea	Rumania
			—	Dresden	Germany (East)
44	917	327.2	5	Tetuan	Spanish Morocco
			13	Ljubljana	Yugoslavia
45	926	324	150	Brussels	Belgium
			—	Ivanovo, Russia	U.S.S.R.
—	—	—	2	Nis	Yugoslavia

Chan.	kc/s	Metres	kW	Station and Country	
46	935	320.9	5 100 100	Berlin (A.F.N.) Tangier Lwow, Ukraine	Germany (West) Tangier U.S.S.R.
—	940	319.1	1	Algeciras San Feliu de Llobregat	Spain Spain
47	944	317.8	100	Toulouse Voronezh, Russia	France U.S.S.R.
48	953	314.8	100 5 15	Brno Ceske-Budejovice Pizen	Czechoslovakia Czechoslovakia Czechoslovakia
49	962	311.9	5 100 5 120	Madrid Turku Paris Tunis	Spain Finland France Tunisia
50	971	309	5 100 100 †	Goettingen (N.D.R.) Hamburg (N.D.R.) Langenberg (N.D.R.) Izmir	Germany (W) Germany (W) Germany (W) Turkey
X 51	980	306.1	— 75 150 2.5	Moscow, Russia Algiers Goteborg Trieste	U.S.S.R. Algeria Sweden Trieste
52	989	303.3	† 300	Rovaniemi Berlin (R.I.A.S.)	Finland Germany (West)
53	998	300.6	† 60 0.2	Beirut Andorra Buchen-Walldurn (S.D.R.)	Lebanon Andorra Germany (West)
—	1,002	299.4	8 100	Heidelberg (S.D.R.) Kishinev, Moldavia	Germany (West) U.S.S.R.
54	1,007	297.9	0.015 50 120	Kufstein Salonika Hilversum	Austria Greece Netherlands
55	1,016	295.3	6 † 1 70	Malaga Aleppo Meknes Mainz (S.W.F.)	Spain Syria French Morocco Germany (West)
56	1,025	292.7	† 50 5 100 100	Istanbul Odessa, Ukraine Dornbirn Graz-Dobl Linz-Kronstorf	Turkey U.S.S.R. Austria Austria Austria
57	1,034	290.1	† 5 3 — 5 10 5 25 5 100 100	Jerusalem Madrid San Sebastian 3 L.P. Stations (A.F.N.) Genoa Milan Naples Pescara Venice Lisbon Tallinn, Estonia	Israel Spain Spain Germany (W.) Italy Italy Italy Italy Italy Portugal U.S.S.R.
—	1,038	289.1	0.045	Mayrhofen	Austria

Chan.	kc/s	Metres	kW	Station and Country
58	1,043	287.6	20	Rabat French Morocco
			500	Dresden Germany (East)
			5	Salonika Greece
59	1,052	285.2	0.05	Krems Austria
			0.05	Neunkirchen Austria
			2	Barnstaple, Devon Great Britain + }
			120	Start Point, Devon Great Britain + }
			2	Tripoli Libya
			50	Bucharest Rumania
60	1,061	202.8	60	Kalundborg (N) Denmark
			5	Cagliari Italy
			1	Coimbra Portugal
			1	Faro Portugal
	1,063	282.2	0.05	Bleiburg Austria
61	1,070	280.4	20	Marseilles France
			100	Paris France
			20	Dniepropetrovsk, Ukraine U.S.S.R.
62	1,079	278	20	Plauen Germany (East)
			2	Bremerhaven Germany (West)
			50	Stalinogrod Poland
			10	Tangier Tangier
	1,087	275.9	0.2	Palamos Spain
63	1,088	275.7	10	Korca Albania
				6 L.P. Stations Austria
			50	Droitwich, Worcs. Great Britain + }
			7.5	Norwich, Norfolk Great Britain + }
	1,089	275.5	1	Caceres Spain
	1,090	275.2	2	Toledo Spain
	1,091	275	1	Lakatamia (B.F.N.) Cyprus
64	1,097	273.5	150	Bratislava Czechoslovakia
65	1,106	271.2	100	Stuttgart (A.F.N.) Germany (West)
			100	Vilna, Lithuania U.S.S.R.
66	1,115	269.1	1	Aosta Italy
			40	Bari Italy
			50	Bologna Italy
			5	Messina Italy
			25	Pisa Italy
			—	Sync. Network Norway
67	1,124	266.9	0.05	Imst Austria
			10	Brussels Belgium
			5	Varna Bulgaria
			3	Barcelona Spain
			—	Leningrad, Russia U.S.S.R.
	1,128	265.9	0.1	Muerzzuschlag Austria
			1	Tangier Tangier
68	1,133	264.8	2.5	Bilbao Spain
			50	Split Yugoslavia
			35	Zagreb Yugoslavia
			50	Zajecar Yugoslavia
69	1,142	262.7	20	Constantine Algeria
			40	Oran Algeria
			0.05	Zell-am-See Austria
			1	Bremerhaven (A.F.N.) Germany (W.)
			—	4 L.P. Stations (A.F.N.) Germany (W.)
			20	Kaliningrad, Russia (D) U.S.S.R.

Chan.	kc/s	Metres	kW	Station and Country
—	1,145	262	2	Toledo Spain
70	1,151	260.6	100	Lisnagarvey, N. Ireland
			0.25	Londonderry, N. Ireland
			2	Scarborough, Yorks. Great Britain+
			100	Stagshaw, North'd Great Britain+
			20	Cluj Rumania
			20	Oradea Rumania
—71	1,160	258.6	150	Strasbourg France
72	1,169	256.6	8	Heilbronn (S.D.R.) Germany (West)
			3	Ulm (S.D.R.) Germany (West)
			1	Oporto Portugal
			2	Leon Spain
			100	Kiev, Ukraine U.S.S.R.
			5	Kopar Yugoslavia
73	1,178	254.7	2	Cuenca Spain
			100	Horby Sweden
—	1,183	253.6	0.1	Bruck a.d. Mur Austria
74	1,187	252.7	135	Szabadsag Hungary
			0.2	Corunna Spain
			—	Teruel Spain
			1	Casablanca French Morocco
—	1,190	252.1	5	Oviedo Spain
75	1,196	250.8	†	Marrakesh French Morocco
			20	Halle Germany (East)
			150	Munich (V.o.A.) Germany (West)
			†	Kerkyra Greece
76	1,205	249	0.05	Hof-Gastein Austria
			—	Alexandria Egypt
			100	Bordeaux France
			5	Haifa Israel
			6	Poznan Poland
77	1,214	247.1	†	Punta Delgada Azores
			60	Brookmans Park, London G. Britain+
			20	Burghead, Moray Great Britain -
			10	Lisnagarvey, N. Ireland G. Britain+
			0.25	Londonderry, N. Ireland G. Britain -
			58	Moorside Edge, Yorks. G. Britain -
			2	Newcastle, North'd Great Britain+
			0.3	Plymouth, Devon Great Britain+
			2	Redmoss, Aberdeen. Great Britain+
			2	Redruth, Cornwall Great Britain+
			50	Westerglen, Stirling. Great Britain+
			20	Barcelona Spain
			—	Tartu, Estonia (N) U.S.S.R.
—	1,218	246.3	0.1	Judenburg Austria
78	1,223	245.3	20	Stara Zagora Bulgaria
			1	Oporto Portugal
			20	Madrid Spain
			100	Falun Sweden
79	1,232	243.5	100	Kosice Czechoslovakia
			1.5	Zilina Czechoslovakia
			50	Tangier Tangier

Chan.	kc/s	Metres	kW	Station and Country	
80	1,241	241.7	10	Vaasa	Finland
			20	Lille	France
			20	Lyons	France
			20	Nancy	France
			1	Nice	France
			20	Pau	France
			20	Quimerch	France
			20	Rennes	France
			†	Tiraspol, Moldavia	U.S.S.R.
81	1,250	240	†	2 Stations	Egypt
			5	Cork	Eire +
			5	Dublin	Eire +
			135	Nyiregyhaza	Hungary
—	1,255	239	0.05	Bischofshofen	Austria
82	1,259	238.3	50	Breslau	Poland
			5	Valencia	Spain
—	1,264	227.3	2	Linares	Spain
83	1,268	236.6	2	Oviedo	Spain
			100	Novi Sad	Yugoslavia
—	1,271	236	—	Soria	Spain
84	1,277	234.9	100	Strasbourg	France
			0.25	Rabat	French Morocco
			1	Tel-Aviv	Israel
85	1,286	233.3	100	Melnik	Czechoslovakia
			2	Lisbon	Portugal
86	1,295	231.7	0.2	Rabat	French Morocco
			5	Berlin (N.D.R.)	Germany (West)
			100	Norden (N.D.R.)	Germany (West)
			†	Ottringham	Great Britain +
87	1,304	230.1	20	Constantine	Algeria
			40	Oran	Algeria
			—	6 L.P. Stations (A.F.N.)	Germany (W.)
			2	Gdansk	Poland
			50	Stettin	Poland
			0.1	Leoben	Austria
88	1,313	228.4	0.05	Mariazell	Austria
			0.2	Las Palmas	Canary Is.
			100	Stavanger	Norway
			2	Badalona	Spain
			2	Corunna	Spain
			0.2	Salamanca	Spain
			1	Alicante	Spain
—	1,315	228.1	1	Vitoria	Spain
—	1,320	227.3	1	Athens	Greece
89	1,322	226.9	0.15	Angra do Heroismo	Azores
			100	Leipzig	Germany (East)
			0.15	Santarem	Portugal
			2	Cadiz	Spain
90	1,331	225.4	†	Ouchgorod, Ukraine	U.S.S.R.
			20	Bari	Italy
			25	Bologna	Italy
			50	Genoa	Italy
			25	Pescara	Italy
			80	Rome	Italy
—	4 L.P. Stations	Italy			

Chan.	kc/s	Metres	kW	Station and Country
—	1,332	225.2	0.1	Valencia Spain
—	1,336	224.5	1	Haifa Israel
91	1,340	223.9	†	Alexandria Egypt
			150	Crowborough, Sussex Great Britain
			0.4	Magyarovar Hungary
			1.25	Miscolc Hungary
			—	Nyiregyhaza Hungary
			1.25	Pecs Hungary
92	1,349	222.4	20	Clermont France
			20	Dijon France
			20	Grenoble France
			20	Limoges France
			20	Nantes France
			20	Toulouse France
			2	Sabadell Spain
			20	Kuldiga, Latvia U.S.S.R.
			20	Riga, Latvia (N) U.S.S.R.
93	1,358	220.9	50	Tirana Albania
			20	Bremen Germany (West)
			0.25	Elvas Portugal
			0.25	Portalegre Portugal
—	1,360	220.6	2	Denia Spain
94	1,367	219.5	†	Thorshavn Faroe Is.
			—	Sync. Network Italy
			24	Torun Poland
			1	Oporto Portugal
			2	Antequera Spain
			—	4 L.P. Stations Switzerland
—	1,374	218.3	2	Linares Spain
			2	Cordoba Spain
95	1,376	218	10	Lille France
96	1,385	216.6	2	Albacete Spain
			150	Kaunas, Lithuania U.S.S.R.
—	1,390	215.8	1	Jerusalem Israel
			1	Santander Spain
97	1,394	215.2	0.05	Bad-Ischl Austria
			25	Graz Austria
			0.25	Bitburg (A.F.N.) Germany (West)
			5	Rhodes Greece
			2	Pamplona Spain
			2	Valencia Spain
			—	Sync. Network Sweden
—	1,401	214.1	0.5	Valladolid Spain
98	1,403	213.8	20	Bordeaux France
			20	Louvetot France
			10	Montpellier France
			20	Nice France
			20	Quimerch France
			5	Komotini Greece
			0.4	Castellon de la Plana Spain
			2	Vigo Spain
			†	Baranovichi, Byelorussia U.S.S.R.
—	1,406	213.4	0.05	Maria Pfarr Austria
			2	Badajoz Spain

Chan.	kc/s	Metres	kW	Station and Country	
99	1,412	212.4	0.4	Santa Cruz	Canary Is.
			3	Bad Mergentheim (S.D.R.)	Germany (West)
			0.5	Gandia	Spain
			0.2	Reus	Spain
			2	Ceuta	Spanish Morocco
			5	Maribor	Yugoslavia
			2	Novi Sad	Yugoslavia
			20	Priscina	Yugoslavia
			15	Rijeka	Yugoslavia
—	1,414	212.2	2	Zamora	Spain
—	1,418	211.5	2	Zaragoza	Spain
—	1,419	211.4	2	Cadiz	Spain
—	1,420	211.3	1	Jaen	Spain
100	1,421	211.1	10	Algiers	Algeria
			1	Tlemcen	Algeria
			2	Athens	Greece
			20	Saarbruecken	Saarland
			†	Sfax	Tunisia
			†	Chernigov, Ukraine	U.S.S.R.
—	1,424	210.6	0.2	Palencia	Spain
—	1,425	210.5	0.05	Radstadt	Austria
			0.4	Santa Cruz	Canary Is.
—	1,428	210.1	0.5	Palma de Mallorca	Spain
101	1,430	209.8	5	Argyrokastro	Albania
			10	Copenhagen	Denmark
x			70	Skive	Denmark
			†	Madrid	Spain
			2	Melilla	Spanish Morocco
x x	1,439	208.5	150	Luxembourg	Luxembourg
—	1,441	208.2	—	Soria	Spain
—	1,445	207.6	0.2	Alicante	Spain
—	1,447	207.4	1	Granada	Spain
103	1,448	207.2	5	Ancona	Italy
			0.25	Cagliari	Italy
			—	Caltanissetta	Italy
			5	Catania	Italy
			3	Florence	Italy
			10	Palermo	Italy
			5	San Remo	Italy
			1	Sassari	Italy
			20	Turin	Italy
			1	Udine	Italy
			†	Sync. Network	Portugal
			9	Burgos	Spain
			0.2	Ciudad Real	Spain
			0.2	Santiago Compostela	Spain
			—	Sync. Network	Sweden
104	1,457	205.9	—	5 L.P. Stations	Austria
x			0	Bartley, Hants.	Great Britain
			2	Bexhill, Sussex	Great Britain
			2	Brighton, Sussex	Great Britain
			20	Clevedon, Somerset	Great Britain
			1	Folkestone, Kent	Great Britain
			2	Redruth, Cornwall	Great Britain

Chan.	kc/s	Metres	kW	Station and Country				
(104)	(1,457)	(205.9)	0.15	Caramulo	Portugal			
			20	Craiova	Rumania			
			0.5	Onteniente	Spain			
			2	Orense	Spain			
—	1,459	205.6	—	Sagunto	Spain			
			105	1,466	204.6	120	Monte Carlo	Monaco
—	1,470	204.1	—	Sync. Network	Norway			
			106	1,475	203.4	100	Santander	Spain
—	1,475	203.4	0.2	Vienna-Wilhelminenberg	Austria			
			0.2	Huesca	Spain			
			2	Valladolid	Spain			
			2	Sueca	Spain			
107	1,484	202.2	—	International Common Frequency				
—	1,490	201.3	2	Manresa	Spain			
108	1,493	200.9	—	7 L.P. Stations	Austria			
			—	Sync. Network	France			
—	1,494	200.8	0.4	Albacete	Spain			
			2	Alcoy	Spain			
			2	Gijon	Spain			
			2	Jerez de la Frontera	Spain			
			5	Gomel, Byelorussia	U.S.S.R.			
			2	Vysilac-Tatry	Czechoslovakia			
			—	1,500	200	0.05	Bleiburg	Austria
			—	—	—	0.05	Lages Field (A.F.N.)	Azores
			—	—	—	2	Las Palmas	Canary Is.
			109	1,502	199.7	0.02	Bludenz	Austria
0.4	Muenster (W.D.R.)	Germany (W.)						
—	3 L.P. Stations (A.F.N.)	Germany (W.)						
10	Cracow	Poland						
2	Algeciras	Spain						
0.2	Pontevedra	Spain						
2	Tarrasa	Spain						
2	Leon	Spain						
110	1,511	198.5				10	Brussels	Belgium
						5	Khania	Greece
			0.15	Patras	Greece			
			2	Lerida	Spain			
—	1,515	198	0.2	Murcia	Spain			
			2	Segovia	Spain			
111	1,520	197.4	5	Ceske-Budejovice	Czechoslovakia			
			15	Karlovy-Vary	Czechoslovakia			
			20	Moravska-Ostrava	Czechoslovakia			
			30	Plzen	Czechoslovakia			
			2	Gerona	Spain			
112	1,529	196.2	†	Funchal	Madeira			
			—	Anda	Spain			
			2	Villanueva	Spain			
			0.2	Vitoria	Spain			
113	1,538	195.1	—	Sync. Network	Sweden			
			5	Vatican City	Vatican City			
			20	Bad Duerrheim (S.W.F.)	Germany (West)			
			—		Germany (West)			
			40	Ravensburg (S.W.F.)	Germany (W.)			
			10	Reutlingen (S.W.F.)	Germany (W.)			
—	—	—	†	Sync. Network	Spain			

Chan.	kc/s	Metres	kW	Station and Country	
—	1,540	194.8	0.6	Jativa	Spain
114	1,546	194.1	—	Sync. Network	Great Britain
			†	Vinnitza, Ukraine	U.S.S.R.
115	1,554	193.1	60	Nice	France
			†	U.S. Forces	Germany (West)
			†	Turi, Estonia	U.S.S.R.
—	1,559	192.4	2	Elche	Spain
116	1,562	192.1	1	Covilha	Portugal
			—	Sync. Network	Sweden
			†	Sync. Network	Switzerland
117	1,570	191.1	0.08	Santa Maria Aero	Azores
			†		Germany (East)
			3	Flensburg (N.D.R.)	Germany (W.)
			5	Lingen (N.D.R.)	Germany (West)
			2	Tarragona	Spain
			†	Sfax	Tunisia
118	1,578	190.1	—	Sync. Network	Italy
			10	Fredrikstad	Norway
119	1,586	189.1	5	Bonn (W.D.R.)	Germany (West)
			20	Hanover (N.D.R.)	Germany (W.)
			5	Kiel (N.D.R.)	Germany (West)
			3	Kleve (W.D.R.)	Germany (West)
			40	Oldenburg (N.D.R.)	Germany (W.)
			5	Osnabruck (N.D.R.)	Germany (W.)
			0.1	Tripoli (A.F.N.)	Libya
			†	Sync. Network	Spain
120	1,594	188.2	⊖	International Common Frequency	
121	1,602	187.3	0.4	Hof (B.R.)	Germany (West)
			20	Kirchheim-Schwaben (B.R.)	Germany (West)
			20	Landau (B.R.)	Germany (West)
			40	Nueremberg (B.R.)	Germany (West)
			†	Sync. Network	Norway
			†	Sync. Network	Portugal

Geographical List of Long- and Medium-wave European Stations

Stations operating on the international common frequencies (1484 and 1594) are included although they are not in the frequency list. Where a country is operating a number of very low-power transmitters on one frequency the abbreviation "L.P. stations" is used.

Country	Station	kc/s	Country	Station	kc/s
ALBANIA	Argyrocastro	5 1,430		Tlemcen	1,421
	Korca	10 1,088	ANDORRA	Andorra	998
	Tirana	50 1,358			
ALGERIA			AUSTRIA	Bad-Aussee	620
	Algiers	890		Bad-Ischl	1,394
	"	980	Bischofshofen	1,255	
	"	1,421	Bleiburg	1,063	
	Bone 1CF	EE† 1,484	"	1,500	
	Constantine	1,142	Bludenz	1,502	
	"	1,304	Bruck a.d. Mur	1,183	
	Fort National 1CF	† 1,484	Dornbirn	629	
	Oran	1,142	"	1,025	
	"	1,304			

	kc/s		kc/s
Austria—cont.			
Eisenerz	620	Las Palmas	1,500
Gmund-Kaernten	881	Santa Cruz	1,412
Graz	1,394	CYPRUS	
Graz-Dobl	1,025	Lakatamia	1,091
Greifenburg-Kaernten	611	Limassol	638
Hermagor	517	Nicosia	606
Hof-Gastein	1,205		692
Imst	1,124	CZECHOSLOVAKIA	
Innsbruck	520	Banska Bystrica	701
"	629	Bratislava	701
Judenburg	1,218	Brno "	1,097
Kitzbuehel	629	" ICF	953
Klagenfurt	584	Ceske-Budejovice	1,484
"	728	" "	953
Krems	1,052	- Hradec-Kralove	1,520
Kufstein	1,002	- Jihlava	701
Leoben	1,313	- Karlovy-Vary	1,594
Linz	890	- Kosice	1,520
Linz-Kronstorf	1,025	"	701
Maria Pfarr	1,406	Liberec	1,232
Mariazell	1,313	Melnik	701
Mayrhofen	1,038	Moravska-Ostrava	1,286
Muerzzuschlag	1,128	- Plzen	1,520
Neunkirchen	1,052	"	953
Radentheim	622	Prague	1,520
Radstadt	1,425	" ICF	638
Salzburg	584	Uherske Hradiste	1,484
Vienna	584	Ustilabem ICF	272
Vienna-Wilhelminenberg	1,475	Vysilac-Tatry	1,484
Zell-am-See	1,142	Zilina	1,494
5 L.P. Stations	520		1,232
5 L.P. Stations	692	DENMARK	
4 L.P. Stations	773	Aalborg ICF	1,484
2 L.P. Stations	890	Copenhagen	1,430
6 L.P. Stations	1,088	" ICF	1,484
5 L.P. Stations	1,457	Esbjerg	1,594
7 L.P. Stations	1,493	Kalundborg	245
AZORES		"	1,061
Angra do Heroismo	1,322	Skive	1,430
Lages	647	Tonder ICF	1,484
Lages Field	1,500	EGYPT	
Punta Delgada	1,214	Alexandria	1,205
Santa Maria Aero	1,570	Cairo	557
BELGIUM		"	620
Brussels	620	"	773
"	926	EIRE	
"	1,124	Athlone	566
"	1,511	Cork	1,250
Kortrijk ICF	1,484	Dublin	1,250
Liege ICF	1,484	FINLAND	
BULGARIA		Helsinki	557
Sofia	593	"	836
"	827	Joensuu	520
Stara Zagora	1,223	Kuopio	755
Varna	1,124	Lahti	254
CANARY ISLANDS		Oulu	433
Las Palmas	1,313	Turku	962

	kc/s		kc/s
Finland—cont.			
Vaasa	1,241	Koenigswusterhausen	173
Ylivieska	836	"	185
6 L.P. Stations ICF	1,484	"	263
FRANCE		Leipzig "	575
Allouis	164	"	1,322
Bordeaux	1,205	Plauen	1,079
"	1,403	Potsdam	557
Clermont	1,349	Schwerin	728
Dijon	1,349	Suhl	688
Grenoble	1,349	GERMANY, WEST	
Lille	1,241	Aachen	701
"	1,376	Bad Duerrheim	1,538
<u>Limoges</u>	791	Bad Mergentheim	1,412
"	1,349	Baden Baden	827
Louvetot	1,403	Berlin	566
Lyons	602	"	683
"	1,241	"	737
Marseilles	710	"	782
"	1,070	"	935
Montpellier	1,403	"	989
Nancy	836	"	1,295
"	1,241	" ICF	1,484
Nantes	1,349	Bitburg	1,394
Nice	1,241	Bonn	1,586
"	1,403	Bremen	1,358
"	X1,554	Bremerhaven	1,079
Nîmes	X1,594	"	1,142
Paris	584	Brunswick	520
"	863	Buchen-Walldurn	998
"	962	Flensburg	1,570
"	1,070	Frankfurt	593
Pau	1,241	"	872
Quimerch	1,241	Freiburg	827
"	1,403	Goettingen	971
Rennes	674	Grafenwohr	655
"	1,241	Hamburg	151
Strasbourg	1,160	"	971
"	1,277	Hanover	1,586
Toulon	X1,594	Heidelberg	998
<u>Toulouse</u>	944	Heilbronn	1,169
"	1,349	Herford	701
8 L.P. Stations ICF	1,484	Hof	737
Sync. Network	1,493	"	1,602
GERMANY, EAST		Hoher Meissner	593
Beeskow-Sarnow	520	Kaiserslautern	665
Berlin	529	"	827
"	881	Kiel	1,586
Berlin-Grunau	611	Kirchheim-Schwaben	1,602
Burg	782	Kleve	1,586
"	904	Koblenz	827
Dresden	912	Landau	1,602
"	1,043	Langenberg	971
Erfurt	742	Lingen	1,570
"	854	Mainz	1,016
Greifswald	656	Muenster	1,502
Halle	1,196	Munich	173
Karlmarxstadt	602	"	548

Germany, West—cont.	kc/s	Redruth, Cornwall	kc/s
Munich	719		1,214
"	800		1,457
"	1,196	Scarborough, Yorks.	1,151
Norden	701	Stagshaw, North'd	1,151
"	1,295	Start Point, Devon	1,052
Nuremberg	520	Towyn, Merioneth	881
"	611	Washford, Somerset	881
"	1,602	Westerglen, Stirlingshire	809
Oldenburg	1,586	"	1,214
Osnabruock	1,586	Whitehaven, Cumberland	692
Ravensburg	1,538	Wrexham, Denbigh	881
Reutlingen	1,538	Sync. Network	647
Siegen	755	Sync. Network	1,546
Sigmaringen	827	GREECE	
Stuttgart	575	Athens	665
"	1,106	"	728
Trier	827	"	1,320
Ulm	1,169	"	1,421
3 L.P. Stations	520	"	*1,484
3 L.P. Stations	1,034	Khania	1,511
4 L.P. Stations	1,142	Komotini	1,403
6 L.P. Stations	1,304	Patras	1,511
5 L.P. Stations ICF	1,484	Rhodes	1,394
3 L.P. Stations	1,502	Salonika	791
GREAT BRITAIN		"	1,007
Barnstaple, Devon	1,052	"	1,043
Barrow-in-Furness, Lancs. ICF	1,484	Volos	*1,484
Bartley, Hants.	1,457	HUNGARY	
Bexhill, Sussex	1,457	Budapest	539
Brighton, Sussex	1,457	"	872
Brookmans Park, London	708	Magyarovar	1,340
"	1,214	Miscolec	1,340
Burghead, Moray	809	Nyiregyhaza	1,250
"	1,214	"	1,340
Cardiff, Glam. ICF	1,484	Pecs	1,340
Clevedon, Somerset	1,457	Szabadsag	1,187
Cromer, Norfolk	692	ICELAND	
Crowborough, Sussex	647	Akureyri	737
"	1,340	Eidar	611
Daventry, Northants.	647	Hoefn	665
Droitwich, Worcs.	200	Keflavik	*1,484
"	1,088	Reykjavik	182
Dumfries	809	ISRAEL	
Folkestone, Kent	1,457	Haifa	1,205
Lisnagarvey, N. Ireland	1,151	"	1,336
"	1,214	Jerusalem	737
Londonderry, N. Ireland	1,151	Tel Aviv	1,390
"	1,214	"	575
Moorside Edge, Yorks.	692	"	652
"	1,214	"	1,277
Newcastle, North'd "	1,214	ITALY	
Norwich, Norfolk	1,088	Ancona	1,448
Penmon, Anglesey	881	Aosta	1,115
Plymouth, Devon	1,214	Bari	1,115
Ramsgate, Kent	*1,484	"	1,331
Redmoss, Aberdeenshire	809	Bologna	1,115
"	1,214	"	1,331

	kc/s		kc/s
Italy—continued			
Bolzano	656	Port Lyautey	* 1,484
Cagliari	1,061	Rabat	1,043
"	1,448	"	1,295
Caltanissetta	566	3 L.P. Stations (A.F.N.)	* 1,594
"	1,448	MOROCCO, SPANISH	
Catania	1,448	Ceuta	1,412
--Florence	656	Melilla	1,430
"	1,448	Tetuan	827
Genoa	1,034	"	917
"	1,331	NETHERLANDS	
Messina	1,115	Hengelo	* 1,594
Milan	899	Hilversum	746
	1,034	"	1,007
Naples	656	Hoogezand	* 1,594
"	1,034	Hulsberg	* 1,594
Palermo	1,448	NORWAY	
Pescara	1,034	Bergen	890
"	1,331	Bodo	674
Pisa	1,115	Finmark	701
Rome	845	Fredrikstad	1,578
"	1,331	Hamar	520
San Remo	1,448	Kristiansand	890
Sassari	1,448	Oslo	218
Turin	656	Stavanger	1,313
"	1,448	Tromso	155
Udine	1,448	Trondheim	890
Venice	656	Vigra	629
"	1,034	Sync. Network	1,115
Sync. Network	1,367	Sync. Network	1,466
Sync. Network	1,578	4 L.P. Stations	* 1,484
4 L.P. Stations	1,331	POLAND	
9 L.P. Stations	* 1,484	Bialystok	* 1,594
JORDAN		Breslau	1,259
Jerusalem	677	Cracow	1,502
LEBANON		Gdansk	1,304
Beirut	836	Lodz	* 1,484
LIBYA		Poznan	1,205
Benghazi	881	Stalinogrod	1,079
Tripoli	1,052	Stettin	1,304
"	* 1,484	Torun	1,367
"	1,586	Warsaw	227
Wheelus Field	800	"	737
LUXEMBOURG		"	818
Luxembourg	233	PORTUGAL	
	208.5/1,439	Caramulo	1,457
MADEIRA		Coimbra	1,061
Funchal	* 1,484	Covilha	1,562
"	* 1,594	Elvas	1,358
MONACO		Faro	1,061
Monte Carlo	1,466	Guarda	557
MOROCCO, FRENCH		Lisbon	665
Casablanca	818	"	719
"	1,187	"	1,034
Meknes	611	"	1,286
"	701	" (5 Stations)	* 1,594
"	1,016	Oporto	755
Oujda	818	"	1,169

