

"Wireless World" Guide to

BROADCASTING STATIONS

Long and Medium-wave Stations of
the European Zone

Short-wave Stations of the World

ONE SHILLING NET

THIRD
EDITION





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Guide to Broadcasting Stations

Compiled by
Wireless World

Third Edition



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INTRODUCTION

IN the face of post-war disorganization of broadcasting special precautions have been needed to minimize errors in this list, which has been compiled from the best available sources and revised for this third edition. Again, we are indebted to the B.B.C. for allowing us to check the entries against frequency measurements made at their Tatsfield Receiving Station.

The list of long- and medium-wave stations does not entirely conform to the Lucerne Plan, introduced in 1934 and still operative, but gives the frequencies at present employed by stations in the European Zone, which, for the purposes of frequency allocations, is bounded on the North and West by the natural limits of Europe, on the East by the meridian 40°E and on the South by the parallel 30°N .

In the case of the short-wave transmitters, the list includes both the frequencies at present employed by stations and those allocated to them although not necessarily in use at the time of the preparation of the data.

In order to differentiate between stations used for Forces transmissions and those for the civil population in occupied Zones of Europe we have indicated the former in the frequency list by the initials A.F. (American Forces), B.F. (British Forces) and R.F. (Russian Forces).

Stations known to have a power of less than one kilowatt have not been included in the lists.

The Editor,
"Wireless World"

Dorset House,
London, S.E.1.

Long- and Medium-wave European Stations

kc/s	Metres	kW	Station	Dial Reading
153	1,961	5	Berlin (Germany : U.S.S.R. Zone)	.....
153	1,961	—	Kaunas, Lithuania (U.S.S.R.)	.....
155	1,935	10	Prague (Czechoslovakia)	.....
160	1,875	150	Lahti (Finland)	.....
160	1,875	150	Brasov (Roumania)	.....
167	1,796	200	Ottringham, Yorks. (Gt. Brit.)	.....
174	1,724	500	Moscow I (U.S.S.R.)	.....
182	1,648	120	Ankara (Turkey)	.....
191	1,571	100	Berlin (R.F.) (Germany : U.S.S.R. Zone)	.....
200	1,500	150	Droitwich, Worcs. (Gt. Brit.)	.....
200	1,500	—	Moscow (U.S.S.R.)	.....
208	1,442	100	Leningrad (U.S.S.R.)	.....
216	1,389	150	Motala (Sweden)	.....
217	1,379	—	Voronezh (U.S.S.R.)	.....
224	1,339	1	Warsaw (Poland)	.....
232	1,293	150	Luxembourg	.....
232	1,293	100	Moscow II (U.S.S.R.)	.....
240	1,250	60	Kalundborg (Denmark)	.....
248	1,209	120	Kiev (U.S.S.R.)	.....
253	1,186	10	Bodö (Norway)	.....
260	1,154	60	Oslo (Norway)	.....
260	1,154	20	Bergen I (Norway)	.....
269	1,115	—	Minsk (U.S.S.R.)	.....
269.5	1,113	60	Prague II (Czechoslovakia)	.....
271	1,107	100	Reykjavik (Iceland)	.....
282	1,064	20	Vigra (Norway)	.....
292	1,027.4	10	Tromsö (Norway)	.....
310	968	1	Joensuu (Finland)	.....
347	864.6	1	Finnmark (Norway)	.....
355	845	1	Bergen II (Norway)	.....
356	843	—	Voronezh (U.S.S.R.)	.....
385	779.2	10	Kharkov (U.S.S.R.)	.....
392	765.3	25	Banska Bystrica (Czechoslovakia)	.....
392	765.3	10	Lulea (Sweden)	.....

kc/s	Metres	kW	Station	Dial Reading
415	722	10	Ostersund (Sweden)	.....
433	693	10	Oulu (Finland)	.....
512	580	—	Tartu, Estonia (U.S.S.R.)	.....
514	583.7	15	Plzen (Czechoslovakia)	.....
519	578	6	Vorarlberg (Austria : French Zone)	.....
519	578	2	Innsbruck (Austria : French Zone)	.....
519	578	1	Hamar (Norway)	.....
527	569	20	Kuopio (Finland)	.....
530	556	5	Cagliari (Italy)	.....
536	559.7	10	Bolzano (Italy)	.....
536	559.7	—	Vilna, Lithuania (U.S.S.R.)	.....
546	549.5	18	Budapest (Hungary)	.....
556	539.6	100	Beromunster (Switzerland)	.....
556	539.6	—	Rostov-on-Don (U.S.S.R.)	.....
563	533	—	Potsdam (Germany : U.S.S.R. Zone)	.....
565	531	100	Athlone (Eire)	.....
565	531	12	Palermo (Italy)	.....
565	531	—	Dresden (Germany : U.S.S.R. Zone)	.....
565	531	—	Graz (B.F.) (Austria : British Zone)	.....
566	530	—	Gorki (U.S.S.R.)	.....
569	527	20	Jerusalem (Palestine)	.....
574	522.6	100	Stuttgart (Germany : U.S. Zone)	.....
583	514.6	20	Droitwich, Worcs. (Gt. Brit.)	.....
583	514.6	—	Riga, Latvia (U.S.S.R.)	.....
583	514.6	—	Krasnodar (U.S.S.R.)	.....
592	506.8	10	Vienna II (Austria : U.S.S.R. Zone)	.....
592	506.8	2	Damascus (Syria)	.....
598	500.9	—	Danzig (Poland)	.....
601	499.2	20	Rabat (Morocco)	.....
601	499.2	15	Athens (Greece)	.....
601	499.2	10	Sundsvall (Sweden)	.....
601	499.2	10	Berlin (Germany : U.S. Zone)	.....
610	491.8	100	Florence I (Italy)	.....
610	491.8	—	Berlin (Germany : U.S. Zone)	.....
610	491.8	2	Paris (France)	.....
615	487.8	1	Eidar (Iceland)	.....
620	483.9	20	Brussels I (Belgium)	.....
620	483.9	—	Cairo I (Egypt)	.....
629	476.9	20	Kristiansand (Norway)	.....

kc/s	Metres	kW	Station	Dial Reading
629	476.9	40	Lisbon (Portugal)	.....
629	476.9	1	Linz (A.F.) (Austria : U.S. Zone)	.....
638	470.2	120	Prague I (Czechoslovakia)	.....
648	463	100	Limoges-Nieul I (France)	.....
648	463	—	Murmansk (U.S.S.R.)	.....
658	455.9	100	Norden (Germany : British Zone)	.....
668	449.1	100	Moorside Edge, Yorks. (Gt. Brit.)	.....
677	443.1	20	Jerusalem (Palestine)	.....
677	443.1	100	Sottens (Switzerland)	.....
686	437	15	Madrid (Spain)	.....
686	437	—	Belgrade (Yugoslavia)	.....
695	431.7	100	Paris I (France)	.....
695	431.7	1	Rome (A.F.) (Italy)	.....
704	426.1	60	Andorra	.....
704	426.1	55	Stockholm (Sweden)	.....
704	426.1	2	Aleppo (Syria)	.....
713	420.8	100	Rome (Italy)	.....
722	415.5	120	Hilversum I (Holland)	.....
722	415.5	100	Leipzig (R.F.) (Germany: U.S.S.R. Zone)	.....
722	415.5	12	Lisbon II (Portugal)	.....
731	410.4	10	Monte Carlo (Monaco)	.....
731	410.4	5	Seville (Spain)	.....
731	410.4	—	Tallinn, Estonia (U.S.S.R.)	.....
740	405.4	100	Munich (Germany: U.S. Zone)	.....
749	400.5	20	Marseilles I (France)	.....
749	400.5	—	Leningrad (U.S.S.R.)	.....
758	395.8	50	Warsaw (Poland)	.....
758	395.8	—	Istanbul (Turkey)	.....
758	395.8	3.5	Madrid (Spain)	.....
767	391.1	60	Burghead, Scotland (Gt. Brit.)	.....
767	391.1	60	Westerglen, Scotland (Gt. Brit.)	.....
767	391.1	2.5	Aberdeen, Scotland (Gt. Brit.)	.....
776	386.6	10	Paris II (France)	.....
776	386.6	10	Stalino (U.S.S.R.)	.....
785	382.2	100	Leipzig (Germany : U.S.S.R. Zone)	.....
795	377.4	9	Barcelona (Spain)	.....
795	377.4	1	Jerusalem (B.F.) (Palestine)	.....
804	373.1	60	Washford, Som. (Gt. Brit.)	.....
804	373.1	10	Penmon, Wales (Gt. Brit.)	.....

kc/s	Metres	kW	Station	Dial Reading
804	373.1	1	Wrexham, Wales (<i>Gt. Brit.</i>)	.....
804	373.1	—	Salonika (<i>Greece</i>)	.....
814	368.6	50	Milan (<i>Italy</i>)	.....
823	364.5	60	Tunis (<i>Tunisia</i>)	.....
823	364.5	12	Bucharest I (<i>Roumania</i>)	.....
832	360.6	35	Moscow (<i>U.S.S.R.</i>)	.....
832	360.6	20	Trondheim (<i>Norway</i>)	.....
832	360.6	10	Quimper-Quimerch (<i>France</i>)	.....
832	360.6	10	Freiburg (<i>Germany : French Zone</i>)	.....
832	360.6	5	Gibraltar	.....
832	360.6	—	Grenoble II (<i>France</i>)	.....
838	358.1	1	Benghazi (B.F.) (<i>Cyrenaica</i>)	.....
841	356.7	—	Berlin (<i>Germany : U.S.S.R. Zone</i>)	.....
850	352.9	100	Stavanger (<i>Norway</i>)	.....
850	352.9	100	Sofia (<i>Bulgaria</i>)	.....
859	349.2	20	Strasbourg-Brumath (<i>France</i>)	.....
859	349.2	—	Simferopol (<i>U.S.S.R.</i>)	.....
863	348.7	—	Zaragoza (<i>Spain</i>)	.....
868	345.6	10	Brussels IV (<i>Belgium</i>)	.....
868	345.6	6	Poznan (<i>Poland</i>)	.....
868	345.6	1	Tunis (<i>Tunisia</i>)	.....
868	345.6	—	Rabat II (<i>Morocco, French</i>)	.....
877	342.1	100	Brookmans Park, London (<i>Gt. Brit.</i>)	.....
886	338.6	100	Alpenland (<i>Austria: British Zone</i>)	.....
895	335.2	40	Turku (<i>Finland</i>)	.....
895	335.2	20	Lyon-Tramoyes (<i>France</i>)	.....
904	331.9	100	Hamburg (<i>Germany : British Zone</i>)	.....
904	331.9	—	Cologne (<i>Germany : British Zone</i>)	.....
913	328.6	100	Toulouse-Muret (<i>France</i>)	.....
913	328.6	10	Dniepropetrovsk (<i>U.S.S.R.</i>)	.....
922	325.4	100	Morava (<i>Czechoslovakia</i>)	.....
922	325.4	20	Komarov (<i>Czechoslovakia</i>)	.....
932	321.9	20	Brussels II (<i>Belgium</i>)	.....
941	318.8	12	Algiers (<i>Algeria</i>)	.....
941	318.8	10	Goteborg (<i>Sweden</i>)	.....
950	315.8	2.5	Breslau (<i>Poland</i>)	.....
950	315.8	1	Cairo (<i>Egypt</i>)	.....
959	312.8	10	Nancy I (<i>France</i>)	.....
961	312.2	1	Namsos (<i>Norway</i>)	.....

kc/s	Metres	kW	Station	Dial Reading
968	309.9	20	Pau (France)	.....
968	309.9	10	Odessa (U.S.S.R.)	.....
968	309.9	20	Corunna (Spain)	.....
968	309.9	—	Rome II (Italy)	.....
977	307.1	100	Start Point, Devon (Gt. Brit.)	.....
986	304.3	20	Turin II (Italy)	.....
986	304.3	10	Milan II (Italy)	.....
986	304.3	5	Genoa II (Italy)	.....
995	301.5	60	Hilversum II (Holland)	.....
1,004	298.8	50	Bratislava (Czechoslovakia)	.....
1,013	296.2	60	Droitwich, Worcs. (Gt. Brit.)	.....
1,013	296.2	1	Norwich, Norfolk (Gt. Brit.)	.....
1,022	293.5	120	Madrid (Spain)	.....
1,022	293.5	10	Cracow (Poland)	.....
1,031	291	50	Coblenz (Germany : French Zone)	.....
1,031	291	—	Weimar (Germany : U.S.S.R. Zone)	.....
1,040	288.5	20	Rennes-Alma (France)	.....
1,040	288.5	10	Leningrad (U.S.S.R.)	.....
1,040	288.5	8	Budapest II (Hungary)	.....
1,050	285.7	100	Stagshaw, North'd. (Gt. Brit.)	.....
1,050	285.7	100	Lisnagarvey, N. Ireland (Gt. Brit.)	.....
1,050	285.7	1	Londonderry, N. Ireland (Gt. Brit.)	.....
1,059	283.3	20	Bari (Italy)	.....
1,068	280.9	30	Lisbon (Portugal)	.....
1,068	280.9	30	San Sebastian (Spain)	.....
1,068	280.9	2	Nimes (France)	.....
1,068	280.9	1	Dijon-Fontaine (France)	.....
1,068	280.9	1	Vienna (A.F.) (Austria : U.S. Zone)	.....
1,068	280.9	1	Bologna II (Italy)	.....
1,068	280.9	—	Florence (Italy)	.....
1,077	278.6	1	Bordeaux II (France)	.....
1,086	276.2	100	Falun (Sweden)	.....
1,096	273.7	30	Barcelona (Spain)	.....
1,095	274	20	Langenberg (B.F.) (Germany : British Zone)	.....
1,095	274	10	Elmshorn (B.F.) (Germany : British Zone)	.....

kc/s	Metres	kW	Station	Dial Reading
1,095	274	10	Hanover (B.F.) (Germany : British Zone)	.....
1,095	274	5	Berlin (B.F.) (Germany : British Zone)	.....
1,104	271.7	5	Catania (Italy)	.....
1,104	271.7	3	Florence II (Italy)	.....
1,104	271.7	2	Oran (Algeria)	.....
1,104	271.7	1	Salzburg (A.F.) (Austria : U.S. Zone)	.....
1,113	269.5	5	Prague II (Czechoslovakia)	.....
1,122	267.4	1	Alexandria (Egypt)	.....
1,122	267.4	—	Crowborough, Sussex (Gt. Brit.)	.....
1,122	267.4	—	Rampisham, Dorset (Gt. Britain)	.....
1,131	265.3	100	Hörby (Sweden)	.....
1,135	264.3	2.5	Bilbao (Spain)	.....
1,140	263.2	10	Turin (Italy)	.....
1,149	261.1	60	Brookmans Park, London (Gt. Brit.)	.....
1,149	261.1	60	Moorside Edge, Yorks. „	.....
1,149	261.1	60	Westerglen, Scotland „	.....
1,149	261.1	20	Burghead, Scotland „	.....
1,149	261.1	10	Lisnagarvey, N. Ireland „	.....
1,149	261.1	10	Stagshaw, North'd. „	.....
1,149	261.1	2	Aberdeen, Scotland „	.....
1,149	261.1	2	Redruth, Cornwall „	.....
1,149	261.1	1	Plymouth, Devon „	.....
1,149	261.1	1	Londonderry, N. Ireland „	.....
1,158	259.1	11	Ostrava (Czechoslovakia)	.....
1,158	259.1	10	Montbeliard (France)	.....
1,167	257.1	15	Monte Ceneri (Switzerland)	.....
1,173	256	—	Algiers (Algeria)	.....
1,176	255.1	10	Copenhagen (Denmark)	.....
1,185	253.2	60	Nice-La Brague (France)	.....
1,195	251.6	1	Frankfurt (Germany : U.S. Zone)	.....
1,201	249.8	1.5	Brno (Czechoslovakia)	.....
1,204	249.2	1	Bayreuth (A.F.) (Germany : U.S. Zone)	.....
1,213	247.3	20	Lille-Camphin I (France)	.....
1,222	245.5	20	Venice-Campalto (Italy)	.....
1,222	245.5	1	Narvik (Norway)	.....
1,222	245.5	1	Porsgrunn (Norway)	.....
1,222	245.5	2	Hoogezand (Holland)	.....