Portugal—cont.	kc/s		kc/s
porto	1,223	Jerez de la Frontera	1,493
"	1,367	Leon	1,169
Oporto-Miramar	782	"	1,507
Portalegre	1,358	Lerida	1,511
Regua	800	Linares	1,264
Santarem	1,322	"	1,374
RUMANIA		Logrono	1,484
Brasov	155	Madrid	584
Bucharest	1,052	"	683
Cluj	1,151	"	854
Craiova	1,457	"	953
Oradea	908	"	1,025
"	1,151	"	1,223
Timisoara	557	Malaga	1,007
"	755	Manresa	1,490
SAARLAND		Murcia	1,511
Felsberg	185	Onteniente	1,457
Saarbruecken	1,421	Orense	1,457
SPAIN		Oviedo	1,190
Albacete	1,385	"	1,268
"	1,493	Palamos	1,087
Alcoy	1,493	Palencia	1,424
Algeciras	940	Palma de Mallorca	1,428
"	1,502	Pamplona	1,394
Alicante	1,315	Pontevedra	1,502
"	1,445	Reus	1,412
Anda	1,529	Sabadell	1,349
Antequera	1,367	Sagunto	1,459
Badajoz	1,406	Salamanca	1,313
"	1,484	San Feliu de Llobregat	940
Badalona	1,313	San Sebastian	1,025
Barcelona	737	Santander	1,390
"	809	"	1,470
"	854	Santiago Compostella	1,448
"	1,124	Segovia	1,515
"	1,214	Seville	638
Bilbao	1,133	"	800
Burgos	1,448	Soria	1,271
Caceres	1,089	"	1,441
Cadiz	1,322	Sueca	1,475
"	1,419	Tarragona	1,570
Castellon de la Plana	1,403	Tarrasa	1,502
Ciudad Real	1,448	Teruel	1,187
Cordoba	1,374	Toledo	1,145
Corunna	692	"	1,090
"	1,187	Valencia	773
"	1,313	"	1,259
Cuenca	1,178	"	1,332
Denia	1,360	"	1,397
Elche	1,559	Valladolid	1,401
Gandia	1,412	"	1,475
Gerona	1,521	Vigo	1,403
Gijon	1,493	Villanueva	1,529
Granada	1,447	Vitoria	1,315
Huelva	836	"	1,529
Huesca	1,475	Zamora	1,414
Jaen	1,420	Zaragoza	872
Jativa	1,540	"	1,418

	kc/s		kc/s
SUDAN		Kishinev, Moldavia	998
Khartoum	572	Krasnodar, Russia	611
SWEDEN		Kuldiga, Latvia	1,349
Falun	1,223	Leningrad, Russia	236
Goteborg	980	" "	263
Horby	1,178	" "	800
Lulea	182	" "	1,124
Malmberget	773	Lwow, Ukraine	935
Motala	191	Minsk, Byelorussia	281
Ostersund	420	" "	400
Stockholm	773	Moscow, Russia	151
Sundsvall	593	" "	173
Sync. Network	1,394	" "	200
Sync. Network	1,448	" "	548
Sync. Network	1,529	" "	872
Sync. Network	1,562	" "	971
SWITZERLAND		Murmansk, Russia	656
Beromuenster	529	Odessa, Ukraine	548
Monte Ceneri	557	" "	1,016
Sottens	764	Ouchgorod, Ukraine	890
4 L.P. Stations	1,367	Petrozavodsk,	
SYRIA		Finno-Karelia	611
Aleppo	710	Riga, Latvia	575
" "	747	" "	1,349
Damascus	602	Rostov-on-Don, Russia	764
" "	665	Simferopol, Russia	647
TANGIER		Stalino, Ukraine	710
Tangier	593	Tallinn, Estonia	1,034
" "	935	Tartu, Estonia	710
" "	1,079	" "	1,214
" "	1,128	Vilna, Lithuania	1,106
" "	1,232	Voronezh, Russia	254
" "	1,594	" "	566
TRIESTE		VATICAN CITY	
Trieste	818	Vatican City	782
" "	980	" "	1,484
" "	1,484	" "	1,529
TUNISIA		YUGOSLAVIA	
Tunis	629	Belgrade	683
" "	962	" "	1,484
TURKEY		Bitolja	1,484
Ankara	182	Dubrovnik	1,484
Istanbul	701	Kopar	1,169
U.S.S.R.		Ljubljana	917
Chernovtsy, Ukraine	674	Maribor	1,412
Dniepropetrovsk, Ukraine	1,070	Nis	926
Gomel, Byelorussia	1,493	Novi Sad	1,268
Gorki, Russia	620	" "	1,412
Ivanovo, Russia	926	Osijek	1,484
Kaliningrad, Russia	1,142	Priscina	1,412
Kaunas, Lithuania	665	Rijeka	1,412
" "	1,385	Sarajevo	611
Kharkov, Ukraine	385	Skoplje	809
" "	836	Sljeme	1,484
Kiev, Ukraine	209	Split	1,133
" "	782	Titograd	881
" "	1,169	Zagreb	1,133
		Zajecar	1,133

Short-wave Stations of the World

This list of short-wave broadcasting stations in order of frequency includes not only the frequencies employed at the time of the preparation of the data but also many of those announced for future use. Stations known to have a power of less than one kilowatt are not included. The abbreviations used in some instances after the name of the town indicate the organization operating the station; they are defined on page 76. At stations where there are a number of transmitters of varying power both the minimum and maximum output are given in the appropriate column.

Mc/s	Metres	kW	Call	Station and Country	
2.330	128.80	5	ZQI	Kingston, Jamaica	British W. Indies
2.360	127.10	1	YVRA	Maturin	Venezuela
2.425	123.70	7.5	—	Salisbury	Southern Rhodesia
2.430	123.50	1	YDK2	Palembang, Java	Indonesia
2.440	123.00	1	YDGZ	Surakarta, Java	Indonesia
2.440	123.00	1	YVLG	Maracay	Venezuela
2.460	122.00	3	PJC	Willemstad	Curacao
2.460	122.00	1	YDB	Djakarta, Java	Indonesia
2.470	121.50	1	YVMU	Carora	Venezuela
2.480	121.00	1	YDL2	Padang, Sumatra	Indonesia
2.480	121.00	2.5	YVMK	Cabimas	Venezuela
2.490	120.48	4	YDP2	Medan, Sumatra	Indonesia
2.510	119.50	10	HLKA	Seoul	Korea
3.205	93.60	10	YDA	Bandoeng, Java	Indonesia
3.205	93.60	1	—	Tananarive	Madagascar
3.214	93.34	5	YDS	Menado, Celebes	Indonesia
3.220	93.17	3.5	BED29	Taipei	Formosa
3.223	93.08	3.5	—	Simla	India
3.232	92.81	5	YDM	Bukittinggi, Sumatra	Indonesia
3.242	92.56	7.5	—	Lourenco Marques	Mozambique
3.245	92.40	4	YVKT	Caracas	Venezuela
3.250	92.30	10	HJKH	Sutatenza	Colombia
3.250	92.30	10	YDO	Bandjermassin, Borneo	Indonesia
3.255	92.17	2	ZFY	Georgetown	British Guiana
3.255	92.17	1	YVQL	El Tigre	Venezuela
3.260	92.02	5	YDH2	Semarang, Java	Indonesia
3.262	91.96	2	—	Tobago	British W. Indies
3.263	91.94	1	ZYK21	Recife	Brazil
3.263	91.94	1	YVOC	San Cristobal	Venezuela
3.275	91.60	1	ZYR31	Bauru	Brazil
✓ 3.275	91.60	5/100	VUD	Delhi	India
3.275	91.60	1	ZQP	Lusaka	Northern Rhodesia
3.277	91.55	1	—	Srinagar, Kashmir	India
3.277	91.55	1	YDD	Djakarta, Java	Indonesia
3.285	91.32	1	HI7T	Cuidad Trujillo	Dominican Rep.
3.286	91.32	3	YDG6	Madiun, Java	Indonesia
3.290	91.19	5	—	Johannesburg	South Africa
3.295	91.05	5/100	VUD	Delhi	India
3.295	91.05	1	YVQI	Barcelona	Venezuela
3.295	91.05	1	YVOG	Trujillo	Venezuela
3.297	91.00	16	HNV	Baghdad	Iraq
3.300	90.91	2	ZFY	Georgetown	British Guiana
3.300	90.91	5	—	Belize	British Honduras

Mc/s	Metres	kW	Call	Station	and Country
3.305	90.77	10	VUC	Calcutta	India
3.305	90.77	10	YDG	Surakarta, Java	Indonesia
3.305	90.77	—	—	Tripoli	Libya
3.315	90.50	2.5	—	Nairobi	Kenya
3.315	90.50	1.2	YVLI	Maracay	Venezuela
3.325	90.23	1	ZYO7	Campina Grande	Brazil
3.325	90.23	1	YDQ	Macassar, Celebes	Indonesia
3.325	90.23	7.5	—	Kaduna	Nigeria
3.325	90.23	7.5	APD	Dacca	Pakistan
3.325	90.23	10	DZB2	Manila, Luzon	Philippines
3.345	89.69	1	ZYN22	Salvador	Brazil
3.345	89.69	5/100	VUD	Delhi	India
3.345	89.69	5	YDW	Pontianak, Borneo	Indonesia
3.345	89.69	2.5	YVKP	Caracas	Venezuela
3.345	89.69	7.5	YVQN	Puerto la Cruz	Venezuela
3.350	89.55	1	—	Tananarive	Madagascar
3.355	89.41	1	YDI	Surabaya, Java	Indonesia
3.356	89.40	5	—	Johannesburg	South Africa
3.360	89.28	5	ZQI	Kingston, Jamaica	British W. Indies
3.365	89.15	5/100	VUD	Delhi	India
3.370	89.00	5	—	Johannesburg	South Africa
3.385	88.62	1	YVQI	Barcelona	Venezuela
3.390	88.50	2	YVKX	Caracas	Venezuela
3.395	88.35	1	—	Colombo	Ceylon
3.395	88.35	10	YDR2	Ambon, Moluccas	Indonesia
3.395	88.35	1	APL	Lahore	Pakistan
3.395	88.35	7.5	ZEAF	Salisbury	Southern Rhodesia
3.395	88.35	1.5	YVOJ	Merida	Venezuela
3.395	88.37	5	—	St. Georges, Grenada	Windward Is.
3.425	87.70	5	—	Goa	Goa
3.440	87.21	7.5	CR7AB	Lourenco Marques	Mozambique
3.450	86.96	5	—	Johannesburg	South Africa
3.458	86.76	1	YVLC	Valencia	Venezuela
3.760	79.80	—	—	Moscow, Russia	U.S.S.R.
3.780	79.37	2	EQD	Teheran	Persia
3.892	77.10	10	HLKA	Seoul	Korea
3.905	76.82	5/100	VUD	Delhi	India
3.914	76.65	—	—	Peking	China
3.914	76.65	2.5	ZQP	Lusaka	Northern Rhodesia
3.914	76.65	1	APL	Lahore	Pakistan
3.925	76.43	5/100	VUD	Delhi	India
3.936	76.24	5/100	VUD	Delhi	India
3.936	76.24	7.5	YDB4	Djakarta, Java	Indonesia
3.940	76.14	2.5	ZBW3	Victoria	Hong Kong
3.940	76.14	—	—	Moscow, Russia	U.S.S.R.
3.945	76.05	10	VUB	Bombay	India
3.950	75.95	5/100	VUD	Delhi	India
3.950	75.95	100	CSA	Lisbon	Portugal
3.952	75.89	50/100	MCM	Overseas Service*	Great Britain
3.955	75.85	7.5	APD	Dacca	Pakistan
3.955	75.85	100	HER22	Schwarzenburg	Switzerland

* B.B.C. short-wave transmitters are located at Daventry, Northants; Skelton, Cumberland; Woofferton, Shropshire; and Rampisham, Dorset. Frequencies, calls and power are interchangeable.

Mc/s	Metres	kW	Call	Station and Country	
3.960	75.75	—	—	Peking	China
3.960	75.75	10	YDL	Padang, Sumatra	Indonesia
3.960	75.75	1	—	Jidda	Saudi Arabia
3.965	75.66	10	—	Allouis	France
3.965	75.66	2.5	—	Enugu	Nigeria
3.965	75.66	7.5	APD	Dacca	Pakistan
3.970	75.57	100	—	Norden	Germany (West)
3.970	75.57	5/100	VUD	Delhi	India
3.973	75.51	7.5	APD	Dacca	Pakistan
3.975	75.50	50/100	GRC	Overseas Service*	Great Britain
3.976	75.45	2.5	—	Enugu	Nigeria
3.980	75.38	8/100	—	Munich (V.o.A.)	Germany (West)
3.980	75.38	5/100	—	Delhi	India
3.980	75.38	10	YDI2	Surabaya, Java	Indonesia
3.980	75.38	35/100	—	Tangier (V.o.A.)	Tangier
3.985	75.28	100	HER22	Schwarzenburg	Switzerland
3.990	75.19	5/100	VUD	Delhi	India
3.995	75.09	—	—	Rome	Italy
4.000	75.00	1	—	Ibadan	Nigeria
4.010	74.81	25	—	Frunze, Kirghiz	U.S.S.R.
4.055	73.98	—	—	Moscow, Russia	U.S.S.R.
4.200	71.43	—	—	Shanghai	China
4.220	71.09	3.5	—	Taipei	Formosa
4.235	70.84	10	—	Achkhabad, Turkmenia	U.S.S.R.
4.315	69.47	—	—	Moscow, Russia	U.S.S.R.
4.370	68.65	5	—	Johannesburg	South Africa
4.560	65.79	—	—	Moscow, Russia	U.S.S.R.
4.625	64.86	15	—	Alma Ata, Kazak	U.S.S.R.
4.650	64.52	7	HC2AK	Guayaquil	Ecuador
4.745	63.22	1	PZH5	Paramaribo	Dutch Guiana
4.755	63.09	1	ZYY3	Sao Paulo	Brazil
4.760	63.03	2.5	—	Simla	India
4.767	62.95	3	HJEF	Cali	Colombia
4.770	62.89	1	YVMW	Punta Fijo	Venezuela
4.775	62.82	1	CR6RG	Dondo	Angola
4.775	62.82	5	ZYR81	Sao Paulo	Brazil
4.775	62.82	5	—	Rangoon	Burma
4.780	62.76	5/100	VUD	Delhi	India
4.781	62.75	1	YVLA	Valencia	Venezuela
4.785	62.70	5	HJAB	Barranquilla	Colombia
4.790	62.63	1	APL	Lahore	Pakistan
4.795	62.58	1	HJFU	Armenia	Colombia
4.798	62.53	1	YSDR	Santa Ana	Salvador
4.800	62.50	7.5	—	Kaduna	Nigeria
4.800	62.50	1	—	Johannesburg	South Africa
4.800	62.50	2	YVME	Maracaibo	Venezuela
4.805	62.43	5	ZYS8	Manaos	Brazil
4.805	62.43	1	ZYA27	Taubate	Brazil
4.807	62.41	50/100	APK	Karachi	Pakistan
4.807	62.41	1	CR5SC	Sao Thome	St. Thomas Island
4.810	62.37	1	YVMG	Maracaibo	Venezuela
4.820	62.24	5	ZHL10	Singapore	Malaya
4.820	62.24	1	—	St. Denis	Reunion Island
4.820	62.24	1	YVNB	Coro	Venezuela
4.820	62.24	1	YVRC	San Fernando	Venezuela

Mc/s	Metres	kW	Call	Station and Country	
4.825	62.18	1	HJHG	Pasto	Colombia
4.825	62.18	15	ZQP	Lusaka	Northern Rhodesia
4.830	62.10	1.3	YVOA	San Cristobal	Venezuela
4.834	62.05	2	HJKE	Bogota	Colombia
4.835	62.05	10	ELWA	Monrovia	Liberia
4.840	61.98	5	ZQI	Kingston, Jamaica	British W. Indies
4.840	61.98	10	VUB	Bombay	India
4.840	61.98	10	YDU	Den Pasar, Bali	Indonesia
4.841	61.96	1.5	YVOI	Valera	Venezuela
4.845	61.92	1	HJGF	Bucaramanga	Colombia
4.850	61.86	1	YVMS	Barquisimeto	Venezuela
4.852	61.76	1	CR6RA	Loando	Angola
4.855	61.79	1	HJFN	Neiva	Colombia
4.855	61.79	10	YDK	Palambang, Sumatra	Indonesia
4.860	61.73	1	—	Srinagar, Kashmir	India
4.860	61.73	1	YVPA	San Felipe	Venezuela
4.865	61.66	1	CSA93	Punta Delgada	Azores
4.865	61.66	2	PRC5	Belem	Brazil
4.865	61.66	1	YDR	Ambon, Moluccas	Indonesia
4.867	61.64	1	HJFA	Pereira	Colombia
4.870	61.60	11	ZOI	Colombo	Ceylon
4.870	61.60	1	FGF	Cotonou	Dahomey
4.871	61.59	2.5	HJBG	Cucuta	Colombia
4.873	61.56	7.5	CR7BV	Lourenco Marques	Mozambique
4.875	61.55	1	HJFH	Armenia	Colombia
4.880	61.48	10	VUC	Calcutta	India
4.880	61.48	7.5	YVKF	Caracas	Venezuela
4.885	61.41	6	VQ7LO	Nairobi	Kenya
4.886	61.39	5	—	Goa	Goa
4.890	61.35	4.7	YVKB	Caracas	Venezuela
4.893	61.32	1	—	Dakar	Senegal
4.895	61.29	2.5	PRF6	Manaos	Brazil
4.895	61.29	3	HJCH	Bogota	Colombia
4.895	61.29	5	—	Johannesburg	South Africa
4.897	61.26	10	VLX4	Perth, W.A.	Australia
4.900	61.22	1	HJAG	Barranquilla	Colombia
4.900	61.22	1	YVQE	Ciudad Bolivar	Venezuela
4.901	61.21	7.5	—	Lagos	Nigeria
4.905	61.16	5	ZYZ20	Rio de Janeiro	Brazil
4.910	61.10	1	YDB2	Djakarta, Java	Indonesia
4.910	61.10	5	JKI	Tokio	Japan
4.913	61.07	1	HJEQ	Popayan	Colombia
4.915	61.04	7.5	CR7BU	Lourenco Marques	Mozambique
4.916	61.04	1.3/5	ZOY	Accra	Gold Coast
4.920	60.98	10	VLM4	Brisbane, Qld.	Australia
4.920	60.98	10	VUM	Madras	India
4.923	60.95	5	YVKR	Caracas	Venezuela
4.925	60.94	1	ZYI21	Natal	Brazil
4.928	60.88	5	—	Johannesburg	South Africa
4.930	60.85	1	HJAP	Cartagena	Colombia
4.930	60.85	7.5	YDP	Medan, Sumatra	Indonesia
4.930	60.85	7.5	—	Benghazi (B.F.N.)	Libya
4.933	60.82	6	VQ7LO	Nairobi	Kenya
4.935	60.79	1	HJFR	Ibague	Colombia
4.940	60.73	5/100	VUD	Delhi	India

Mc/s	Metres	kW	Call	Station and Country
4.940	60.73	—	—	Moscow, Russia U.S.S.R.
4.940	60.73	4	YVMQ	Barquisimeto Venezuela
4.945	60.67	1	HJCW	Bogota Colombia
4.945	60.67	3	YDA3	Bandoeng, Java Indonesia
4.945	60.67	1	—	Abidjan Ivory Coast
4.950	60.61	5	ZQI	Kingston, Jamaica British W. Indies
4.950	60.61	5	FHE9	Dakar Senegal
4.950	60.61	1	YVMM	Coro Venezuela
4.960	60.48	10	HJCQ	Bogota Colombia
4.960	60.48	5/100	VUD	Delhi India
4.960	60.48	2	—	Baku, Azerbaidjan U.S.S.R.
4.960	60.48	1	—	Blagoveshchensk, Russia U.S.S.R.
4.960	60.48	1	YVQA	Cumana Venezuela
4.965	60.45	7.5	—	Colombo Ceylon
4.965	60.45	1	HJAE	Cartagena Colombia
4.970	60.36	1	—	Mogadishu Italian Somaliland
4.970	60.36	2.5	ZYY9	Sao Luiz Brazil
4.972	60.35	1	YVLK	Caracas Venezuela
4.985	60.18	5	YDN2	Kutaradja, Sumatra Indonesia
4.989	60.12	5	YVMO	Barquisimeto Venezuela
4.990	60.12	5/100	VUD	Delhi India
4.990	60.12	1	—	Ibadan Nigeria
4.995	60.06	1	ZYY2	Goiana Brazil
4.995	60.06	10	—	Petrozavodsk, Finno-Karelia U.S.S.R.
5.000	60.00	1	—	Kuwait Kuwait
5.005	59.94	6.5	—	Khartoum Sudan
5.010	59.88	—	HJCQ	Bogota Colombia
5.015	59.82	10	—	Rio de Janeiro Brazil
5.016	59.81	20	—	Vladivostok, Russia U.S.S.R.
5.020	59.76	1	HJFW	Manizales Colombia
5.025	59.69	1	CR6RH	Lubango Angola
5.025	59.69	1	—	Colombo Ceylon
5.026	59.68	7.5	—	Kampala Uganda
5.030	59.64	1	YDM2	Bukittinggi, Sumatra Indonesia
5.030	59.64	7.5	YVKM	Caracas Venezuela
5.039	59.53	5	YVMA	Maracaibo Venezuela
5.040	59.59	10	—	Tiflis, Georgia U.S.S.R.
5.045	59.46	5	ZYP23	Rio de Janeiro Brazil
5.045	59.46	—	—	Peking China
5.045	59.46	5	—	Hollandia Dutch New Guinea
5.047	59.44	2.5	YVKD	Caracas Venezuela
5.050	59.41	20	—	Dar-es-Salaam Tanganyika
5.050	59.41	50	—	Petropavlovsk, Russia U.S.S.R.
5.055	59.35	5	HJDW	Medellin Colombia
5.055	59.35	5	—	Kuching, Sarawak Indonesia
5.060	59.29	7.5	YDJ	Djakakarta, Java Indonesia
5.065	59.25	—	—	Moscow, Russia U.S.S.R.
5.070	59.17	1.5	4VDP	Cap Haitien Haiti
5.075	59.10	1	HJKH	Sutatenza Colombia
5.090	58.94	—	—	Moscow, Russia U.S.S.R.
5.150	58.25	1	—	Guryev, Kazak U.S.S.R.
5.225	57.39	—	—	Novosibirsk, Russia U.S.S.R.
5.230	57.36	2	—	Nikolaevsk, Russia U.S.S.R.
5.260	57.03	15	—	Alma Ata, Kazak U.S.S.R.
5.270	56.93	—	—	Moscow, Russia U.S.S.R.

Mc/s	Metres	kW	Call	Station and Country	
5.290	56.71	—	—	Krasnoyarsk, Siberia	U.S.S.R.
5.420	55.35	—	—	Moscow, Russia	U.S.S.R.
5.455	55.00	—	—	Moscow, Russia	U.S.S.R.
5.470	54.84	10	—	Frankfurt (A.F.N.)	Germany (West)
5.480	54.74	—	—	Moscow, Russia	U.S.S.R.
5.740	52.26	—	—	Moscow, Russia	U.S.S.R.
5.750	52.20	1	CE8AA	Santiago	Chile
5.840	51.37	10	—	Magadan, Russia	U.S.S.R.
5.860	51.19	15	—	Alma Ata, Kazak	U.S.S.R.
5.872	51.09	1	HRN	Tegucigalpa	Honduras Rep.
5.892	50.91	5	ZRK	Cape Town	South Africa
5.900	50.85	15	—	Alma Ata, Kazak	U.S.S.R.
5.905	50.81	—	—	Moscow, Russia	U.S.S.R.
5.915	50.72	—	—	Moscow, Russia	U.S.S.R.
5.920	50.68	2	HRA	Tegucigalpa	Honduras Rep.
5.920	50.68	—	—	Moscow, Russia	U.S.S.R.
5.924	50.63	7.5/100	—	Warsaw	Poland
5.930	50.59	—	—	Moscow, Russia	U.S.S.R.
5.940	50.51	1	YNWW	Granada	Nicaragua
5.940	50.51	5	—	Dakar	Senegal
5.940	50.51	20	—	Khabarovsk, Siberia	U.S.S.R.
5.950	50.42	100	—	(Allouis) MDP PARIS	France
5.950	50.42	5	TGNA	Guatemala City	Guatemala
5.950	50.42	1.5	EA9AH	Tetuan	Spanish Morocco
5.953	50.39	1	—	Rabat	French Morocco
5.955	50.38	7.5	—	Sao Paulo	Brazil
5.955	50.38	7.5/100	—	Warsaw	Poland
5.955	50.38	—	—	Moscow, Russia	U.S.S.R.
5.960	50.34	1	HJCF	Bogota	Colombia
5.960	50.34	35	—	Athens	Greece
5.960	50.34	5/100	VUD	Delhi	India
5.960	50.34	—	—	Rome	Italy
5.960	50.34	50/100	CSA	Lisbon	Portugal
5.960	50.34	—	—	Moscow, Russia	U.S.S.R.
5.963	50.31	7.5	—	Porto Alegre	Brazil
5.965	50.30	—	—	Peking	China
5.965	50.30	5/20	—	Tangier	Tangier
5.965	50.30	—	—	Moscow, Russia	U.S.S.R.
5.970	50.25	50	CKNA	Sackville, N.B.	Canada
5.970	50.25	7.5	H14T	Ciudad Trujillo	Dominican Rep.
5.970	50.25	10	YDO2	Bandjermassin, Borneo	Indonesia
5.973	50.21	2	OBX4Q	Lima	Peru
5.975	50.21	50/100	MCP	Overseas Service*	Great Britain
5.975	50.21	7.5/100	—	Warsaw	Poland
5.976	50.20	3	—	Jidda	Saudi Arabia
5.979	50.18	25	—	Andorra	Andorra
5.979	50.18	5	HJDY	Medellin	Colombia
5.980	50.17	100	—	Norden	Germany (West)
5.980	50.17	5	—	Bucharest	Rumania
5.980	50.17	1	YSWW	Santa Ana	Salvador
5.980	50.17	—	—	Moscow, Russia	U.S.S.R.
5.980	50.17	2	RV214	Yakutsk, Siberia	U.S.S.R.
5.980	50.17	5	—	St. Georges, Grenada	Windward Is.
5.981	50.16	2	ZFY	Georgetown	British Guiana
5.983	50.14	4	OEI30	Vienna	Austria

Mc/s	Metres	kW	Call	Station and Country	
5.985	50.13	10	BED29	Taipei	Formosa
5.985	50.13	1.5	4VHW	Port au Prince	Haiti
5.985	50.13	1	—	Sana'a	Yemen
5.986	50.12	5	LRS1	Buenos Aires	Argentina
5.990	50.08	50/100	MCU	Overseas Service*	Great Britain
5.990	50.08	1	TGJA	Guatemala City	Guatemala
5.990	50.08	5/100	VUD	Delhi	India
5.990	50.08	5	YDS2	Manado, Celebes	Indonesia
5.990	50.08	1	HO50	Panama City	Panama
5.990	50.08	50	—	Komsomolsk, Siberia	U.S.S.R.
5.995	50.04	1	HRP1	San Pedro Sula	Honduras Rep.
5.995	50.04	1	YNGD	Leon	Nicaragua
5.995	50.04	7.5/100	—	Warsaw	Poland
5.995	50.04	100	—	Madrid	Spain
5.995	50.04	—	—	Moscow, Russia	U.S.S.R.
6.000	50.00	100	ORU	Wavre	Belgium
6.000	50.00	5	PRK5	Belo Horizonte	Brazil
6.000	50.00	5	HJKD	Bogota	Colombia
6.000	50.00	1	DZH4	Manila, Luzon	Philippines
6.000	50.00	—	RNE	Moscow, Russia	U.S.S.R.
6.005	49.96	1	CFCX	Montreal, Quebec	Canada
6.005	49.96	20	—	Berlin (R.I.A.S.)	Germany (West)
6.005	49.96	1	HP5K	Colon	Panama
6.005	49.96	5	—	Johannesburg	South Africa
6.006	49.95	1	—	Rabat	French Morocco
6.010	49.92	1	CJCX	Sydney, N.S.	Canada
6.010	49.92	1	HJFC	Armeria	Colombia
6.010	49.92	30	OLR2A	Podebrady	Czechoslovakia
6.010	49.92	50/100	GRB	Overseas Service*	Great Britain
6.010	49.92	10	VUC	Calcutta	India
6.010	49.92	60	—	Rome	Italy
6.010	49.92	2.5	XEOI	Mexico City	Mexico
6.010	49.92	5	YSS	San Salvador	Salvador
6.012	49.90	1.2	4VM	Port au Prince	Haiti
6.015	49.88	5	PRA8	Recife	Brazil
6.015	49.88	35	—	Salonika (V.o.A.)	Greece
6.015	49.88	20	JKK	Tokio	Japan
6.015	49.88	35/100	—	Tangier (V.o.A.)	Tangier
6.015	49.88	—	—	Moscow, Russia	U.S.S.R.
6.018	49.85	7.5	—	Rangoon	Burma
6.018	49.85	7.5	—	Salisbury	Southern Rhodesia
6.020	49.83	5	HJCX	Bogota	Colombia
6.020	49.83	1	HROW	Tegucigalpa	Honduras Rep.
6.020	49.83	5	PCD	Lopik	Netherlands
6.020	49.83	1	OAX4Q	Lima	Peru
6.020	49.83	50/200	KNBH	Dixon, Cal.	U.S.A.
6.020	49.83	40	—	Kiev, Ukraine	U.S.S.R.
6.025	49.79	50	ZYR63	Sao Paulo	Brazil
6.025	49.79	5	VS2K6	Kuala Lumpur	Malaya
X 6.025	49.79	40	—	(Lopik) WILVERSUM	Netherlands
6.025	49.79	7.5/100	—	Warsaw	Poland
6.025	49.79	100	CSA	Lisbon	Portugal
6.028	49.77	30	OLR2B	Podebrady	Czechoslovakia
6.030	49.75	10	—	Stuttgart (S.D.R.)	Germany (West)
6.030	49.75	1	FK8AA	Noumea	New Caledonia

Mc/s	Metres	kW	Call	Station and Country	
6.030	49.75	1	APL	Lahore	Pakistan
6.030	49.75	1	DZH6	Manila, Luzon	Philippines
6.030	49.75	—	—	Moscow, Russia	U.S.S.R.
6.035	49.71	—	ZYC26	Sao Paulo	Brazil
6.035	49.71	50/100	GWS	Overseas Service*	Great Britain
6.035	49.71	1	HRTL	Tela	Honduras Rep.
6.035	49.71	—	—	Moscow, Russia	U.S.S.R.
6.035	49.71	1	CXA30	Montevideo	Uruguay
6.036	49.69	1.5	TIHBG	San Jose	Costa Rica
6.037	49.69	2	TIFC	San Jose	Costa Rica
X 6.037	49.69	25	3AM3	Monte Carlo	Monaco
6.038	49.68	7	—	Tabriz	Persia
6.040	49.67	50/100	GSY	Overseas Service*	Great Britain
6.040	49.67	35	—	Salonika (V.o.A.)	Greece
6.040	49.67	75/200	WLWO	Cincinnati, Ohio	U.S.A.
6.040	49.67	50/200	KCBR	Delano, Cal.	U.S.A.
6.040	49.67	—	—	Moscow, Russia	U.S.S.R.
6.045	49.63	100	—	Allouis	France
6.045	49.63	100	YDF	Djakarta, Java	Indonesia
6.045	49.63	5	XETW	Tampico	Mexico
6.045	49.63	1	HOU31	David	Panama
6.045	49.63	—	—	Moscow, Russia	U.S.S.R.
6.047	49.61	1	—	Amman	Jordan
6.050	49.59	—	—	Peking	China
6.050	49.59	1	HIIN	Santiago	Dominican Rep.
6.050	49.59	1	HCJB	Quito	Ecuador
6.050	49.59	50/100	GSA	Overseas Service*	Great Britain
6.050	49.59	50	—	Komsomolsk, Siberia	U.S.S.R.
6.050	49.59	—	—	Moscow, Russia	U.S.S.R.
6.055	49.55	5	PRB21	Sao Paulo	Brazil
6.055	49.55	2.5	HJEX	Cali	Colombia
6.055	49.55	5	JOZ2	Tokio	Japan
6.055	49.55	10/50	APK	Karachi	Pakistan
6.055	49.55	25	HER2	Schwarzenburg	Switzerland
6.055	49.55	75/100	WLWO	Cincinnati, Ohio	U.S.A.
6.055	49.55	5	CXA14	Montevideo	Uruguay
6.058	49.52	5	—	Jerusalem	Jordan
6.060	49.50	50	CKRZ	Sackville, N.B.	Canada
6.060	49.50	50	OZF3	Copenhagen	Denmark
6.060	49.50	50/100	GSX	Overseas Service*	Great Britain
6.060	49.50	1	HRYN2	San Pedro Sula	Honduras Rep.
6.060	49.50	5	VU7MC	Akashvani, Mysore	India
6.060	49.50	5/100	VUD	Delhi	India
6.060	49.50	—	—	Caltanissetta	Italy
6.060	49.50	3	VQ7LO	Nairobi	Kenya
6.060	49.50	1	HORT	Panama City	Panama
6.060	49.50	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
6.060	49.50	50/200	KNBH	Dixon, Cal.	U.S.A.
6.060	49.50	—	—	Moscow, Russia	U.S.S.R.
6.065	49.46	25	LRA	Buenos Aires	Argentina
6.065	49.46	1	HC2FQ	Guayaquil	Ecuador
6.065	49.46	5/100	VUD	Delhi	India
X 6.065	49.46	100	—	(Horby) STOCKHOLM	Sweden
6.065	49.46	—	—	Leningrad, Russia	U.S.S.R.
6.066	49.45	10	XEXG	Mexico City	Mexico

Mc/s	Metres	kW	Call	Station and Country	
6.070	49.42	5	—	Sofia	Bulgaria
6.070	49.42	1	CFRX	Toronto, Ont.	Canada
6.070	49.42	50/100	GRR	Overseas Service*	Great Britain
6.070	49.42	—	—	Moscow, Russia	U.S.S.R.
6.073	49.41	7.5	—	Athens	Greece
6.075	49.38	100	—	Norden	Germany (West)
6.075	49.38	10/50	APK	Karachi	Pakistan
6.075	49.38	1	APL2	Lahore	Pakistan
6.075	49.38	10	—	Erivan, Armenia	U.S.S.R.
6.080	49.34	8/100	—	Munich (V.o.A.)	Germany (West)
6.080	49.34	50/100	MCV	Overseas Service*	Great Britain
6.080	49.34	35	—	Salonika (V.o.A.)	Greece
6.080	49.34	7.5	ZL7	Wellington	New Zealand
6.080	49.34	10	DZ17	Manila, Luzon	Philippines
6.080	49.34	1	CSB	Lisbon	Portugal
6.080	49.34	35/100	—	Tangier (V.o.A.)	Tangier
6.080	49.34	75/200	WLWO	Cincinnati, Ohio	U.S.A.
6.080	49.34	50	—	Petropavlovsk, Russia	U.S.S.R.
6.081	49.33	15	OAX4Z	Lima	Peru
6.085	49.30	100	ORU	Wavre	Belgium
6.085	49.30	16	ZYK2	Recife	Brazil
6.085	49.30	10	VUM	Madras	India
6.085	49.30	—	—	Leningrad, Russia	U.S.S.R.
6.088	49.28	2.5	CNR3	Rabat	French Morocco
6.090	49.26	50	LRV	Buenos Aires	Argentina
6.090	49.26	2	VLI6	Sydney, N.S.W.	Australia
6.090	49.26	50	CKOB	Sackville, N.B.	Canada
6.090	49.26	7.5	CBFW	Vercheres, Quebec	Canada
6.090	49.26	50/100	GW M	Overseas Service*	Great Britain
6.090	49.26	7.5	4VB	Port au Prince	Haiti
6.090	49.26	1	—	Pnompenh	Indo-China
6.090	49.26	5	LXA	Luxembourg	Luxembourg
x 6.090	49.26	10/50	APK	Karachi	Pakistan
6.090	49.26	1	OAX4G	Lima	Peru
6.090	49.26	—	—	Moscow, Russia	U.S.S.R.
6.095	49.22	25	ZYB7	Sao Paulo	Brazil
6.095	49.22	1	YSC	San Salvador	Salvador
6.095	49.22	5	—	Johannesburg	South Africa
6.095	49.22	100	—	Horby	Sweden
6.100	49.18	5	—	Belize	British Honduras
6.100	49.18	—	—	Peking	China
x 6.100	49.18	10	YUA	Belgrade	Yugoslavia
6.101	49.17	7.5	—	Enugu	Nigeria
6.101	49.17	2	—	Jidda	Saudi Arabia
6.104	49.15	1	4VE	Cap Haitien	Haiti
6.105	49.14	5	ZYN6	Fortaleza	Brazil
6.105	49.14	4.5	HJFD	Manizales	Colombia
6.105	49.14	2.5	HJFK	Pereira	Colombia
6.105	49.14	1	HRXW	Tegucigalpa	Honduras Rep.
6.110	49.10	50/100	GSL	Overseas Service*	Great Britain
6.110	49.10	1	—	Srinagar, Kashmir	India
6.110	49.10	7.5/100	—	Tebrau	Malaya
6.110	49.10	1	—	Tangier	Tangier
6.110	49.10	—	—	Leningrad, Russia	U.S.S.R.
6.115	49.06	30	—	Podebrady	Czechoslovakia

Mc/s	Metres	kW	Call	Station and Country	
6.115	49.06	1	HIIZ	Ciudad Trujillo	Dominican Rep.
6.115	49.06	5	—	Berlin	Germany (East)
6.115	49.06	7.5/100	—	Warsaw	Poland
6.115	49.06	50	—	Komsomolsk, Russia	U.S.S.R.
6.120	49.02	1	LRX1	Buenos Aires	Argentina
6.120	49.02	1	CP15	La Paz	Bolivia
6.120	49.02	7.5	ZJM4	Limassol	Cyprus
6.120	49.02	15	OIX7	Pori	Finland
6.120	49.02	50	WDSI	Brentwood, N.Y.	U.S.A.
6.120	49.02	—	—	Moscow, Russia	U.S.S.R.
6.124	48.99	1	HRQ	San Pedro	Honduras Rep.
6.125	48.98	7.5	—	Sao Paulo	Brazil
6.125	48.98	5	VPC	Port Stanley	Falkland Islands
6.125	48.98	50/100	GWA	Overseas Service*	Great Britain
6.125	48.98	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
6.130	48.94	1	CHNX	Halifax, N.S.	Canada
6.130	48.94	1	COCD	Havana	Cuba
6.130	48.94	5/100	VUD	Delhi	India
6.130	48.94	1	—	Vientiane, Laos	Indo-China
6.130	48.94	10	LKJ	Tromso	Norway
6.130	48.94	2	VLT6	Port Moresby	Papua
6.130	48.94	1	OAX7A	Cuzco	Peru
6.130	48.94	1	FO8AA	Papeete	Tahiti
6.130	48.94	10	CXA4	Montevideo	Uruguay
6.135	48.90	7.5	PRC21	Porto Alegre	Brazil
6.135	48.90	1	HJEV	Cali	Colombia
6.135	48.90	35	—	Salonika (V.o.A.)	Greece
6.135	48.90	10	ZHL	Singapore	Malaya
6.135	48.90	—	—	Kaunas, Lithuania	U.S.S.R.
6.136	48.89	100	—	Madrid	Spain
6.138	48.88	1	APL	Lahore	Pakistan
6.140	48.86	8/100	—	Munich (V.o.A.)	Germany (West)
6.140	48.86	50/100	MCW	Overseas Service*	Great Britain
6.140	48.86	1	YNWA	Managua	Nicaragua
6.140	48.86	1	DYH2	Cebu	Philippines
6.140	48.86	35/100	—	Tangier (V.o.A.)	Tangier
6.145	48.82	5	HJDE	Medellin	Colombia
6.145	48.82	100	—	Allouis	France
6.145	48.82	35	—	Okinawa (V.o.A.)	Okinawa Island
6.147	48.79	50	PRL9	Rio de Janeiro	Brazil
6.150	48.78	2	VLR6	Lyndhurst, Vic.	Australia
6.150	48.78	1	CP12	La Paz	Bolivia
6.150	48.78	2	CKRO	Winnipeg, Manitoba	Canada
6.150	48.78	5	CE615	Valparaiso	Chile
6.150	48.78	50/100	GRW	Overseas Service*	Great Britain
6.150	48.78	1	4VWA	Cap Haitien	Haiti
6.150	48.78	10	VUB	Bombay	India
6.150	48.78	—	—	Moscow, Russia	U.S.S.R.
6.152	48.76	2	TIRH	San Jose	Costa Rica
6.154	48.75	35	BEF6	Chungking	China
6.154	48.75	10	CSB52	Lisbon	Portugal
6.155	48.74	4	OEI21	Vienna	Austria
6.155	48.74	10	HJKC	Bogota	Colombia
6.155	48.74	30	OLR2D	Podebrady	Czechoslovakia
6.155	48.74	2	EQB	Teheran	Persia

Mc/s	Metres	kW	Call	Station and Country	
6.155	48.74	75/200	WLWO	Cincinnati, Ohio	U.S.A.
6.156	48.74	5	CXA13	Montevideo	Uruguay
6.160	48.70	10	—	Algiers	Algeria
6.160	48.70	50	CHAC	Sackville, N.B.	Canada
6.160	48.70	10	—	Munich (B.R.)	Germany (West)
6.162	48.68	5	HJKJ	Bogota	Colombia
6.165	48.66	7.5	ZYR58	Sao Paulo	Brazil
6.165	48.66	2	TILS	San Jose	Costa Rica
6.165	48.66	50/100	GWK	Overseas Service *	Great Britain
6.165	48.66	6	—	Khartoum	Sudan
6.165	48.66	100	HER3	Schwarzenburg	Switzerland
6.165	48.66	20	—	Damascus	Syria
6.165	48.66	—	—	Moscow, Russia	U.S.S.R.
6.170	48.62	7.5	ZJM5	Limassol	Cyprus
6.170	48.62	50/100	GSZ	Overseas Service*	Great Britain
6.170	48.62	1	YDL3	Padang, Sumatra	Indonesia
6.170	48.62	1	FIQA	Tananarive	Madagascar
6.170	48.62	1	DUH2	Manila, Luzon	Philippines
6.170	48.62	50	WDSI	Brentwood, N.Y.	U.S.A.
6.170	48.62	1	CXA21	Montevideo	Uruguay
6.170	48.62	2	YVKO	Caracas	Venezuela
6.175	48.58	7.5/100	—	Tebrau	Malaya
6.176	48.57	2	—	Jidda	Saudi Arabia
6.180	48.54	10	LRM	Mendoza	Argentina
6.180	48.54	3	TIGPH4	San Jose	Costa Rica
6.180	48.54	50/100	GRO	Overseas Service*	Great Britain
6.180	48.54	2.5	—	Malaga	Spain
6.180	48.54	—	—	Moscow, Russia	U.S.S.R.
6.183	48.52	10	HJCT	Bogota	Colombia
6.185	48.50	10	ZYR77	Sao Paulo	Brazil
6.185	48.50	50/200	KCBR	Delano, Cal.	U.S.A.
6.185	48.50	40	—	Kiev, Ukraine	U.S.S.R.
6.190	48.47	1	CE619	Santiago	Chile
6.190	48.47	5/100	VUD	Delhi	India
6.190	48.47	5	—	Caltanissetta	Italy
6.190	48.47	1	YSUA	San Salvador	Salvador
6.190	48.47	—	—	Leningrad, Russia	U.S.S.R.
6.190	48.47	25	HVJ	Vatican City	Vatican City
6.195	48.43	7.5	—	Nictheroy	Brazil
6.195	48.43	5	HJEZ	Cali	Colombia
6.195	48.43	50/100	GRN	Overseas Service*	Great Britain
6.195	48.43	100	KRHO	Honolulu	Hawaii
6.196	48.43	7.5/100	—	Warsaw	Poland
6.200	48.39	100	—	Allouis	France
6.200	48.39	20	—	Damascus	Syria
6.200	48.39	—	—	Moscow, Russia	U.S.S.R.
6.203	48.37	—	—	Peking	China
6.207	48.34	1	TGWB	Guatemala City	Guatemala
6.210	48.31	5	—	Bucharest	Rumania
6.215	48.27	40/100	—	Cairo	Egypt
6.215	48.27	—	—	Rome	Italy
6.220	48.23	5/100	VUD	Delhi	India
6.220	48.23	10/50	APK	Karachi	Pakistan
6.222	48.21	5	CE622	Santiago	Chile
6.230	48.15	50	APK	Karachi	Pakistan

Mcs	Metres	kW	Call	Station and Country	
6.236	48.12	100	—	Budapest	Hungary
6.240	48.08	5	—	Caltanissetta	Italy
6.240	48.08	1	HS1JS	Bangkok	Siam
6.287	47.71	1	TGLA	Guatemala City	Guatemala
6.290	47.69	5/100	VUD	Delhi	India
6.299	47.61	1	—	Istanbul	Turkey
6.308	47.56	1	OAX6E	Arequipa	Peru
6.314	47.51	1	OAX4H	Lima	Peru
6.327	47.44	5	—	Athens	Greece
6.334	47.37	1	TGTA	Guatemala City	Guatemala
6.355	47.21	1	CR6RC	Loando	Angola
6.360	47.17	1	TGWB	Guatemala City	Guatemala
6.365	47.14	—	—	Moscow, Russia	U.S.S.R.
6.373	47.09	50/100	CSA21	Lisbon	Portugal
6.410	46.80	1	HLRP	Tegucigalpa	Honduras Rep.
6.422	46.71	5	—	Shiraz	Persia
6.450	46.51	1	COCY	Havana	Cuba
6.470	46.37	—	—	Moscow, Russia	U.S.S.R.
6.498	46.17	—	—	San Jose	Costa Rica
6.672	44.97	2	HROW	Tegucigalpa	Honduras Rep.
6.675	44.94	25	HBQ	Geneva	Switzerland
6.700	44.78	25	—	Stalinabad, Tadzhik	U.S.S.R.
6.710	44.71	1	TGQA	Quezaltenango	Guatemala
6.722	44.63	7.5	4XB44	Tel Aviv	Israel
6.730	44.58	15	—	Tashkent, Uzbek	U.S.S.R.
6.745	44.48	1.2	—	Alicante	Spain
6.750	44.44	5	—	Shanghai	China
6.790	44.18	7.5	ZJM6	Limassol	Cyprus
6.810	44.05	—	—	Peking	China
6.825	43.96	15	—	Tashkent, Uzbek	U.S.S.R.
6.833	43.90	50	4XB21	Tel Aviv	Israel
6.890	43.54	—	—	Peking	China
6.975	43.01	2	EAJ9	Malaga	Spain
6.975	43.01	—	—	Moscow, Russia	U.S.S.R.
6.980	42.98	40	—	Valencia	Spain
6.980	42.98	—	—	Moscow, Russia	U.S.S.R.
6.995	42.89	3	EAJ3	Valencia	Spain
7.000	42.86	—	—	Peking	China
7.005	42.83	1	—	Valladolid	Spain
7.008	42.81	50	APK	Karachi	Pakistan
7.025	42.70	5/100	VUD	Delhi	India
7.035	42.64	5/100	VUD	Delhi	India
7.050	42.55	100	—	Allouis	France
7.055	42.52	50	—	Cairo	Egypt
7.065	42.46	5/100	VUD	Delhi	India
7.078	42.37	3	—	Jidda	Saudi Arabia
7.083	42.35	5	CR8AB	Goa	Goa
7.083	42.35	7.5	—	Dacca	Pakistan
7.090	42.31	1	EDV10	Madrid	Spain
7.097	42.27	100	—	Allouis	France
7.100	42.25	20	YDJ2	Djokjakarta, Java	Indonesia
7.100	42.25	1	—	Katmandu	Nepal
7.100	42.25	50/200	—	Madrid	Spain
7.100	42.25	35/100	—	Tangier (V.o.A.)	Tangier
7.100	42.25	—	—	Moscow, Russia	U.S.S.R.

SUBPHEST 71

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11 (17)

P1, 11F

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SOF 10

Mc/s	Metres	kW	Call	Station and Country	
7.105	42.22	50	—	Cairo	Egypt
7.105	42.22	7.5/100	—	Warsaw	Poland
7.105	42.22	2.5	HS3PN	Bangkok	Siam
7.105	42.22	—	—	Moscow, Russia	U.S.S.R.
7.110	42.19	35	—	Colombo	Ceylon
7.110	42.19	50/100	MCS	Overseas Service*	Great Britain
7.110	42.19	3	—	Jidda	Saudi Arabia
7.110	42.19	—	—	Moscow, Russia	U.S.S.R.
7.115	42.16	100	—	Allouis	France
7.115	42.16	35/100	—	Tangier (V.o.A.)	Tangier
7.115	42.16	—	—	Moscow, Russia	U.S.S.R.
7.120	42.13	50/100	GRM	Overseas Service*	Great Britain
7.120	42.13	7.5/100	—	Tebrau	Malaya
7.120	42.13	—	—	Moscow, Russia	U.S.S.R.
7.125	42.11	35	—	Salonika (V.o.A.)	Greece
7.127	42.09	1	VQ6MI	Hargeisa	British Somaliland
7.130	42.08	10	BED7	Taipei	Formosa
7.132	42.07	2	—	Jidda	Saudi Arabia
7.132	42.07	40	—	Kiev, Ukraine	U.S.S.R.
7.135	42.05	4	—	Vienna	Austria
7.135	42.05	3	CR4AA	Praia	Cape Verde Islands
7.135	42.05	50/100	GRS	Overseas Service*	Great Britain
7.135	42.05	1	F1QA	Tananarive	Madagascar
7.135	42.05	100	TAL4	Ankara	Turkey
7.135	42.05	—	—	Moscow, Russia	U.S.S.R.
7.140	42.02	5/100	VUD	Delhi	India
7.140	42.02	30	3AM4	Monte Carlo	Monaco
x 7.141	42.01	7.5	—	Athens	Greece
7.145	41.99	7.5/100	—	Warsaw	Poland
7.145	41.99	20	—	Damascus	Syria
7.145	41.99	35/100	—	Tangier (V.o.A.)	Tangier
7.147	41.98	10/50	APK	Karachi	Pakistan
7.150	41.96	100	—	Berlin	Germany (East)
7.150	41.96	50/100	GRT	Overseas Service*	Great Britain
7.150	41.96	5/100	VUD	Delhi	India
7.150	41.96	—	—	Moscow, Russia	U.S.S.R.
7.155	41.93	5/100	VUD	Delhi	India
7.155	41.93	1	—	Tananarive	Madagascar
7.155	41.93	7.5/100	—	Warsaw	Poland
7.155	41.93	—	—	Moscow, Russia	U.S.S.R.
7.160	41.90	100	—	Allouis	France
7.160	41.90	8/100	—	Munich (V.o.A.)	Germany (West)
7.160	41.90	35	—	Okinawa (V.o.A.)	Okinawa Island
7.160	41.90	10/50	APK	Karachi	Pakistan
7.160	41.90	35/100	—	Tangier (V.o.A.)	Tangier
7.165	41.87	5/100	VUD	Delhi	India
7.170	41.84	3	—	Aden	Aden
7.170	41.84	—	—	Peking	China
x 7.170	41.84	100	—	Norden	Germany (West)
7.170	41.84	50/100	VUD	Delhi	India
7.170	41.84	3	—	Tangier	Tangier
7.170	41.84	—	—	Moscow, Russia	U.S.S.R.
7.175	41.81	—	—	Palermo	Italy
7.175	41.81	7.5	—	Kaduna	Nigeria
7.175	41.81	7.5/100	—	Warsaw	Poland

Mc/s	Metres	kW	Call	Station and Country	
7.175	41.81	—	—	Moscow, Russia	U.S.S.R.
7.180	41.78	50/100	JOB2	Tokio	Japan
7.180	41.78	5	—	Mombasa	Kenya
7.180	41.78	—	—	Moscow, Russia	U.S.S.R.
7.185	41.75	50/100	GRK	Overseas Service*	Great Britain
7.185	41.75	2	—	Jidda	Saudi Arabia
7.185	41.75	—	—	Moscow, Russia	U.S.S.R.
7.190	41.72	7.5	—	Colombo	Ceylon
7.190	41.72	—	—	Cotonou	Dahomey
7.190	41.72	5/100	VUD	Delhi	India
7.195	41.69	20	YDP3	Medan, Sumatra	Indonesia
7.195	41.69	7.5/100	—	Warsaw	Poland
7.200	41.67	—	—	Silve Porto	Angola
7.200	41.67	50/100	GWZ	Overseas Service*	Great Britain
7.200	41.67	—	—	—	Indo-China
7.200	41.67	15	ZQP	Lusaka	Northern Rhodesia
7.200	41.67	35/100	—	Tangier (V.o.A.)	Tangier
7.200	41.67	—	—	Moscow, Russia	U.S.S.R.
7.200	41.67	100	—	Belgrade	Yugoslavia
7.205	41.64	100	—	Norden	Germany (West)
7.205	41.64	35	—	Salonika (V.o.A.)	Greece
7.205	41.64	7.5/100	—	Warsaw	Poland
7.205	41.64	—	—	Moscow, Russia	U.S.S.R.
7.210	41.61	50/100	GWL	Overseas Service*	Great Britain
7.210	41.61	10	VUC	Calcutta	India
7.210	41.61	5/100	VUD	Delhi	India
7.210	41.61	40	—	Lopik	Netherlands
7.210	41.61	10	LLS	Tromso	Norway
7.210	41.61	100	—	Horby	Sweden
7.210	41.61	100	HEI3	Schwarzenburg	Switzerland
7.210	41.61	—	—	Moscow, Russia	U.S.S.R.
7.215	41.58	10	VLQ7	Brisbane, Qld.	Australia
7.215	41.58	50	VLC7	Shepparton, Vic.	Australia
7.215	41.58	35	—	Salonika (V.o.A.)	Greece
7.215	41.58	—	—	Moscow, Russia	U.S.S.R.
7.220	41.55	50	VLC7	Shepparton, Vic.	Australia
7.220	41.55	30	—	Podebrady	Czechoslovakia
7.220	41.55	100	—	Allouis	France
7.220	41.55	50/100	—	Overseas Service*	Great Britain
7.220	41.55	100	YDF5	Djakarta, Java	Indonesia
7.220	41.55	—	—	Tripoli	Libya
7.222	41.54	100	—	Budapest	Hungary
7.225	41.52	—	—	Moscow, Russia	U.S.S.R.
7.230	41.49	1	CR6RM	Mossamedes	Angola
7.230	41.49	50/100	GSW	Overseas Service*	Great Britain
7.230	41.49	5/25	—	Saigon	Indo-China
7.230	41.49	—	—	Kaunas, Lithuania	U.S.S.R.
7.235	41.47	35/100	—	Tangier (V.o.A.)	Tangier
7.235	41.47	—	—	Moscow, Russia	U.S.S.R.
7.240	41.44	50	VLC17	Shepparton, Vic.	Australia
7.240	41.44	100	—	Allouis	France
7.240	41.44	10	VUB	Bombay	India
7.240	41.44	20	YDP3	Medan, Sumatra	Indonesia
7.240	41.44	5	LLR	Oslo	Norway
7.240	41.44	20	—	Damascus	Syria

Mc/s	Metres	kW	Call	Station and Country	
7.240	41.44	—	—	Moscow, Russia	U.S.S.R.
7.245	41.41	4	OEI22	Vienna	Austria
7.245	41.41	—	—	Moscow, Russia	U.S.S.R.
7.250	41.38	8/100	—	Munich (V.o.A.)	Germany (West)
7.250	41.38	50/100	GW1	Overseas Service*	Great Britain
7.250	41.38	1	YDG3	Surakarta, Java	Indonesia
7.250	41.38	7.5	CR7AA	Lourenco Marques	Mozambique
7.250	41.38	7.5/100	—	Warsaw	Poland
7.250	41.38	35/100	—	Tangier (V.o.A.)	Tangier
7.255	41.35	5	—	Sofia	Bulgaria
7.255	41.35	30	OLR8E	Podebrady	Czechoslovakia
7.257	41.33	5	JKH	Tokio	Japan
7.260	41.32	50/100	GSU	Overseas Service *	Great Britain
7.260	41.32	10	VUM	Madras	India
7.260	41.32	12	—	Saigon	Indo-China
7.260	41.32	—	—	Moscow, Russia	U.S.S.R.
7.265	41.29	1	—	Bad Durrheim	Germany (West)
7.265	41.29	35	—	Salonika (V.o.A.)	Greece
7.265	41.29	1	—	Dalat	Indo-China
7.265	41.29	—	—	Moscow, Russia	U.S.S.R.
7.266	41.28	4	—	Vienna	Austria
7.270	41.27	1	—	Srinagar, Kashmir	India
7.270	41.27	7.5	YDB3	Djakarta, Java	Indonesia
7.270	41.27	12	—	Motala	Sweden
7.270	41.27	35/100	—	Tangier (V.o.A.)	Tangier
7.270	41.27	5	—	Erivan, Armenia	U.S.S.R.
7.270	41.27	—	—	Moscow, Russia	U.S.S.R.
7.275	41.24	5/100	VUD	Delhi	India
7.275	41.24	50/100	—	Rome	Italy
7.280	41.21	100	VLA7	Shepparton, Vic.	Australia
7.280	41.21	100	—	Allouis	France
7.280	41.21	50/100	GWN	Overseas Service*	Great Britain
7.280	41.21	7.5	APD	Dacca	Pakistan
7.280	41.21	—	—	Moscow, Russia	U.S.S.R.
7.280	41.21	25	HVJ	Vatican City	Vatican City
7.285	41.18	5	JKJ	Tokio	Japan
7.285	41.18	100	TAS	Ankara	Turkey
7.285	41.18	—	—	Moscow, Russia	U.S.S.R.
7.286	41.18	1	FIA6	Duala	Cameroons
7.286	41.18	5/100	VUD	Delhi	India
7.288	41.16	3	—	Tangier	Tangier
7.290	41.15	2	EA8AB	Teneriffe	Canary Islands
7.290	41.15	100	—	Norden	Germany (West)
7.290	41.15	60	—	Rome	Italy
7.290	41.15	40	—	Kiev, Ukraine	U.S.S.R.
7.295	41.12	—	—	Peking	China
7.295	41.12	8/100	—	Munich (V.o.A.)	Germany (West)
7.295	41.12	5/100	VUD	Delhi	India
7.295	41.12	20	YDQ3	Macassar, Celebes	Indonesia
7.295	41.12	5	—	Johannesburg	South Africa
7.295	41.12	35/100	—	Tangier (V.o.A.)	Tangier
7.300	41.10	3	BEC36	Taipei	Formosa
7.300	41.10	—	—	Moscow, Russia	U.S.S.R.
7.310	41.04	—	—	Moscow, Russia	U.S.S.R.
7.320	40.98	—	—	Moscow, Russia	U.S.S.R.