kc/s	Metres	kW	Station	Dial Reading
1,231	243.7	10	Gleiwitz (Poland)	.....
1,235	243	—	Schwerin (Germany : U.S.S.R. Zone)	.....
1,238	242	1	Tangier (Tangier : International Zone)	.....
1,240	241.9	5	Sigmeringen (Germany : French Zone)	.....
1,240	241.9	1	Cork (Eire)	.....
1,249	240	100	Munich (A.F.) (Germany : U.S. Zone)	.....
1,249	240	100	Stuttgart (A.F.) (Germany : U.S. Zone)	.....
1,258	238.5	5	Rome II (Italy)	.....
1,258	238.5	2	Valencia (Spain)	.....
1,267	236.8	5	Salzburg (Austria : U.S. Zone)	.....
1,276	235.1	10	Fredrikstad (Norway)	.....
1,276	235.1	2	Varna (Bulgaria)	.....
1,285	233.5	15	Klagenfurt (Austria : British Zone)	.....
1,285	233.5	15	Graz (Austria : British Zone)	.....
1,285	233.5	5	Brussels III (Belgium)	.....
1,285	233.5	—	Athens (Greece)	.....
1,294	231.8	15	Linz (Austria : U.S. Zone)	.....
1,303	230.2	50	Bologna I (Italy)	.....
1,303	230.2	10	Warsaw (Poland)	.....
1,303	230.2	—	Magdeburg (Germany : U.S.S.R. Zone)	.....
1,312	228.7	10	Vienna II (Austria : U.S.S.R. Zone)	.....
1,312	228.7	5	Naples I (Italy)	.....
1,312	228.7	2.5	Malmö (Sweden)	.....
1,321	227.1	20	Clermont-Royat (France)	.....
1,325	226	—	Vatican City	.....
1,330	225.6	—	Flensburg (Germany : British Zone)	.....
1,330	225.6	10	Hanover (Germany : British Zone)	.....
1,330	225.6	2.5	Berlin (Germany : British Zone)	.....
1,339	224	25	Lyon-Dardilly (France)	.....
1,339	224	20	Limoges-Nieul II (France)	.....
1,339	224	10	Lodz (Poland)	.....
1,339	224	10	Realtort II (France)	.....
1,339	224	1	Toulouse II (France)	.....
1,348	222.6	5	San Remo (Italy)	.....
1,348	222.6	5	Jihlava (Czechoslovakia)	.....
1,348	222.6	2	Saarbrücken (Germany : French Zone)	.....
1,348	222.6	1	Montélimar (France)	.....
1,348	222.6	1	Perpignan (France)	.....
1,348	222.6	1	Cairo II (Egypt)	.....

kc/s	Metres	kW	Station	Dial Reading
1,348	222.6	1	Dublin (Eire)	.....
1,348	222.6	1	Poitiers (France)	.....
1,357	221.1	80	Turin (Italy)	.....
1,366	219.6	10	Nantes-Montbert (France)	.....
1,366	219.6	5	Ceske-Budejovice (Czechoslovakia)	.....
1,366	219.6	—	Herford (B.F.) (Germany : British Zone)	.....
1,375	218.2	2	Beek (Holland)	.....
1,384	216.8	20	Clevedon, Som. (Gt. Brit.)	.....
1,384	216.8	10	Bartley, Hants. (Gt. Brit.)	.....
1 384	216.8	1	Stettin (Poland)	.....
1,384	216.8	—	Memel, Lithuania (U.S.S.R.)	.....
1,393	215.4	40	Bordeaux-Carrère I (France)	.....
1,393	215.4	25	Nice-Antibes (France)	.....
1,393	215.4	15	Grenoble (France)	.....
1,393	215.4	10	Montpellier I (France)	.....
1,393	215.4	5	Rouen-Louvetot (France)	.....
1,393	215.4	2	Strasbourg II (France)	.....
1,402	214	2	Stara Zagora (Bulgaria)	.....
1,402	214	1	Umea (Sweden)	.....
1,402	214	1	Hudiksvall (Sweden)	.....
1,411	212.6	3	Oporto (Portugal)	.....
1,411	212.6	1	Frankfurt (A.F.) (Germany : U.S. Zone)	.....
1,420	211.3	10	Helsinki (Finland)	.....
1,429	209.9	2	Bremen (A.F.) (Germany : U.S. Zone)	.....
1,429	209.9	1	Vienna (Austria : U.S. Zone)	.....
1,429	209.9	2	Montceau-les-Mines (France)	.....
1,438	208.6	1	Leghorn (A.F.) (Italy)	.....
1,447	207.3	9	Castilla (Spain)	.....
1,451	206.7	2	Kosice (Czechoslovakia)	.....
1,456	206	1.5	Lille-Camphin II (France)	.....
1,456	206	1	Nancy II (France)	.....
1,456	206	1	Angers (France)	.....
1,456	206	1	Limoges III (France)	.....
1,459	205.7	1	Pori (Finland)	.....
1,465	204.8	1	Naples (A.F.) (Italy)	.....
1,471	203.9	1	Tirana (Albania)	.....
1,474	203.5	—	Synchronised low power Stations (Gt. Brit.)	.....
1,488	201.5	1	Pietarsaari (Finland)	.....

kc/.	Metres	kW	Station	Dial Reading
1,492	201.1	5	Messina (Italy) ...	.....
1,502	199.7	1	Tampere (Finland)	.....
1,510	198.7	1	Gorizia (A.F.) (Italy)
1,522	197	10	Vaasa (Finland)
1,584	189.4	5	Wiesbaden (Germany : U.S. Zone)

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Geographical List of Long- and Medium- wave European Stations

	kc/s		kc/s	Finland—Cont.	kc/s
ALBANIA		CYRENAICA		Pori	1,459
Tirana	1,471	Benghazi	838	Tampere	1,502
ALGERIA		CZECHOSLOVAKIA		Turku	895
Algiers	941	Banska Bystrica	392	Vaasa	1,522
"	1,173	Bratislava	1,004	FRANCE	
Oran	1,104	Brno	1,201	Angers	1,456
ANDORRA	704	Ceske-Budejovice	1,366	Bordeaux	1,077
AUSTRIA		Jihlava	1,348	Bordeaux-Carrère	1,393
(British Zone)		Komarov	922	Clermont-Royat	1,321
Alpenland	886	Kosice	1,451	Dijon-Fontaine	1,068
Graz	565	Morava	922	Grenoble	832
"	1,285	Ostrava	1,158	"	1,393
Klagenfurt	1,285	Plzen	514	Lille-Camphin	1,213
(French Zone)		Prague	155	" "	1,456
Innsbruck	519	"	638	Limoges	1,456
Vorarlberg	519	"	1,113	Limoges-Nieul	648
(U.S. Zone)		DENMARK		" "	1,339
Linz	629	Copenhagen	1,176	Lyon-Dardilly	1,339
"	1,294	Kalundborg	240	Lyon-Tramoyes	895
Salzburg	1,104	EGYPT		Marseilles	749
"	1,267	Alexandria	1,122	Montbéliard	1,158
Vienna	1,068	Cairo	620	Montceau-les-Mines	1,429
(U.S.S.R. Zone)		"	950	Montélimar	1,348
Vienna	592	"	1,348	Montpellier	1,393
"	1,312	EIRE		Nancy	959
"	1,429	Athlone	565	"	1,456
BELGIUM		Cork	1,240	Nantes-Montbert	1,366
Brussels	620	Dublin	1,348	Nice-Antibes	1,393
"	868	ESTONIA (See U.S.S.R.)		Nice-La Brague	1,185
"	932	FINLAND		Nimes	1,068
"	1,285	Helsinki	1,420	Paris	610
BULGARIA		Joensuu	310	"	695
Sofia	850	Kuopio	527	"	776
Stara Zagora	1,402	Lahti	160	Pau	968
Varna	1,276	Oulu	433	Perpignan	1,348
		Pietarsaari	1,488	Poitiers	1,348

France—Cont.	kc/s	Germany—Cont.	kc/s	Gt. Britain—Cont.	kc/s
Quimper-Quimerch	832	(U.S.S.R. Zone)		Rampisham, Dorset	1,122
Realtort	1,339	Berlin	153	Redruth, Cornwall	1,149
Rennes-Alma	1,040	"	"	Stagshaw, North'd.	1,050
Rouen-Louvetot	1,393	"	841	" "	1,149
Strasbourg	1,393	Dresden	565	Start Point, Devon	977
Strasbourg-Brumath	859	Leipzig	722	Washford, Som.	804
Toulouse	1,339	"	785	Westerglen,	
Toulouse-Muret	913	Magdeburg	1,303	Scotland	767
		Potsdam	563	" "	1,149
		Schwerin	1,235	Wrexham, Wales	804
		Weimar	1,031		
GERMANY		GIBRALTAR	832	GREECE	
(British Zone)		GREAT BRITAIN		Athens	601
Berlin	1,095	Aberdeen, Scotland	767	"	1,285
"	1,330	" "	1,149	Salonika	804
"	1,366	Bartley, Hants	1,384	HOLLAND	
Cologne	904	Brookmans Park,		Beek	1,375
Elmshorn	1,095	London	877	Hilversum	722
Flensburg	1,330	" " "	1,149	"	995
Hamburg	904	Burghead, Scotland	767	Hoogezand	1,222
Hanover	1,095	" "	1,149	HUNGARY	
"	1,330	Clevedon, Som.	1,384	Budapest	546
Herford	1,366	Crowborough,		"	1,040
Norden	658	Sussex	1,122	ICELAND	
Langenberg	1,095	Droitwich, Worcs.	200	Eidar	615
		" "	583	Reykjavik	271
		" "	1,013	ITALY	
(French Zone)		Lisnagarvey,		Bari	1,059
Coblentz	1,031	N. Ireland	1,050	Bologna	1,068
Freiburg	832	" "	1,149	"	1,303
Saarbrücken	1,348	Londonderry,		Bolzano	536
Sigmaringen	1,240	N. Ireland	1,050	Cagliari	530
		" "	1,149	Catania	1,104
(U.S. Zone)		Moorside Edge,		Florence	610
Bayreuth	1,204	Yorks.	668	"	1,068
Berlin	601	" " "	1,149	Genoa	986
"	1,420	Norwich, Norfolk	1,013	Gorizia	1,510
Bremen	1,429	Ottringham, Yorks.	167	Leghorn	1,438
Frankfurt	1,195	Penmon, Wales	804	Messina	1,492
"	1,411	Plymouth, Devon	1,149	Milan	814
Munich	740				
"	1,249				
Stuttgart	574				
"	1,249				
Weisbaden	1,584				

Italy—Cont.	kc/s		kc/s	Sweden—Cont.	kc/s
Milan	986	PALESTINE		Luleå	392
"	1,312	Jerusalem	569	Malmö	1,312
Naples	1,465	"	677	Motala	216
Palermo	565	"	795	Ostersund	415
Rome	695	POLAND		Stockholm	704
"	713	Breslau	950	Sundsvall	601
"	1,258	Cracow	1,022	Umea	1,402
San Remo	1,348	Danzig	596	SWITZERLAND	
Turin	986	Gleiwitz	1,231	Beromunster	556
"	1,140	Lodz	1,339	Monte Ceneri	1,167
"	1,357	Poznan	868	Sottens	677
Venice-Campalto	1,222	Stettin	1,384	SYRIA	
LATVIA (See U.S.S.R.)		Warsaw	224	Aleppo	704
LITHUANIA		"	758	Damascus	592
(See U.S.S.R.)		"	1,303	TUNISIA	
LUXEMBOURG	232	PORTUGAL		Tunis	823
MONACO		Lisbon	629	TURKEY	
Monte Carlo	731	"	722	Ankara	182
MOROCCO, FRENCH		"	1,068	Istanbul	758
Rabat	601	Oporto	1,411	U.S.S.R.	
"	868	ROUMANIA		Dniepropetrovsk	913
MOROCCO		Brasov	160	Gorki	566
(INT'L ZONE)		Bucharest	823	Kaunas, Lithuania	153
Tangier	1,238	SPAIN		Kharkov	385
NORWAY		Barcelona	795	Kiev	248
Bergen	260	"	1,096	Krasnodar	583
"	355	Bilbao	1,135	Leningrad	208
Bodö	253	Castilla	1,447	"	749
Finmark	347	Corunna	958	"	1,040
Fredrikstad	1,276	Madrid	686	Memel, Lithuania	1,384
Hamar	519	"	758	Minsk	269
Kristiansand	629	"	1,022	Moscow	153
Namsos	961	San Sebastian	1,066	"	174
Narvik	1,222	Seville	731	"	200
Oslo	260	Valencia	1,258	"	232
Porsgrunn	1,222	Zagaroza	863	"	832
Stavanger	850	SWEDEN		Murmansk	648
Tromsö	292	Falun	1,086	Odessa	968
Trondheim	832	Goteborg	941	Riga, Latvia	583
Vigra	282	Hörby	1,131	Rostov-on-Don	556
		Hudiksvall	1,402	Simferopol	859

U.S.S.R.—Cont.	kc/s.	U.S.S.R.—Cont.	kc/s.		kc/s
Stalino	776	Vilna, Lithuania	536	VATICAN CITY	1,325
Tallinn, Estonia	731	Voronezh	217	YUGOSLAVIA	
Tartu, Estonia	512		356	Belgrade	686

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Short-wave Stations of the World

Mc/s	Metres	kW	Call	Station	Notes
4.830	62.11	2	EQD	Teheran (Iran)	
4.840	61.98	10	VUC2	Calcutta (India)	
4.860	61.73	10	VUD3	Delhi (India)	
4.880	61.48	10	VUB2	Bombay (India)	
4.885	61.41	—	VQ7LO	Nairobi (Kenya)	
4.893	61.31	12	FHE9	Dakar (Fr. W. Africa)	
4.895	61.28	5	—	Johannesburg (S. Africa)	
4.911	61.09	—	ZOY	Accra (Gold Coast)	
4.915	61.04	5	YV5RN	Caracas (Venezuela)	
4.960	60.48	—	VUD	Delhi (India)	
4.970	60.36	4.7	YV5RM	Caracas (Venezuela)	
4.994	60.07	5	YV3RN	Barquisimeto (Venezuela)	
5.080	59.06	—	—	Moscow (U.S.S.R)	
5.865	51.15	1	TIGPH	San Jose (Costa Rica)	
5.883	50.99	5	—	Cape Town (S. Africa)	
5.918	50.69	7.5	XGOA	Nanking (China)	
5.920	50.68	—	—	Moscow (U.S.S.R.)	
5.948	50.44	—	HH2S	Port-au-Prince (Haiti)	
5.958	50.36	—	—	Ashkhabad (U.S.S.R.)	
5.969	50.26	25	HVJ	Vatican City	
5.980	50.17	25	—	Andorra	
6.000	50.00	1	XEBT	Mexico City (Mexico)	
6.000	50.00	1	PR13	Belo Horizonte (Brazil)	
6.000	50.00	—	ZFY	Georgetown (British Guiana)	
6.000	50.00	—	RNE	Moscow (U.S.S.R.)	
6.002	49.99	—	HSPF	Bangkok (Siam)	
6.005	49.96	7.5	CFCX	Verchères, Quebec (Canada)	
6.005	49.96	1	HP5K	Colon (Panama)	
6.006	49.95	50	—	Rabat (Morocco, French)	
6.007	49.94	5	—	Johannesburg (S. Africa)	
6.010	49.92	—	GRB	British Overseas Service	
6.010	49.92	17	OLR2A	Podebrady (Czechoslovakia)	
6.010	49.92	5	CE601	Antofagasta (Chile)	
6.010	49.92	5	XEO1	Mexico City (Mexico)	
6.010	49.92	1	CJCX	Sydney, N.S. (Canada)	
6.010	49.92	5	VUD3	Delhi (India)	