Mc/s	Metres	kW	Call	Station and Country	
7.321	40.98	40/100	—	Cairo	Egypt
7.325	40.96	50/100	GRJ	Overseas Service*	Great Britain
7.325	40.96	—	—	Moscow, Russia	U.S.S.R.
7.335	40.90	40/100	—	Cairo	Egypt
7.336	40.90	3.5	—	Taipei	Formosa
7.340	40.87	—	—	Leningrad, Russia	U.S.S.R.
7.350	40.82	—	—	Moscow, Russia	U.S.S.R.
7.360	40.76	—	RWG	Moscow, Russia	U.S.S.R.
7.365	40.74	—	—	Moscow, Russia	U.S.S.R.
7.370	40.71	—	—	Peking	China
7.375	40.68	—	—	Moscow, Russia	U.S.S.R.
7.380	40.65	4.6	—	Madrid	Spain
7.385	40.63	—	—	Moscow, Russia	U.S.S.R.
7.397	40.55	1	CR4AA	Praia	Cape Verde Islands
7.400	40.54	—	—	Moscow, Russia	U.S.S.R.
7.408	40.49	1	—	Hanoi	Indo-China
7.420	40.43	1	—	Athens	Greece
7.440	40.32	—	—	Moscow, Russia	U.S.S.R.
7.450	40.25	—	—	Moscow, Russia	U.S.S.R.
7.500	40.00	—	—	Peking	China
7.540	39.79	—	—	Moscow, Russia	U.S.S.R.
7.576	39.60	1	YDQ	Macassar, Celebes	Indonesia
7.605	39.45	1	FET	(Madrid) RADIO SPAIN.	Spain
x 7.650	39.22	100	—	Allouis	France
7.650	39.22	—	—	Murmansk, Russia	U.S.S.R.
7.660	39.16	1	CE766	Santiago	Chile
7.670	39.11	5	—	Sofia	Bulgaria
7.770	38.65	—	—	Peking	China
7.848	38.23	3	ZAA	Tirana	Albania
7.935	37.81	5	HLKB	Pusan	Korea
7.950	37.74	1	—	Ahwaz	Persia
8.030	37.36	2	FXE	Beirut	Lebanon
8.215	36.52	3	—	Scutari	Albania
8.915	33.65	30	—	Podebrady	Czechoslovakia
x 9.007	33.31	50	4XB31	Tel Aviv	Israel
9.007	33.31	1	COBZ	Havana	Cuba
9.025	33.24	—	—	Peking	China
9.025	33.24	1	CR6RL	Loando	Angola
9.100	32.97	—	—	Peking	China
9.145	32.76	100	ORU	Wavre	Belgium
9.145	32.76	—	—	Moscow, Russia	U.S.S.R.
9.170	32.72	—	—	Peking	China
9.170	32.72	5	CE920	Punta Arenas	Chile
9.170	32.72	7.5	OTH	Leopoldville	Belgian Congo
9.170	32.72	1	COBQ	Havana	Cuba
9.255	32.41	5	—	Bucharest	Rumania
9.320	32.19	25	LRS2	Buenos Aires	Argentina
9.329	32.15	—	—	Peking	China
9.332	32.15	30	—	Podebrady	Czechoslovakia
9.332	32.15	1	OAX4J	Lima	Peru
9.340	32.12	—	—	Peking	China
9.340	32.12	15	—	Alma Ata, Kazak	U.S.S.R.
x 9.360	32.05	40	—	Madrid	Spain
9.360	32.05	1	COBC	Havana	Cuba
9.360	32.05	3	—	Jidda	Saudi Arabia

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Mc/s	Metres	kW	Call	Station and Country	
9.375	32.00	1	CQM7	Bissao	Portuguese Guinea
9.380	31.98	1	CR6RI	Dondo	Angola
9.380	31.98	50	OTM2	Leopoldville	Belgian Congo
9.380	31.98	15	—	Alma Ata, Kazak	U.S.S.R.
9.390	31.95	—	—	Peking	China
9.406	31.89	2	OAX4W	Lima	Peru
9.410	31.88	50/100	GRI	Overseas Service*	Great Britain
9.420	31.85	—	—	Caltanissetta	Italy
9.437	31.79	5	CP38	La Paz	Bolivia
9.440	31.78	50	FZI	Brazzaville	French Eq. Africa
9.450	31.75	—	—	Moscow, Russia	U.S.S.R.
9.459	31.71	—	—	Peking	China
9.464	31.70	100	TAP	Ankara	Turkey
9.470	31.68	—	—	Moscow, Russia	U.S.S.R.
9.475	31.66	50	—	Cairo	Egypt
9.480	31.65	7.5	4VC	Port au Prince	Haiti
9.480	31.65	—	—	Moscow, Russia	U.S.S.R.
9.485	31.63	2.5/10	WTAN	Tangier	Tangier
9.490	31.61	—	—	Moscow, Russia	U.S.S.R.
9.499	31.58	50	APK	Karachi	Pakistan
9.500	31.58	100	VLA9	Shepparton, Vic.	Australia
9.500	31.58	2	VL19	Sydney, N.S.W.	Australia
9.500	31.58	10	XEWV	Mexico City	Mexico
9.500	31.58	1	DZH3	Manila, Luzon	Philippines
9.500	31.58	35/100	—	Tangier (V.o.A.)	Tangier
9.500	31.58	—	—	Moscow, Russia	U.S.S.R.
9.502	31.58	1	CR6RF	Benguela	Angola
9.502	31.58	1	HOLA	Colon	Panama
9.504	31.57	30	OLR3B	Podebrady	Czechoslovakia
9.505	31.57	4	OEI32	Vienna	Austria
9.505	31.57	5	PRB22	Sao Paulo	Brazil
9.505	31.57	10	JBD	Tokio	Japan
9.505	31.57	3	ZEA	Salisbury	Southern Rhodesia
9.505	31.57	35/100	—	Tangier (V.o.A.)	Tangier
9.507	31.56	10	YUC	Belgrade	Yugoslavia
9.510	31.55	—	—	Peking	China
9.510	31.55	50/100	GSB	Overseas Service*	Great Britain
9.510	31.55	5/100	VUD	Delhi	India
9.510	31.55	—	—	Moscow, Russia	U.S.S.R.
9.510	31.55	4	YVXJ	Barquisimeto	Venezuela
9.514	31.53	1	FNR1	Tananarive	Madagascar
9.515	31.53	—	—	Caltanissetta	Italy
9.515	31.53	25	HBX	Geneva	Switzerland
9.515	31.53	100	TAT	Ankara	Turkey
9.515	31.53	50/200	KCBR	Delano, Cal.	U.S.A.
9.515	31.53	50/200	KNBH	Dixon, Cal.	U.S.A.
9.515	31.53	100	—	Minsk, Byelorussia	U.S.S.R.
9.520	31.51	7.5	CBFR	Vercheres, Quebec	Canada
9.520	31.51	100	—	Colombo	Ceylon
9.520	31.51	50	OZF	Copenhagen	Denmark
9.520	31.51	100	—	Allouis	France
9.520	31.51	35	—	Salonika (V.o.A.)	Greece
9.520	31.51	5/100	VUD	Delhi	India
9.520	31.51	7.5	ZLI8	Wellington	New Zealand
9.520	31.51	15	OAX4Z	Lima	Peru

Mc/s	Metres	kW	Call	Station and Country	
9.520	31.51	—	—	Moscow, Russia	U.S.S.R.
9.525	31.50	50/100	GWJ	Overseas Service*	Great Britain
9.525	31.50	1	OXI	Godthaab	Greenland
9.525	31.50	5/100	VUD	Delhi	India
9.525	31.50	7.5/100	—	Warsaw	Poland
9.527	31.49	35/100	—	Tangier (V.o.A.)	Tangier
9.528	31.49	2.5	ZBW3	Victoria	Hong Kong
9.530	31.48	35	—	Salonika (V.o.A.)	Greece
9.530	31.48	10	VUC	Calcutta	India
9.530	31.48	80	WRUL5	Boston, Mass.	U.S.A.
9.530	31.48	50	WBOU	Bound Brook, N.J.	U.S.A.
9.530	31.48	25/100	WGEO	Schenectady, N.Y.	U.S.A.
9.530	31.48	—	—	Moscow, Russia	U.S.S.R.
9.530	31.48	50	—	Petropavlovsk, Russia	U.S.S.R.
9.535	31.46	1	VPD2	Suva	Fiji Islands
9.535	31.46	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
9.535	31.46	100	—	Horby	Sweden
9.535	31.46	100	HER4	Schwarzenburg	Switzerland
9.535	31.46	—	—	Kaunas, Lithuania	U.S.S.R.
9.538	31.45	7.5	—	Rangoon	Burma
9.539	31.45	7.5/100	—	Warsaw	Poland
9.540	31.45	100	—	Allouis	France
9.540	31.45	8/100	—	Munich (V.o.A.)	Germany (West)
9.540	31.45	7.5	ZL2	Wellington	New Zealand
9.540	31.45	35/100	—	Tangier (V.o.A.)	Tangier
9.545	31.43	7.5	ZYS43	Curityba	Brazil
9.545	31.43	75/200	WLWO	Cincinnati, Ohio	U.S.A.
9.550	31.41	30	OLR3A	Podebrady	Czechoslovakia
9.550	31.41	100	—	Allouis	France
9.550	31.41	50/100	GWB	Overseas Service*	Great Britain
9.550	31.41	10	VUB	Bombay	India
9.550	31.41	10	LLD	Tromso	Norway
9.550	31.41	1	DZI2	Manila, Luzon	Philippines
9.552	31.41	5	YSS	San Salvador	Salvador
9.554	31.40	15	OIX2	Pori	Finland
9.554	31.40	3	YDQ2	Macassar, Celebes	Indonesia
9.555	31.40	50/100	—	Overseas Service*	Great Britain
9.555	31.40	1	HLKA	Seoul	Korea
9.555	31.40	7.5/100	—	Warsaw	Poland
9.555	31.40	20	—	Damascus	Syria
9.555	31.40	—	—	Moscow, Russia	U.S.S.R.
9.560	31.38	100	—	Allouis	France
9.560	31.38	50/100	—	Overseas Service*	Great Britain
9.560	31.38	5/100	VUD	Delhi	India
9.560	31.38	5	JBD2	Osaka	Japan
9.560	31.38	7.5/100	—	Tebrau	Malaya
9.560	31.38	10	OAX4T	Lima	Peru
9.560	31.38	5	—	Dakar	Senegal
9.560	31.38	35/100	—	Tangier (V.o.A.)	Tangier
9.560	31.38	50	WBOU	Bound Brook, N.J.	U.S.A.
9.560	31.38	75/200	WLWO	Cincinnati, Ohio	U.S.A.
9.565	31.36	60	ZYK3	Recife	Brazil
9.565	31.36	5/100	VUD	Delhi	India
9.565	31.36	—	—	Moscow Russia	U.S.S.R.
9.570	31.35	100	—	Allouis	France

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	Mc/s	Metres	kW	Call	Station and Country
	9.570	31.35	50/100	GWX	Overseas Service* Great Britain
7-15	9.570	31.35	60	—	Rome Italy
X	9.570	31.35	5	—	Bucharest Rumania
	9.570	31.35	35/100	—	Tangier (V.o.A.) Tangier
	9.570	31.35	50	WRUL1	Boston, Mass. U.S.A.
	9.570	31.35	—	—	Moscow, Russia U.S.S.R.
	9.575	31.33	3.5	—	Taipei Formosa
	9.575	31.33	7.5/100	—	Warsaw Poland
	9.580	31.32	100	VLB9	Shepparton, Vic. Australia
	9.580	31.32	30	—	Podebrady Czechoslovakia
	9.580	31.32	50/100	GSC	Overseas Service* Great Britain
	9.580	31.32	—	—	Moscow, Russia U.S.S.R.
	9.585	31.30	50	CKLP	Sackville, N.B. Canada
	9.585	31.30	20/80	WRUL	Boston, Mass. U.S.A.
X	9.590	31.28	30	PCJ	(Huizen) RADIO NILVERSUM Netherlands
	9.590	31.28	7.5/50	—	Manila, Luzon (V.o.A.) Philippines
	9.590	31.28	50/200	KCBR	Delano, Cal. U.S.A.
	9.590	31.28	50/200	KNBH	Dixon, Cal. U.S.A.
	9.593	31.27	40	—	Kiev, Ukraine U.S.S.R.
	9.595	31.26	20	ZYN22	Salvador Brazil
	9.595	31.26	35/100	—	Tangier (V.o.A.) Tangier
	9.597	31.26	2.5	CE960	Santiago Chile
	9.597	31.26	5	—	Johannesburg South Africa
	9.600	31.25	50/100	GRY	Overseas Service* Great Britain
	9.600	31.25	7.5/100	—	Warsaw Poland
	9.605	31.23	—	—	Madrid Spain
	9.606	31.23	7.5	—	Athens Greece
	9.610	31.22	10	VLX9	Perth, W.A. Australia
	9.610	31.22	25	ZYC8	Rio de Janeiro Brazil
	9.610	31.22	50	CHLS	Sackville, N.B. Canada
	9.610	31.22	7.5	CBFX	Vercheres, Quebec Canada
	9.610	31.22	10	CR8AD	Goa Goa
	9.610	31.22	5	XERQ	Mexico City Mexico
	9.610	31.22	100	LLG	Fredrikstad Norway
	9.610	31.22	—	—	Moscow, Russia U.S.S.R.
	9.614	31.20	7.5/100	—	Warsaw Poland
	9.615	31.20	100	VLC9	Shepparton, Vic. Australia
	9.615	31.20	4	OEI33	Vienna Austria
	9.615	31.20	35/100	—	Tangier (V.o.A.) Tangier
	9.615	31.20	50	WBOU	Bound Brook, N.J. U.S.A.
	9.615	31.20	25/100	W GEO	Schenectady, N.Y. U.S.A.
	9.615	31.20	—	—	Moscow, Russia U.S.S.R.
	9.619	31.19	3	TIDCR	San Jose Costa Rica
	9.620	31.19	7.5	ZYR83	Aparecida Brazil
	9.620	31.19	1	COJK	Camaguey Cuba
	9.620	31.19	5/100	VUD	Delhi India
	9.620	31.19	12	—	Saigon Indo-China
	9.620	31.19	7.5	ZL8	Wellington New Zealand
	9.620	31.19	100	—	(Horby) RADIO SWEDEN Sweden
X	9.620	31.19	35/100	—	Tangier (V.o.A.) Tangier
X	9.625	31.17	50	CKLO	Sackville, N.B. Canada
	9.625	31.17	1	ETA	Addis Ababa Ethiopia
	9.625	31.17	7	FZI	Brazzaville French Eq. Africa
	9.625	31.17	50/100	GWO	Overseas Service* Great Britain
	9.625	31.17	7.5/100	—	Tebrau Malaya

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Mc/s	Metres	kW	Call	Station	Country
9.625	31.17	10	XEBT	Mexico City	Mexico
9.625	31.17	—	—	Moscow, Russia	U.S.S.R.
9.625	31.17	1	YVMZ	Maracaibo	Venezuela
9.630	31.15	7.5	CBFO	Vercheres, Quebec	Canada
9.630	31.15	100	—	Norden	Germany (West)
9.630	31.15	100	—	Rome	Italy
9.630	31.15	5	—	Freetown	Sierra Leone
9.630	31.15	5/20	—	Tangier	Tangier
9.630	31.15	—	—	Moscow, Russia	U.S.S.R.
9.632	31.14	1	CR6RL	Loando	Angola
9.633	31.14	100	—	Lisbon	Portugal
9.635	31.14	35	—	Okinawa (V.o.A.)	Okinawa Island
9.635	31.14	7.5	—	Warsaw	Poland
9.635	31.14	35/100	—	Tangier (V.o.A.)	Tangier
9.640	31.12	100	—	Allouis	France
9.640	31.12	100	—	Norden	Germany (West)
9.640	31.12	50/100	GVZ	Overseas Service*	Great Britain
9.640	31.12	1	DZH2	Manila, Luzon	Philippines
9.640	31.12	40	—	Kiev, Ukraine	U.S.S.R.
9.640	31.12	10	YVSC	Caracas	Venezuela
9.645	31.10	4	—	Vienna	Austria
9.645	31.10	2	TIFC	San Jose	Costa Rica
9.645	31.10	50	APK2	Karachi	Pakistan
9.645	31.10	—	—	Moscow, Russia	U.S.S.R.
9.645	31.10	25	HVJ	Vatican City	Vatican City
X 9.650	31.09	7.5	ZJM8	Limassol	Cyprus
9.650	31.09	100	KRHK	Honolulu	Hawaii
9.650	31.09	3	—	Jidda	Saudi Arabia
9.650	31.09	50	WDSI	Brentwood, N.Y.	U.S.A.
9.650	31.09	50/200	KNBH	Dixon, Cal.	U.S.A.
9.650	31.09	—	—	Moscow, Russia	U.S.S.R.
9.655	31.07	50	OTC2	Leopoldville	Belgian Congo
9.655	31.07	3	4VEH	Cap Haitien	Haiti
9.655	31.07	5	JKI2	Tokio	Japan
9.655	31.07	—	—	Moscow, Russia	U.S.S.R.
9.660	31.06	25	LRX	Buenos Aires	Argentina
9.660	31.06	10	VLQ9	Brisbane, Qld.	Australia
9.660	31.06	50/100	GWP	Overseas Service*	Great Britain
9.660	31.06	—	—	Moscow, Russia	U.S.S.R.
9.663	31.05	—	—	Peking	China
9.663	31.05	3	4VBA	Port au Prince	Haiti
9.665	31.04	5	OEI23	Vienna	Austria
9.665	31.04	100	HEU3	Schwarzenburg	Switzerland
X 9.665	31.04	40	—	Kiev, Ukraine	U.S.S.R.
9.667	31.03	7.5	ZJM8	Limassol	Cyprus
9.668	31.03	5	TGNA	Guatemala City	Guatemala
9.670	31.02	5	COCQ	Havana	Cuba
9.670	31.02	30	—	Podebrady	Czechoslovakia
9.670	31.02	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
9.670	31.02	40	—	Kiev, Ukraine	U.S.S.R.
9.675	31.01	7.5	PRC22	Porto Alegre	Brazil
9.675	31.01	100	—	Allouis	France
9.675	31.01	50/100	GWT	Overseas Service*	Great Britain
9.675	31.01	5/100	VUD	Delhi	India

Mc/s	Metres	kW	Call	Station and Country	
9.675	31.01	50/100	JOB3	Tokio	Japan
9.675	31.01	50	WRUL	Boston, Mass.	U.S.A.
9.675	31.01	—	—	Moscow, Russia	U.S.S.R.
9.676	31.01	100	—	Madrid	Spain
9.680	30.99	10	VLH9	Lyndhurst, Vic.	Australia
9.680	30.99	100	—	Allouis	France
9.680	30.99	5/100	VUD	Delhi	India
9.680	30.99	1	XEQQ	Mexico City	Mexico
9.680	30.99	7	EQC	Teheran	Persia
9.680	30.99	100	CSA	Lisbon	Portugal
9.680	30.99	5	—	Johannesburg	South Africa
9.685	30.98	50	—	Sao Paulo	Brazil
9.685	30.98	35	—	Salonika (V.o.A.)	Greece
9.685	30.98	35/100	—	Tangier (V.o.A.)	Tangier
9.685	30.98	40	—	Kiev, Ukraine	U.S.S.R.
9.690	30.96	10	LRA1	Buenos Aires	Argentina
9.690	30.96	50/100	GRX	Overseas Service*	Great Britain
9.690	30.96	7.5/100	—	Tebrau	Malaya
9.690	30.96	40	—	Kiev, Ukraine	U.S.S.R.
9.695	30.94	5/100	VUD	Delhi	India
9.695	30.94	100	—	Madrid	Spain
9.700	30.93	5	—	Sofia	Bulgaria
9.700	30.93	50/100	GWY	Overseas Service*	Great Britain
9.700	30.93	50	APK	Karachi	Pakistan
9.700	30.93	50	WDSI	Brentwood, N.Y.	U.S.A.
9.700	30.93	75/200	WLWO	Cincinnati, Ohio	U.S.A.
9.700	30.93	50/200	KCBR	Delano, Cal.	U.S.A.
9.700	30.93	—	—	Moscow, Russia	U.S.S.R.
9.704	30.92	1.5	FZF6	Fort de France	Martinique
9.705	30.92	1	CR6RD	Nova Lisboa	Angola
9.705	30.92	100	ORU	Wavre	Belgium
9.705	30.92	10	ZYZZ24	Rio de Janeiro	Brazil
9.705	30.92	50	APK	Karachi	Pakistan
9.705	30.92	—	—	Moscow, Russia	U.S.S.R.
9.705	30.92	1	—	Sana'a	Yemen
9.710	30.90	50/100	—	Overseas Service*	Great Britain
9.710	30.90	50/100	YDF6	Djakarta, Java	Indonesia
9.710	30.90	100	—	Rome	Italy
9.710	30.90	—	—	Moscow, Russia	U.S.S.R.
9.711	30.90	5	FHE9	Dakar	Senegal
9.715	30.88	—	—	Moscow, Russia	U.S.S.R.
9.720	30.86	50	PRL7	Rio de Janeiro	Brazil
9.720	30.86	5/100	VUD	Delhi	India
9.720	30.86	—	—	Moscow, Russia	U.S.S.R.
9.725	30.85	50/100	—	Overseas Service*	Great Britain
9.725	30.85	7.5/100	—	Tebrau	Malaya
9.725	30.85	75/200	WLWO	Cincinnati, Ohio	U.S.A.
9.725	30.85	—	—	Moscow, Russia	U.S.S.R.
9.728	30.84	12	—	Leipzig	Germany (East)
9.730	30.83	2	BEA8	Shanghai	China
9.730	30.83	7	FZI	Brazzaville	French Eq. Africa
9.730	30.83	3	DZH7	Manila, Luzon	Philippines
9.730	30.83	40	—	Kiev, Ukraine	U.S.S.R.
9.735	30.82	7.5	H12T	Ciudad Trujillo	Dominican Rep.
9.735	30.82	100	—	Norden	Germany (West)

Mc/s	Metres	kW	Call	Station and Country	
9.735	30.82	50/100	GWF	Overseas Service*	Great Britain
9.735	30.82	5/100	VUD	Delhi	India
9.737	30.81	5	CE970	Santiago	Chile
9.737	30.81	1	ZPA4	Ascuncion	Paraguay
9.738	30.81	50	APK	Karachi	Pakistan
9.740	30.80	1.2	COKG	Santiago	Cuba
9.740	30.80	5/100	VUD	Delhi	India
9.740	30.80	35/100	—	Tangier (V.o.A.)	Tangier
9.740	30.80	40	—	Kiev, Ukraine	U.S.S.R.
9.744	30.79	1	HCJB	Quito	Ecuador
9.745	30.79	100	ORU	Wavre	Belgium
9.745	30.79	7.5	ZYR57	Sao Paulo	Brazil
9.745	30.79	5/100	VUD	Delhi	India
9.745	30.79	5	—	Huizen	Netherlands
9.745	30.79	—	—	Moscow, Russia	U.S.S.R.
9.746	30.79	50/100	CSA	Lisbon	Portugal
9.750	30.77	50/100	—	Overseas Service*	Great Britain
9.750	30.77	—	—	Moscow, Russia	U.S.S.R.
9.753	30.76	140	—	Cairo	Egypt
9.755	30.75	7.5	ZYW23	Goiana	Brazil
9.755	30.75	100	—	Allouis	France
9.755	30.75	5/100	VUD	Delhi	India
9.755	30.75	—	—	Moscow, Russia	U.S.S.R.
9.760	30.74	50	LRV	Buenos Aires	Argentina
9.760	30.74	50/100	MCR	Overseas Service*	Great Britain
9.760	30.74	10	TGWA	Guatemala City	Guatemala
9.760	30.74	5/100	VUD	Delhi	India
9.760	30.74	35/100	—	Tangier (V.o.A.)	Tangier
9.760	30.74	—	—	Moscow, Russia	U.S.S.R.
9.765	30.72	100	—	Allouis	France
9.765	30.72	7.5	CR7BJ	Lourenco Marques	Mozambique
9.767	30.72	100	ORU	Wavre	Belgium
9.770	30.71	50/100	MCN	Overseas Service*	Great Britain
9.770	30.71	5/100	VUD	Delhi	India
9.770	30.71	—	—	Moscow, Russia	U.S.S.R.
9.775	30.69	1	PRL4	Rio de Janeiro	Brazil
9.775	30.69	50/100	CSB	Lisbon	Portugal
9.775	30.69	—	—	Moscow, Russia	U.S.S.R.
9.780	30.67	60	—	Rome	Italy
9.780	30.67	5/20	—	Tangier	Tangier <i>6am</i>
9.785	30.66	—	—	Kaunas, Lithuania	U.S.S.R. <i>west.</i>
9.790	30.64	—	—	Peking	China
9.790	30.64	—	—	Moscow, Russia	U.S.S.R.
9.792	30.63	50	—	Cairo	Egypt <i>10.</i>
* 9.795	30.63	5/100	VUD	Delhi	India
9.795	30.63	5/25	—	Saigon	Indo-China
9.805	30.60	5/100	VUD	Delhi	India
9.810	30.58	—	—	Moscow, Russia	U.S.S.R.
* 9.820	30.56	5/100	VUD	Delhi	India
9.825	30.54	50/100	GRH	Overseas Service*	Great Britain
9.832	30.51	1	COBL	Havana	Cuba
9.832	30.51	100/135	—	Budapest	Hungary
* 9.840	30.49	5/100	VUD	Delhi	India
9.840	30.49	2	—	Baku, Azerbaidjan	U.S.S.R.
9.850	30.46	5/100	VUD	Delhi	India

Mc/s	Metres	kW	Call	Station and Country	
9.850	30.46	100	—	Lisbon	Portugal
9.850	30.46	—	—	Moscow, Russia	U.S.S.R.
9.860	30.43	—	—	Moscow, Russia	U.S.S.R.
X 9.865	30.42	100	YDF6	Djakarta, Java	Indonesia
X 9.880	30.36	—	—	Moscow, Russia	U.S.S.R.
9.915	30.26	50/100	GRU	Overseas Service*	Great Britain
9.937	30.19	1.5	FZI	Brazzaville	French Eq. Africa
9.973	30.08	25	—	Kabul	Afghanistan
9.996	30.01	5/20	—	Tangier	Tangier
10.070	29.79	—	—	Peking	China
10.262	29.23	—	—	Peking	China
10.620	28.25	—	—	Moscow, Russia	U.S.S.R.
10.660	28.14	—	—	Peking	China
11.110	27.05	—	—	Peking	China
11.203	26.78	—	—	Chungking	China
11.300	26.55	—	—	Peking	China
11.420	26.27	—	—	Peking	China
11.455	26.19	—	—	Peking	China
11.514	26.05	20	—	Tangier	Tangier
11.515	26.05	—	—	Peking	China
11.590	25.88	—	—	Peking	China
11.600	25.86	—	—	Peking	China
11.610	25.84	—	—	Moscow, Russia	U.S.S.R.
11.625	25.81	5/100	VUD	Delhi	India
11.630	25.80	—	—	Leningrad, Russia	U.S.S.R.
11.640	25.77	5/100	VUD	Delhi	India
11.650	25.75	—	—	Peking	China
11.650	25.75	—	—	Moscow, Russia	U.S.S.R.
11.670	25.71	140	—	Cairo	Egypt
11.671	25.71	50	—	Bangkok	Siam
11.680	25.68	50/100	GRG	Overseas Service*	Great Britain
11.680	25.68	—	—	Moscow, Russia	U.S.S.R.
11.685	25.67	25	HVJ	Vatican City	Vatican City
11.690	25.66	—	—	Moscow, Russia	U.S.S.R.
11.700	25.64	100	—	Allouis	France
11.700	25.64	50/100	GVW	Overseas Service*	Great Britain
11.700	25.64	5/100	VUD	Delhi	India
11.700	25.64	16	HNG	Baghdad	Iraq
11.700	25.64	7.5/100	—	Tebrau	Malaya
11.700	25.64	40	—	Kiev, Ukraine	U.S.S.R.
11.705	25.63	50	CKXA	Sackville, N.B.	Canada
11.705	25.63	7.5	CBFY	Vercheres, Quebec	Canada
11.705	25.63	5/100	VUD	Delhi	India
11.705	25.63	50/100	JOA4	Tokio	Japan
11.705	25.63	100	—	Horby	Sweden
11.705	25.63	—	—	Moscow, Russia	U.S.S.R.
11.710	25.62	100	VLA11	Shepparton, Vic.	Australia
X 11.710	25.62	35/100	—	Tangier (V.o.A.)	Tangier
11.710	25.62	20/80	WRUL	Boston, Mass.	U.S.A.
11.710	25.62	200	WLWO5	Cincinnati, Ohio	U.S.A.
11.710	25.62	50/200	KCBR	Delano, Cal.	U.S.A.
11.710	25.62	50/200	KNBH	Dixon, Cal.	U.S.A.
11.710	25.62	—	—	Moscow, Russia	U.S.S.R.
11.715	25.61	—	—	Peking	China
11.715	25.61	5/100	VUD	Delhi	India

Mc/s	Metres	kW	Call	Station and Country	
11.715	25.61	100	HEI5	Schwarzenburg	Switzerland
11.715	25.61	—	—	Moscow, Russia	U.S.S.R.
11.718	25.60	7.5	ZJM7	Limassol	Cyprus
11.718	25.60	7.5	—	Athens	Greece
11.720	25.60	7.5	OTM4	Leopoldville	Belgian Congo
11.720	25.60	100	ORU	Wavre	Belgium
11.720	25.60	50	PRL8	Rio de Janeiro	Brazil
11.720	25.60	50	CHOL	Sackville, N.B.	Canada
11.720	25.60	7.5	CBFL	Vercheres, Quebec	Canada
11.720	25.60	2	CKRX	Winnipeg, Manitoba	Canada
11.720	25.60	5/100	VUD	Delhi	India
11.720	25.60	50/100	CSA	Lisbon	Portugal
11.720	25.60	5/20	—	Tangier	Tangier
11.720	25.60	—	—	Moscow, Russia	U.S.S.R.
11.725	25.59	50/100	JOB6	Tokio	Japan
11.725	25.59	7.5/100	—	Tebrau	Malaya
11.725	25.59	50	APK	Karachi	Pakistan
11.730	25.58	15	COCY	Havana	Cuba
11.730	25.58	100	—	Allouis	France
11.730	25.58	50/100	GVV	Overseas Service*	Great Britain
11.730	25.58	5	PHI	Lopik	Netherlands
11.730	25.58	20/80	WRUL	Boston, Mass.	U.S.A.
11.730	25.58	—	—	Moscow, Russia	U.S.S.R.
11.732	25.57	30	OLR4E	Podebrady	Czechoslovakia
11.735	25.56	2	ZYA58	Rio de Janeiro	Brazil
11.735	25.56	10	BED6	Taipei	Formosa
11.735	25.56	8	LKQ	Fredrikstad	Norway
11.735	25.56	—	—	Moscow, Russia	U.S.S.R.
11.740	25.55	100	VLA11	Shepparton, Vic.	Australia
11.740	25.55	50	APK	Karachi	Pakistan
11.740	25.55	7.5/100	—	Warsaw	Poland
11.740	25.55	—	—	Tangier	Tangier
11.740	25.55	20/80	WRUL	Boston, Mass.	U.S.A.
11.740	25.55	40	—	Kiev, Ukraine	U.S.S.R.
11.740	25.55	5	CXA7	Montevideo	Uruguay
11.740	25.55	25	HVJ	Vatican City	Vatican City
11.743	25.54	4	CE1174	Santiago	Chile
11.745	25.54	—	—	Peking	China
11.745	25.54	5/100	VUD	Delhi	India
11.747	25.53	7.5	—	Lourenco Marques	Mozambique
11.750	25.53	50/100	GSD	Overseas Service*	Great Britain
11.750	25.53	4	—	Jidda	Saudi Arabia
11.750	25.53	20	—	Damascus	Syria
11.750	25.53	—	—	Moscow, Russia	U.S.S.R.
11.751	25.53	10	—	Tokio	Japan
11.754	25.52	25	—	Komsomolsk, Siberia	U.S.S.R.
11.755	25.52	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
11.755	25.52	—	—	Moscow, Russia	U.S.S.R.
11.760	25.51	100	VLB11	Shepparton, Vic.	Australia
11.760	25.51	7.5	CBFA	Vercheres, Quebec	Canada
11.760	25.51	8/100	—	Munich (V.o.A.)	Germany (West)
11.760	25.51	5/100	VUD	Delhi	India
11.760	25.51	50	—	Tangier	Tangier
11.765	25.50	25	ZYB8	Sao Paulo	Brazil
11.765	25.50	—	—	Moscow, Russia	U.S.S.R.

Mc/s	Metres	kW	Call	Station and Country	
11.770	25.49	35	—	Colombo	Ceylon
11.770	25.49	50/100	GVU	Overseas Service*	Great Britain
11.770	25.49	7.5/100	YDF2	Djakarta, Java	Indonesia
11.770	25.49	20/80	WRUL	Boston, Mass.	U.S.A.
11.770	25.49	50/200	KNBH	Dixon, Cal.	U.S.A.
11.770	25.49	—	—	Moscow, Russia	U.S.S.R.
11.775	25.48	4	OEI35	Vienna	Austria
11.775	25.48	50	PRA	Rio de Janeiro	Brazil
11.775	25.48	50/200	KNBH	Dixon, Cal.	U.S.A.
11.780	25.47	50/100	—	Overseas Service*	Great Britain
11.780	25.47	7.5	ZL3	Wellington	New Zealand
11.780	25.47	—	—	Moscow, Russia	U.S.S.R.
11.785	25.46	4	OEI24	Vienna	Austria
11.785	25.46	5/100	VUD	Delhi	India
11.790	25.45	50/100	GWV	Overseas Service*	Great Britain
11.790	25.45	100	VUD	Delhi	India
11.790	25.45	5/25	—	Saigon	Indo-China
11.790	25.45	8/100	—	Manila, Luzon (V.o.A.)	Philippines
11.790	25.45	50	WBOU	Bound Brook, N.J.	U.S.A.
11.790	25.45	50	WDSI	Brentwood, N.Y.	U.S.A.
11.790	25.45	200	WLWO3	Cincinnati, Ohio	U.S.A.
11.790	25.45	50/200	KNBH	Dixon, Cal.	U.S.A.
11.790	25.45	—	—	Moscow, Russia	U.S.S.R.
11.795	25.43	100	—	Norden	Germany (West)
11.795	25.43	100	YDF7	Djakarta, Java	Indonesia
11.798	25.42	10	ELWA	Monrovia	Liberia
11.800	25.42	1	COBH	Havana	Cuba
11.800	25.42	50/100	GWH	Overseas Service*	Great Britain
11.800	25.42	5/100	VUD	Delhi	India
11.800	25.42	50	APK	Karachi	Pakistan
11.803	25.41	30	—	Podebrady	Czechoslovakia
11.805	25.41	8/1000	—	Munich (V.o.A.)	Germany (West)
11.805	25.41	35/100	—	Tangier (V.o.A.)	Tangier
11.805	25.41	—	—	Moscow, Russia	U.S.S.R.
11.808	25.40	50	—	Cairo	Egypt
11.810	25.40	10	VLG11	Lyndhurst, Vic.	Australia
11.810	25.40	100	VLB11	Shepparton, Vic.	Australia
11.810	25.40	50	IBU2	Rome	Italy
11.810	25.40	2	YNWW	Granada	Nicaragua
11.810	25.40	35/100	—	Tangier (V.o.A.)	Tangier
11.810	25.40	50/200	KCBR	Delano, Cal.	U.S.A.
11.810	25.40	—	—	Moscow, Russia	U.S.S.R.
11.812	25.40	20	—	Khabarovsk, Siberia	U.S.S.R.
11.814	25.39	50/200	—	Madrid	Spain
11.815	25.39	5	ZYW24	Goiana	Brazil
11.820	25.38	50/100	GSN	Overseas Service*	Great Britain
11.820	25.38	7.5/100	—	Tebrau	Malaya
11.825	25.37	60	ZYK32	Recife	Brazil
11.825	25.37	—	—	Moscow, Russia	U.S.S.R.
11.830	25.36	2	VLW11	Perth, W.A.	Australia
11.830	25.36	8/100	—	Munich (V.o.A.)	Germany (West)
11.830	25.36	7.5	ZL19	Wellington	New Zealand
11.830	25.36	35/100	—	Tangier (V.o.A.)	Tangier
11.830	25.36	50	WBOU	Bound Brook, N.J.	U.S.A.
11.830	25.36	50	WDSI	Brentwood, N.Y.	U.S.A.

Mc/s	Metres	kW	Call	Station and Country
11.830	25.36	—	—	Moscow, Russia U.S.S.R.
11.830	25.36	5	—	St. Georges, Grenada Windward Is.
11.835	25.35	5	CXA19	Montevideo Uruguay
11.840	25.34	5	LRT	Tucuman Argentina
11.840	25.34	50/100	GWQ	Overseas Service* Great Britain
11.840	25.34	50/100	CSA	Lisbon Portugal
11.840	25.34	50	—	Tangier (V.o.A.) Tangier
11.840	25.34	40	—	Kiev, Ukraine U.S.S.R.
11.845	25.33	100	—	Allouis France
11.845	25.33	50	—	Tangier (V.o.A.) Tangier
11.845	25.33	—	—	Moscow, Russia U.S.S.R.
11.846	25.32	5	—	Jidda Saudi Arabia
11.850	25.32	10	VLG11	Lyndhurst, Vic. Australia
11.850	25.32	100	VLB11	Shepparton, Vic. Australia
11.850	25.32	100	ORU	Wavre Belgium
11.850	25.32	5	TGNA	Guatemala City Guatemala
11.850	25.32	100	KRHQ	Honolulu (V.o.A.) Hawaii
11.850	25.32	20	VUD11	Delhi India
11.850	25.32	8	LLK	Fredrikstad Norway
11.850	25.32	1.2	ZPA3	Ascuncion Paraguay
11.850	25.32	—	—	Moscow, Russia U.S.S.R.
11.855	25.31	10	DZH9	Manila, Luzon Philippines
11.855	25.31	75/200	WLWQ	Cincinnati, Ohio U.S.A.
11.860	25.30	50/100	GSE	Overseas Service* Great Britain
11.860	25.30	50/200	KCBR	Delano, Cal. U.S.A.
11.860	25.30	—	—	Moscow, Russia U.S.S.R.
11.862	25.29	1	CR6RC	Loando Angola
11.865	25.28	100	HER5	Schwarzenburg Switzerland
11.865	25.28	—	—	Moscow, Russia U.S.S.R.
11.870	25.27	5/100	VUD	Delhi India
11.870	25.27	50	WBOU	Bound Brook, N.J. U.S.A.
11.870	25.27	50/200	KCBR	Delano, Cal. U.S.A.
11.870	25.27	50/200	KNBH	Dixon, Cal. U.S.A.
11.870	25.27	—	—	Moscow, Russia U.S.S.R.
11.875	25.26	35	—	Colombo Ceylon
11.875	25.26	30	—	Podebrady Czechoslovakia
11.875	25.26	5/100	VUD	Delhi India
11.875	25.26	35/100	—	Tangier (V.o.A.) Tangier
11.880	25.25	5	LRS	Buenos Aires Argentina
11.880	25.25	10	VLH11	Lyndhurst, Vic. Australia
11.880	25.25	50/100	GRE	Overseas Service* Great Britain
11.880	25.25	5/100	VUD	Delhi India
11.880	25.25	7.5/100	—	Tebrau Malaya
11.880	25.25	1	XEHH	Mexico City Mexico
11.880	25.25	100	—	Horby Sweden
11.880	25.25	—	—	Moscow, Russia U.S.S.R.
11.885	25.24	10	—	Rio de Janeiro Brazil
11.885	25.24	50	APK	Karachi Pakistan
11.890	25.23	50/100	GWV	Overseas Service* Great Britain
11.890	25.23	7.5/50	—	Manila, Luzon (V.o.A.) Philippines
11.890	25.23	35/100	—	Tangier (V.o.A.) Tangier
11.890	25.23	50	WBOU	Bound Brook, N.J. U.S.A.
11.890	25.23	50/200	KNBH	Dixon, Cal. U.S.A.
11.890	25.23	15/120	—	Moscow, Russia U.S.S.R.
11.895	25.22	—	—	Peking China

Mc/s	Metres	kW	Call	Station and Country	
11.895	25.22	35	—	Salonika (V.o.A.)	Greece
11.895	25.22	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
11.895	25.22	12	FHE3	Dakar	Senegal
11.896	25.22	20	CXA10	Montevideo	Uruguay
11.900	25.21	100	VLB11	Shepparton, Vic.	Australia
11.900	25.21	50	CKEX	Sackville, N.B.	Canada
11.900	25.21	10	XEXE	Mexico City	Mexico
11.900	25.21	35/100	—	Tangier (V.o.A.)	Tangier
11.900	25.21	75/200	WLWO	Cincinnati, Ohio	U.S.A.
11.900	25.21	100	WGEO1	Schenectady, N.Y.	U.S.A.
11.900	25.21	—	—	Moscow, Russia	U.S.S.R.
11.905	25.20	60	—	Rome	Italy
11.905	25.20	15/120	—	Moscow, Russia	U.S.S.R.
11.910	25.19	50/100	MCO	Overseas Service*	Great Britain
11.910	25.19	50	APK	Karachi	Pakistan
11.910	25.19	1	HSK7	Bangkok	Siam
11.911	25.19	100	—	Budapest	Hungary
11.915	25.18	10	HCJB	Quito	Ecuador
11.915	25.18	5/100	VUD	Delhi	India
11.915	25.18	1	—	Hanoi	Indo-China
11.915	25.18	100	CSA	Lisbon	Portugal
11.915	25.18	20	—	Damascus	Syria
11.915	25.18	—	—	Moscow, Russia	U.S.S.R.
11.916	25.18	10	—	Taipei	Formosa
11.920	25.17	100	—	Allouis	France
11.920	25.17	50/100	—	Overseas Service*	Great Britain
11.920	25.17	5/100	VUD	Delhi	India
11.920	25.17	35	—	Okinawa (V.o.A.)	Okinawa Island
11.920	25.17	—	—	Moscow, Russia	U.S.S.R.
11.924	25.16	1	CR6RQ	Nova Lisboa	Angola
11.924	25.16	10	ZYR78	Sao Paulo	Brazil
11.925	25.16	1	CSA92	Punta Delgada	Azores
11.925	25.16	25	—	Curityba	Brazil
11.925	25.16	15/120	—	Moscow, Russia	U.S.S.R.
11.926	25.15	7.5	—	Athens	Greece
11.930	25.15	50/100	GVX	Overseas Service*	Great Britain
11.930	25.15	15/120	—	Moscow, Russia	U.S.S.R.
11.935	25.14	4	OEI36	Vienna	Austria
11.935	25.14	10	—	Rio de Janeiro	Brazil
11.935	25.14	5	—	Bucharest	Rumania
11.935	25.14	—	—	Moscow, Russia	U.S.S.R.
11.937	25.14	5	—	Johannesburg	South Africa
11.938	25.13	5	CE1190	Valparaiso	Chile
11.940	25.13	5/100	VUD10	Delhi	India
11.940	25.13	35/100	—	Tangier (V.o.A.)	Tangier
11.945	25.12	50	CKNK	Sackville	Canada
11.945	25.12	100	—	Norden	Germany (West)
11.945	25.12	50/100	MCQ	Overseas Service*	Great Britain
11.945	25.12	7.5/100	—	Warsaw	Poland
11.945	25.12	10	—	Magadan, Russia	U.S.S.R.
11.947	25.11	5/20	—	Tangier	Tangier
11.948	25.11	1	YSAXA	San Salvador	Salvador
11.950	25.10	10	PRL5	Rio de Janeiro	Brazil
11.950	25.10	5/100	VUD	Delhi	India
11.950	25.10	5	—	Huizen	Netherlands

Mc/s	Metres	kW	Call	Station and Country	
11.950	25.10	5	ZPA5	Ascuncion	Paraguay
11.950	25.10	5	—	Jidda	Saudi Arabia
11.950	25.10	—	—	Kaunas, Lithuania	U.S.S.R.
11.955	25.09	50/100	GVY	Overseas Service*	Great Britain
11.955	25.09	5/100	—	Delhi	India
11.955	25.09	7.5/100	—	Tebrau	Malaya
11.955	25.09	7.5/100	—	Warsaw	Poland
11.955	25.09	100	CSA	Lisbon	Portugal
11.960	25.08	2.5	—	Santiago	Chile
11.960	25.08	—	—	Peking	China
11.960	25.08	50/100	MCT	Overseas Service*	Great Britain
11.960	25.08	5/100	VUD	Delhi	India
11.960	25.08	—	—	Moscow, Russia	U.S.S.R.
11.965	25.07	7.5	PRB24	Sao Paulo	Brazil
11.965	25.07	—	—	Moscow, Russia	U.S.S.R.
11.970	25.06	7	FZI	Brazzaville	French Eq. Africa
11.970	25.06	50/100	—	Overseas Service*	Great Britain
11.970	25.06	5/100	VUD	Delhi	India
11.975	25.05	7.5	—	Colombo	Ceylon
11.975	25.05	30	—	Podebrady	Czechoslovakia
11.975	25.05	10	—	Magadan, Russia	U.S.S.R.
11.980	25.04	—	—	Moscow, Russia	U.S.S.R.
11.985	25.03	—	—	Moscow, Russia	U.S.S.R.
11.995	25.01	50/100	CSA32	Lisbon	Portugal
11.995	25.01	—	—	Moscow, Russia	U.S.S.R.
12.000	25.00	1	CE1180	Santiago	Chile
12.000	25.00	—	—	Moscow, Russia	U.S.S.R.
12.020	24.96	5/100	VUD	Delhi	India
12.020	24.96	—	—	Moscow, Russia	U.S.S.R.
12.029	24.94	50	—	Cairo	Egypt
12.029	24.94	100	—	Allouis	France
12.040	24.92	50/100	GRV	Overseas Service*	Great Britain
12.095	24.80	50/100	GRF	Overseas Service*	Great Britain
12.174	24.65	7	TFJ	Reykjavik	Iceland
13.845	21.67	—	—	Peking	China
14.973	20.04	20	—	Tangier	Tangier
15.022	19.98	1	—	Hanoi	Indo-China
15.040	19.95	5/100	VUD	Delhi	India
15.040	19.95	—	—	Moscow, Russia	U.S.S.R.
15.053	19.93	—	—	Moscow, Russia	U.S.S.R.
15.060	19.92	—	—	Peking	China
15.060	19.92	—	—	Moscow, Russia	U.S.S.R.
15.070	19.91	50/100	GWC	Overseas Service*	Great Britain
15.080	19.89	—	—	Moscow, Russia	U.S.S.R.
15.081	19.89	10	CR7BG	Lourenco Marques	Mozambique
15.090	19.88	50	CKLX	Sackville, N.B.	Canada
15.090	19.88	7.5	CBLX	Vercheres, Quebec	Canada
15.100	19.87	100	—	Allouis	France
15.100	19.87	14	EPB	Teheran	Persia
15.100	19.87	—	—	Moscow, Russia	U.S.S.R.
15.105	19.86	—	—	Peking	China
15.105	19.86	5/100	VUD	Delhi	India
15.105	19.86	1	OAX4X	Lima	Peru
15.105	19.86	—	—	Moscow, Russia	U.S.S.R.
15.110	19.85	50/100	GWG	Overseas Service*	Great Britain

THIS IS A TRANSMISSION FOR TRAFFIC ADJUSTMENT PURPOSES FOR THE RADIO OPERATION
 OF STATION OF THE AUSTRIAN POST & TELEGRAPH ADMIN. THIS STATION IS LOCATED IN

Mc/s	Metres	kW	Call	Station and Country	
15.110	19.85	—	—	Moscow, Russia	U.S.S.R.
15.115	19.85	1	HCJB	Quito	Ecuador
15.120	19.84	100	—	Colombo	Ceylon
15.120	19.84	100	—	Rome	Italy
15.120	19.84	7.5	100	Warsaw	Poland
15.120	19.84	100	HED7	Schwarzenburg	Switzerland
15.120	19.84	—	—	Moscow, Russia	U.S.S.R.
15.120	19.84	10	HVJ	Vatican City	Vatican City
15.125	19.84	50	CSA36	Lisbon	Portugal
15.130	19.83	—	—	Peking	China
15.130	19.83	5/100	VUD	Delhi	India
15.130	19.83	35/100	—	Tangier (V.o.A.)	Tangier
15.130	19.83	50	WDSI	Brentwood, N.Y.	U.S.A.
15.130	19.83	50/200	KCBR	Delano, Cal.	U.S.A.
15.130	19.83	—	—	Moscow, Russia	U.S.S.R.
15.135	19.82	7	PRB23	Sao Paulo	Brazil
15.135	19.82	50/100	JOA6	Tokio	Japan
15.135	19.82	50	APK	Karachi	Pakistan
15.135	19.82	35/100	—	Tangier (V.o.A.)	Tangier
15.140	19.82	50/100	GSF	Overseas Service*	Great Britain
15.140	19.82	40	—	Kiev, Ukraine	U.S.S.R.
15.145	19.81	20	ZYK33	Recife	Brazil
15.148	19.80	1	CE1515	Santiago	Chile
15.150	19.80	5/100	VUD	Delhi	India
15.150	19.80	50/100	YDC	Djakarta, Java	Indonesia
15.150	19.80	50	WBOU	Bound Brook, N.Y.	U.S.A.
15.150	19.80	100	KCBR	Delano, Cal.	U.S.A.
15.150	19.80	50/200	KNBH	Dixon, Cal.	U.S.A.
15.155	19.79	25	ZYB9	Sao Paulo	Brazil
15.155	19.79	100	—	Horby	Sweden
15.155	19.79	—	—	Moscow, Russia	U.S.S.R.
15.160	19.79	100	VLA15	Shepparton, Vic.	Australia
15.160	19.79	5/100	VUD	Delhi	India
15.160	19.79	10	XEWW	Mexico City	Mexico
15.160	19.79	100	TAU	Ankara	Turkey
15.160	19.79	—	—	Moscow, Russia	U.S.S.R.
15.165	19.78	10	ZYN7	Fortaleza	Brazil
15.165	19.78	50	OZF8	Copenhagen	Denmark
15.165	19.78	8/100	—	Munich (V.o.A.)	Germany (West)
15.165	19.78	75/200	WLWO	Cincinnati, Ohio	U.S.A.
15.170	19.78	10	TGWA	Guatemala City	Guatemala
15.170	19.78	10	LKV	Fredrikstad	Norway
15.175	19.77	10	LLM	Fredrikstad	Norway
15.180	19.76	50	OZF8	Copenhagen	Denmark
15.180	19.76	50/100	GSO	Overseas Service*	Great Britain
15.180	19.76	—	—	Moscow, Russia	U.S.S.R.
15.190	19.75	5	PRK9	Belo Horizonte	Brazil
15.190	19.75	50	CKCX	Sackville, N.B.	Canada
15.190	19.75	7.5	CBFZ	Vercheres, Quebec	Canada
15.190	19.75	400	OIX4	Pori	Finland
15.190	19.75	8/100	—	Munich (V.o.A.)	Germany (West)
15.190	19.75	35/100	—	Tangier (V.o.A.)	Tangier
15.192	19.74	100	CSA	Lisbon	Portugal
15.195	19.74	35	—	Salonika (V.o.A.)	Greece
15.195	19.74	100	TAQ	Ankara	Turkey

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Mc/s	Metres	kW	Call	Station and Country	
15.195	19.74	—	—	Moscow, Russia	U.S.S.R.
15.199	19.74	10	ELWA	Monrovia	Liberia
15.199	19.74	1	OAX4X	Lima	Peru
15.200	19.74	50	VLC15	Shepparton, Vic.	Australia
15.200	19.74	8/100	—	Munich (V.o.A.)	Germany (West)
15.200	19.74	5/100	VUD	Delhi	India
15.200	19.74	200	WLWO7	Cincinnati, Ohio	U.S.A.
15.205	19.73	10	XESC	Puebla	Mexico
15.205	19.73	35/100	—	Tangier (V.o.A.)	Tangier
15.205	19.73	—	—	Moscow, Russia	U.S.S.R.
15.207	19.73	50	APK	Karachi	Pakistan
15.210	19.72	50	VLC15	Shepparton, Vic.	Australia
15.210	19.72	50/100	GWU	Overseas Service*	Great Britain
15.210	19.72	5/100	VUD	Delhi	India
15.210	19.72	35	—	Okinawa	Okinawa Island
15.210	19.72	50	WBOU	Bound Brook, N.J.	U.S.A.
15.215	19.72	2.5	—	Sao Luiz	Brazil
15.215	19.72	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
15.220	19.71	40	PCJ2	Huizen	Netherlands
15.220	19.71	7.5	ZL10	Wellington	New Zealand
15.220	19.71	50	WRUL2	Boston, Mass.	U.S.A.
15.220	19.71	40	—	Kiev, Ukraine	U.S.S.R.
15.225	19.70	7.5	JBD3	Osaka	Japan
15.227	19.70	5	—	Johannesburg	South Africa
15.230	19.70	10	VLG15	Lyndhurst, Vic.	Australia
15.230	19.70	50/100	GWD	Overseas Service*	Great Britain
15.230	19.70	50	WBOU	Bound Brook, N.J.	U.S.A.
15.230	19.70	—	—	Moscow, Russia	U.S.S.R.
15.235	19.69	10	BED3	Taipei	Formosa
15.235	19.69	50/100	JOB5	Tokio	Japan
15.235	19.69	—	—	Moscow, Russia	U.S.S.R.
15.238	19.69	—	—	Belgrade	Yugoslavia
15.240	19.69	100	—	Allouis	France
15.240	19.69	5/100	VUD	Delhi	India
15.240	19.69	100	—	Horby	Sweden
15.240	19.69	35/100	—	Tangier (V.o.A.)	Tangier
15.245	19.69	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
15.245	19.69	20	—	Tangier	Tangier
15.250	19.67	—	—	Peking	China
15.250	19.67	75	WLWO1	Cincinnati, Ohio	U.S.A.
15.250	19.67	50/200	KNBH	Dixon, Cal.	U.S.A.
15.250	19.67	—	—	Moscow, Russia	U.S.S.R.
15.252	19.67	40	—	Kiev, Ukraine	U.S.S.R.
15.255	19.67	5/100	VUD	Delhi	India
15.255	19.67	50	APK3	Karachi	Pakistan
15.260	19.66	50/100	GSI	Overseas Service*	Great Britain
15.260	19.66	—	—	Moscow, Russia	U.S.S.R.
15.265	19.65	7.5	APD	Dacca	Pakistan
15.270	19.65	8/100	—	Munich (V.o.A.)	Germany (West)
15.270	19.65	5/100	VUD	Delhi	India
15.270	19.65	50/100	APK	Karachi	Pakistan
15.270	19.65	50	WDSI	Brentwood, N.Y.	U.S.A.
15.270	19.65	50/100	KNBH	Dixon, Cal.	U.S.A.
15.270	19.65	—	—	Moscow, Russia	U.S.S.R.
15.275	19.64	100	—	Norden	Germany (West)

Mc/s	Metres	kW	Call	Station and Country	
15.280	19.63	7.5	ZL4	Wellington	New Zealand
15.280	19.63	50	WBOU	Bound Brook, N.J.	U.S.A.
15.280	19.63	—	—	Moscow, Russia	U.S.S.R.
15.285	19.62	5/100	VUD	Delhi	India
15.285	19.62	1.5	V3USE	Forest Side	Mauritius
15.285	19.62	50	WBOU	Bound Brook, N.J.	U.S.A.
15.285	19.62	—	—	Kaunas, Lithuania	U.S.S.R.
15.290	19.62	6	LRU	Buenos Aires	Argentina
15.290	19.62	8/100	—	Munich (V.o.A.)	Germany (West)
15.290	19.62	5/100	VUD	Delhi	India
15.290	19.62	20/80	WRUL	Boston, Mass.	U.S.A.
15.290	19.62	50/200	KNBH	Dixon, Cal.	U.S.A.
15.290	19.62	15/120	—	Moscow, Russia	U.S.S.R.
15.295	19.61	25	—	Allouis	France
15.295	19.61	35/100	—	Tangier (V.o.A.)	Tangier
15.300	19.61	50/100	GWR	Overseas Service*	Great Britain
15.300	19.61	7.5/100	—	Tebrau	Malaya
15.301	19.61	2	DZH8	Manila, Luzon	Philippines
15.305	19.60	100	HER6	Schwarzenburg	Switzerland
15.305	19.60	40	—	Kiev, Ukraine	U.S.S.R.
15.310	19.60	50/100	GSP	Overseas Service*	Great Britain
15.310	19.60	5/100	VUD	Delhi	India
15.310	19.60	7.5/100	—	Tebrau	Malaya
15.310	19.60	—	—	Moscow, Russia	U.S.S.R.
15.315	19.59	50	—	Cairo	Egypt
15.315	19.59	35	—	Salonika (V.o.A.)	Greece
15.315	19.59	5/100	VUD	Delhi	India
15.315	19.59	100	HEU6-	Schwarzenburg	Switzerland
15.315	19.59	50/200	KCBR	Delano, Cal.	U.S.A.
15.315	19.59	50/200	KNBH	Dixon, Cal.	U.S.A.
15.315	19.59	—	—	Moscow, Russia	U.S.S.R.
15.320	19.58	50	VLC15	Shepparton, Vic.	Australia
15.320	19.58	50	CKCS	Sackville, N.B.	Canada
15.320	19.58	—	—	Kaunas, Lithuania	U.S.S.R.
15.324	19.58	100	CSA	Lisbon	Portugal
15.325	19.58	5/100	VUD	Delhi	India
15.325	19.58	100	—	Rome	Italy
15.330	19.57	7.5/50	—	Manila, Luzon (V.o.A.)	Philippines
15.330	19.57	200	WLWO6	Cincinnati, Ohio	U.S.A.
15.330	19.57	100	WGEO1	Schenectady, N.Y.	U.S.A.
15.335	19.56	100	ORU	Wavre	Belgium
15.335	19.56	50	APK3	Karachi	Pakistan
15.335	19.56	—	—	Moscow, Russia	U.S.S.R.
15.340	19.56	100	KCBR	Delano, Cal.	U.S.A.
15.340	19.56	—	—	Moscow, Russia	U.S.S.R.
15.345	19.55	1	ETAA	Addis Ababa	Ethiopia
15.345	19.55	7.5	—	Athens	Greece
15.345	19.55	35/100	—	Tangier (V.o.A.)	Tangier
15.346	19.55	5	LRA	Buenos Aires	Argentina
15.350	19.54	100	—	Allouis	France
15.350	19.54	50	WRUL1	Boston, Mass.	U.S.A.
15.353	19.54	—	—	Peking	China
15.355	19.54	—	—	Moscow, Russia	U.S.S.R.
15.360	19.53	50/100	—	Overseas Service*	Great Britain
15.360	19.53	—	—	Moscow, Russia	U.S.S.R.