Mc/s	Metres	kW	Call	Station	Notes
6.010	49.92	10	VUC2	Calcutta (India)	.....
6.015	49.88	5	PRA8	Recife (Brazil)	.....
6.020	49.83	6	—	Luxembourg	.....
6.020	49.83	1	OAX4Q	Lima (Peru)	.....
6.020	49.83	—	—	Kiev (U.S.S.R.)	.....
6.024	49.80	1.5	FZI	Brazzaville (Fr. Eq. Africa)	.....
6.025	49.79	5	PGD	Huizen (Holland)	.....
6.030	49.75	17	—	Podebrady (Czechoslovakia)	.....
6.030	49.75	—	—	Moscow (U.S.S.R.)	.....
6.030	49.75	—	—	Rome (Italy)	.....
6.035	49.71	—	GWS	British Overseas Service	.....
6.035	49.71	1	CXA30	Montevideo (Uruguay)	.....
6.040	49.67	50	WRUL	Boston, Mass. (U.S.A.)	.....
6.040	49.67	50	WRUS	" " "	.....
6.040	49.67	50	WRUA	" " "	.....
6.040	49.67	10	—	Algiers (Algeria)	.....
6.040	49.67	5	COBF	Havana (Cuba)	.....
6.040	49.67	—	—	Rangoon (Burma)	.....
6.045	49.63	—	—	Moscow (U.S.S.R.)	.....
6.050	49.59	—	GSA	British Overseas Service	.....
6.054	49.55	1	HJFA	Pereira (Colombia)	.....
6.060	49.50	100	KWID	San Francisco, Cal. (U.S.A.)	.....
6.060	49.50	50	KWIX	" " " "	.....
6.060	49.50	50	CKRZ	Sackville, N.B. (Canada)	.....
6.060	49.50	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
6.060	49.50	50	WCBX	" " "	.....
6.060	49.50	10	WCDA	" " "	.....
6.060	49.50	20	VUD11	Delhi (India)	.....
6.060	49.50	5	VQ7LO	Nairobi (Kenya)	.....
6.065	49.46	12	SBO	Motala (Sweden)	.....
6.065	49.46	10	LRS1	Buenos Aires (Argentina)	.....
6.067	49.45	20	—	Tetuan (Morocco, Spanish)	.....
6.070	49.42	—	—	Berlin (Germany : U.S.S.R. Zone)	.....
6.070	49.42	—	GRR	British Overseas Service	.....
6.070	49.42	1	CFRX	Toronto, Ont. (Canada)	.....
6.075	49.38	100	—	Colombo (Ceylon)	.....
6.075	49.38	2.5	CXA3	Montevideo (Uruguay)	.....
6.080	49.34	200	WLWR	Cincinnati, Ohio (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
6.080	49.34	200	WLWL	Cincinnati, Ohio (U.S.A.)	.....
6.080	49.34	200	WLWS	" " "	.....
6.080	49.34	75	WLWO	" " "	.....
6.080	49.34	50	WLWK	" " "	.....
6.080	49.34	50	LRYI	Buenos Aires (Argentina)	.....
6.080	49.34	50	—	Munich (A.F.) (Germany: U.S. Zone)	.....
6.082	49.32	14	OAX4Z	Lima (Peru)	.....
6.085	49.30	10	VUM2	Madras (India)	.....
6.090	49.26	—	GWM	British Overseas Service	.....
6.090	49.26	50	CKOB	Sackville, N.B. (Canada)	.....
6.090	49.26	10	XRRR	Peiping (China)	.....
6.090	49.26	7.5	CBFW	Verchères, Quebec (Canada)	.....
6.090	49.26	2	—	Beirut (Syria)	.....
6.090	49.26	—	—	Kuala Lumpur (Malaya)	.....
6.095	49.22	5	ZYB7	Sao Paulo (Brazil)	.....
6.095	49.22	1	OAX4H	Lima (Peru)	.....
6.097	49.21	2.5	HJFK	Pereira (Colombia)	.....
6.095	49.22	1	—	Johannesburg (S. Africa)	.....
6.100	49.18	50	WNRE	Bound Brook, N.J. (U.S.A.)	.....
6.100	49.18	50	WNRI	" " " "	.....
6.100	49.18	50	WNRX	" " " "	.....
6.100	49.18	50	WNRA	" " " "	.....
6.100	49.18	50	WRCA	" " " "	.....
6.100	49.18	50	WNBI	" " " "	.....
6.100	49.18	—	VUDI0	Delhi (India)	.....
6.100	49.18	—	YUA	Belgrade (Yugoslavia)	.....
6.105	49.14	6	HJFB	Manizales (Colombia)	.....
6.110	49.10	—	GSL	British Overseas Service	.....
6.110	49.10	5	CP2	La Paz (Bolivia)	.....
6.110	49.10	5	VUD	Delhi (India)	.....
6.112	49.09	—	—	Monte Carlo (Monaco)	.....
6.115	49.06	—	—	Hamburg (Germany: British Zone)	.....
6.115	49.06	7.5	—	Warsaw (Poland)	.....
6.120	49.02	100	KRHO	Honolulu (Hawaii)	.....
6.120	49.02	50	WCBX	Brentwood, N.Y. (U.S.A.)	.....
6.120	49.02	50	WCBN	" " " "	.....
6.120	49.02	50	WOOW	Wayne, N.J. (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
6.120	49.02	50	WOOC	Wayne, N.J. (U.S.A.)	.....
6.120	49.02	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
6.120	49.02	10	WCDA	" " "	.....
6.120	49.02	7.5	LRX1	Buenos Aires (Argentina)	.....
6.120	49.02	30	OIX1	Helsinki (Finland)	.....
6.125	48.98	—	GWA	British Overseas Service	.....
6.125	48.98	5	CXA4	Montevideo (Uruguay)	.....
6.130	48.94	1	COCD	Regia (Cuba)	.....
6.130	48.94	1	VPD2	Suva (Fiji Islands)	.....
6.130	48.94	—	LKJ2	Fredrikstad (Norway)	.....
6.130	48.94	—	—	Moscow (U.S.S.R.)	.....
6.130	48.94	—	—	*Monte Carlo (Monaco)	.....
6.140	48.86	50	WBOS	Boston, Mass. (U.S.A.)	.....
6.140	48.86	50	OTC	Léopoldville (Belgian Congo)	.....
6.140	48.86	—	—	Moscow (U.S.S.R.)	.....
6.145	48.82	5	HJDE	Medellin (Colombia)	.....
6.146	48.81	35	XGOY	Chungking (China)	.....
6.150	48.78	—	GRW	British Overseas Service	.....
6.150	48.78	5	CE615	Valparaiso (Chile)	.....
6.150	48.78	2	CKRO	Winnipeg, Manitoba (Canada)	.....
6.150	48.78	2	VLR2	Lyndhurst, Vic. (Australia)	.....
6.150	48.78	—	—	Belgrade (Yugoslavia)	.....
6.150	48.78	10	VUB2	Bombay (India)	.....
6.150	48.78	—	—	Moscow (U.S.S.R.)	.....
6.154	48.75	10	CS2WD	Lisbon (Portugal)	.....
6.155	48.74	2	EQB	Teheran (Iran)	.....
6.155	48.74	—	YSPB	San Salvador (Salvador)	.....
6.160	48.70	100	—	Allouis (France)	.....
6.160	48.70	50	CHAC	Sackville, N.B. (Canada)	.....
6.160	48.70	5	HJCD	Bogota (Colombia)	.....
6.165	48.66	1	HHCM	Port-au-Prince (Haiti)	.....
6.165	48.66	—	GWK	British Overseas Service	.....
6.165	48.66	25	HER3	Schwarzenburg (Switzerland)	.....
6.165	48.66	2	TILS	San Pedro (Costa Rica)	.....
6.170	48.62	50	—	Munich (Germany : U.S. Zone)	.....
6.170	48.62	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
6.170	48.62	50	WCBX	" " "	.....
6.170	48.62	50	WOOC	Wayne, N.J. (U.S.A.)	.....
6.170	48.62	50	WOOW	" " "	.....

Mc/s	Metres	kW	Call	Station	Notes
6.170	48.62	50	WCBN	Brentwood, N.Y. (U.S.A.)	.....
6.170	48.62	10	WCDA	" " "	.....
6.170	48.62	1	CXA21	Montevideo (Uruguay)	.....
6.170	48.62	30	OLR2D	Padebrady (Czechoslovakia)	.....
6.175	48.58	100	—	Allouis (France)	.....
6.175	48.58	—	—	Kuala Lumpur (Malaya)	.....
6.180	48.54	—	GRO	British Overseas Service	.....
6.180	48.54	10	LRM	Mendoza (Argentina)	.....
6.180	48.54	—	—	Ashkhabad (U.S.S.R.)	.....
6.185	48.50	—	LLI	Fredrikstad (Norway)	.....
6.190	48.47	100	WGEO	Schenectady, N.Y. (U.S.A.)	.....
6.190	48.47	50	WGEA	" " "	.....
6.190	48.47	50	WNRI	Bound Brook, N.J. (U.S.A.)	.....
6.190	48.47	50	KGEI	Belmont, Cal. (U.S.A.)	.....
6.190	48.47	25	HVJ	Vatican City	.....
6.190	48.47	20	VUD7	Delhi (India)	.....
6.195	48.43	—	GRN	British Overseas Service	.....
6.195	48.43	—	—	Vienna (Austria: U.S.S.R. Zone)	.....
6.195	48.43	5	LLJ	Oslo (Norway)	.....
6.199	48.40	10	HJCT	Bagota (Colombia)	.....
6.200	48.39	100	—	Allouis (France)	.....
6.200	48.39	5	—	Ruiselede (Belgium)	.....
6.200	48.39	1	—	Tangier (Morocco: Intl. Zone)	.....
6.200	48.39	1	YV6RD	Bolivar (Venezuela)	.....
6.220	48.23	5	CE622	Santiago (Chile)	.....
6.230	48.15	—	—	Moscow (U.S.S.R.)	.....
6.243	48.05	1	HIIN	Ciudad Trujillo (Dominican Rep.)	.....
6.250	48.00	5	CE625	Santiago (Chile)	.....
6.300	47.62	2.5	ZPAI	Asuncion (Paraguay)	.....
6.320	47.47	1	—	Baden Baden (Germany: French Zone)	.....
6.320	47.47	—	COCW	Havana (Cuba)	.....
6.370	47.10	1	OAX4H	Lima (Peru)	.....
6.345	47.28	25	HEI2	Schwarzenburg (Switzerland)	.....
6.380	47.02	1	HIIX	Ciudad Trujillo (Dominican Rep.)	.....
6.400	46.88	1	TGQA	Quezaltenango (Guatemala)	.....
6.440	46.57	1	TGWB	Guatemala City (Guatemala)	.....

Mc/s	Metres	kW	Call	Station	Notes
6.455	46.47	1	COHI	Santa Clara (Cuba)	.....
6.700	44.78	1	TIEP	San Jose (Costa Rica)	.....
6.700	44.78	—	—	Moscow (U.S.S.R.)	.....
6.705	44.75	1	YVKB	Caracas (Venezuela)	.....
6.850	43.80	—	—	Moscow (U.S.S.R.)	.....
6.770	44.31	7.5	—	Singapore (Malaya)	.....
6.917	43.37	—	—	Dakar (Fr. W. Africa)	.....
6.950	43.17	6	—	Luxembourg	.....
6.990	42.92	10	XUPA	Kweiyang (China)	.....
7.000	42.86	100	WGEO	Schenectady, N.Y. (U.S.A.)	.....
7.000	42.86	50	WGEA	" " "	.....
7.001	42.86	—	FZI	Brazzaville (French Eq. Africa)	.....
7.006	42.83	—	FETI	Valladolid (Spain)	.....
7.050	42.55	—	FET15	Cordoba (Spain)	.....
7.050	42.55	—	ZOY	Accra (Gold Coast)	.....
7.058	42.50	1.2	COKG	Santiago (Cuba)	.....
7.075	42.40	—	GRS	British Overseas Service	.....
7.100	42.25	—	EAJ7	Cuenca (Spain)	.....
7.120	42.13	—	GRM	British Overseas Service	.....
7.130	42.07	—	EAJ22	Oviedo (Spain)	.....
7.150	41.96	—	GRT	British Overseas Service	.....
7.150	41.96	—	—	Moscow (U.S.S.R.)	.....
7.153	41.95	10	XGOA	Chungking (China)	.....
7.165	41.87	—	—	Moscow (U.S.S.R.)	.....
7.185	41.76	—	GRK	British Overseas Service	.....
7.185	41.76	—	—	Colombo (Ceylon)	.....
7.195	41.71	—	—	Vienna (Austria: U.S.S.R. Zone)	.....
7.200	41.67	—	XGSE	Nanking (China)	.....
7.200	41.67	—	—	Moscow (U.S.S.R.)	.....
7.210	41.61	—	GWL	British Overseas Service	.....
7.210	41.61	12	FHE7	Dakar (Fr. W. Africa)	.....
7.210	41.61	2	—	Beirut (Syria)	.....
7.210	41.61	10	VUC2	Calcutta (India)	.....
7.210	41.61	—	HEI3	Schwarzenburg (Switzerland)	.....
7.214	41.59	—	—	Rabat (Morocco, French)	.....
7.215	41.58	10	VLQ2	Brisbane (Australia)	.....
7.220	41.55	—	JCKW	Jerusalem (B.F.) (Palestine)	.....
7.220	41.55	2	KOFA	Salzburg (A.F.) (Austria: U.S. Zone)	.....

Mc/s	Metres	kW	Call	Station	Notes
7.225	41.52	—	PJCI	Willemstad (Curacao)	.....
7.230	41.49	—	GSW	British Overseas Service	.....
7.230	41.49	100	KWID	San Francisco, Cal. (U.S.A.)	.....
7.230	41.49	50	KWIX	" " " "	.....
7.236	41.46	25	—	Realtort (France)	.....
7.240	41.44	10	VLQ	Brisbane (Australia)	.....
7.240	41.44	10	VUB2	Bombay (India)	.....
7.240	41.44	—	—	Moscow (U.S.S.R.)	.....
7.250	41.38	—	GW1	British Overseas Service	.....
7.250	41.38	50	KGE1	Belmont, Cal. (U.S.A.)	.....
7.250	41.38	1	—	Rome (Italy)	.....
7.250	41.38	—	—	Baden Baden (Germany: French Zone)	.....
7.257	41.34	—	XGSF	Nanking (China)	.....
7.258	41.33	—	JLW	Tokio (Japan)	.....
7.260	41.32	—	GSU	British Overseas Service	.....
7.260	41.32	10	VUM2	Madras (India)	.....
7.260	41.32	10	CSW8	Lisbon (Portugal)	.....
7.260	41.32	6	—	Copenhagen (Denmark)	.....
7.265	41.29	1	HCIBF	Quito (Ecuador)	.....
7.270	41.27	1	YSN	San Salvador (Salvador)	.....
7.270	41.27	1	—	Rome (Italy)	.....
7.270	41.27	—	—	Moscow (U.S.S.R.)	.....
7.280	41.21	—	GWN	British Overseas Service	.....
7.280	41.21	100	VLA	Shepparton, Vic. (Australia)	.....
7.280	41.21	50	VLC8	" " " "	.....
7.280	41.21	100	—	Allouis (France)	.....
7.280	41.21	—	—	Erevan (U.S.S.R.)	.....
7.290	41.15	100	VUD5	Delhi (India)	.....
7.290	41.15	50	—	Munich (Germany : U.S. Zone)	.....
7.290	41.15	20	VUD11	Delhi (India)	.....
7.290	41.15	—	—	Hamburg (Germany: British Zone)	.....
7.295	41.12	10	—	Athens (Greece)	.....
7.300	41.10	5	—	Ruiselede (Belgium)	.....
7.300	41.10	—	—	Moscow (U.S.S.R.)	.....
7.320	40.98	—	GRJ	British Overseas Service	.....
7.330	40.93	—	—	Moscow (U.S.S.R.)	.....
7.350	40.82	—	—	Moscow (U.S.S.R.)	.....