Mc/s	Metres	kW	Call	Station and Country	
15.365	19.53	40	—	Lopik	Netherlands
15.370	19.52	25	ZYC9	Rio de Janeiro	Brazil
15.370	19.52	8/100	—	Munich (V.o.A.)	Germany (West)
15.370	19.52	—	—	Moscow, Russia	U.S.S.R.
15.375	19.51	50/100	—	Overseas Service*	Great Britain
15.375	19.51	5/100	VUD	Delhi	India
15.376	19.51	1	4VWI	Cap Haitien	Haiti
15.380	19.50	100	CSA	Lisbon	Portugal
15.380	19.50	5/100	VUD	Delhi	India
15.380	19.50	15/120	—	Moscow, Russia	U.S.S.R.
15.385	19.49	35/100	—	Tangier (V.o.A.)	Tangier
15.390	19.49	50/100	—	Overseas Service*	Great Britain
15.390	19.49	—	—	Moscow, Russia	U.S.S.R.
15.395	19.49	20	—	Damascus	Syria
15.400	19.48	100	—	Allouis	France
15.400	19.48	50/100	—	Overseas Service*	Great Britain
15.400	19.48	5/100	VUD	Delhi	India
15.400	19.48	100	—	Rome	Italy
15.400	19.48	15/120	—	Moscow, Russia	U.S.S.R.
15.405	19.48	100	—	Norden	Germany (West)
15.405	19.48	5/100	VUD	Delhi	India
15.405	19.48	35/100	—	Tangier (V.o.A.)	Tangier
15.407	19.47	5	PZC	Paramaribo	Dutch Guiana
15.410	19.47	35/100	—	Tangier (V.o.A.)	Tangier
15.410	19.47	—	—	Moscow, Russia	U.S.S.R.
15.415	19.46	5/100	VUD	Delhi	India
15.415	19.46	20/80	WRUL	Boston, Mass.	U.S.A.
15.420	19.45	—	—	Brazzaville	French Eq. Africa
15.420	19.45	50/100	—	Overseas Service*	Great Britain
15.420	19.45	100	—	Madrid	Spain
15.420	19.45	—	—	Moscow, Russia	U.S.S.R.
15.425	19.45	5/100	VUD	Delhi	India
15.425	19.45	15	PHI	Lopik	Netherlands
15.435	19.44	50/100	GWE	Overseas Service*	Great Britain
15.435	19.44	7.5/100	—	Tebrau	Malaya
15.440	19.43	30	—	Podebrady	Czechoslovakia
15.440	19.43	5/100	VUD	Delhi	India
15.440	19.43	50	WBOU	Bound Brook, N.J.	U.S.A.
15.440	19.43	—	—	Moscow, Russia	U.S.S.R.
15.445	19.42	—	—	Peking	China
15.447	19.42	50/100	GRD	Overseas Service*	Great Britain
15.470	19.39	—	—	Moscow, Russia	U.S.S.R.
15.480	19.38	5/100	VUD	Delhi	India
15.520	19.33	8/100	—	Munich (V.o.A.)	Germany (West)
15.577	19.25	—	—	Peking	China
15.590	19.24	—	—	Peking	China
15.595	19.24	50	FZI	Brazzaville	French Eq. Africa
15 631	19.19	40	—	Madrid	Spain
15.640	19.18	1	HSJ4	Bangkok	Siam
15.710	19.10	—	—	Peking	China
15.875	18.88	—	—	Peking	China
16.370	18.37	—	—	Moscow Russia	U.S.S.R.
16.380	18.32	—	—	Moscow, Russia	U.S.S.R.
17.450	17.19	—	—	Peking	China
17.540	17.10	—	—	Peking	China

Mc/s	Metres	kW	Call	Station and Country	
17.605	17.04	—	—	Peking	China
17.650	16.99	—	—	Peking	China
17.677	16.97	1	CR5SB	Sao Thome	St. Thomas Island
17.700	16.95	50/100	GVP	Overseas Service*	Great Britain
17.705	16.94	50/100	—	Overseas Service*	Great Britain
17.705	16.94	35/100	—	Tangier (V.o.A.)	Tangier
17.710	16.94	20/80	WRUL	Boston, Mass.	U.S.A.
17.710	16.94	40	—	Kiev, Ukraine	U.S.S.R.
17.715	16.93	50/100	GRA	Overseas Service*	Great Britain
17.720	16.93	5/100	VUD	Delhi	India
17.720	16.93	100	HEU7	Schwarzenburg	Switzerland
17.720	16.93	35/100	—	Tangier (V.o.A.)	Tangier
17.725	16.93	50	APK	Karachi	Pakistan
17.730	16.92	7.5	—	Colombo	Ceylon
17.730	16.92	50/100	GVQ	Overseas Service*	Great Britain
x 17.730	16.92	5/100	VUD	Delhi (ALL INDIA RADIO)	India
17.735	16.92	50	APK	Karachi	Pakistan
17.740	16.91	50/100	GRQ	Overseas Service*	Great Britain
17.740	16.91	5/100	VUD	Delhi	India
17.740	16.91	—	—	Moscow, Russia	U.S.S.R.
17.745	16.90	50/100	—	Overseas Service*	Great Britain
17.745	16.90	7.5	—	Athens	Greece
17.745	16.90	5	—	St. Georges, Grenada	Windward Is.
17.750	16.90	100	—	Rome	Italy
17.750	16.90	35/100	—	Tangier (V.o.A.)	Tangier
17.750	16.90	80	WRUL5	Boston, Mass.	U.S.A.
17.755	16.90	7.5/100	—	Tebrau	Malaya
17.755	16.90	50	APK	Karachi	Pakistan
17.755	16.90	15/120	—	Moscow, Russia	U.S.S.R.
17.760	16.89	50	—	Cairo	Egypt
17.760	16.89	5/100	VUD	Delhi	India
17.760	16.89	35/100	—	Tangier (V.o.A.)	Tangier
News 17.760	16.89	50/100	KNBH	Dixon, Cal.	U.S.A.
22 17.760	16.89	25	WGEO3	Schenectady, N.Y.	U.S.A.
CT 17.770	16.88	100	—	Rome	Italy
20 GM 17.770	16.88	7.5	ZL5	Wellington	New Zealand
17.770	16.88	50	APK	Karachi	Pakistan
17.770	16.88	75	WLWO	Cincinnati, Ohio	U.S.A.
17.770	16.88	50	KCBR3	Delano, Cal.	U.S.A.
17.770	16.88	—	—	Moscow, Russia	U.S.S.R.
17.775	16.88	5	PHI	Lopik	Netherlands
17.780	16.87	5/100	VUD	Delhi	India
17.780	16.87	50	WBOU	Bound Brook, N.J.	U.S.A.
17.784	16.87	100	HER7	Schwarzenburg	Switzerland
17.785	16.87	5/25	—	Saigon	Indo-China
17.785	16.87	—	—	Tokio	Japan
17.790	16.86	100	VLB17	Shepparton, Vic.	Australia
17.790	16.86	50/100	GSG	Overseas Service*	Great Britain
17.795	16.86	3	OEI37	Vienna	Austria
17.795	16.86	5/100	VUD	Delhi	India
17.795	16.86	200	WLWO8	Cincinnati, Ohio	U.S.A.
17.797	16.85	15	OIX5	Pori	Finland
17.800	16.85	100	—	Shepparton, Vic.	Australia
17.800	16.85	5/100	—	Delhi	India
17.800	16.85	60	—	Rome	Italy

Mc/s	Metres	kW	Call	Station and Country
17.800	16.85	7.5/100	—	Warsaw Poland
17.800	16.85	100	—	Horby Sweden
17.800	16.85	20/80	WRUL	Boston, Mass. U.S.A.
17.800	16.85	50/200	KNBH	Dixon, Cal. U.S.A.
17.800	16.85	15/120	—	Moscow, Russia U.S.S.R.
17.805	16.85	1.5	DZI6	Manila, Luzon Philippines
17.805	16.85	50	WBOU	Bound Brook, N.J. U.S.A.
17.810	16.84	50/100	GSV	Overseas Service* Great Britain
17.810	16.84	5/100	VUD	Delhi India
17.810	16.84	—	—	Moscow, Russia U.S.S.R.
17.815	16.84	100	—	Norden Germany (West)
17.820	16.84	50	CKNC	Sackville, N.B. Canada
17.820	16.84	7.5	—	Colombo Ceylon
17.820	16.84	5/100	VUD	Delhi India
17.820	16.84	7.5	ZL14	Wellington New Zealand
17.820	16.84	15/120	—	Moscow, Russia U.S.S.R.
17.825	16.83	—	—	Tokio Japan
17.825	16.83	10	LLN	Fredrikstad <i>22 (S)</i> Norway
17.825	16.83	100	TAV	Ankara Turkey
17.830	16.83	5/100	VUD	Delhi India
17.830	16.83	35/100	—	Tangier (V.o.A.) Tangier
17.830	16.83	50	WDSI	Brentwood, N.Y. U.S.A.
17.830	16.83	50/100	KNBH	Dixon, Cal. U.S.A.
17.835	16.82	7	FZI	Brazzaville French Eq. Africa
17.835	16.82	100	CSA	Lisbon Portugal
17.840	16.82	10	VLG17	Lyndhurst, Vic. Australia
17.840	16.82	100	VLB17	Shepparton, Vic. Australia
17.840	16.82	8/100	—	Munich (V.o.A.) Germany (West)
17.840	16.82	5/100	VUD	Delhi India
17.840	16.82	—	—	Moscow, Russia U.S.S.R.
17.840	16.82	25	HVJ	Vatican City Vatican City
17.842	16.82	7	FZI	Brazzaville French Eq. Africa
17.845	16.81	100	—	Colombo Ceylon
17.845	16.81	100	—	Norden Germany (West)
17.845	16.81	—	—	Moscow, Russia U.S.S.R.
17.850	16.81	100	—	Allouis France
17.850	16.81	5/100	VUD	Delhi India
17.850	16.81	50	KCBR2	Delano, Cal. U.S.A.
17.855	16.81	35/100	—	Tangier (V.o.A.) Tangier
17.860	16.80	100	ORU	Wavre Belgium
17.860	16.80	30	—	Podebrady Czechoslovakia
17.860	16.80	50/100	—	Overseas Service* Great Britain
17.865	16.79	5/100	VUD	Delhi India
17.865	16.79	20	—	Damascus Syria
17.865	16.79	15/120	—	Moscow, Russia U.S.S.R.
17.870	16.79	50/100	GRP	Overseas Service* Great Britain
17.870	16.79	5/100	VUD	Delhi India
17.870	16.79	7.5/100	—	Tebrau Malaya
17.875	16.78	1	PRL4	Rio de Janeiro Brazil
17.875	16.78	100	—	Norden Germany (West)
17.875	16.78	50	WDSI	Brentwood, N.Y. U.S.A.
17.880	16.78	50/100	—	Overseas Service* Great Britain
17.880	16.78	100	CSA	Lisbon Portugal
17.880	16.78	35/100	—	Tangier (V.o.A.) Tangier
17.880	16.78	50	WDSI	Brentwood, N.Y. U.S.A.

Mc/s	Metres	kW	Call	Station and Country	
17.880	16.78	15/120	—	Moscow, Russia	U.S.S.R.
17.890	16.77	10	HCJB	Quito	Ecuador
17.890	16.77	50/100	GVO	Overseas Service*	Great Britain
17.890	16.77	7.5/100	—	Tebrau	Malaya
17.890	16.77	50/100	CSA43	Lisbon	Portugal
17.892	16.77	100	—	Issoudun	France
17.910	16.75	15/120	—	Moscow, Russia	U.S.S.R.
17.943	16.72	10	—	Cap Haitien	Haiti
21.455	13.98	35/100	—	Tangier (V.o.A.)	Tangier
21.460	13.98	50/100	KNBH	Dixon, Cal.	U.S.A.
21.470	13.97	50/100	GSH	Overseas Service*	Great Britain
21.485	13.96	75/200	WLWO	Cincinnati, Ohio	U.S.A.
21.490	13.96	100	CSA	Lisbon	Portugal
21.500	13.95	35/100	—	Tangier (V.o.A.)	Tangier
21.500	13.95	50	WDSI	Brentwood, N.Y.	U.S.A.
21.510	13.95	100	ORU	Wavre	Belgium
21.515	13.94	100	CSA	Lisbon	Portugal
21.515	13.94	75/200	WLWO	Cincinnati, Ohio	U.S.A.
21.520	13.94	100	HER8	Schwarzenburg	Switzerland
21.530	13.93	50/100	GSJ	Overseas Service*	Great Britain
21.540	13.93	50	WBOU	Bound Brook, N.J.	U.S.A.
21.550	13.92	50/100	GST	Overseas Service*	Great Britain
21.560	13.91	100	—	Rome	Italy
21.570	13.91	5/100	VUD	Delhi	India
21.570	13.91	50	WDSI	Brentwood, N.Y.	U.S.A.
21.580	13.90	5/100	VUD	Delhi	India
21.590	13.90	50/100	APK	Karachi	Pakistan
21.590	13.90	25/100	WCEO	Schenectady, N.Y.	U.S.A.
21.600	13.89	100	VLB21	Shepparton, Vic.	Australia
21.600	13.89	50	CKRP	Sackville, N.B.	Canada
21.605	13.88	100	HE19	Schwarzenburg	Switzerland
21.610	13.88	35/100	—	Tangier (V.o.A.)	Tangier
21.610	13.88	50	WBOU	Bound Brook, N.J.	U.S.A.
21.610	13.88	50/200	KNBH	Dixon, Cal.	U.S.A.
21.610	13.88	15/120	—	Moscow, Russia	U.S.S.R.
21.620	13.87	7.5	—	Colombo	Ceylon
21.620	13.87	100	—	Allouis	France
21.626	13.87	50/100	APK	Karachi	Pakistan
21.630	13.87	50/100	GVT	Overseas Service*	Great Britain
21.630	13.87	50/200	KCBR	Delano, Cal.	U.S.A.
21.640	13.86	50/100	GRZ	Overseas Service*	Great Britain
21.650	13.86	75/200	WLWO	Cincinnati, Ohio	U.S.A.
21.660	13.85	50/100	MCX	Overseas Service*	Great Britain
21.660	13.85	5/100	VUD	Delhi	India
21.670	13.84	5	LLP	Oslo	Norway
21.670	13.84	35/100	—	Tangier (V.o.A.)	Tangier
21.675	13.84	50/100	GVR	Overseas Service*	Great Britain
21.680	13.84	15/120	—	Moscow, Russia	U.S.S.R.
21.690	13.83	35/100	—	Tangier (V.o.A.)	Tangier
21.700	13.83	5/100	VUD	Delhi	India
21.700	13.83	100	CSA	Lisbon	Portugal
21.710	13.82	50	CHLA	Sackville, N.B.	Canada
21.710	13.82	50/100	GVS	Overseas Service*	Great Britain
21.720	13.81	100	—	Allouis	France
21.720	13.81	7.5/100	—	Tebrau	Malaya

Mc/s	Metres	kW	Call	Station and Country	
21.730	13.81	5	LLQ	Oslo	Norway
21.730	13.81	50	WBOU	Bound Brook, N.J.	U.S.A.
21.740	13.80	100	—	Allouis	France
21.740	13.80	50/100	MCY	Overseas Service*	Great Britain
21.740	13.80	100	KCBR	Delano, Cal.	U.S.A.
21.740	13.80	25	HVJ	Vatican City	Vatican City
25.615	11.71	3	OEI38	Vienna	Austria
25.670	11.69	35/100	—	Tangier (V.o.A.)	Tangier
25.720	11.67	50/100	GSR	Overseas Service*	Great Britain
25.750	11.65	50/100	GSQ	Overseas Service*	Great Britain
25.760	11.65	5	—	Johannesburg	South Africa
25.820	11.62	5	—	Johannesburg	South Africa
25.840	11.62	50/100	GSS	Overseas Service*	Great Britain
25.920	11.57	100	—	Norden	Germany (West)
25.945	11.56	3	OEI39	Vienna	Austria
26.080	11.50	50/100	GSK	Overseas Service*	Great Britain

Short-wave Broadcasting Bands

By international agreement, reached at Atlantic City in 1947, broadcasting on the short waves is limited to certain bands ; these are listed below. It will be seen, however, from the foregoing list that many stations are operating outside these bands. Some bands are officially shared with other services and the use of others (marked T) is limited to the tropics.

2.300 — 2.498	Mc/s	(T)	} Shared with fixed and mobile services.
3.200 — 3.400		(T)	
3.950 — 4.000			} Shared with fixed service.
4.750 — 4.995		(T)	} Shared with fixed and mobile services.
5.005 — 5.060		(T)	
5.950 — 6.200			
7.100 — 7.300			First 50 kc/s shared with amateurs.
9.500 — 9.775			
11.700 — 11.975			
15.100 — 15.450			
17.700 — 17.900			
21.450 — 21.750			
25.600 — 26.100			

9.680 Moscow

Geographical List of Short-wave Stations of the World

	Mc/s		Mc/s		Mc/s
✓ ADEN	7.170	✓ Buenos Aires	9.690	Vienna	11.775
		" "	9.760	"	11.785
AFGHANISTAN		" "	11.880	"	11.935
✓ Kabul	9.973	" "	15.290	"	17.795
AFRICA,		" "	15.346	"	25.615
FRENCH EQ.		✓ Mendoza	6.180	"	25.945
✓ Brazzaville	9.440	✓ Tucuman	11.840	✓ AZORES	
"	9.625	AUSTRALIA		Punta Delgada	4.865
"	9.730	✓ Brisbane, Qld.	4.920	"	11.925
"	9.937	" "	7.215	BAHAMAS (See	
"	11.970	" "	9.660	West Indies, British)	
"	15.420	.. Lyndhurst, Vic.	6.150	BALI	
"	15.595	" "	9.680	(See Indonesia)	
"	17.835	" "	11.810	BELGIUM ...	
"	17.842	" "	11.850	Wavre	6.000
AFRICA,		" "	11.880	"	6.085
FRENCH WEST		" "	15.230	"	9.145
(See Dahomey, Senegal and Ivory Coast)		" "	17.840	"	9.705
AFRICA,		Perth, W.A.	4.897	"	9.745
PORT. EAST		" "	9.610	"	9.767
(See Mozambique)		.. Shepparton, Vic.	11.830	"	11.720
AFRICA,		" "	7.220	"	11.850
PORT. WEST		" "	7.240	"	15.335
(See Angola)		" "	7.280	"	17.860
ALBANIA		" "	9.500	"	21.510
✓ Scutari	8.215	" "	9.580	BOLIVIA	
✓ Tirana	7.848	" "	9.615	La Paz	6.120
ALGERIA		" "	11.710	"	6.150
✓ Algiers	6.160	" "	11.740	"	9.437
ANDORRA		" "	11.810	BORNEO	
✓ Andorra	5.979	" "	11.850	(See Indonesia)	
ANGOLA		" "	11.900	BRAZIL	
✓ Benguela	9.502	" "	15.160	.. Aparecida	9.620
.. Dondo	4.775	" "	15.200	Bahia	3.345
"	9.380	" "	15.210	.. Baura	3.275
✓ Loando	4.852	" "	15.320	Belem	4.865
"	6.355	" "	17.790	Belo Horizonte	6.000
"	9.050	" "	17.800	"	15.190
"	9.632	" "	17.840	.. Campina	
"	11.862	" "	21.600	Grande	3.325
Lubango	5.025	Sydney, N.S.W.	6.090	.. Curityba	9.545
Mossamedes	7.230	" "	9.500	"	11.925
✓ Nova Lisboa	9.705	AUSTRIA		Fortaleza	6.105
"	11.924	✓ Vienna	5.983	"	15.165
✓ " " Silvo Porto	7.200	" "	6.155	.. Goiana	4.995
ARGENTINA		" "	7.135	"	9.755
Buenos Aires	5.986	" "	7.245	"	11.815
" "	6.065	" "	7.266	Manaos	4.805
" "	6.090	" "	9.505	"	4.895
" "	6.120	" "	9.615	Natal	4.925
" "	9.320	" "	9.645	Nittheroy	6.195
" "	9.660	" "	9.665	Porto Alegre	5.963
		" "		" "	6.135

	Mc/s		Mc/s		Mc/s
Brazil—cont.		CAMEROONS		Colombo	11.770
Porto Alegre	9.675	Duala	7.286	"	11.875
Recife	3.263	CANADA		"	11.975
"	6.015	Halifax, N.S.	6.130	"	15.120 CHNX
"	6.085	✓Montreal,		"	17.730
"	9.565	Quebec	6.005	"	17.820 CFCX
"	11.825	✓Sackville, N.B.	5.970	"	17.845 CKNP
"	15.145	"	6.060	"	21.620 CKRZ
Rio de Janeiro	4.905	"	6.090	CHILE	CKOB
"	5.015	"	6.160	Punta Arenas	9.199 CHAC
"	5.045	"	9.585	Santiago	5.750 CKLP
"	6.147	"	9.610	"	6.190 CHLS
"	9.610	"	9.625	"	6.222 CKLO
"	9.705	"	11.705	"	7.660 CKXA
"	9.720	"	11.720	"	HOL
"	9.775	"	11.760	"	9.597
"	11.720	"	11.900	"	9.737 CKEX
"	11.735	"	11.945	"	11.743 KKK
"	11.775	"	15.090	"	11.960 KLY
"	11.885	"	15.190	"	12.000 CKCY
"	11.935	"	15.320	"	15.148 CKCS
"	11.950	"	17.820	Valparaiso	6.150 CKNC
"	15.370	"	21.600	"	11.938 KKP
"	17.875	"	21.710	CHINA	CHL9
Salvador	9.595	Sydney, N.S.	6.010	Chungking	6.154 CJCX
Sao Luiz	4.970	Toronto, Ont.	6.070	✓Peking	11.203
"	15.215	Vercheres,		"	3.914 CBFV
Sao Paulo	4.755	Quebec	6.090	"	3.960 CBFIR
"	4.775	"	9.520	"	5.045 CBFX
"	5.955	"	9.610	"	5.965 CBF0
"	6.025	"	9.630	"	6.050 CBFY
"	6.035	"	11.705	"	6.100 CBF1
"	6.055	"	11.720	"	6.203 CBLX
"	6.095	"	15.090	"	6.810 CBFZ
"	6.125	"	15.190	"	6.890
"	6.165	Winnipeg,		"	7.000 CARO
"	6.185	Manitoba	6.150	"	7.170 CKRX
"	9.505	"	11.720	"	7.295
"	9.685	CANARY IS.		"	7.370
"	9.745	Teneriffe	7.290	"	7.500
"	11.765	CAPE VERDE IS.		"	7.770
"	11.924	Praia	7.135	"	9.025
"	11.965	"	7.397	"	9.100
"	15.135	CEBU		"	9.170
"	15.155	(See Philippines)		"	9.329
••• Taubate	4.805	CELEBES		"	9.340
BULGARIA		(See Indonesia)		"	9.390
Sofia	6.070	CEYLON		"	9.459
"	7.255	Colombo	3.395	"	9.510
"	7.670	"	4.870	"	9.663
"	9.700	"	4.965	"	9.790
BURMA		"	5.025	"	10.070
Rangoon	4.775	"	7.110	"	10.262
"	6.018	"	7.190	"	10.660
"	9.538	"	9.520	"	11.110

	Mc/s		Mc/s		Mc/s
China—cont.		Ibague	4.935	Podebrady	8.915
Peking	11.300	Manizales	5.020	"	9.332
"	11.420	"	6.105	"	9.504
"	11.455	Medellin	5.055	"	9.550
"	11.515	"	5.979	"	9.580
"	11.590	"	6.145	"	9.670
"	11.600	Neiva	4.855	"	11.732
"	11.650	Pasto	4.825	"	11.803
"	11.715	••Pereira	4.867	"	11.875
"	11.745	"	6.103	"	11.975
"	11.895	Popayan	4.913	"	15.440
"	11.960	••Sutatenza	5.075	"	17.860
"	13.845	CONGO, BELGIAN		DAHOMEY	
"	15.060	Leopoldville	3.250	Cotonou	4.870
"	15.105	"	9.220	"	7.190
"	15.130	"	9.380	DENMARK	
"	15.250	"	9.655	Copenhagen	6.060
"	15.353	"	11.720	"	7.306
"	15.445	COSTA RICA		"	9.520
"	15.577	San Jose	6.036	"	15.165
"	15.590	"	6.037	"	15.180
"	15.710	"	6.152	DOMINICAN	
"	15.875	"	6.165	REPUBLIC	
"	17.450	"	6.180	Ciudad Trujillo	3.285
"	17.540	"	6.498	"	5.970
"	17.605	"	9.619	"	6.115
"	17.650	"	9.645	"	9.735
Shanghai	4.200	CUBA		Santiago	6.050
"	6.750	Camaguey	9.620	ECUADOR	
"	9.730	Havana	6.130	Guayaquil	4.650
COLOMBIA		"	6.450	"	6.065
•• Armenia	4.795	"	9.022	Quito	6.050
"	4.875	"	9.232	"	9.744
"	6.010	"	9.362	"	11.915
Barranquilla	4.785	"	9.670	"	15.115
"	4.900	"	9.832	"	17.890
Bogota	4.834	"	11.730	EGYPT	
"	4.895	"	11.800	Cairo	6.125
"	4.945	Santiago	9.740	"	7.055
"	4.960	CURACAO		"	7.105
"	5.010	••Willemstad	2.460	"	7.321
"	5.960	CYPRUS		"	7.335
"	6.000	Limassol	6.120	"	9.475
"	6.020	"	6.170	"	9.753
"	6.155	"	6.790	"	9.792
"	6.162	"	9.650	"	11.670
"	6.183	"	9.667	"	11.808
Bucaramanga	4.845	"	11.718	"	12.029
Cali	4.767	CZECHOSLOVAKIA		"	15.315
"	6.055	••Podebrady	6.010	"	17.760
"	6.135	"	6.028	ETHIOPIA	
"	6.195	"	6.115	Addis Ababa	9.625
Cartagena	4.930	"	6.155	"	15.345
"	4.965	"	7.220	FALKLAND IS.	
Cucuta	4.871	"	7.255	Port Stanley	6.125