Mc/s	Metres	kW	Call	Station	Notes
7.360	40.76	25	HET3	Schwarzenburg (Switzerland)	.....
7.360	40.76	—	RWG	Moscow (U.S.S.R.)	.....
7.380	40.65	25	HEK3	Schwarzenburg (Switzerland)	.....
7.390	40.60	—	—	Moscow (U.S.S.R.)	.....
7.430	40.38	—	—	Leningrad "	.....
7.490	40.05	—	—	Tbilisi (U.S.S.R.)	.....
7.520	39.89	—	—	Moscow (U.S.S.R.)	.....
7.552	39.73	—	JLW5	Tokio (Japan)	.....
7.558	39.69	20	EAJ43	Teneriffe (Canary Is.)	.....
7.650	39.22	—	—	Leningrad (U.S.S.R.)	.....
7.700	38.96	—	—	Tirana (Albania)	.....
7.770	38.61	—	—	Moscow (U.S.S.R.)	.....
7.852	38.22	—	ZAA	Tirana (Albania)	.....
7.867	38.13	10	SUX	Cairo (Egypt)	.....
7.894	38.00	—	YSD	San Salvador (Salvador)	.....
7.934	37.81	12	PSL	Marapicu (Brazil)	.....
7.945	37.74	—	—	Alicante (Spain)	.....
8.000	37.50	3	—	Bandoeng, Java (Indonesia)	.....
8.037	37.33	2	FXE	Beirut (Syria)	.....
8.050	37.27	—	—	Moscow (U.S.S.R.)	.....
8.240	36.39	—	—	Addis Abbaba (Ethiopia)	.....
8.565	35.03	50	—	Munich (Germany: U.S. Zone)	.....
8.660	34.64	1	COJK	Camaguey (Cuba)	.....
8.760	34.25	—	—	Moscow (U.S.S.R.)	.....
8.825	34.00	5	COCQ	Havana (Cuba)	.....
8.890	33.03	12	—	Dakar (Fr. W. Africa)	.....
8.905	33.67	—	—	Moscow (U.S.S.R.)	.....
8.955	33.50	12	COKG	Santiago (Cuba)	.....
9.010	33.30	—	—	Moscow (U.S.S.R.)	.....
9.045	33.17	—	—	" "	.....
9.082	33.03	2	—	Rabat (Morocco, French)	.....
9.084	33.02	—	—	Baghdad (Iraq)	.....
9.185	32.66	25	HEF4	Schwarzenburg (Switzerland)	.....
9.235	32.48	—	COBQ	Havana (Cuba)	.....
9.250	32.43	4	—	Bucharest (Roumania)	.....
9.310	32.22	1	HC2AK	Guayaquil (Ecuador)	.....
9.330	32.15	25	—	Andorra	.....

Mc/s	Metres	kW	Call	Station	Notes
9.350	32.09	5	LZC	Sofia (Bulgaria)	.....
9.350	32.10	—	HBL	Geneva (Switzerland)	.....
9.368	32.02	—	—	Madrid (Spain)	.....
9.380	31.98	50	OTM2	Léopoldville (Belgian Congo)	.....
9.405	31.90	—	FGA	Dakar (Fr. W. Africa)	.....
9.410	31.88	—	GRI	British Overseas Service	.....
9.420	31.85	—	—	Belgrade (Yugoslavia)	.....
9.440	31.78	7	FZI	Brazzaville (Fr. Eq. Africa)	.....
9.440	31.78	5	COCH	Guanabacoa (Cuba)	.....
9.465	31.70	—	TAP	Ankara (Turkey)	.....
9.480	31.65	5	—	Ruiselede (Belgium)	.....
9.480	31.65	—	—	Moscow (U.S.S.R.)	.....
9.490	31.61	—	GWf	British Overseas Service	.....
9.490	31.61	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
9.490	31.61	50	WCBX	" " "	.....
9.490	31.61	50	WOOW	Wayne, N.J. (U.S.A.)	.....
9.490	31.61	50	KNBI	Dixon, Cal. (U.S.A.)	.....
9.490	31.61	50	KNBA	" " "	.....
9.490	31.61	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
9.500	31.58	100	—	Allouis (France)	.....
9.500	31.58	20	OIX2	PorI (Finland)	.....
9.500	31.58	12	PRF5	Marapicu (Brazil)	.....
9.500	31.58	10	XEWW	Mexico City (Mexico)	.....
9.500	31.58	—	—	Minsk (U.S.S.R.)	.....
9.505	31.57	5	CP38	La Paz (Bolivia)	.....
9.505	31.57	—	JLW2	Tokio (Japan)	.....
9.507	31.56	—	—	Belgrade (Yugoslavia)	.....
9.510	31.55	—	GSB	British Overseas Service	.....
9.515	31.53	—	—	Geneva (Switzerland)	.....
9.520	31.51	200	WLWL	Cincinnati, Ohio (U.S.A.)	.....
9.520	31.51	100	—	Allouis (France)	.....
9.520	31.51	100	—	Colombo (Ceylon)	.....
9.520	31.51	6	OZF	Copenhagen (Denmark)	.....
9.520	31.51	2	VLW7	Perth (Australia)	.....
9.520	31.51	1	CP6	La Paz (Bolivia)	.....
9.520	31.51	—	—	Moscow (U.S.S.R.)	.....
9.523	31.50	5	—	Johannesburg (S. Africa)	.....
9.525	31.50	—	GWJ	British Overseas Service	.....
9.525	31.50	—	ZBW3	Victoria (Hong Kong)	.....

Mc/s	Metres	kW	Call	Station	Notes
9.526	31.49	7.5	SPI3	Warsaw (Poland)	.....
9.530	31.48	100	YV GEO	Schenectady, N.Y. (U.S.A.)	.....
9.530	31.48	50	WGEA	" " "	.....
9.530	31.48	50	KGEI	Belmont, Cal. (U.S.A.)	.....
9.530	31.48	—	—	Moscow (U.S.S.R.)	.....
9.530	31.48	10	VUC2	Calcutta (India)	.....
9.535	31.46	25	HER4	Schwarzenburg (Switzerland)	.....
9.535	31.46	12	SBU	Motala (Sweden)	.....
9.535	31.46	1	VPD2	Suva (Fiji Islands)	.....
9.535	31.46	—	XGSG	Nanking (China)	.....
9.539	31.45	25	HEI4	Schwarzenburg (Switzerland)	.....
9.540	31.45	100	VLB	Shepparton, Vic. (Australia)	.....
9.540	31.45	50	VLC5	" " "	.....
9.540	31.45	50	—	Munich (Germany : U.S. Zone)	.....
9.540	31.45	5	LKJ	Oslo (Norway)	.....
9.540	31.45	2	VLR	Lyndhurst, Vic. (Australia)	.....
9.540	31.45	—	—	Moscow (U.S.S.R.)	.....
9.545	31.43	25	HED5	Schwarzenburg (Switzerland)	.....
9.545	31.43	—	—	Rangoon (Burma)	.....
9.550	31.41	—	GWB	British Overseas Service	.....
9.550	31.41	100	—	Allouis (France)	.....
9.550	31.41	50	KGEI	Belmont, Cal. (U.S.A.)	.....
9.550	31.41	50	WGEA	Schenectady, N.Y. (U.S.A.)	.....
9.550	31.41	25	HVJ	Vatican City	.....
9.550	31.41	20	WRUW	Boston, Mass. (U.S.A.)	.....
9.550	31.41	17	—	Podebrady (Czechoslovakia)	.....
9.555	31.40	1	XETT	Monterrey (Mexico)	.....
9.560	31.38	10	—	Les Essarts (France)	.....
9.560	31.38	1	—	Linz (Austria : U.S. Zone)	.....
9.560	31.38	—	—	Moscow (U.S.S.R.)	.....
9.562	31.37	12	FHE4	Dakar (Fr. W. Africa)	.....
9.562	31.37	10	OAX4T	Lima (Peru)	.....
9.565	31.36	10	VUM2	Madras (India)	.....
9.570	31.35	100	KWID	San Francisco, Cal. (U.S.A.)	.....
9.570	31.35	50	WBOS	Boston, Mass. (U.S.A.)	.....
9.570	31.35	50	WRUS	" " "	.....
9.570	31.35	50	WRUA	" " "	.....
9.570	31.35	50	KWIX	San Francisco, Cal. (U.S.A.)	.....
9.570	31.35	20	WRUW	Boston, Mass. (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
9.573	31.34	50	LRS	Buenos Aires (Argentina)	.....
9.575	31.33	—	—	Rabat (Morocco, French)	.....
9.575	31.33	—	YSPA	San Salvador (Salvador)	.....
9.580	31.32	—	GSC	British Overseas Service	.....
9.580	31.32	10	VLH3	Lyndhurst, Vic. (Australia)	.....
9.580	31.32	10	VLG	" " "	.....
9.580	31.32	—	—	Moscow (U.S.S.R.)	.....
9.582	31.31	10	CR7BF	Lourenco Marques (Mozambique)	.....
9.590	31.28	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
9.590	31.28	200	WLWR	" " "	.....
9.590	31.28	200	WLWL	" " "	.....
9.590	31.28	75	WLWO	" " "	.....
9.590	31.28	50	WLWK	" " "	.....
9.590	31.28	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
9.590	31.28	50	WCBX	" " "	.....
9.590	31.28	30	PCJ	Huizen (Holland)	.....
9.590	31.28	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
9.590	31.28	100	VUD5	Delhi (India)	.....
9.600	31.25	—	GRY	British Overseas Service	.....
9.600	31.25	12	PRF5	Marapicu (Brazil)	.....
9.600	31.25	2	CE960	Santiago (Chile)	.....
9.605	31.23	—	XGSH	Nanking (China)	.....
9.605	31.23	—	JLP	Tokio (Japan)	.....
9.606	31.23	5	—	Cape Town (S. Africa)	.....
9.607	31.23	7.5	CBFX	Verchères, Québec (Canada)	.....
9.607	31.23	1	HP5J	Panama City (Panama)	.....
9.610	31.22	50	CHLS	Sackville, N.B. (Canada)	.....
9.610	31.22	25	ZYC8	Rio de Janeiro (Brazil)	.....
9.610	31.22	10	—	Algiers (Algeria)	.....
9.615	31.20	100	VLA2	Shepparton, Vic. (Australia)	.....
9.615	31.20	100	VLB9	" " "	.....
9.615	31.20	50	VLC6	" " "	.....
9.615	31.20	5	XERQ	Mexico City (Mexico)	.....
9.615	31.20	2.5	TIPG	San Jose (Costa Rica)	.....
9.620	31.19	25	—	Realtort (France)	.....
9.620	31.19	2	CXA6	Montevideo (Uruguay)	.....
9.620	31.19	—	—	Moscow (U.S.S.R.)	.....
9.625	31.17	—	GWO	British Overseas Service	.....

Mc/s	Metres	kW	Call	Station	Notes
9.630	31.15	50	—	Milan (Italy)	.....
9.630	31.15	50	CKLO	Sackville, N.B. (Canada)	.....
9.630	31.15	7.5	CBFO	Verchères, Quebec (Canada)	.....
9.630	31.15	20	VUD10	Delhi (India)	.....
9.630	31.15	10	VUB2	Bombay (India)	.....
9.635	31.14	35	XGOY	Chungking (China)	.....
9.640	31.12	—	GVZ	British Overseas Service	.....
9.640	31.12	50	CHMD	Sackville, N.B. (Canada)	.....
9.640	31.12	50	LRV	Buenos Aires (Argentina)	.....
9.640	31.12	1	COX	Havana (Cuba)	.....
9.640	31.12	1	KZRH	Manila (Philippines)	.....
9.645	31.10	10	CR7Bj	Lourenco Marques (Mozambique)	.....
9.650	31.09	100	KRHO	Honolulu (Hawaii)	.....
9.650	31.09	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
9.650	31.09	50	WCBX	" " "	.....
9.650	31.09	50	WCBN	" " "	.....
9.650	31.09	50	KNBI	Dixon, Cal. (U.S.A.)	.....
9.650	31.09	50	KNBA	" " "	.....
9.650	31.09	50	WOOW	Wayne, N.J. (U.S.A.)	.....
9.650	31.09	50	WOOC	" " "	.....
9.650	31.09	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
9.650	31.09	—	—	Moscow (U.S.S.R.)	.....
9.650	31.09	—	—	Omdurman (Sudan)	.....
9.655	31.07	25	HED6	Schwarzenburg (Switzerland)	.....
9.655	31.07	—	XGSI	Nanking (China)	.....
9.660	31.06	—	GWP	British Overseas Service	.....
9.660	31.06	25	HVJ	Vatican City	.....
9.660	31.06	20	VUD11	Delhi (India)	.....
9.660	31.06	10	—	Algiers (Algeria)	.....
9.660	31.06	7.5	LRX	Buenos Aires (Argentina)	.....
9.660	31.06	10	VLQ3	Brisbane (Australia)	.....
9.660	31.06	7.5	HOXC	Panama City (Panama)	.....
9.665	31.04	5	ORR	Ruiselede (Belgium)	.....
9.670	31.02	100	WRCA	Bound Brook, N.J. (U.S.A.)	.....
9.670	31.02	100	WNBI	" " " "	.....
9.670	31.02	50	WNRI	" " " "	.....
9.670	31.02	50	WNRE	" " " "	.....
9.670	31.02	50	WNRX	" " " "	.....

Mc/s	Metres	kW	Call	Station	Notes
9.670	31.02	50	WNRA	Bound Brook, N.J. (U.S.A.)	.....
9.670	31.02	5	VUD3	Delhi (India)	.....
9.675	31.01	—	GWT	British Overseas Service	.....
9.675	31.01	100	—	Allouis (France)	.....
9.675	31.01	—	XGSJ	Nanking (China)	.....
9.680	30.99	100	VLA3	Shepparton, Vic. (Australia)	.....
9.680	30.99	100	VLB2	" " "	.....
9.680	30.99	50	VLC2	" " "	.....
9.680	30.99	10	VUD2	Delhi (India)	.....
9.680	30.99	2	EQC	Teheran (Iran)	.....
9.680	30.99	—	XEQQ	Mexico City (Mexico)	.....
9.685	30.98	100	—	Allouis (France)	.....
9.690	30.96	—	GRX	British Overseas Service	.....
9.690	30.96	10	LRAI	Buenos Aires (Argentina)	.....
9.690	30.96	2.5	HJCAB	Bogota (Colombia)	.....
9.695	30.94	—	—	Fort de France (Martinique)	.....
9.700	30.93	200	WLWR	Cincinnati, Ohio (U.S.A.)	.....
9.700	30.93	200	WLWL	" " "	.....
9.700	30.93	200	KCBR	Delano, Cal. (U.S.A.)	.....
9.700	30.93	50	WRUA	Boston, Mass. (U.S.A.)	.....
9.700	30.93	50	WRUS	" " "	.....
9.700	30.93	20	WRUW	" " "	.....
9.700	30.93	10	CB970	Valparaiso (Chile)	.....
9.700	30.93	1	CP25	La Paz (Bolivia)	.....
9.708	30.90	—	—	Manila (Philippines)	.....
9.720	30.86	50	PRL7	Rio de Janeiro (Brazil)	.....
9.720	30.86	—	—	Moscow (U.S.S.R.)	.....
9.725	30.85	10	CR7BE	Lourenco Marques (Mozambique)	.....
9.727	30.84	—	—	Liepzig (Germany : U.S.S.R. Zone)	.....
9.730	30.83	10	CE970	Valparaiso (Chile)	.....
9.730	30.83	—	XGOA	Chungking (China)	.....
9.745	30.79	50	OTC2	Léopoldville (Belgian Congo)	.....
9.750	30.77	200	WLWL	Cincinnati, Ohio (U.S.A.)	.....
9.750	30.77	50	WNRA	Bound Brook, N.J. (U.S.A.)	.....
9.750	30.77	50	WNR1	" " "	.....
9.750	30.77	50	WNRX	" " "	.....
9.750	30.77	50	KCBA	Delano, Cal. (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
9.750	30.77	50	KCBF	Delano, Cal. (U.S.A.)	.....
9.760	30.74	—	—	Moscow (U.S.S.R.)	.....
9.800	30.58	—	—	Vienna (Austria; U.S.S.R. Zone)	.....
9.820	30.55	—	HNF	Baghdad (Iraq)	.....
9.825	30.53	—	GRH	British Overseas Service	.....
9.832	30.51	—	EAQ	Madrid (Spain)	.....
9.837	30.50	10	CR7BE	Lourenco Marques (Mozambique)	.....
9.850	30.46	—	PLU	Bandoeng, Java (Indonesia)	.....
9.860	30.43	—	—	Soerakarta, Java (Indonesia)	.....
9.880	30.36	—	—	Moscow (U.S.S.R.)	.....
9.912	30.26	1	—	Johannesburg (S. Africa)	.....
9.915	30.26	—	GRU	British Overseas Service	.....
9.958	30.12	10	HCJB	Quito (Ecuador)	.....
9.980	30.06	25	HVJ	Vatican City	.....
9.984	30.04	—	FZI	Brazzaville (French Eq. Africa)	.....
10.040	29.88	—	—	Kuibyshev (U.S.S.R.)	.....
10.055	29.83	10	—	Cairo (Egypt)	.....
10.135	29.60	—	HH3W	Port-au-Prince (Haiti)	.....
10.140	29.59	—	OTM	Léopoldville (Belgian Congo)	.....
10.205	29.40	—	—	Moscow (U.S.S.R.)	.....
10.220	29.35	12	PSH	Marapicu (Brazil)	.....
10.260	29.24	10	XRRRA	Peiping (China)	.....
10.405	28.83	25	HED4	Schwarzenburg (Switzerland)	.....
10.730	27.96	5	VQG3	Nairobi (Kenya)	.....
10.780	27.83	12	SDB2	Motala (Sweden)	.....
11.003	27.27	—	—	Bandoeng, Java (Indonesia)	.....
11.030	27.20	10	CSW6	Lisbon (Portugal)	.....
11.090	27.05	—	—	Ponta Delgada (Azores)	.....
11.610	25.84	—	—	Moscow (U.S.S.R.)	.....
11.630	25.79	—	RIG	" "	.....
11.645	25.76	50	—	Léopoldville (Belgian Congo)	.....
11.680	25.68	—	GRG	British Overseas Service	.....
11.700	25.64	—	GVW	" " "	.....
11.700	25.64	100	—	Allouis (France)	.....
11.700	25.64	1	HP5A	Panama City (Panama)	.....
11.705	25.63	50	CKXA	Sackville, N.B. (Canada)	.....
11.705	25.63	12	SBP	Motala (Sweden)	.....
11.705	25.63	7.5	CBFY	Verchères, Quebec (Canada)	.....

Mc/s	Metres	kW	Call	Station	Notes
11.705	25.63	—	JLW3	Tokio (Japan)	.....
11.710	25.62	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
11.710	25.62	200	WLWL	" " "	.....
11.710	25.62	200	WLWR	" " "	.....
11.710	25.62	100	—	Allouis (France)	.....
11.710	25.62	75	WLWO	Cincinnati, Ohio (U.S.A.)	.....
11.710	25.62	50	WLWK	" " "	.....
11.710	25.62	10	VLG3	Lyndhurst (Australia)	.....
11.710	25.62	5	—	Johannesburg (S. Africa)	.....
11.710	25.62	—	—	Moscow (U.S.S.R.)	.....
11.712	25.61	12	FHE3	Dakar (Fr. W. Africa)	.....
11.715	25.61	25	HEI5	Schwarzenburg (Switzerland)	.....
11.720	25.60	50	PRL8	Rio de Janeiro (Brazil)	.....
11.720	25.60	50	CHOL	Sackville, N.B. (Canada)	.....
11.720	25.60	5	—	Ruiselede (Belgium)	.....
11.720	25.60	2	CKRX	Winnipeg, Manitoba (Canada)	.....
11.720	25.60	—	—	Moscow (U.S.S.R.)	.....
11.725	25.59	—	JVW3	Tokio (Japan)	.....
11.725	25.59	—	XGSK	Nanking (China).	.....
11.730	25.58	—	GVV	British Overseas Service	.....
11.730	25.58	100	—	Allouis (France)	.....
11.730	25.58	100	KGEX	Belmont, Cal. (U.S.A.)	.....
11.730	25.58	50	KGEI	" " "	.....
11.730	25.58	50	WRUA	Boston, Mass. (U.S.A.)	.....
11.730	25.58	50	WRUS	" " "	.....
11.730	25.58	50	WRUL	" " "	.....
11.730	25.58	20	WRUW	" " "	.....
11.730	25.58	10	LRA3	Buenos Aires (Argentina)	.....
11.730	25.58	5	PHI	Huizen (Holland)	.....
11.735	25.56	5	CXA7	Montevideo (Uruguay)	.....
11.735	25.56	—	—	Belgrade (Yugoslavia)	.....
11.735	25.56	—	—	Fredrikstad (Norway)	.....
11.735	25.56	7.5	—	Singapore (Malaya)	.....
11.735	25.56	—	XGSL	Nanking (China)	.....
11.740	25.55	100	VLB10	Shepparton, Vic. (Australia)	.....
11.740	25.55	25	HVJ	Vatican City	.....
11.740	25.55	15	COCY	Havana (Cuba)	.....
11.740	25.55	4	CBI174	Santiago (Chile)	.....
11.740	25.55	—	—	Moscow (U.S.S.R.)	.....

Mc/s	Metres	kW	Call	Station	Notes
11.750	25.53	—	GSD	British Overseas Service	.....
11.750	25.53	—	—	Jerusalem (<i>Palestine</i>)	.....
11.750	25.53	—	—	Komsomolsk (<i>U.S.S.R.</i>)	.....
11.760	25.51	100	VLB8	Shepparton, Vic. (<i>Australia</i>)	.....
11.760	25.51	50	CKRA	Sackville, N.B. (<i>Canada</i>)	.....
11.760	25.51	10	VLG10	Lyndhurst, Vic. (<i>Australia</i>)	.....
11.760	25.51	20	VUD11	Delhi (<i>India</i>)	.....
11.765	25.50	25	ZYB8	Sao Paulo (<i>Brazil</i>)	.....
11.765	25.50	10	—	Algiers (<i>Algeria</i>)	.....
11.770	25.49	—	GVU	British Overseas Service	.....
11.770	25.49	200	KCBR	Delano, Cal. (<i>U.S.A.</i>)	.....
11.770	25.49	100	VLA4	Shepparton, Vic. (<i>Australia</i>)	.....
11.770	25.49	100	VLB3	" " "	.....
11.770	25.49	100	—	Colombo (<i>Ceylon</i>)	.....
11.775	25.48	25	HER4	Schwarzenburg (<i>Switzerland</i>)	.....
11.780	25.47	100	—	Allouis (<i>France</i>)	.....
11.780	25.47	—	XENN	Mexico City (<i>Mexico</i>)	.....
11.780	25.47	15	OIX3	Lahti (<i>Finland</i>)	.....
11.780	25.47	4	XORA	Shanghai (<i>China</i>)	.....
11.783	25.46	12	—	Saigon (<i>Fr. Indo-China</i>)	.....
11.790	25.45	75	WLWO	Cincinnati, Ohio (<i>U.S.A.</i>)	.....
11.790	25.45	50	WNRA	Bound Brook, N.J. (<i>U.S.A.</i>)	.....
11.790	25.45	50	KNBX	Dixon, Cal. (<i>U.S.A.</i>)	.....
11.790	25.45	50	WRUS	Boston, Mass. (<i>U.S.A.</i>)	.....
11.790	25.45	50	WRUL	" " "	.....
11.790	25.45	20	WRUW	" " "	.....
11.790	25.45	—	VUD5	Delhi (<i>India</i>)	.....
11.800	25.42	—	GWH	British Overseas Service	.....
11.800	25.42	1	CE1180	Santiago (<i>Chile</i>)	.....
11.800	25.42	—	XGSM	Nanking (<i>China</i>)	.....
11.810	25.40	200	KCBR	Delano, Cal. (<i>U.S.A.</i>)	.....
11.810	25.40	100	VLB4	Shepparton, Vic. (<i>Australia</i>)	.....
11.810	25.40	50	WGEA	Schenectady, N.Y. (<i>U.S.A.</i>)	.....
11.810	25.40	50	WOOW	Wayne, N.J. (<i>U.S.A.</i>)	.....
11.810	25.40	50	—	Milan (<i>Italy</i>)	.....
11.810	25.40	7.5	HOXB	Panama City (<i>Panama</i>)	.....
11.815	25.39	25	HEU5	Schwarzenburg (<i>Switzerland</i>)	.....
11.820	25.38	—	GSN	British Overseas Service	.....
11.830	25.36	50	WCBX	Brentwood, N.Y. (<i>U.S.A.</i>)	.....

Mc/s	Metres	kW	Call	Station	Notes
11.830	25.36	50	WCBN	Brentwood N.Y. (U.S.A.)	.....
11.830	25.36	50	WCRC	" " "	.....
11.830	25.36	50	WOOC	Wayne, N.J. (U.S.A.)	.....
11.830	25.36	50	WOOW	" " "	.....
11.830	25.36	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
11.830	25.36	2	VLW3	Perth (Australia)	.....
11.830	25.36	—	—	Moscow (U.S.S.R.)	.....
11.830	25.36	10	VUD4	Delhi (India)	.....
11.833	25.35	5	CXA19	Montevideo (Uruguay)	.....
11.835	25.35	10	THA	Algiers (Algeria)	.....
11.835	25.35	10	CR7BF	Lourenco Marques (Mozambique)	.....
11.840	25.34	—	GWQ	British Overseas Service	.....
11.840	25.34	50	VLC7	Shepparton, Vic. (Australia)	.....
11.840	25.34	17	OLR4A	Podebrady (Czechoslovakia)	.....
11.840	25.34	10	VLG4	Lyndhurst (Australia)	.....
11.840	25.34	10	CSW5	Lisbon (Portugal)	.....
11.845	25.33	—	—	Rangoon (Burma)	.....
11.845	25.33	25	—	Muret (France)	.....
11.847	25.33	100	WGEO	Schenectady, N.Y. (U.S.A.)	.....
11.847	25.33	50	WGEA	" " "	.....
11.850	25.32	5	ORY	Ruiselede (Belgium)	.....
11.850	25.32	25	CE1185	Santiago (Chile)	.....
11.850	25.32	12	—	Marapicu (Brazil)	.....
11.850	25.32	1.2	ZPA3	Asuncion (Paraguay)	.....
11.850	25.32	20	VUD11	Delhi (India)	.....
11.850	25.32	6	—	Copenhagen (Denmark)	.....
11.857	25.30	—	—	Rabat (Morocco, French)	.....
11.860	25.30	—	—	Madan, Sumatra (Indonesia)	.....
11.860	25.30	—	GSE	British Overseas Service	.....
11.865	25.28	25	HER5	Schwarzenburg (Switzerland)	.....
11.870	25.27	100	KWID	San Francisco, Cal. (U.S.A.)	.....
11.870	25.27	50	KWIX	" " "	.....
11.870	25.27	50	WBOS	Boston, Mass. (U.S.A.)	.....
11.870	25.27	50	WOOC	Wayne, N.J. (U.S.A.)	.....
11.870	25.27	50	WOOW	" " "	.....
11.870	25.27	50	—	Munich (Germany : U.S. Zone)	.....
11.870	25.27	50	WNRA	Bound Brook, N.J. (U.S.A.)	.....
11.870	25.27	7.5	VUD9	Delhi (India)	.....

Mc/s	Metres	kW	Call	Station	Notes
11.875	25.26	—	—	Moscow (U.S.S.R.)	.....
11.880	25.25	10	VLG5	Lyndhurst, Vic. (Australia)	.....
11.880	25.25	10	VLH4	" " "	.....
11.880	25.25	10	—	Algiers (Algeria)	.....
11.880	25.25	—	—	Moscow (U.S.S.R.)	.....
11.880	25.25	1	XERH	Mexico City (Mexico)	.....
11.880	25.25	—	XGSN	Nanking (China)	.....
11.885	25.24	25	—	Muret (France)	.....
11.887	25.26	10	LRR	Rosario (Argentina)	.....
11.890	25.23	100	KRHO	Honolulu (Hawaii)	.....
11.890	25.23	50	WNRE	Bound Brook, N.J. (U.S.A.)	.....
11.890	25.23	50	WNRA	" " " "	.....
11.890	25.23	50	WNRX	" " " "	.....
11.890	25.23	50	WNR1	" " " "	.....
11.890	25.23	50	KWIX	San Francisco, Cal. (U.S.A.)	.....
11.890	25.23	—	—	Moscow (U.S.S.R.)	.....
11.893	25.22	50	WNBI	Bound Brook, N.J. (U.S.A.)	.....
11.893	25.22	50	WRCA	" " " "	.....
11.893	25.22	5	—	Ruiselede (Belgium)	.....
11.895	25.22	1	—	Suva (Fiji Islands)	.....
11.900	25.21	100	KWID	San Francisco, Cal. (U.S.A.)	.....
11.900	25.21	50	CKEX	Sackville, N.B. (Canada)	.....
11.900	25.21	20	CXA10	Montevideo (Uruguay)	.....
11.900	25.21	10	VLG9	Lyndhurst, Vic. (Australia)	.....
11.900	25.21	5	CEI190	Valparaiso (Chile)	.....
11.900	25.21	—	XGOY	Chungking (China)	.....
11.910	25.19	—	—	Moscow (U.S.S.R.)	.....
11.913	25.18	35	XGOY	Chungking (China)	.....
11.930	25.15	—	GVX	British Overseas Service	.....
11.940	25.13	12	CNR2	Rabat (Morocco, French)	.....
11.950	25.10	3	ZPA5	Encarnacion (Paraguay)	.....
11.955	25.09	—	GVY	British Overseas Service	.....
11.960	25.08	25	HEK4	Schwarzenburg (Switzerland)	.....
11.965	25.07	—	HEF7	" "	.....
11.972	25.06	50	FZ1	Brazzaville (Fr. Eq. Africa)	.....
11.975	25.05	—	—	Moscow (U.S.S.R.)	.....
12.040	24.92	—	GRV	British Overseas Service	.....
12.080	24.83	12	PST	Marapicu (Brazil)	.....
12.095	24.80	—	GRF	British Overseas Service	.....

Mc/s	Metres	kW	Call	Station	Notes
12.116	24.76	12	TPZ	Algiers (Algeria)	.....
12.140	24.70	—	—	Vienna (Austria; U.S.S.R. Zone)	.....
12.228	24.53	1	—	Tangier (Morocco : Intl. Zone)	.....
12.270	24.45	—	—	Moscow (U.S.S.R.)	.....
12.370	24.25	7	TFJ	Reykjavik (Iceland)	.....
12.455	24.09	10	HCJB	Quito (Ecuador)	.....
12.539	23.92	—	—	Hanoi (French Indo-China)	.....
12.750	23.53	—	CSX	Lisbon (Portugal)	.....
12.865	23.32	—	CSWI	" "	.....
13.050	22.99	50	WNRJ	Bound Brook, N.J. (U.S.A.)	.....
13.320	22.52	—	—	Omdurman (Sudan)	.....
13.400	22.39	—	—	Moscow (U.S.S.R.)	.....
14.280	21.00	1	—	Tangier (Morocco : Intl. Zone)	.....
14.400	20.85	25	—	Andorra	.....
14.462	20.74	25	HBZ3	Geneva (Switzerland)	.....
14.538	20.64	25	HBZ2	" "	.....
14.560	20.60	50	WNRX	Bound Brook, N.J. (U.S.A.)	.....
15.040	19.95	—	—	Moscow (U.S.S.R.)	.....
15.070	19.91	—	GWC	British Overseas Service	.....
15.078	19.89	—	—	Addis Abbaba (Ethiopia)	.....
15.090	19.88	50	CKLX	Sackville, N.B. (Canada)	.....
15.090	19.88	7.5	CBLX	Verchères, Quebec (Canada)	.....
15.100	19.87	100	—	Allouis (France)	.....
15.100	19.87	7.5	HOXA	Panama City (Panama)	.....
15.100	19.87	—	—	Teheran (Iran)	.....
15.104	19.86	—	—	Rabat (Morocco, French)	.....
15.105	19.86	—	XGSO	Nanking (China)	.....
15.110	19.85	—	GWG	British Overseas Service	.....
15.110	19.85	—	JLG4	Tokio (Japan)	.....
15.117	19.85	10	HCJB	Quito (Ecuador)	.....
15.120	19.84	—	—	Rome (Italy)	.....
15.120	19.84	100	—	Colombo (Ceylon)	.....
15.120	19.84	25	HVJ	Vatican City	.....
15.120	19.84	25	HED7	Schwarzenburg (Switzerland)	.....
15.130	19.83	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
15.130	19.83	200	WLWR	" " "	.....
15.130	19.83	200	WLWL	" " "	.....
15.130	19.83	50	KCBA	Delano, Cal. (U.S.A.)	.....
15.130	19.83	50	KGEI	Belmont, Cal. (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
15.130	19.83	50	WRUA	Boston, Mass. (U.S.A.)	.....
15.130	19.83	50	WRUL	" " "	.....
15.130	19.83	50	WRUS	" " "	.....
15.130	19.83	20	WRUW	" " "	.....
15.130	19.83	—	VUD3	Delhi (India)	.....
15.135	19.82	—	XGSP	Nanking (China)	.....
15.140	19.81	—	GSF	British Overseas Service	.....
15.140	19.81	—	JLW6	Tokio (Japan)	.....
15.145	19.81	20	—	Rio de Janeiro (Brazil)	.....
15.150	19.80	200	KCBR	Delano, Cal. (U.S.A.)	.....
15.150	19.80	10	OAX4R	Lima (Peru)	.....
15.150	19.80	50	WNRE	Bound Brook, N.J. (U.S.A.)	.....
15.150	19.80	50	WNRI	" " " "	.....
15.150	19.80	50	WNRX	" " " "	.....
15.150	19.80	50	WNRA	" " " "	.....
15.150	19.80	50	WRCA	" " " "	.....
15.150	19.80	50	WNB1	" " " "	.....
15.155	19.79	10	SBT	Motala (Sweden)	.....
15.155	19.79	25	ZYB9	Sao Paulo (Brazil)	.....
15.160	19.79	10	VLG7	Lyndhurst, Vic. (Australia)	.....
15.160	19.79	100	VUD7	Delhi (India)	.....
15.160	19.79	—	—	Suva (Fiji Islands)	.....
15.165	19.78	10	—	Algiers (Algeria)	.....
15.165	19.78	6	—	Copenhagen (Denmark)	.....
15.165	19.78	10	PRE9	Fortaleza (Brazil)	.....
15.167	19.78	—	RW96	Moscow (U.S.S.R.)	.....
15.165	19.78	50	OTC4	Léopoldville (Belgian Congo)	.....
15.170	19.77	10	TGWA	Guatemala City (Guatemala)	.....
15.180	19.76	—	GSO	British Overseas Service	.....
15.190	19.75	50	CKCX	Sackville, N.B. (Canada)	.....
15.190	19.75	50	WNB1	Bound Brook, N.J. (U.S.A.)	.....
15.190	19.75	50	WNRI	" " " "	.....
15.190	19.75	50	WNRX	" " " "	.....
15.190	19.75	50	WNRE	" " " "	.....
15.190	19.75	50	WNRA	" " " "	.....
15.190	19.75	50	WRCA	" " " "	.....
15.190	19.75	15	OIX4	Pori (Finland)	.....
15.190	19.75	7.5	CBFZ	Verchères, Quebec (Canada)	.....
15.190	19.75	100	VUD5	Delhi (India)	.....