	Mc/s		Mc/s		Mc/s
FIJI ISLANDS		Allouis	21.740	GT. BRITAIN	
Suva	9.535	Issoudun	17.892	Overseas	
FINLAND		GERMANY, EAST		Service*	3.952MCM MCM
Pori OIX 7	6.120	Berlin	6.115	" "	3.975GRC GRC
" OIX 2	9.554	"	7.150	" "	5.975MCF MCP
" OIX 4	15.190	Leipzig	9.728	" "	5.990MCU MCU
" OIX 5	17.797	GERMANY, WEST		" "	6.010GRB GRB
FORMOSA		Bad Durrheim	7.265	" "	6.035GWS GWS
Taipei	3.220	Berlin	6.005	" "	6.040GY GSY
"	4.220	Frankfurt	5.470	" "	6.050GO GSO
"	5.985	✓Munich	3.980	" "	6.060GSX GSX
"	7.130	"	6.080	" "	6.070GRR GRR
"	7.300	"	6.140	" "	6.080MCV MCV
"	7.336	"	6.160	" "	6.090GWM GWM
"	9.575	"	7.160	" "	6.110GSL GSL
"	11.735	"	7.250	" "	6.125GWA
"	11.916	"	7.295	" "	6.140MCW
"	15.235	"	9.540	" "	6.150GRW
FRANCE		"	11.760	" "	6.165GWK
✓Allouis	3.965	"	11.805	" "	6.170GSZ
"	5.950	"	11.830	" "	6.180GRO
"	6.045	" RFE.	15.165	" "	6.195GRN
"	6.145	"	15.190	" "	7.110
"	6.200	"	15.200	" "	7.120
"	7.050	"	15.270	" "	7.135
"	7.097	"	15.290	" "	7.150
"	7.115	"	15.370	" "	7.185
"	7.160	"	15.520	" "	7.200
"	7.220	"	17.840	" "	7.210
"	7.240	Norden	3.970	" "	7.220
"	7.280	"	5.980	" "	7.230
"	7.650	"	6.075	" "	7.250
"	9.520	"	7.170	" "	7.260
"	9.540	"	7.205	" "	7.280
"	9.550	"	7.290	" "	7.325
"	9.560	"	9.630	" "	9.410
"	9.570	"	9.640	" "	9.510
"	9.640	"	9.735	" "	9.525
"	9.675	"	11.795	" "	9.550
"	9.680	"	11.945	" "	9.555
"	9.755	"	15.275	" "	9.560
"	9.765	"	15.405	" "	9.570
"	11.700	"	17.815	" "	9.580
"	11.730	"	17.845	" "	9.600
"	11.845	"	17.875	" "	9.625
"	11.920	"	25.920	" "	9.640
"	12.029	Stuttgart	6.030	" "	9.660
"	15.100	GOA		" "	9.675
"	15.240	Goa	3.425	" "	9.690
"	15.295	"	4.886	" "	9.700
"	15.350	"	7.083	" "	9.710
"	15.400	"	9.610	" "	9.725
"	17.850	GOLD COAST		" "	9.735
"	17.892	Accra	4.916	" "	9.750

* B.B.C. short-wave transmitters are located at Daventry, Northants; Skelton, Cumberland; Woofferton, Shropshire; and Rampisham, Dorset. Frequencies, calls and power are interchangeable.

Gt. Britain—cont. Mc/s		Mc/s	Mc/s	Me/s
Overseas		Overseas		
Service*	9.760	Service*	21.550	GUIANA, DUTCH
"	9.770	"	21.630	Paramaribo
"	9.825	"	21.640	"
"	9.915	"	21.660	15.407
"	11.680	"	21.675	GUINEA, PORT.
"	11.700	"	21.710	Bissao
"	11.730	"	21.740	9.375
"	11.750	"	25.720	HAITI
"	11.770	"	25.750	Cap Haitien
"	11.780	"	25.840	"
"	11.790	"	26.080	"
"	11.800	"		6.104
"	11.820	GREECE		6.150
"	11.840	Athens	5.960	"
"	11.860	"	6.073	"
"	11.880	"	6.327	"
"	11.890	"	7.141	"
"	11.910	"	7.420	"
"	11.920	"	9.606	9.655
"	11.930	"	11.718	"
"	11.945	"	11.926	15.376
"	11.955	"	15.345	"
"	11.955	"	17.745	17.943
"	11.960	Salonika	6.015	Port au Prince
"	11.970	"	6.040	"
"	12.040	"	6.080	"
"	12.095	"	6.135	5.985
"	15.070	"	7.125	6.012
"	15.110	"	7.205	"
"	15.140	"	7.215	6.090
"	15.180	"	7.265	"
"	15.210	"	9.520	9.480
"	15.230	"	9.530	9.663
"	15.260	"	9.685	HAWAII
"	15.300	"	11.895	Honolulu
"	15.310	"	15.195	"
"	15.360	"	15.315	"
"	15.375	"		6.195
"	15.390	GREENLAND		9.650
"	15.400	Godthaab	9.525	11.850
"	15.420	GUATEMALA		HONDURAS, BRIT.
"	15.435	Guatemala City	5.950	Belize
"	15.447	"	5.990	3.300
"	17.700	"	6.101	6.100
"	17.705	"	6.207	HONDURAS
"	17.715	"	6.287	REPUBLIC
"	17.730	"	6.334	San Pedro Sula
"	17.730	"	6.360	"
"	17.740	"	9.668	"
"	17.745	"	9.760	"
"	17.790	"	11.850	"
"	17.810	"	15.170	"
"	17.860	"		6.410
"	17.870	Quezaltenango	6.710	6.672
"	17.880	GUIANA, BRIT.		6.035
"	17.890	Georgetown	3.255	HONG KONG
"	21.470	"	3.300	Victoria
"	21.530	"	5.981	"
				3.940
				9.528
				HUNGARY
				Budapest
				"
				6.236
				7.222
				9.832
				11.911
				ICELAND
				Reykjavik
				12.174
				INDIA
				Akashvani,
				Mysore
				6.060
				Bombay
				3.945
				4.840
				6.150
				7.240
				9.550

	Mc/s		Mc/s		Mc/s
India—cont.					
Calcutta	3.305	Delhi	9.760	Delhi	17.780
"	4.880	"	9.770	"	17.795
"	6.010	"	9.795	"	17.800
"	7.210	"	9.805	"	17.810
"	9.530	"	9.820	"	17.820
✓ Delhi	3.275	"	9.840	"	17.830
"	3.295	"	9.850	"	17.840
"	3.345	"	11.625	"	17.850
"	3.365	"	11.640	"	17.865
"	3.905	"	11.700	"	17.870
"	3.925	"	11.705	"	21.570
"	3.936	"	11.715	"	21.580
"	3.950	"	11.720	"	21.660
"	3.970	"	11.745	"	21.700
"	3.980	"	11.760	Madras	4.920
"	3.990	"	11.785	"	6.085
"	4.780	"	11.790	"	7.260
"	4.940	"	11.800	Murree,	
"	4.960	"	11.850	Kashmir	3.258
"	4.990	"	11.870	"	6.250
"	5.960	"	11.875	Simla	3.223
"	5.990	"	11.880	"	4.760
"	6.060	"	11.915	Srinagar,	
"	6.065	"	11.920	Kashmir	4.860
"	6.130	"	11.940	"	7.270
"	6.190	"	11.950		
"	6.220	"	11.955	INDO-CHINA	
"	6.290	"	11.960	Dalat	7.265
"	7.025	"	11.970	Hanoi	7.408
"	7.035	"	12.020	"	11.915
"	7.065	"	15.040	"	15.022
"	7.140	"	15.105	Hue	7.200
"	7.150	"	15.130	Pnompenh	6.090
"	7.155	"	15.150	Saigon	7.230
"	7.165	"	15.160	"	7.260
"	7.170	"	15.200	"	9.620
"	7.190	"	15.210	"	9.795
"	7.210	"	15.240	"	11.790
"	7.275	"	15.255	"	17.785
"	7.286	"	15.270	"	
"	7.295	"	15.285	Vientiane, Laos	6.130
"	9.510	"	15.290		
"	9.520	"	15.310	INDONESIA	
"	9.525	"	15.315	Ambon,	
"	9.560	"	15.325	Moluccas	3.395
"	9.565	"	15.375	"	4.865
"	9.620	"	15.380	Bandjermassin,	
"	9.675	"	15.400	Borneo	3.250
"	9.680	"	15.405	"	5.970
"	9.695	"	15.415	Bandoeng, Java	3.205
"	9.720	"	15.415	"	4.945
"	9.735	"	15.425	Bukittinggi,	
"	9.740	"	15.440	Sumatra	3.232
"	9.745	"	15.480	"	5.030
"	9.755	"	17.720	Den Pasar, Bali	4.840
			17.730	Djakarta, Java	2.460
			17.740	"	3.277
			17.760	"	

	Mc/s		Mc/s		Mc/s
Indonesia—cont.		Caltanissetta	9.420	KOREA	
Djakarta, Java	3.936	"	9.515	Pusan	7.935
" "	4.910	Palermo	7.175	Seoul	2.510
" "	6.045	Rome	3.995	"	3.892
" "	7.220	"	5.960	"	9.555
" "	7.270	"	6.010	KUWAIT	
" "	9.710	"	6.215	Kuwait	5.000
" "	9.865	"	7.275	LEBANON	
" "	11.770	"	7.290	Beirut	8.030
" "	11.795	"	9.570	LIBERIA	
" "	15.150	"	9.630	Monrovia	4.835
Djokjakarta,		"	9.710	"	11.798
Java	5.060	"	9.780	"	15.199
" "	7.100	"	11.810	LIBYA	
Kutaradja,		"	11.905	Benghazi	4.930
Sumatra	4.985	"	15.120	Tripoli	3.305
Macassar,		"	15.325	"	7.220
Celebes	3.325	"	15.400	LUXEMBOURG	
" "	7.295	"	17.750	Luxembourg	6.090
" "	7.576	"	17.770	LUZON	
" "	9.554	"	17.800	(See Philippines)	
Madium, Java	3.286	"	21.560	MADAGASCAR	
Medan,		IVORY COAST		Tananarive	3.205
Sumatra	2.490	Abidjan	4.945	"	3.350
" "	4.930	JAMAICA (See		"	6.170
" "	7.195	West Indies, British)		"	7.135
" "	7.240	JAPAN		"	7.155
Menado,		Osaka	15.225	"	9.514
Celebes	3.214	Tokio	4.910	MALAYA	
" "	5.990	"	6.015	Kuala Lumpur	6.025
Padang,		"	6.055	Singapore	4.820
Sumatra	2.480	"	7.180	"	6.135
" "	3.960	"	7.257	Tebrau	6.110
" "	6.170	"	7.285	"	6.175
Palembang,		"	9.505	"	7.120
Java	2.430	"	9.655	"	9.560
" "	4.855	"	9.675	"	9.625
Pontianak,		"	11.705	"	9.690
Borneo	3.345	"	11.725	"	9.725
Semarang, Java	3.260	"	11.751	"	11.700
Surabaya, Java	3.355	"	15.135	"	11.725
" "	3.980	"	15.235	"	11.820
Surakarta, Java	2.440	"	17.785	"	11.880
" "	3.305	"	17.825	"	11.955
" "	7.250	"		"	15.300
IRAQ		JAVA (See Indonesia)		"	15.310
Baghdad	3.297	JORDAN		"	15.435
" "	11.700	Amman	6.047	"	17.755
ISRAEL		Jerusalem	6.058	"	17.870
Tel Aviv	6.722	KENYA		"	17.890
" "	6.833	Mombasa	7.180	"	21.720
" "	9.007	Nairobi	3.315	MARTINIQUE	
ITALY		"	4.885	Fort de France	9.704
Caltanissetta	6.060	"	4.933		
" "	6.190	"	6.060		
" "	6.240	"			

	Mc/s		Mc/s		Mc/s
MAURITIUS		NEW GUINEA,		Dacca	15.265
Forest Side	15.285	DUTCH		Karachi	4.807
MEXICO		Hollandia	5.045	"	6.055
Mexico City	6.010	NEW ZEALAND		"	6.075
"	6.066	Wellington	6.080	"	6.090
"	9.500	"	9.520	"	6.220
"	9.610	"	9.540	"	6.230
"	9.625	"	9.620	"	7.008
"	9.680	"	11.780	"	7.147
"	11.880	"	11.830	"	7.160
"	11.900	"	15.220	"	9.499
"	15.160	"	15.280	"	9.645
Puebla	15.205	"	17.770	"	9.700
Tampico	6.045	"	17.820	"	9.705
MOLUCCAS (See		NICARAGUA		"	9.738
Indonesia)		Granada	5.940	"	11.725
MONACO		"	11.810	"	11.740
Monte Carlo	6.037	Leon	5.995	"	11.800
"	7.140	Managua	6.140	"	11.885
MOROCCO,		NIGERIA		"	11.910
FRENCH		Enugu	3.965	"	15.135
Rabat	5.953	"	3.976	"	15.207
"	6.006	Ibadan	4.000	"	15.255
"	6.088	"	4.990	"	15.270
MOROCCO,		Kaduna	3.325	"	15.335
SPANISH		"	4.800	"	17.725
Tetuan	5.950	"	7.175	"	17.735
MOZAMBIQUE		Lagos	4.901	"	17.755
Lourenco		"	6.101	"	17.770
Marques	3.242	NORWAY		"	21.590
"	3.440	Fredrikstad	9.610	"	21.626
"	4.873	"	11.735	Lahore	3.395
"	4.915	"	11.850	"	3.914
"	7.250	"	15.170	"	4.790
"	9.765	"	15.175	"	6.030
"	11.747	Oslo	17.825	"	6.075
"	15.081	"	7.240	"	6.138
NEPAL		"	21.670	PANAMA	
Katmandu	7.100	Tromso	21.730	Colon	6.005
NETHERLANDS		"	6.130	"	9.502
Huizen	9.590	"	7.210	Panama City	5.990
"	9.745	OKINAWA I.	9.550	"	6.060
"	11.950	Okinawa	6.145	PARAGUAY	
"	15.220	"	7.160	Ascuncion	9.737
Lopik	6.020	"	9.635	"	11.850
"	6.025	"	11.920	"	11.950
"	7.210	"	15.210	PERSIA	
"	11.730	PAKISTAN		Ahwaz	7.950
"	15.365	Dacca	3.325	Shiraz	6.422
"	15.425	"	3.955	Tabriz	6.038
"	17.775	"	3.965	Teheran	3.780
NEW CALEDONIA		"	3.973	"	6.155
Noumea	6.030	"	7.083	"	9.680
		"	7.280	"	15.100

Ref. to Call. S. M. S. M. S.

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135- 9833

*OKOK
MS
8th DEC
OO ms
1200 gm
3
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14
21
28 mg
SW*

PERU					
Arequipa	6.308	Warsaw	7.250	RUMANIA	
Cuzco	6.130	"	9.525	Bucharest	5.980
David	6.045	"	9.539	"	6.210
Lima	5.973	"	9.555	"	9.255
"	6.020	"	9.575	"	9.570
"	6.081	"	9.600	"	11.935
"	6.090	"	9.614	ST. THOMAS I.	
"	6.314	"	9.635	Sao Thome	4.807
"	9.336	"	11.740	"	17.677
"	9.406	"	11.945	SALVADOR	
"	9.520	"	11.955	San Salvador	6.010
"	9.560	"	15.120	"	6.095
"	15.105	"	17.800	"	6.190
"	15.199	PORTUGAL		"	9.552
PHILIPPINES		Lisbon	3.950	"	11.948
Cebu	6.140	"	5.960	Santa Ana	4.798
Manila, Luzon	3.325	"	6.025	"	5.980
"	6.000	"	6.080	SAUDI ARABIA	
"	6.030	"	6.154	Jidda	3.960
"	6.060	"	6.373	"	5.976
"	6.080	"	9.633	"	6.101
"	6.125	"	9.680	"	6.176
"	6.170	"	9.746	"	7.078
"	9.500	"	9.775	"	7.110
"	9.535	"	9.850	"	7.132
"	9.550	"	11.720	"	7.185
"	9.590	"	11.840	"	7.185
"	9.640	"	11.915	"	9.364
"	9.670	"	11.955	"	9.650
"	9.730	"	11.995	"	11.750
"	11.755	"	15.125	"	11.846
"	11.790	"	15.192	"	11.950
"	11.855	"	15.324	SENEGAL	
"	11.890	"	15.380	Dakar	4.893
"	11.895	"	17.835	"	4.950
"	15.215	"	17.880	"	5.940
"	15.245	"	17.890	"	9.560
"	15.301	"	21.490	"	9.711
"	15.330	"	21.515	"	11.895
"	17.805	"	21.700	SIAM	
POLAND		REUNION ISLAND		Bangkok	6.240
Warsaw	5.924	St. Denis	4.820	"	7.105
"	5.955	"		"	11.671
"	5.975	RHODESIA, N.		"	11.910
"	5.995	Lusaka	3.275	"	15.640
"	6.025	"	3.914	SIERRA LEONE	
"	6.115	"	4.825	Freetown	9.630
"	6.196	"	7.200	SOMALILAND, BRITISH	
"	7.105	RHODESIA, S.		Hargeisa	7.127
"	7.145	Salisbury	2.425	SOMALILAND, ITALIAN	
"	7.155	"	3.395	Mogadishu	4.970
"	7.175	"	6.018	SOUTH AFRICA	
"	7.195	"	9.505	Cape Town	5.852
				Johannesburg	3.290

Paradys

	Mc/s	Mc/s		Mc/s
South Africa—cont.		SWITZERLAND	Tangier	9.505
Johannesburg	3.356	Geneva	"	9.527HBQ
"	3.370	Schwarzenburg	"	9.540HER 22
<i>Paradys</i>	3.450	"	"	9.560HER 22
"	4.370	"	"	9.570HER 2.
"	4.800	"	"	9.595HER 3
"	4.895	"	"	9.615HEI 3.
"	4.928	" ^{em}	"	9.620HBX
"	6.005	" _c	12 30	9.630HER 4.
"	6.095	"	"	9.635HEU 3.
"	7.295	"	15 00	9.685HEI 5.
"	9.597	"	"	9.740HER 5
"	9.680	"	"	9.760HFD
"	11.937	"	"	9.780HER 6
"	15.227	"	"	9.996HEU 6
"	25.760	"	"	11.514HEU 7
"	25.820	"	"	11.710HER 7.
SPAIN		"	"	11.720HER 8.
Alicante	6.745	"	"	11.740HEI 9
Madrid	5.995	SYRIA	"	11.760
"	6.136	Damascus	"	11.805
"	7.090	"	"	11.810
"	7.100	"	"	11.830
"	7.380	"	"	11.840
"	7.605	"	"	11.845
"	9.360	"	"	11.875
"	9.605	"	"	11.890
"	9.676	"	"	11.900
"	9.695	"	"	11.940
"	11.814	"	"	11.947
"	15.420	TAHITI	"	14.973
"	15.631	Papeete	"	15.130
Malaga	6.180	TAIWAN (See	"	15.135
"	6.975	Formosa)	"	15.190
Valencia	6.980	TANGANYIKA	"	15.205
"	6.995	Dar-es-Salaam	"	15.240
Valladolid	7.005	TANGIER	"	15.245
SUDAN		"	"	15.295
Khartoum	5.005	"	"	15.345
"	6.165	"	"	15.385
SUMATRA (See		"	"	15.405
Indonesia)		"	"	15.410
SURINAM (See		"	"	17.705
Guiana, Dutch)		"	"	17.720
SWEDEN		"	"	17.750
x Horby	6.065	"	"	17.760
"	6.095	"	"	17.830
"	7.210	"	"	17.855
"	9.535	"	"	17.880
"	9.620	"	"	21.455
x "	11.705	"	"	21.500
"	11.880	"	"	21.610
"	15.155	"	"	21.670
"	15.240	"	"	21.690
"	17.800	"	"	25.670
Motala	7.270	"	"	

	Mc/s		Mc/s		Mc/s
TOBAGO (See West Indies, British)		Brentwood, N.Y.	11.830	Dixon, Cal.	11.870
TRINIDAD (See West Indies, British)		" "	15.130	" "	11.890
TRIPOLITANIA (See Libya)		" "	15.270	" "	15.150
TURKEY		" "	17.830	" "	15.250
Ankara	7.135	" "	17.875	" "	15.270
"	7.285	" "	17.880	" "	15.290
"	9.464	Cincinnati,	21.500	" "	15.315
"	9.515	" "	21.570	" "	17.760
"	15.160	Ohio	6.040	" "	17.800
"	15.195	" "	6.055	" "	17.830
"	17.825	" "	6.080	" "	21.460
Istanbul	6.299	" "	6.155	Schenectady,	21.610
U.S.A.		" "	9.545	N.Y.	9.530
Boston, Mass.	9.530	" "	9.560	" "	9.615
" "	9.570	" "	9.700	" "	11.900
" "	9.585	" "	9.725	" "	15.330
" "	9.675	" "	11.710	" "	17.760
" "	11.710	" "	11.790	" "	21.590
" "	11.730	" "	11.855	U.S.S.R.	
" "	11.740	" "	11.900	Achkhabad,	
" "	11.770	" "	15.165	Turkmenia	4.235
" "	11.770	" "	15.200	Alma Ata,	
" "	15.220	" "	15.250	Kazak	4.625
" "	15.290	" "	15.330	" "	5.260
" "	15.350	" "	17.770	" "	5.860
" "	15.415	" "	17.795	" "	5.900
" "	17.710	" "	21.485	" "	9.340
" "	17.750	" "	21.515	" "	9.380
" "	17.800	" "	21.650	Baku,	
Bound Brook,		Delano, Cal.	6.040	Azerbaidjan	4.960
N.J.	9.530	" "	6.185	" "	9.840
" "	9.560	" "	9.515	Blagoveshchensk,	
" "	9.615	" "	9.590	Russia	4.960
" "	11.790	" "	9.700	Erivan, Armenia	6.075
" "	11.830	" "	11.710	Frunze, Kirghiz	4.010
" "	11.870	" "	11.810	Guryev, Kazak	5.150
" "	11.890	" "	11.860	Kaunas,	
" "	15.150	" "	11.870	Lithuania	6.135
" "	15.210	" "	15.130	" "	7.230
" "	15.230	" "	15.150	" "	9.535
" "	15.280	" "	15.315	" "	9.785
" "	15.285	" "	15.340	" "	11.950
" "	15.440	" "	17.770	" "	15.285
" "	17.780	" "	17.850	" "	15.320
" "	17.805	" "	21.740	Khabarovsk,	
" "	21.540	Dixon, Cal.	6.020	Siberia	5.940
" "	21.610	" "	6.060	" "	11.812
" "	21.730	" "	9.515	Kiev, Ukraine	6.020
Brentwood, N.Y.	6.120	" "	9.590	" "	6.185
" "	6.170	" "	9.650	" "	7.132
" "	9.650	" "	11.710	" "	7.290
" "	9.700	" "	11.770	" "	9.593
" "	11.790	" "	11.775	" "	9.640
		" "	11.790	" "	9.665
				" "	9.670

U.S.S.R.—cont.		Mc/s	Moscow, Russia		Mc/s	VATICAN CITY		Mc/s
Moscow,	Russia	11.805	"	"	15.390	✓Vatican City		6.190
"	"	11.810	"	"	15.400	"	"	7.280
"	"	11.825	"	"	15.410	"	"	9.645
"	"	11.830	"	"	15.420	"	"	11.685
"	"	11.845	"	"	15.440	"	"	11.740
"	"	11.850	"	"	15.470	"	"	15.120
"	"	11.860	"	"	16.370	"	"	17.840
"	"	11.865	"	"	16.830	"	"	17.840
"	"	11.870	"	"	17.740	"	"	21.740
"	"	11.870	"	"	17.755	VENEZUELA		
"	"	11.880	"	"	17.771	Barcelona		3.295
"	"	11.890	"	"	17.800	"		3.385
"	"	11.900	"	"	17.810	Barquisimeto		4.850
"	"	11.905	"	"	17.820	"		4.940
"	"	11.915	"	"	17.840	"		4.989
"	"	11.920	"	"	17.845	"		9.510
"	"	11.925	"	"	17.865	Cabimas		2.480
"	"	11.930	"	"	17.880	Caracas		3.245
"	"	11.935	"	"	17.910	"		3.345
"	"	11.960	"	"	21.610	"		3.390
"	"	11.965	"	"	21.680	"		4.880
"	"	11.980	Murmansk,			"		4.890
"	"	11.985	Russia	7.650		"		4.923
"	"	11.995	Nikolaevsk,			"		4.972
"	"	12.000	Russia	5.230		"		5.030
"	"	12.020	Novosibirsk,			"		5.047
"	"	15.040	Russia	5.225		"		6.170
"	"	15.053	Petropavlovsk,			"		9.640
"	"	15.060	Russia	5.050		Carora		2.470
"	"	15.080	"	6.080		Ciudad Bolivar		4.900
"	"	15.100	"	9.530		Coro		4.820
"	"	15.105	Petrozavodsk,			"		4.950
"	"	15.110	Finno-Karelia	4.995		Cumana		4.960
"	"	15.120	Stalinabad,			El Tigre		3.255
"	"	15.155	Tadzhik	6.700		Maracaibo		4.800
"	"	15.160	Tashkent,			"		4.810
"	"	15.180	Uzbek	6.730		"		5.039
"	"	15.195	"	6.825		"		9.625
"	"	15.205	Tiflis, Georgia	5.040		Maracay		2.440
"	"	15.230	Vladivostok,			"		3.315
"	"	15.235	Russia	5.016		Maturin		2.360
"	"	15.250	Yakutsk,			Merida		3.395
"	"	15.260	Siberia	5.980		Puerto la Cruz		3.345
"	"	15.270	UGANDA			Punta Fijo		4.770
"	"	15.280	Kampala	5.026		San Cristobal		3.263
"	"	15.290	URUGUAY			"		4.830
"	"	15.310	Montevideo	6.035		San Felipe		4.860
"	"	15.315	"	6.055		San Fernando		4.820
"	"	15.335	"	6.130		Trujillo		3.295
"	"	15.340	"	6.156		Valencia		3.458
"	"	15.355	"	6.170		"		4.781
"	"	15.360	"	11.740		Valera		4.841
"	"	15.370	"	11.835				
"	"	15.380	"	11.896				

	Mc/s		Mc/s		Mc/s
WEST INDIES, BRITISH		Tobago	3.262	YEMEN	
		WINDWARD IS.		Sana'a	5.985
Kingston,		St. Georges,		"	9.705
Jamaica	2.330	Grenada	3.395	YUGOSLAVIA	
"	3.360	"	5.980	Belgrade	6.100
"	4.840	"	11.830	"	7.200
"	4.950	"	17.745	"	9.507
"		"		"	15.238

Wavelength and Frequency Conversion

Broadcast receivers have their tuning scales calibrated in metres, kilocycles, megacycles or with the names of the principal stations. Kilocycle markings, where used, are as a rule confined to the medium- and long-wave bands, while either metres or megacycles are used on the short waves. Thus in order to locate a particular station on the dial of a receiver it may be necessary to convert the available wavelength, or frequency, figures into the form it appears on the dial of the receiver.