Mc/s	Metres	kW	Call	Station	Notes
15.195	19.74	—	TAQ	Ankara (Turkey)	.....
15.200	19.74	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
15.200	19.74	100	VLA6	Shepparton, Vic. (Australia)	.....
15.200	19.74	100	VLB6	" " "	.....
15.200	19.74	50	WOOC	Wayne, N.J. (U.S.A.)	.....
15.200	19.74	20	XGOX	Chungking (China)	.....
15.210	19.72	100	KGEX	Belmont, Cal. (U.S.A.)	.....
15.210	19.72	50	WBOS	Boston, Mass. (U.S.A.)	.....
15.210	19.72	50	KGEI	Belmont, Cal. (U.S.A.)	.....
15.210	19.72	50	VLC11	Shepparton, Vic. (Australia)	.....
15.210	19.72	—	VUD3	Delhi (India)	.....
15.215	19.72	10	CSW4	Lisbon (Portugal)	.....
15.220	19.71	50	CHTA	Sackville, N.B. (Canada)	.....
15.220	19.71	30	PCJ	Huizen (Holland)	.....
15.225	19.70	—	XGSQ	Nanking (China)	.....
15.225	19.70	—	JLT3	Tokio (Japan)	.....
15.230	19.70	200	WLWL	Cincinnati, Ohio (U.S.A.)	.....
15.230	19.70	17	OLR5A	Podebrady (Czechoslovakia)	.....
15.230	19.70	10	VLH5	Lyndhurst, Vic. (Australia)	.....
15.230	19.70	—	—	Moscow (U.S.S.R.)	.....
15.235	19.69	—	XGSR	Nanking (China)	.....
15.235	19.69	—	JVW4	Tokio (Japan)	.....
15.240	19.69	100	—	Allouis (France)	.....
15.240	19.69	50	KCBA	Delano, Cal. (U.S.A.)	.....
15.240	19.69	10	CR7BD	Lourenco Marques (Mozambique)	.....
15.240	19.69	10	VLG6	Lyndhurst, Vic. (Australia)	.....
15.250	19.67	200	WLWL	Cincinnati, Ohio (U.S.A.)	.....
15.250	19.67	200	WLWS	" " "	.....
15.250	19.67	100	KRHO	Honolulu (Hawaii)	.....
15.250	19.67	75	WLWO	Cincinnati, Ohio (U.S.A.)	.....
15.250	19.67	50	WBOS	Boston, Mass. (U.S.A.)	.....
15.250	19.67	50	KNBX	Dixon, Cal. (U.S.A.)	.....
15.250	19.67	50	WLWK	Cincinnati, Ohio (U.S.A.)	.....
15.260	19.66	—	GS1	British Overseas Service	.....
15.262	19.65	7.5	—	Singapore (Malaya)	.....
15.267	19.65	50	WCBX	Brentwood, N.Y. (U.S.A.)	.....
15.267	19.65	50	WCRC	" " "	.....
15.267	19.65	10	WCDA	" " "	.....

Mc/s	Metres	kW	Call	Station	Notes
15.270	19.65	50	WCBN	Brentwood, N.Y. (U.S.A.)	.....
15.270	19.65	50	WCBX	" " "	.....
15.270	19.65	50	WOOW	Wayne, N.J. (U.S.A.)	.....
15.270	19.65	50	WOOC	" " "	.....
15.270	19.65	—	—	Moscow (U.S.S.R.)	.....
15.280	19.63	50	WNRE	Bound Brook, N.J. (U.S.A.)	.....
15.280	19.63	5	—	Ruiselede (Belgium)	.....
15.280	19.63	—	ZL4	Wellington (New Zealand)	.....
15.290	19.62	100	KWID	San Francisco, Cal. (U.S.A.)	.....
15.290	19.62	50	WRUL	Boston, Mass. (U.S.A.)	.....
15.290	19.62	50	KWIX	San Francisco, Cal. (U.S.A.)	.....
15.290	19.62	20	VUDI	Delhi (India)	.....
15.295	19.61	25	—	Realtort (France)	.....
15.295	19.61	—	—	Belgrade (Yugoslavia)	.....
15.299	19.61	—	CSW7	Lisbon (Portugal)	.....
15.300	19.61	—	GWR	British Overseas Service	.....
15.300	19.61	2.5	CXA18	Montevideo (Uruguay)	.....
15.300	19.61	1	CP7	La Paz (Bolivia)	.....
15.300	19.61	7.5	—	Singapore (Malaya)	.....
15.305	19.60	25	HER6	Schwarzenburg (Switzerland)	.....
15.308	19.60	—	—	Milan (Italy)	.....
15.310	19.60	—	GSP	British Overseas Service	.....
15.315	19.59	—	—	Moscow (U.S.S.R.)	.....
15.318	19.59	25	HE17	Schwarzenburg (Switzerland)	.....
15.320	19.58	100	VLA5	Shepparton, Vic. (Australia)	.....
15.320	19.58	50	VLC4	" " "	.....
15.320	19.58	50	CKCS	Sackville, N.B. (Canada)	.....
15.320	19.58	5	OZH	Copenhagen (Denmark)	.....
15.320	19.58	—	—	Moscow (U.S.S.R.)	.....
15.325	19.58	—	JKVK	Tokio (Japan)	.....
15.326	19.58	10	CR7BG	Lourenco Marques (Mozambique)	.....
15.330	19.57	200	KCBR	Delano, Cal. (U.S.A.)	.....
15.330	19.57	100	WGEO	Schenectady, N.Y. (U.S.A.)	.....
15.330	19.57	50	WGEA	" " "	.....
15.330	19.57	50	KGEI	Belmont, Cal. (U.S.A.)	.....
15.335	19.56	5	—	Ruiselede (Belgium)	.....
15.340	19.56	50	KNBX	Dixon, Cal. (U.S.A.)	.....
15.340	19.56	—	—	Moscow (U.S.S.R.)	.....

Mc/s	Metres	kW	Call	Station	Notes
15.350	19.54	75	WLWO	Cincinnati, Ohio (U.S.A.)	
15.350	19.54	50	WRUA	Boston, Mass. (U.S.A.)	
15.350	19.54	50	WRUL	" " "	
15.350	19.54	20	WRUW	" " "	
15.350	19.54	50	WRUS	" " "	
15.350	19.54	25	—	Realtort (France)	
15.350	19.54	—	YUD8	Delhi (India)	
15.360	19.53	—	—	Moscow (U.S.S.R.)	
15.370	19.52	25	ZYC9	Rio de Janeiro (Brazil)	
15.375	19.51	—	GRE	British Overseas Service	
15.390	19.49	12	FHE2	Dakar (French W. Africa)	
15.410	19.47	—	—	Moscow (U.S.S.R.)	
15.420	19.46	—	GWD	British Overseas Service	
15.435	19.44	—	GWE	" " "	
15.440	19.43	—	—	Moscow (U.S.S.R.)	
15.450	19.42	—	GRD	British Overseas Service	
15.530	19.31	2	—	Teheran (Iran)	
15.595	19.24	50	FZI	Brazzaville (French Eq. Africa)	
15.715	19.09	—	—	Moscow (U.S.S.R.)	
16.666	18.00	2	—	Rabat (Morocco, French)	
17.450	17.19	25	HVJ	Vatican City	
17.530	17.11	1.5	—	Brazzaville (Fr. Eq. Africa)	
17.700	16.95	—	GVP	British Overseas Service	
17.715	16.93	—	GRA	" " "	
17.720	16.93	10	LRA5	Buenos Aires (Argentina)	
17.730	16.92	—	GVQ	British Overseas Service	
17.745	16.91	50	OTCS	Léopoldville (Belgian Congo)	
17.750	16.90	—	—	Moscow (U.S.S.R.)	
17.750	16.90	50	WRUA	Boston, Mass. (U.S.A.)	
17.750	16.90	50	WRUS	" " "	
17.750	16.90	50	WRUL	" " "	
17.750	16.90	20	WRUW	" " "	
17.755	16.90	—	XGSS	Nanking (China)	
17.760	16.89	100	KWID	San Francisco, Cal. (U.S.A.)	
17.760	16.89	50	KWIX	" " "	
17.760	16.89	5	YUD3	Delhi (India)	
17.765	16.88	25	—	Muret (France)	
17.770	16.88	100	—	Colombo (Ceylon)	
17.770	16.88	25	HED8	Schwarzenburg (Switzerland)	

Mc/s	Metres	kW	Call	Station	Notes
17.770	16.88	50	KNBI	Dixon, Cal., (U.S.A.)	.....
17.770	16.88	50	KNBA	" " "	.....
17.770	16.88	—	ZL5	Wellington (New Zealand)	.....
17.775	16.88	5	PHI	Huizen (Holland)	.....
17.780	16.87	50	KCBR	Delano, Cal. (U.S.A.)	.....
17.780	16.87	50	WBOS	Boston, Mass. (U.S.A.)	.....
17.780	16.87	50	WRCA	Bound Brook, N.J. (U.S.A.)	.....
17.780	16.87	50	WNBI	" " " "	.....
17.784	16.87	25	HER7	Schwarzenburg (Switzerland)	.....
17.785	16.87	—	XGST	Nanking (China)	.....
17.790	16.86	—	GSG	British Overseas Service	.....
17.800	16.85	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
17.800	16.85	200	WLWR	" " "	.....
17.800	16.85	200	WLWL	" " "	.....
17.800	16.85	100	VLA7	Shepparton, Vic. (Australia)	.....
17.800	16.85	100	VLB7	" " "	.....
17.800	16.85	100	KRHO	Honolulu (Hawaii)	.....
17.800	16.85	75	WLWO	Cincinnati, Ohio (U.S.A.)	.....
17.800	16.85	50	WLWK	" " "	.....
17.800	16.85	20	XGOX	Chungking (China)	.....
17.800	16.85	1	OIX5	Helsinki (Finland)	.....
17.810	16.84	—	GSV	British Overseas Service	.....
17.810	16.84	—	—	Moscow (U.S.S.R.)	.....
17.812	16.84	—	—	Rabat (Morocco, French)	.....
17.820	16.84	50	CKNC	Sackville, N.B. (Canada)	.....
17.830	16.83	50	WCRC	Brentwood, N.Y. (U.S.A.)	.....
17.830	16.83	50	WCBX	" " "	.....
17.830	16.83	50	WCBN	" " "	.....
17.830	16.83	50	WOOW	Wayne, N.J. (U.S.A.)	.....
17.830	16.83	50	WOOC	" " "	.....
17.830	16.83	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
17.830	16.83	20	VUDI0	Delhi (India)	.....
17.835	16.82	—	XGSU	Nanking (China)	.....
17.835	16.82	6	—	Copenhagen (Denmark)	.....
17.835	16.82	—	JLP3	Tokio (Japan)	.....
17.840	16.82	100	VLA10	Shepparton, Vic. (Australia)	.....
17.840	16.82	25	HVJ	Vatican City	.....
17.840	16.82	50	VLC9	Shepparton, Vic. (Australia)	.....
17.843	16.81	7	—	Brazzaville (French Eq. Africa)	.....

Mc/s	Metres	kW	Call	Station	Notes
17.845	16.81	5	—	Ruiselede (Belgium)	.....
17.845	16.81	—	XGSV	Nanking (China)	.....
17.850	16.81	50	PRL9	Rio de Janeiro (Brazil)	.....
17.850	16.81	50	KCBF	Delano, Cal. (U.S.A.)	.....
17.850	16.81	25	—	Muret (France)	.....
17.850	16.81	50	KNBI	Dixon, Cal. (U.S.A.)	.....
17.859	16.80	—	—	Moscow (U.S.S.R.)	.....
17.860	16.80	5	—	Ruiselede (Belgium)	.....
17.880	16.78	50	KGEX	Belmont, Cal. (U.S.A.)	.....
17.880	16.78	—	WGEX	Schenectady, N.Y. (U.S.A.)	.....
17.910	16.75	—	—	Moscow (U.S.S.R.)	.....
17.955	16.71	200	WLWR	Cincinnati, Ohio (U.S.A.)	.....
17.955	16.71	200	WLWL	" " "	.....
18.025	16.64	—	GRQ	British Overseas Service	.....
18.080	16.59	—	GVO	" " "	.....
18.130	16.55	—	GRP	" " "	.....
18.150	16.53	25	HVJ	Vatican City	.....
18.160	16.52	50	WNRA	Bound Brook, N.J. (U.S.A.)	.....
18.160	16.52	50	WNRI	" " "	.....
18.390	16.31	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
18.450	16.26	20	HBF	Geneva (Switzerland)	.....
18.540	16.18	—	—	Moscow (U.S.S.R.)	.....
18.600	16.13	—	—	Bandoeng, Java (Indonesia)	.....
19.350	15.50	—	PMA	" " "	.....
19.790	15.16	3	—	Batavia, " "	.....
21.000	14.29	—	FZI	Brazzaville (French Eq. Africa)	.....
21.450	13.99	5	—	Ruiselede (Belgium)	.....
21.450	13.99	—	XGSW	Nanking (China)	.....
21.460	13.98	50	WRUA	Boston, Mass. (U.S.A.)	.....
21.460	13.98	50	WRUL	" " "	.....
21.460	13.98	50	WRUS	" " "	.....
21.460	13.98	50	KCBF	Delano, Cal. (U.S.A.)	.....
21.470	13.97	—	—	Colombo (Ceylon)	.....
21.470	13.97	—	GSH	British Overseas Service	.....
21.480	13.96	5	PHI	Huizen (Holland)	.....
21.490	13.96	50	KGEI	Belmont, Cal. (U.S.A.)	.....
21.495	13.95	—	—	Moscow (U.S.S.R.)	.....
21.500	13.95	50	WGEA	Schenectady, N.Y. (U.S.A.)	.....
21.500	13.95	50	WOOW	Wayne, N.J. (U.S.A.)	.....

Mc/s	Metres	kW	Call	Station	Notes
21.510	13.95	7.5	VUD8	Delhi (India)	.....
21.510	13.95	—	XGSX	Nanking (China)	.....
21.510	13.94	—	—	Moscow (U.S.S.R.)	.....
21.520	13.94	50	WCBN	Brentwood, N.Y. (U.S.A.)	.....
21.520	13.94	50	WCBX	" " "	.....
21.520	13.94	50	WCRC	" " "	.....
21.520	13.94	50	WOOC	Wayne, N.J. (U.S.A.)	.....
21.520	13.94	50	WOOW	" " "	.....
21.520	13.94	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
21.530	13.93	—	GSJ	British Overseas Service	.....
21.540	13.93	50	WBOS	Boston, Mass. (U.S.A.)	.....
21.540	13.93	100	VLB5	Shepparton, Vic. (Australia)	.....
21.550	13.92	—	—	Moscow (U.S.S.R.)	.....
21.550	13.92	—	GST	British Overseas Service	.....
21.550	13.92	10	—	Rio de Janeiro (Brazil)	.....
21.550	13.92	—	XGSY	Nanking (China)	.....
21.570	13.91	50	WCBX	Brentwood, N.Y. (U.S.A.)	.....
21.570	13.91	50	WCBN	" " "	.....
21.570	13.91	50	WCRC	" " "	.....
21.570	13.91	50	WOOW	Wayne, N.J. (U.S.A.)	.....
21.570	13.91	50	WOOC	" " "	.....
21.570	13.91	10	WCDA	Brentwood, N.Y. (U.S.A.)	.....
21.590	13.89	50	WGEA	Schenectady, N.Y. (U.S.A.)	.....
21.600	13.89	100	VLA9	Shepparton, Vic. (Australia)	.....
21.600	13.89	100	VLB8	" " "	.....
21.610	13.88	100	KWID	San Francisco, Cal. (U.S.A.)	.....
21.610	13.88	50	WNRX	Bound Brook, N.J. (U.S.A.)	.....
21.610	13.88	50	KNBI	Dixon, Cal. (U.S.A.)	.....
21.610	13.88	50	KWIX	San Francisco, Cal. (U.S.A.)	.....
21.620	13.88	—	XGSZ	Nanking (China)	.....
21.620	13.87	—	—	Colombo (Ceylon)	.....
21.630	13.87	50	KNBA	Dixon, Cal. (U.S.A.)	.....
21.630	13.87	50	WRCA	Bound Brook, N.J. (U.S.A.)	.....
21.630	13.87	50	WNBI	" " " "	.....
21.630	13.87	50	WNRX	" " " "	.....
21.630	13.87	50	WNRI	" " " "	.....
21.630	13.87	50	WNRE	" " " "	.....
21.630	13.87	50	WNRA	" " " "	.....
21.640	13.86	—	GRZ	British Overseas Service	.....

Mc/s	Metres	kW	Call	Station	Notes
21.650	13.85	200	WLWS	Cincinnati, Ohio (U.S.A.)	.....
21.650	13.85	200	WLWR	" " "	.....
21.650	13.85	200	WLWL	" " "	.....
21.650	13.85	75	WLWO	" " "	.....
21.650	13.85	50	WLWK	" " "	.....
21.675	13.84	—	GVR	British Overseas Service	.....
21.680	13.84	50	VLC10	Shepparton, Vic. (Australia)	.....
21.680	13.84	50	—	Léopoldville (Belgian Congo)	.....
21.690	13.83	50	WLWK	Cincinnati, Ohio (U.S.A.)	.....
21.710	13.82	—	GVS	British Overseas Service	.....
21.710	13.82	50	CHLA	Sackville, N.B. (Canada)	.....
21.715	13.82	5	—	Ruselede (Belgium)	.....
21.730	13.81	50	WNRX	Bound Brook, N.J. (U.S.A.)	.....
21.740	13.80	100	—	Allouis (France)	.....
21.750	13.79	—	GVT	British Overseas Service	.....
25.600	11.72	20	WRUW	Boston, Mass. (U.S.A.)	.....
25.750	11.65	—	GSQ	British Overseas Service	.....
25.800	11.63	—	ZL6	Wellington (New Zealand)	.....
26.100	11.49	—	GSK	British Overseas Service	.....
26.200	11.45	5	—	Ruselede (Belgium)	.....
26.400	11.36	—	GSR	British Overseas Service	.....
26.470	11.33	5	—	Ruselede (Belgium)	.....
26.550	11.30	—	GSS	British Overseas Service	.....
27.000	11.11	2.5	CXA11	Montevideo (Uruguay)	.....

SPECIAL SERVICE STATIONS

kc/s	Metres	kW	Call	Station
245	1224	—	Airmet	Borough Hill, Daventry, Great Britain
2,500	120	1	WWV	Standard Frequency Station, Washington, U.S.A.
5,000	60	10	WWV	
10,000	30	10	WWV	
15,000	20	10	WWV	

Geographical List of Short-wave Stations

	Mc/s	Australia—Cont.	Mc/s	Belg.Congo—Cont.	Mc/s
ALBANIA		Lyndhurst, Vic.	11.760	Léopoldville	10.140
Tirana	7.700	"	11.840	"	11.645
"	7.852	"	11.880	"	15.165
ALGERIA		"	11.900	"	17.745
Algiers	6.040	"	15.160	"	21.680
"	9.610	"	15.230	BELGIUM	
"	9.660	"	15.240	Ruiselede	6.200
"	11.535	Perch, W.A.	9.520	"	7.300
"	11.765	"	11.830	"	9.480
"	11.880	Shepparton, Vic.	7.280	"	9.665
"	12.116	"	9.540	"	11.720
"	15.165	"	9.615	"	11.850
ANDORRA		"	9.680	"	11.893
"	5.980	"	11.740	"	15.280
"	9.330	"	11.760	"	15.335
"	14.400	"	11.770	"	17.845
ARGENTINA		"	11.810	"	17.860
Buenos Aires	6.065	"	11.840	"	21.450
"	6.080	"	15.200	"	21.715
"	6.120	"	15.210	"	26.200
"	9.573	"	15.315	"	26.470
"	9.640	"	15.320	BOLIVIA	
"	9.660	"	17.800	La Paz	6.110
"	9.690	"	17.840	"	9.505
"	11.730	"	21.540	"	9.520
"	17.720	"	21.600	"	9.700
Mendoza	6.180	"	21.680	"	15.300
Rosario	11.887	AUSTRIA		BRAZIL	
AUSTRALIA		(U.S. Zone)		Belo Horizonte	6.000
Brisbane, Qld.	7.215	Linz	9.560	Fortaleza	15.165
"	7.240	Salzburg	7.220	Marapicu	7.934
"	9.660	AZORES		"	9.500
Lyndhurst, Vic.	6.150	Ponta Delgada	11.090	"	9.600
"	9.540	BELGIAN CONGO		"	10.220
"	9.580	Léopoldville	6.140	"	11.850
"	11.710	"	9.380	"	12.080
		"	9.745	Recife	6.015

Brazil—Cont.	Mc/s	Canada—Cont.	Mc/s	China—Cont.	Mc/s
Rio de Janeiro	9.610	Vercheres, Quebec	11.705	Nanking	9.535
" "	9.720	" "	15.090	"	9.605
" "	11.720	" "	15.190	"	9.655
" "	15.145	Winnipeg, Manitoba	6.150	"	9.675
" "	15.370	" "	11.720	"	11.725
" "	17.850	CANARY ISLANDS		"	11.735
" "	21.550	Teneriffe	7.558	"	11.800
Sao Paulo	6.095	CEYLON		"	11.880
" "	11.765	Colombo	6.075	"	15.105
" "	15.155	"	7.185	"	15.135
BRITISH GUIANA		"	9.520	"	15.225
Georgetown	6.000	"	11.770	"	15.235
BULGARIA		"	15.120	"	17.755
Sofia	9.350	"	17.770	"	17.785
BURMA		"	21.470	"	17.835
Rangoon	6.040	"	21.620	"	17.845
"	9.545	CHILE		"	21.450
"	11.845	Antofagasta	6.010	"	21.510
CANADA		Santiago	6.220	"	21.550
Sackville, N.B.	6.060	"	6.250	"	21.620
"	6.090	"	9.600	Peiping	6.090
"	6.160	"	9.730	"	10.260
"	9.610	"	11.740	Shanghai	11.780
"	9.630	"	11.800	COLOMBIA	
"	9.640	"	11.850	Bogota	6.160
"	11.705	Valparaiso	6.150	"	6.199
"	11.720	"	9.700	"	9.690
"	11.760	"	11.900	Manizales	6.105
"	11.900	CHINA		Medellin	6.145
"	15.090	Chungking	6.146	Pereira	6.054
"	15.190	"	7.153	"	6.097
"	15.220	"	9.635	COSTA RICA	
"	15.320	"	9.730	San Jose	5.865
"	17.820	"	11.900	" "	6.700
"	21.710	"	11.913	" "	9.615
Sydney, N.S.	6.010	"	15.200	San Pedro	6.165
Toronto, Ont.	6.070	"	17.800	CUBA	
Vercheres, Quebec	6.005	Kweiyang	6.990	Camaguey	8.660
" "	6.090	Nanking	5.918	Guanabacoa	9.440
" "	9.607	"	7.200	Havana	6.040
" "	9.630	"	7.258	"	6.320

	Mc/s		Mc/s		Mc/s
Cuba—Cont.		ETHIOPIA		FRENCH EQ. AFRICA	
Havana	8.825	Addis Abbaba	8.240	Brazzaville	6.024
"	9.235	" "	15.078	"	7.001
"	9.640	" "		"	9.440
"	11.740	" "		"	9.984
Regla	6.130	FIJI ISLANDS		"	11.972
Santa Clara	6.455	Suva	6.130	"	15.595
Santiago	7.058	"	11.895	"	17.530
"	8.955	"	15.160	"	17.843
CURACAO		"		"	21.000
Willemstad	7.250	FINLAND			
CZECHOSLOVAKIA		Helsinki	6.120	FRENCH INDO-CHINA	
Podebrady	6.010	"	17.800	Hanoi	12.539
"	6.030	Lahti	11.780	Saigon	11.783
"	6.170	Pori	9.500		
"	9.550	"	15.190	FRENCH W. AFRICA	
"	11.840	FRANCE		Dakar	4.893
"	15.230	Allouis	6.160	"	6.917
DENMARK		"	6.175	"	7.210
Copenhagen	7.260	"	6.200	"	8.890
"	9.520	"	7.280	"	9.405
"	11.850	"	9.500	"	9.562
"	15.165	"	9.520	"	11.712
"	15.320	"	9.550	"	15.390
"	17.835	"	9.675		
DOMINICAN REPUBLIC		"	9.685	GERMANY	
Ciudad Trujillo	6.243	"	11.700	(British Zone)	
"	6.380	"	11.710	Hamburg	6.115
DUTCH E. INDIES		"	11.730	"	7.290
(See Indonesia)		"	11.780	(French Zone)	
ECUADOR		"	15.100	Baden Baden	6.320
Guayaquil	9.310	"	15.240	" "	7.250
Quito	7.265	"	21.740	(U.S. Zone)	
"	9.958	Les Essarts	9.560	Munich	6.080
"	12.455	Muret	11.845	"	6.170
"	15.117	"	11.885	"	7.290
EGYPT		"	17.765	"	8.565
Cairo	7.867	"	17.850	"	9.540
"	10.055	Realtort	7.236	"	11.870
		"	9.620	(U.S.S.R. Zone)	
		"	15.295	Berlin	6.070
		"	15.350	Leipzig	9.727

GOLD COAST			Mc/s	Great Britain—Cont.			Mc/s	Great Britain—Cont.			Mc/s
Accra			4.911	British Overseas				British Overseas			
"			7.050		Service	11.700			Service	26.100	
GREAT BRITAIN				"	"	11.730	"	"	"	26.400	
British Overseas				"	"	11.750	"	"	"	26.550	
	Service		6.010	"	"	11.770	GREECE				
"	"	"	6.035	"	"	11.800	Athens			7.295	
"	"	"	6.050	"	"	11.820	GUATEMALA				
"	"	"	6.070	"	"	11.840	Guatemala City			6.440	
"	"	"	6.090	"	"	11.860	"	"		15.170	
"	"	"	6.110	"	"	11.930	Quezaltenango			6.400	
"	"	"	6.125	"	"	11.955	HAITI				
"	"	"	6.150	"	"	12.040	Port-au-Prince			5.948	
"	"	"	6.165	"	"	12.095	"	"		6.165	
"	"	"	6.180	"	"	15.070	"	"		10.135	
"	"	"	6.195	"	"	15.110	HAWAII				
"	"	"	7.075	"	"	15.140	Honolulu			6.120	
"	"	"	7.120	"	"	15.180	"			9.650	
"	"	"	7.150	"	"	15.260	"			11.890	
"	"	"	7.185	"	"	15.300	"			15.250	
"	"	"	7.210	"	"	15.310	"			17.800	
"	"	"	7.230	"	"	15.375	HOLLAND				
"	"	"	7.250	"	"	15.420	Huizen			6.025	
"	"	"	7.260	"	"	15.435	"			9.590	
"	"	"	7.280	"	"	15.450	"			11.730	
"	"	"	7.320	"	"	17.700	"			15.220	
"	"	"	9.410	"	"	17.715	"			17.775	
"	"	"	9.490	"	"	17.730	"			21.480	
"	"	"	9.510	"	"	17.790	HONG KONG				
"	"	"	9.525	"	"	17.810	Victoria			9.525	
"	"	"	9.550	"	"	18.025	ICELAND				
"	"	"	9.580	"	"	18.080	Reykjavik			12.370	
"	"	"	9.600	"	"	18.130	INDIA				
"	"	"	9.625	"	"	21.470	Bombay			4.880	
"	"	"	9.640	"	"	21.530	"			6.150	
"	"	"	9.660	"	"	21.550	"			7.240	
"	"	"	9.675	"	"	21.640	"			9.630	
"	"	"	9.690	"	"	21.675	Calcutta			4.840	
"	"	"	9.825	"	"	21.710	"			6.010	
"	"	"	9.915	"	"	21.750	"			7.210	
"	"	"	11.680	"	"	25.750	"			9.530	

India—Cont.	Mc/s		Mc/s	Malaya—Cont.	Mc/s
Delhi	4.860	IRAN		Singapore	15.262
"	4.960	Teheran	4.830	"	15.300
"	6.010	"	6.155	MARTINIQUE	
"	6.060	"	9.680	Fort de France	9.695
"	6.100	"	15.100	MEXICO	
"	6.110	"	15.530	Mexico City	6.000
"	6.190	IRAQ		" "	6.010
"	7.290	Baghdad	9.084	" "	9.500
"	9.590	"	9.820	" "	9.615
"	9.630	ITALY		" "	9.680
"	9.660	Rome	6.030	" "	11.780
"	9.670	"	7.250	" "	11.880
"	9.680	"	7.270	Monterey	9.555
"	11.760	"	15.120	MONACO	
"	11.790	Milan	9.630	Monte Carlo	6.112
"	11.830	"	11.810	" "	6.130
"	11.850	"	15.308	MOROCCO, FRENCH	
"	11.870	JAPAN		Rabat	6.006
"	15.130	Tokio	7.258	"	7.214
"	15.160	"	7.552	"	9.082
"	15.190	"	9.505	"	9.575
"	15.210	"	9.605	"	11.857
"	15.290	"	11.705	"	11.940
"	15.350	"	11.725	"	15.104
"	17.760	"	15.110	"	16.666
"	17.830	"	15.140	"	17.812
"	21.510	"	15.225	MOROCCO, INTL.	
Madras	6.085	"	15.235	ZONE	
"	7.260	"	15.325	Tangier	6.200
"	9.565	"	17.835	"	12.228
		"		"	14.280
INDONESIA		KENYA		MOROCCO, SPANISH	
Bandoeng, Java	8.000	Nairobi	4.885	Tetuan	6.067
" "	9.850	"	6.060	MOZAMBIQUE	
" "	11.003	"	10.730	Lourenco Marques	9.582
" "	18.600	LUXEMBOURG	6.950	" "	9.645
" "	19.350	MALAYA		" "	9.725
Batavia, "	19.790	Kuala Lumpur	6.090	" "	9.837
Madan, Sumatra	11.860	" "	6.175	" "	11.835
Soerakarta, Java	9.860	Singapore	6.770	" "	15.240
		"	11.735	" "	15.326