There is a simple relationship between wavelength and frequency as both these quantities are determined by the velocity of propagation of radio waves through space; this relationship is

$$\text{Wavelength} = \frac{\text{Velocity}}{\text{Frequency}} ; \text{ or } \text{Frequency} = \frac{\text{Velocity}}{\text{Wavelength}}$$

As the velocity of propagation in space is, in round figures, 300,000,000 metres per second, any of the quantities—metres, kilocycles or megacycles—are readily converted into the other forms by means of the following formulae :

$$\text{Metres} = \frac{\text{Kilocycles to Metres } 300,000}{\text{Frequency (kc/s)}}$$

$$\text{Metres} = \frac{\text{Megacycles to Metres } 300}{\text{Frequency (Mc/s)}}$$

$$\text{kc/s} = \frac{\text{Metres to Kilocycles } 300,000}{\text{Wavelength (metres)}}$$

$$\text{Mc/s} = \frac{\text{Metres to Megacycles } 300}{\text{Wavelength (metres)}}$$

$$m : \lambda = \frac{3000}{7.6}$$

European V.H.F. Stations

Arranged geographically, this list includes all the v.h.f. (Band III) sound broadcasting stations known to be operating in Europe at the time of going to press and also those which are planned to be brought into operation shortly. Where it is known, the effective radiated power in kilowatts is given in the last column. All the transmitters are frequency modulated with the exception of the A.F.N. station marked with an asterisk which employs amplitude modulation. The abbreviations are defined on page 76.

Station	Mc/s	kW	Station	Mc/s	kW
AUSTRIA			Turku	98.2	30
Graz	95.4	10	Vaasa	93.1	25
Innsbruck	88.5	0.3	Vaasa	95.2	25
Kanzelhoehe	97.8		FRANCE		
Klagenfurt	93.0	1	Nancy	92.7	
Klagenfurt	97.8		Paris	96.1	20
Linz	99.3	1	Strasbourg	95.0	
St. Poelten	88.8	10	Toulouse	92.8	
St. Poelten	94.3	10	GERMANY, EAST		
Salzburg	94.8	1	Berlin	92.5	
Vienna-Kahlenberg			Berlin	98.2	
	95.8	30	Berlin	105.41	
Vienna-Kahlenberg			Brocken	94.6	
	99.9	30	Burg	97.0	
Villach	97.8	0.1	Damgarten	91.4	
BELGIUM			Dresden	89.8	
Brussels	95.29		Inselberg	94.0	
DENMARK			Leipzig	88.0	
Bornholm	94.5		Oranienburg	93.4	
Bornholm	99.3		Raum Jessen	91.0	
Copenhagen	90.8		Rheinsberg	93.4	
Copenhagen	96.5		Rheinsberg	95.2	
FINLAND			Schwerin	89.2	
Forssa	89.2		GERMANY, WEST		
Helsinki	91.9	40	Aachen (W.D.R.)	90.0	6
Helsinki	94.0	40	Aachen (W.D.R.)	98.45	6
Imatra	91.0	15	Aalen (S.D.R.)	89.1	3
Jyvaskyla	92.9	10	Aalen (S.D.R.)	92.7	
Kokkola	99.7	10	Augsburg (B.R.)	94.1	
Koli	88.0	18	Bad Mergentheim		
Kristiina	94.6	10	(S.D.R.)	88.85	
Kuopio	91.6	30	Bad Reichenhall		
Lahti	95.5	30	(B.R.)	90.3	0.25
Mikkeli	88.9	10	Baden Baden		
Pietarsaari	97.6	10	(S.W.F.)	89.9	
Pori	97.9	3	Baden Baden		
Pori	99.4		(S.W.F.)	92.5	
Rovaniemi	96.7	18	Bamberg (B.R.)	90.9	5
Savonlinna	95.8	10	Bamberg (B.R.)	94.5	5
Tammisaari	89.5	3	Berlin (R.I.A.S.)	88.8	
Tampere	93.7	10	Berlin (B.F.N.)	87.6	8
Turku	94.3	10			

Station	Mc/s	kW
Germany, West—cont.		
Berlin (R.F.B.)	90.0	7
Berlin (R.F.B.)	93.6	3
Berlin (B.F.N.)	99.05	1
Betzdorf (S.W.F.)	89.4	
Betzdorf (S.W.F.)	93.0	
Biedenkopf (H.R.)	91.2	10
Biedenkopf (H.R.)	95.4	
Berchtesgaden (B.R.)	89.7	
Blauen-Schwaben (S.W.F.)	87.9	3
Blauen-Schwaben (S.W.F.)	95.7	
Bonn (W.D.R.)	89.75	0.5
Bonn (B.F.N.)	96.55	2
Bremen	89.4	3
Bremen	96.9	
Bremerhaven	91.8	
Brodjackriegel (B.R.)	91.5	10
Brunswick (N.D.R.)	90.9	2.5
Brunswick (B.F.N.)	99.3	80
Buchen (S.D.R.)	92.7	
Buettelberg (B.R.)	96.6	
Bungsberg (N.D.R.)	91.5	0.5
Bungsberg (N.D.R.)	95.7	0.5
Burgstall (B.R.)	88.8	3
Coburg (B.R.)	90.0	1
Cologne (W.D.R.)	89.7	0.5
Cologne (W.D.R.)	93.3	2.5
Dannenberg (N.D.R.)	93.3	2
Dillberg (B.R.)	91.5	
Dillberg (B.R.)	93.9	
Feldberg (H.R.)	88.53	10
Feldberg (H.R.)	92.13	10
Feldberg/Schw. (S.W.F.)	95.7	
Flensburg (N.D.R.)	93.0	13
Frankfurt (A.F.N.)	94.9	
Geislingen (S.D.R.)	87.6	
Geislingen (S.D.R.)	91.2	
Gelbesece (B.R.)	88.5	3
Goettingen (N.D.R.)	88.8	1.7
Goettingen (N.D.R.)	96.6	0.15

Station	Mc/s	kW
Gruenten (B.R.)	90.5	10
Haardtkopf (S.W.F.)	90.0	3
Haardtkopf (S.W.F.)	93.6	
Hamburg (N.D.R.)	88.53	40
Hamburg (N.D.R.)	92.1	4.5
Hamburg (N.D.R.)	96.3	0.13
Hamburg-Pinneberg (B.F.N.)	98.4	3
Hanover (N.D.R.)	93.0	46
Hanover (N.D.R.)	97.85	3.5
Hanover (B.F.N.)	99.0	15
Hardberg (H.R.)	89.7	
Hardberg (H.R.)	93.3	
Harz (N.D.R.)	96.0	10
Harz (N.D.R.)	99.9	10
Heide (N.D.R.)	90.0	13
Heide (N.D.R.)	93.6	
Heidelberg (S.D.R.)	87.9	10
Heidelberg (S.D.R.)	91.5	10
Heidelberg* (A.F.N.)	93.9	
Herford (B.F.N.)	96.6	6
Hochrheinsender (S.W.F.)	89.1	
Hochrheinsender (S.W.F.)	92.7	
Hohe Linie (B.R.)	90.9	
Hohenpeissenberg (B.R.)	89.7	
Hornisgrinde (S.W.F.)	89.4	3
Hornisgrinde (S.W.F.)	93.0	
Hostenberg (S.W.F.)	87.6	
Hostenberg (S.W.F.)	91.2	
Huehnerberg (B.R.)	93.3	
Kiel (N.D.R.)	94.15	2
Kiel (N.D.R.)	90.6	0.25
Kleve (W.D.R.)	91.5	0.2
Koblenz (S.W.F.)	90.9	1
Koblenz (S.W.F.)	94.5	
Kreuzberg (B.R.)	93.0	
Kreuzbeck (B.R.)	93.0	
Landshut (B.R.)	87.9	
Langenberg (N.D.R.)	87.9	60

occasionally

Station	Mc/s	kW	Station	Mc/s	kW
Germany, West—cont.					
Langenberg (B.F.N.)	89.1	60	Teutoburger Wald (W.D.R.)	94.2	
Langenberg (N.D.R.)	95.7	95	Traunstein (B.R.)	89.1	1
Lindau (B.R.)	88.2		Ulm Wilhemsburg (S.D.R.)	87.9	
Lingen (N.D.R.)	88.8	11	Ulm Wilhemsburg (S.D.R.)	91.5	
Linz (S.W.F.)	96.0		Verden (B.F.N.)	90.3	10
Linz (S.W.F.)	97.8		Waldburg (S.W.F.)	92.4	
Luebeck (N.D.R.)	87.9	0.5	Waldenburg (S.D.R.)	90.0	
Mainz (S.W.F.)	93.3		Waldenburg (S.D.R.)	93.6	
Meissner (H.R.)	89.71	90	Weinbiet (S.W.F.)	90.3	6
Monschau (W.D.R.)	98.4	0.07	Wendelstein (B.R.)	90.0	5
Muehlacker (S.D.R.)	88.8		Wendelstein (B.R.)	93.6	
Muenster (W.D.R.)	94.5	11	Wertheim (S.D.R.)	92.72	
Munich (B.R.)	91.85		Wittoh (S.W.F.)	87.6	1
Norden (N.D.R.)	93.3	12	Wittoh (S.W.F.)	91.2	1
Nordhelle (B.F.N.)	89.15	15	Wolfsheim (S.W.F.)	96.9	
Nordhelle (W.D.R.)	90.3		Wolfsheim (S.W.F.)	99.3	
Nordhelle (W.D.R.)	93.9	16	Wuerzburg (B.R.)	89.7	
Nordhelle (W.D.R.)	98.7	3	Wuerzburg (B.R.)	87.6	1
Ochsenkopf (B.R.)	88.2	10	GREAT BRITAIN		
Oldenburg (N.D.R.)	87.6	34	Blaen Plwy, Cardigan.	88.7	60
Oldenburg (N.D.R.)	95.4	34	Blaen Plwy	90.9	60
Osnabrueck (N.D.R.)	93.6	2	Blaen Plwy	93.1	60
Passau (B.R.)	93.0		Divis, N. Ireland	90.1	60
Pfaffenberg (B.R.)	94.2		Divis, N. Ireland	92.3	60
Potzberg (S.W.F.)	91.2		Divis, N. Ireland	94.5	60
Potzberg (S.W.F.)	95.4		Holme Moss, Yorks.	89.3	120
Raichberg (S.W.F.)	88.2	3	Holme Moss	91.5	120
Raichberg (S.W.F.)	91.8		Holme Moss	93.7	120
Rothbuehl (B.R.)	89.4		Meldrum, Aberdeen.	88.7	60
Scharteberg (S.W.F.)	88.2		Meldrum	90.9	60
Scharteberg (S.W.F.)	91.8		Meldrum	93.1	60
Siegen (W.D.R.)	91.8	2.5	N. Hessary Tor, Devon	88.1	60
Stuttgart (S.D.R.)	90.9	10	N. Hessary Tor	90.3	60
Stuttgart (S.D.R.)	93.2		N. Hessary Tor	92.5	60
Stuttgart (S.D.R.)	94.5		Penmon, Anglesey	89.6	100
Tegernseer Tal (B.R.)	87.6		Penmon	91.8	100
Teutoburger Wald (W.D.R.)	90.6	13	Penmon	94.0	100
			Pontop Pike, Co. Durham	88.5	60
			Pontop Pike	90.7	60
			Pontop Pike	92.9	60

Station	Mc/s	kW
Gt. Britain—cont.		
Sutton Coldfield, Warwicks.	88.3	120
Sutton Coldfield	90.5	120
Sutton Coldfield	92.7	120
Tacolneston, Norwich	89.7	120
Tacolneston	91.9	120
Tacolneston	94.1	120
Wenvoe, Glam.	89.9	120
Wenvoe	92.1	120
Wenvoe	94.3	120
Wrotham, Kent	89.1	120
Wrotham	91.3	120
Wrotham	93.5	120

ISRAEL

Jerusalem	88.3	
Jerusalem	89.3	
Jerusalem	90.3	
Tel Aviv	92.0	
Tel Aviv	93.3	
Tel Aviv	93.6	
Tel Aviv	94.3	

ITALY

Bellagio	91.1	
Bellagio	93.2	
Bellagio	96.7	
Bologna	90.9	
Bolzano	95.1	
Bolzano	97.1	
Bolzano	99.5	
Campo Catino	95.3	
Campo Catino	97.3	
Campo Catino	99.3	
Campo Imperatore	95.1	
Campo Imperatore	97.1	
Campo Imperatore	99.1	
Como	92.2	
Como	95.3	
Como	98.2	
Cortina	92.5	
Cortina	94.7	
Cortina	96.7	
Genoa	89.5	
Genoa	91.9	
Genoa	94.9	
Maranza	91.1	
Mart. Franca	89.1	
Mart. Franca	93.1	
Mart. Franca	95.5	
Milan	93.7	
Milan	95.9	
Monte Beigua	93.9	
Monte Beigua	96.7	
Monte Beigua	98.9	

Station	Mc/s	kW
Monte Bignone	90.6	
Monte Bignone	93.2	
Monte Bignone	97.5	
Monte Faito	94.1	
Monte Faito	96.1	
Monte Faito	98.1	
Monte Favone	88.9	
Monte Favone	90.9	
Monte Favone	92.9	
Monte Peglia	95.7	
Monte Peglia	97.7	
Monte Peglia	99.7	
Monte Penice	94.2	
Monte Penice	97.4	
Monte Penice	99.9	
M. Sant'Angelo	88.3	
M. Sant'Angelo	90.7	
M. Sant'Angelo	92.3	
Monte Serpeddi	88.7	
Monte Serpeddi	90.7	
Monte Serpeddi	92.7	
Monte Serra	88.5	
Monte Serra	90.5	
Monte Serra	92.9	
Monte Venda	88.1	
Monte Venda	89.0	
Monte Venda	89.9	
Paganella	88.6	
Paganella	90.7	
Paganella	92.7	
Palermo	94.9	
Palermo	96.9	
Palermo	98.9	
Pescara	94.3	
Pescara	96.3	
Pescara	98.3	
Premeno	91.7	
Premeno	96.1	
Premeno	99.1	
Rome	89.7	
Rome	91.7	
Rome	93.7	
S. Cerbone	95.3	
S. Cerbone	97.3	
S. Cerbone	99.3	
Turin	92.1	
Turin	95.6	
Turin	98.2	

MOROCCO, FRENCH

Agadir	90.0	
Casablanca	90.0	
Casablanca	99.0	
Marrakesh	89.15	
Oujda	90.0	
Rabat	90.6	

Station	Mc/s	kW	Station	Mc/s	kW
Morocco, French—cont.			Malmö	98.7	3
Safi	90.6		Orebro	91.5	1
Sebaa Aioun	88.4		Stockholm	92.4	
NETHERLANDS			Stockholm	96.6	1
Hengelo	97.2		SWITZERLAND		
Hoogezand	91.8	15	Bantiger	95.1	60
Hoogezand	94.9		Fadara	99.3	1
Hulsberg	95.1	4	Gotschnagrat	94.8	1
Hulsberg	97.5		Ladir	95.7	
Irnsun	88.2	15	Les Ordons	97.8	1
Irnsun	96.0		Leuk Feschel	88.2	1
Markelo	97.2	50	Leuk Feschel	93.0	1
Markelo	98.3		Monte Morello	96.3	
Mierlo	93.5	15	Niederhorn	99.6	0.7
Mierlo	99.9		St. Anton	96.9	
NORWAY			St. Moritz	91.5	1
Lyngdal	97.6		Schuls	95.1	0.5
Voss	93.3		Sool	93.0	1
POLAND			Uetliberg	97.5	60
Warsaw	89.25		Zeneggen	93.9	1.4
PORTUGAL			TRIESTE		
Lisbon	94.3		Trieste	91.3	
Oporto	92.5		Trieste	93.5	
Paredé	90.2		Trieste	96.3	
SAARLAND			VATICAN CITY		
Saarbruecken	96.0		Vatican City	93.3	
Tholey	91.8		Vatican City	96.3	
SWEDEN			YUGOSLAVIA		
Gothenburg	96.3	20	Ljubljana	90.1	

Abbreviations

A.F.N.	American Forces Network	1	45
B.F.N.	British Forces Network	2	51
B.R.	Bayerischer Rundfunk	3	56
H.R.	Hessischer Rundfunk	4	61
N.D.R.	Norddeutscher Rundfunk	5	66
N.W.R.V.	Nord- und West-deutscher Rundfunkverband	6	66
R.F.B.	Radio Free Berlin	7	71
R.F.E.	Radio Free Europe	8	76
R.I.A.S.	Radio im Amerikanischen Sektor	9	189
S.D.R.	Suddeutscher Rundfunk	10	194
S.W.F.	Sudwestfunk	11	199
V.o.A.	Voice of America		205
W.D.R.	Westdeutscher Rundfunk		

D.D.R. ⁷⁶ Demokratischer Deutscher Rundfunk

$\frac{57}{6}$ $\frac{56}{5}$ $\frac{61}{5}$

European Television Stations

Grouped under countries, the television stations already in Europe and those planned to be introduced shortly are tabulated. The characteristics of the system used are given after the name of the country. The first column of figures gives the vision carrier, the sound carrier (in Mc/s) and, where known, the effective radiated power of the vision transmitter (in kW) is given in the third column; where a directional aerial is used, both the minimum and maximum e.r.p. are given. In the last column the sense of the polarization (H, horizontal; V, vertical) is given in some instances. In accordance with the Stockholm Plan (1952) sound and vision carriers of some stations sharing channels are slightly off-set from the nominal frequencies to reduce mutual interference.

Abbreviations are defined on page 76.

Algeria (819 lines ; + vision mod. ; A.M. sound)					
Algiers	199.70	188.55			
Austria (625 lines ; — vision mod. ; F.M. sound)					10
Graz/Schoeckl	189.25	194.75	4	H	8
Linz/Freinberg	182.25	187.75	0.3	H	7
Salzburg/Gaisberg	196.25	201.75	2	H	7
Vienna/Kahlenberg	49.75	55.25	1	H	7
Vienna/Kahlenberg	175.25	180.75	5	H	7
Belgium (625 and 819 lines ; + vision mod. ; A.M. sound)					
Antwerp (625)	48.25	53.75	6	H	2
Braine-le-Comte	196.25	201.75	100	H	10
Brussels (819)	196.25	201.75	2	H	10
Brussels (625)	210.25	215.75	2	H	10
Liege (819)	55.25	60.75	100	H	
Malines	210.25	215.75	100	H	
Neufchateau	217.25	222.75	25	H	
Tielt	48.25	53.75	100	H	
Czechoslovakia (625 lines ; — vision mod. ; F.M. sound)					
Bratislava	59.75	65.25	100		
Ostrava	49.75	56.25			
Prague	49.75	56.25	5	H	
Denmark (625 lines ; — vision mod. ; F.M. sound)					
Aarhus	196.25	201.75	10		
Copenhagen	62.25	67.75	10	V	
Odense	55.20	60.75	10	H	
France (819 lines ; + vision mod. ; A.M. sound)					
Amiens	203.45	214.6	30	V	
Bordeaux	199.70	188.55			
Bourges	190.30	201.45	200	H	
Caen	52.40	41.25	50	H	
Cherbourg	212.85	201.70	5	H	
Cote d'Azur	173.40	162.25	10	H	
Dijon	199.70	188.55	5	V	
Grenoble	199.70	188.55	1	H	
Lille	185.25	174.10	200	H	
Lorraine	173.40	162.25	50	H	
Lyons	164.00	175.15	0.1	H	
Marseilles	186.55	175.40	5	H	
Metz	173.40	162.25	0.1	H	
Mont Pilat	212.85	201.70	200	H	
Mulhouse	186.55	175.40	200	V	
Nancy	177.15	188.30	0.1	V	

cont.

Paris	185.25	174.10	100	H
Reims	164.00	175.15	0.3	V
Rouen	199.70	188.55	50	H
Strasbourg	164.00	175.15	5.20	H
Toulon	203.45	214.60	10	H
Germany, East (625 lines ; — vision mod. ; F.M. sound)				
Berlin	41.75	48.25		H
Berlin	59.25	65.75		H
Berlin	209.25	215.75		H
Brocken	169.25	175.75		H
Dresden	145.24	151.75		H
Inselberg	185.25	191.75		H
Karl-Marx-Stadt	201.25	207.75		H
Leipzig	59.25	65.75		H
Marlow	193.25	199.75		H
Germany, West (625 lines ; — vision mod. ; F.M. sound)				
Aalen-Braunenberg (S.D.R.)	196.25	201.75	0.4	H
Baden Baden (S.W.F.)	189.25	194.75	0.6	H
Bamberg (B.R.)	196.25	201.75	5	H
Berlin-Witzleben (N.W.R.V.)	189.25	194.75	5	H
Biedenkopf (H.R.)	175.25	180.75	0.5	H
Bonn (N.W.R.V.)	175.25	180.75	0.25	H
Bremen	55.25	60.75	0.1	H
Bremen-Oldenburg (N.W.R.V.)	48.25	53.75	100	H
Cologne (N.W.R.V.)	217.25	222.75	5	H
Dillberg (B.R.)	182.25	187.75	100	
Feldberg/Schw. (S.W.F.)	196.25	201.75	100	H
Flensburg (N.W.R.V.)	62.27	67.75	50	H
Freiburg (S.W.F.)	189.25	194.75	0.8	H
Friederichshafen (S.W.F.)	175.25	180.75	0.1	H
Grosser Feldberg (H.R.)	196.25	201.75	100	H
Gruenten (B.R.)	210.25	215.75		H
Hamburg-Billwerder (N.W.R.V.)	203.25	208.75	92	H
Hanover-Hemmingen (N.W.R.V.)	196.25	201.75	4	H
Harz (N.W.R.V.)	210.25	215.75	10	H
Hoher Meissner (H.R.)	189.25	194.75	100	H
Hornisgrinde (S.W.F.)	203.25	208.75	100	H
Idar-Oberstein (S.W.F.)	175.25	180.75	0.1	H
Kaiserslautern (S.W.F.)	189.25	194.75	0.8	H
Kiel (N.W.R.V.)	217.25	222.75	4.5	H
Koblenz (S.W.F.)	182.25	187.75	50	H
Konstanz (S.W.F.)	189.25	194.75	0.1	H
Kreuzberg (B.R.)	55.25	60.75	100	V
Langenberg (N.W.R.V.)	203.25	208.75	92	H
Nueremberg (B.R.)	182.25	187.75	100	H
Passau (B.R.)	189.25	194.75	1	H
Raichberg (S.W.F.)	62.25	67.75	40	H
Ravensburg (S.W.F.)	182.25	187.75	0.1	H
Reutlingen (S.W.F.)	182.25	187.75		H
Singen (S.W.F.)	182.25	187.75	0.1	H
Stuttgart (S.D.R.)	217.25	222.75	100	H
Stuttgart-Degerloch (S.D.R.)	175.25	180.75		H
Teutoburger Wald (N.W.R.V.)	217.25	222.75	100	H
Trier (S.W.F.)	182.25	187.75	0.6	H
Tuttlingen (S.W.F.)	175.25	180.75	0.1	H

Germany—cont.

Weinbiet-Neustadt (S.W.F.)	210.25	215.75	50	H
Wendelstein (B.R.)	210.25	215.75	100	H
Wuerzburg (B.R.)	210.25	215.75	5	H
Zweibrucken (S.W.F.)	189.25	194.75	0.8	H

Great Britain (405 lines ; + vision mod. ; A.M. sound)

Blaen Plwy, Cardigan.	56.75	53.25	1	H
Carlisle, Cumberland	61.75	58.25	1	H
Croydon (I.T.A.), London	194.75	191.25	120	V
Crystal Palace, London	45.00	41.50	125	V
Divis, N. Ireland	45.00	41.50	20	H
Douglas, Isle of Man	66.75	63.25	1	V
Dover, Kent	51.75	48.25	0.1—1	H
Emley Moor, (I.T.A.), Yorks.	199.75	196.25	10—200	V
Holme Moss, Yorks.	51.75	48.25	100	V
Jersey, Channel Islands	61.75	58.25	1	H
Kirk o' Shotts, Lanarks.	56.75	53.25	100	V
Lichfield (I.T.A.), Staffs.	189.75	186.25	200	V
Londonderry, N. Ireland	51.75	48.25	0.5	H
Meltdrum, Aberdeen.	61.75	58.25	20	H
N. Hessary Tor, Devon	51.75	48.25	1—16	V
Pontop Pike, Co. Durham	66.75	63.25	10	H
Rosemarkie, Inverness.	51.75	48.25	1	H
Rowridge, Isle of Wight	56.75	53.25	1—32	V
Sutton Coldfield, Warwicks.	61.75	58.25	100	V
Tacolneston, Norwich	56.75	53.25	1—10	H
Wenvoe, Glam.	66.75	63.25	100	V
Winter Hill (I.T.A.), Lancs.	194.75	191.25	100	V

Italy (625 lines ; + vision mod. ; F.M. sound)

Aosta	175.25	180.75		H
Bellagio	175.25	180.75		H
Bolzano	175.25	180.75		H
Campo Imperatore	175.25	180.75		H
Col Visentin	210.25	215.75		H
Como	210.25	215.75		H
Cortina d'Ampezzo	175.25	180.75		H
Fiuggi	175.25	180.75		H
Garfagnana	201.25	206.75		H
Genoa-Polcevera	175.25	180.75		H
Genoa-Righi	62.25	65.75		H
Milan	201.25	206.75	28	H
Monte Faito	62.25	65.75		H
Monte Peglia	210.25	215.75	10—32	H
Monte Penice	62.25	67.75	100	H
Monte Serra	175.25	180.75	30—270	H
Monte Venda	175.25	180.75	190	H
Mugello	210.25	215.75		H
Paganella	201.25	206.75		H
Plateau Rosa	210.25	215.75		H
Portofino	210.25	215.75	14—127	H
Premeno	175.25	180.75		H
Rome	201.25	206.75	12—108	H
S. Cerbone	201.25	206.75		H
San Remo	62.25	65.75		H
Trieste	201.25	206.75		H
Turin	82.25	87.75	17.5	H

	Luxembourg (819 lines ; + vision mod. ; A.M. sound)				
	Luxembourg	189.25	194.75	30	H
EUROVISION	(Monaco (819 lines ; + vision mod. ; A.M. sound)				
	Monte Carlo	199.70	188.55	50	H
	Morocco, French (819 lines ; + vision mod. ; A.M. sound)				
	Casablanca	212.85	201.70	20	
B.L.P.F.	Fez	199.70	188.55	20	
	Meknes	199.70	188.55		
	Rabat	186.55	175.40	20	
.G.2	Netherlands (625 lines ; — vision mod. ; F.M. sound)				
20 S	Appelscha	182.25	187.75	45	
	Eindhoven	175.25	180.75	20	
41 S	Goes	189.25	194.75	5	
	Lopik	62.25	67.75	20	H
	Markelo	189.25	194.75	30	
-40 11	Roermond	175.25	180.75	50	
	Norway (625 lines ; — vision mod. ; F.M. sound)				
	Oslo	62.25	67.75	1.3	H
230	Poland (625 lines ; — vision mod. ; F.M. sound)				
	Warsaw	59.25	65.75		
10 12	Warsaw	89.25	95.75		
	Saarland (819 lines ; + vision mod. ; A.M. sound)				
	Saarbruecken	177.15	188.30	0.8	
	Saarlouis	52.40	41.25	3	V
	Sweden (625 lines ; — vision mod. ; F.M. sound)				
EUROVISION	Stockholm	62.25	67.75	1	V
	Stockholm	175.25	180.75	25	
	Switzerland (625 lines ; — vision mod. ; F.M. sound)				
	Basle	210.25	215.75	10	
	Berne	48.25	53.75	30	H
	Geneva	217.25	222.75		
	Lausanne	62.25	67.75	100	H
	Zurich	55.25	60.75	25	H
	U.S.S.R. (625 lines ; — vision mod. ; F.M. sound)				
	Kiev, Ukraine	77.25	83.75	5	H
	Kharkov, Ukraine	49.75	56.25		H
	Leningrad, Russia	59.25	65.75	20	H
	Moscow, Russia	49.75	56.25	40	H
	Odessa, Ukraine	49.75	56.25		H
	Riga, Latvia	59.25	65.75		H
	Tallinn, Estonia	59.25	65.75		H
	Vatican City (625 lines ; + vision mod. ; F.M. sound)				
	Vatican City	55.25	60.75	5	

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RADIO NEAPOLAND 10-30 Sundays

31 m	} to Europe.	EAA
49 m		EAA
31 m	} to N. America.	EAA I
30 m		EAA
25 m		FAU
25 m		FAU

EAS
EES

13	} to East	
16		
19	} to N. America	
25		
31	} to Europe	
49		

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 12.40 - 23.00 - Gubernat
 23.00 - Italian
 23.00 - silent
 Gubernat
 Mon.

11.10 - 11.40 2735 m
 GMT

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Long concert GMT 25.59 m

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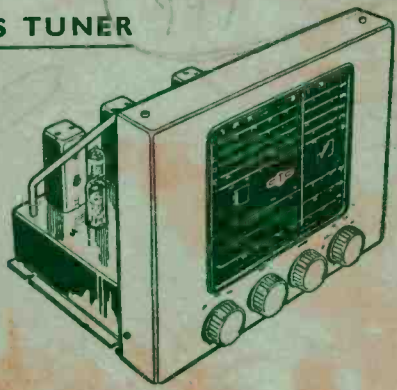
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