	Mc/s	Portugal—Cont.	Mc/s	Sweden—Cont.	Mc/s
NEW ZEALAND		Lisbon	7.260	Motala	15.155
Wellington	15.280	"	11.030		
"	17.770	"	11.840	SWITZERLAND	
"	25.800	"	12.750	Geneva	9.350
NORWAY		"	12.865	"	9.515
Fredrikstad	6.130	"	15.215	"	14.462
"	6.185	"	15.299	"	14.538
"	11.735	ROUMANIA		"	18.450
Oslo	6.195	Bucharest	9.250	Schwarzenburg	6.165
"	9.540	SALVADOR		"	6.345
PALESTINE		San Salvador	6.155	"	7.210
Jerusalem	7.220	" "	7.270	"	7.360
"	11.750	" "	7.894	"	7.380
PANAMA		" "	9.575	"	9.185
Colon	6.005	SIAM		"	9.535
Panama City	9.607	Bangkok	6.002	"	9.539
" "	9.660	SOUTH AFRICA		"	9.545
" "	11.700	Cape Town	5.883	"	9.655
" "	11.810	" "	9.606	"	10.405
" "	15.100	Johannesburg	4.895	"	11.715
PARAGUAY		"	6.007	"	11.775
Asuncion	6.300	"	6.095	"	11.815
"	11.850	"	9.523	"	11.865
Encarnacion	11.950	"	9.912	"	11.960
PERU		"	11.710	"	11.965
Lima	6.020	SPAIN		"	15.120
"	6.082	Alicante	7.945	"	15.305
"	6.095	Cordoba	7.050	"	15.318
"	6.370	Madrid	9.368	"	17.770
"	9.562	"	9.832	"	17.784
"	15.150	Oveido	7.130	SYRIA	
PHILIPPINES		Valladolid	7.006	Beirut	6.090
Manila	9.640	SUDAN		"	7.210
"	9.708	Omdurman	9.650	"	8.037
POLAND		"	13.320	TURKEY	
Warsaw	6.115	SWEDEN		Ankara	9.465
"	9.526	Motala	6.065	"	15.195
PORTUGAL		"	9.535	U.S.A.	
Lisbon	6.154	"	10.780	Belmont, Cal.	6.190
		"	11.705	" "	7.250

U.S.A.—Cont.	Mc/s	U.S.A.—Cont.	Mc/s	U.S.A.—Cont.	Mc/s
Belmont, Cal.	9.530	Bound Brook, N.J.	21.610	Delano, Cal.	17.850
" "	9.550	" " "	21.630	" "	21.460
" "	11.730	" " "	21.730	Dixon, Cal.	9.490
" "	15.130	Brentwood, N.Y.	6.060	" "	9.650
" "	15.210	" "	6.120	" "	11.790
" "	15.330	" "	6.170	" "	15.250
" "	17.880	" "	9.490	" "	15.340
" "	21.490	" "	9.590	" "	17.770
Boston, Mass.	6.040	" "	9.650	" "	17.850
" "	6.140	" "	11.830	" "	21.610
" "	9.550	" "	15.267	" "	21.630
" "	9.570	" "	15.270	San Francisco, Cal.	6.060
" "	9.700	" "	17.830	" " "	7.230
" "	11.730	" "	21.520	" " "	9.570
" "	11.790	" "	21.570	" " "	11.870
" "	11.870	Cincinnati, Ohio	6.080	" " "	11.890
" "	15.130	" "	9.520	" " "	11.900
" "	15.210	" "	9.590	" " "	15.290
" "	15.250	" "	9.700	" " "	17.760
" "	15.290	" "	9.750	" " "	21.610
" "	15.350	" "	11.710	Schenectady, N.Y.	6.190
" "	17.750	" "	11.790	" "	7.000
" "	17.780	" "	15.130	" "	9.530
" "	21.460	" "	15.200	" "	9.550
" "	21.540	" "	15.230	" "	11.810
" "	25.600	" "	15.250	" "	11.847
Bound Brook, N.J.	6.100	" "	15.350	" "	15.330
" " "	6.190	" "	17.800	" "	17.880
" " "	9.670	" "	17.955	" "	21.500
" " "	9.750	" "	18.390	" "	21.590
" " "	11.790	" "	21.650	Wayne, N.J.	6.120
" " "	11.870	" "	21.690	" "	6.170
" " "	11.890	Delano, Cal.	9.700	" "	9.490
" " "	11.893	" "	9.750	" "	9.650
" " "	13.050	" "	11.770	" "	11.810
" " "	14.560	" "	11.810	" "	11.830
" " "	15.150	" "	15.130	" "	11.870
" " "	15.190	" "	15.150	" "	15.200
" " "	15.280	" "	15.240	" "	15.270
" " "	17.780	" "	15.330	" "	17.830
" " "	18.160	" "	17.780	" "	

U.S.A.—Cont.	Mc/s	U.S.S.R.—Cont.	Mc/s	U.S.S.R.—Cont.	Mc/s
Wayne, N.J.	21.500	Moscow	9.045	Moscow	18.540
" "	21.520	"	9.480	"	21.495
" "	21.570	"	9.520	"	21.510
		"	9.530	"	21.550
		"	9.540	Tbilisi	7.490
U.S.S.R.					
Ashkhabad	5.958	"	9.560		
"	6.180	"	9.580	URUGUAY	
Erevan	7.280	"	9.620	Montevideo	6.035
Kiev	6.020	"	9.650	"	6.075
Komsomolsk	11.750	"	9.720	"	6.125
Leningrad	7.430	"	9.760	"	6.170
"	7.650	"	9.880	"	9.620
"		"	10.205	"	11.735
Minsk	9.500	"	11.610	"	11.833
Moscow	5.080	"	11.630	"	11.900
"	5.920	"	11.710	"	15.300
"	6.000	"	11.720	"	27.000
"	6.030	"	11.740	VATICAN CITY	5.969
"	6.045	"	11.830	"	6.190
"	6.130	"	11.875	"	9.550
"	6.140	"	11.880	"	9.660
"	6.150	"	11.890	"	9.980
"	6.230	"	11.910	"	11.740
"	6.700	"	11.975	"	15.120
"	6.850	"	12.270	"	17.450
"	7.150	"	13.400	"	17.840
"	7.165	"	15.040	"	18.150
"	7.200	"	15.167	VENEZUELA	
"	7.240	"	15.230	Barquisimeto	4.994
"	7.270	"	15.270	Bolivar	6.200
"	7.300	"	15.315	Caracas	4.915
"	7.330	"	15.320	"	4.970
"	7.350	"	15.340	"	6.705
"	7.360	"	15.360		
"	7.390	"	15.410	YUGOSLAVIA	
"	7.520	"	15.440	Belgrade	6.100
"	7.770	"	15.715	"	6.150
"	8.050	"	17.750	"	9.420
"	8.750	"	17.810	"	9.507
"	8.905	"	17.859	"	11.735
"	9.010	"	17.910	"	15.295

WAVELENGTH AND FREQUENCY CONVERSION

BROADCAST receivers have their tuning scales calibrated either 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 these quantities as both wavelength and frequency are determined by the velocity of propagation of radio waves in space, this relationship is

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

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 in the other forms by means of the following formulae.

Kilocycles to Metres

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

Metres to Kilocycles

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

Megacycles to Metres

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

Metres to Megacycles

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

Conversion Table

Centi- metres or Metres	Mega- cycles	Metres	Mega- cycles	Metres	Mega- cycles
1 cm	30,000	34	8.823	113	2.655
5 "	6,000	35	8.572	115	2.609
10 "	3,000	36	8.332	117	2.564
50 "	600	37	8.118	120	2.50
1 metre	300	38	7.894	122	2.459
2 metres	150	39	7.692	124	2.419
5 "	60	40	7.50	126	2.381
7 "	42.86	41	7.317	128	2.344
9 "	33.33	42	7.143	130	2.308
10 "	30.0	43	6.977	135	2.222
11 "	27.27	44	6.819	140	2.143
12 "	25.0	45	6.667	145	2.069
13 "	23.08	46	6.522	150	2.0
14 "	21.43	47	6.383	160	1.875
15 "	20.0	48	6.250	165	1.818
16 "	18.75	49	6.122	170	1.765
17 "	17.64	50	6.0	175	1.714
18 "	16.67	52	5.769	180	1.667
19 "	15.78	54	5.555	185	1.622
20 "	15.0	56	5.357	190	1.579
21 "	14.28	60	5.0	195	1.538
22 "	13.64	65	4.617	200	1.5
23 "	13.04	70	4.287		
24 "	12.50	75	4.0		
25 "	12.0	80	3.750		
26 "	11.54	85	3.530	Metres	Kilo- cycles
27 "	11.11	90	3.333		
28 "	10.71	95	3.153	210	1,429
29 "	10.35	100	3.0	220	1,364
30 "	10.0	103	2.913	230	1,304
31 "	9.678	106	2.830	240	1,250
32 "	9.375	109	2.752	250	1,200
33 "	9.090	111	2.703	260	1,154

Metres	kc/s	Metres	kc/s	Metres	kc/s
270	1,111	430	697.7	1,100	272.7
280	1,071	435	689.7	1,200	250.0
290	1,034	440	681.8	1,300	230.8
300	1,000	445	674.2	1,400	214.3
305	983.6	450	666.7	1,500	200.0
310	967.8	455	659.3	1,600	187.5
315	953.4	460	652.2	1,700	176.5
320	937.5	465	645.2	1,800	166.7
325	923.0	470	638.3	1,900	157.9
330	909.0	475	631.6	2,000	150.0
335	895.6	480	625.0	2,200	136.4
340	882.3	485	618.6	2,400	125.0
345	869.6	490	612.2	2,600	115.4
350	857.2	495	606.1	2,800	107.1
355	845.0	500	600.0	3,000	100.0
360	833.2	510	588.2	3,500	85.7
365	822.0	520	576.9	4,000	75.0
370	811.8	530	566.0	4,500	66.7
375	800.0	540	555.6	5,000	60.0
380	789.4	550	545.5	5,500	54.5
385	779.2	600	500.0	6,000	50.0
390	769.2	650	461.5	6,500	46.1
395	759.4	700	428.6	7,000	42.9
400	750.0	750	400.0	7,500	40.0
405	740.7	800	375.0	8,000	37.5
410	731.7	850	352.9	8,500	35.3
415	722.9	900	333.3	9,000	33.3
420	714.3	950	315.8	9,500	31.6
425	705.9	1,000	300.0	10,000	30.0

British Amateur Transmitting Frequencies

Mc/s	Max. Power (W)	Mc/s	Max. Power (W)
1.75 — 2.0	10	58.5 — 60.0	25
3.5 — 3.635	150	2,300 — 2,450	25
3.685 — 3.8	150	Frequencies for Radio Control	
7.0 — 7.3	150		
14.0 — 14.4	150	27.66 — 28.0	5
28.0 — 30.0	150	460.0 — 461.0	5

International Allocation of Call Signs

The following list is in accordance with the allocations made at the Cairo Convention 1938. It will, of course, be realized that there have been many changes in national boundaries since then, but this allocation still governs the use of call signs until any revised recommendations from the Atlantic City International Telecommunications Conference have been ratified.

A	U.S.A.	G	Great Britain
B	Great Britain	HAA-HAZ	Hungary
CAA-CÉZ	Chile	HBA-HBZ	Switzerland
CFA-CKZ	Canada	HCA-HDZ	Ecuador
CLA-CMZ	Cuba	HEA-HEZ	Switzerland
CNA-CNZ	Morocco	HFA-HFZ	Poland
COA-COZ	Cuba	HGA-HGZ	Japan
CPA-CPZ	Bolivia	HHA-HHZ	Haiti
CQA-CRZ	Portuguese colonies	HIA-HIZ	Dominican Republic
CSA-CUZ	Portugal	HJA-HKZ	Colombia
CVA-CXZ	Uruguay	HLA-HMZ	Japan
CYA-CZZ	Canada	HNA-HNZ	Iraq
D	Germany	HOA-HPZ	Panama
EAA-EHZ	Spain	HQA-HRZ	Honduras
EIA-EJZ	Eire	HSA-HSZ	Siam
EKA-EKZ	Japan	HTA-HTZ	Nicaragua
ELA-ELZ	Liberia	HUA-HUZ	Salvador
EMA-EOZ	Japan	HVA-HVZ	Vatican City
EPA-EQZ	Iran	HWA-HYZ	France, colonies and protectorates
ERA-ERZ	Japan	HZA-HZZ	Saudi Arabia
ESA-ESZ	Estonia	I	Italy and colonies
ETA-ETZ	Ethiopia	J	Japan
EUA-EYZ	Japan	K	U.S.A.
EZA-EZZ	Germany	LAA-LNZ	Norway
F	France, colonies and protectorates	LOA-LWZ	Argentina

LXA-LXZ	Luxembourg	VPA-VSZ	British colonies and protectorates
LYA-LYZ	Lithuania	VT A-VWZ	India
LZA-LZZ	Bulgaria	VXA-VYZ	Canada
M	Great Britain	VZA-VZZ	Australia
N	U.S.A.	W	U.S.A.
OAA-OCZ	Peru	XAA-XFZ	Mexico
ODA-ODZ	Syria	XGA-XUZ	China
OEA-OEZ	Austria	XVA-XWZ	France, colonies and protectorates
OFA-OJZ	Finland	XXA-XXZ	Portuguese colonies
OKA-OMZ	Czechoslovakia	XYA-XZZ	Burma
ONA-OTZ	Belgium and colonies	YAA-YAZ	Afghanistan
OUA-OZZ	Denmark	YBA-YHZ	Indonesia
PAA-PIZ	Holland	YIA-YIZ	Iraq
PJA-PJZ	Curacao	YJA-YJZ	New Hebrides
PKA-POZ	Indonesia	YKA-YKZ	U.S.S.R.
PPA-PYZ	Brazil	YLA-YLZ	Latvia
PZA-PZZ	Surinam	YMA-YMZ	Danzig
Q	(Abbreviations)	YNA-YNZ	Nicaragua
R	U.S.S.R.	YOA-YRZ	Roumania
SAA-SMZ	Sweden	YSA-YSZ	Salvador
SNA-SRZ	Poland	YTA-YUZ	Yugoslavia
SSA-SUZ	Egypt	YVA-YWZ	Venezuela
SVA-SZZ	Greece	YXA-YZZ	U.S.S.R.
TAA-TCZ	Turkey	ZAA-ZAZ	Albania
TDA-TDZ	Guatemala	ZBA-ZJZ	British colonies and protectorates
TEA-TEZ	Costa Rica	ZKA-ZMZ	New Zealand
TFA-TFZ	Iceland	ZNA-ZOZ	British colonies and protectorates
TGA-TGZ	Guatemala	ZPA-ZPZ	Paraguay
THA-THZ	France, colonies and protectorates	ZQA-ZQZ	British colonies and protectorates
TIA-TIZ	Costa Rica	ZRA-ZUZ	South Africa
TJA-TZZ	France, colonies and protectorates	ZVA-ZZZ	Brazil
U	U.S.S.R.		
VAA-VGZ	Canada		
VHA-VNZ	Australia		
VOA-VOZ	Newfoundland		

STANDARD TIME

Ahead of Greenwich Mean Time

	Meridian (East)	h.m.
Australia—Victoria, N.S.W. & Queensland...	150	10-0
South & N. Territory	142-30	9-30
West	120	8-0
Austria	15	1-0
Bulgaria	30	2-0
Burma	97-30	6-30
China	120	8-0
Czechoslovakia... ..	15	1-0
Denmark	15	1-0
Egypt	30	2-0
Finland	30	2-0
Germany	15	1-0
Greece	30	2-0
Hong Kong	120	8-0
Hungary	15	1-0
India (except Calcutta), Pakistan & Ceylon...	82-30	5-30
Calcutta	—	5-54
Iraq	45	3-0
Italy	15	1-0
Japan	135	9-0
Malaya	112-30	7-30
Malta	15	1-0
New Zealand	172	11-30†
Nigeria	15	1-0
Norway	15	1-0
Palestine & Cyprus	30	2-0
Philippine Islands	120	8-0*
Poland	30	2-0
Roumania	30	2-0
Siam	105	7-0
South Africa	30	2-0
Sweden	15	1-0
Switzerland	15	1-0
Turkey	30	2-0
U.S.S.R.—Moscow	30	2-0*
Kuibyshev	45	3-0*
Tomsk	75	5-0*
Kharbarovsk	135	9-0*
Yugoslavia	15	1-0

* Standard time is now 1 hour ahead of zone time.

† Standard time is now 30 min. ahead of zone time

STANDARD TIME

Behind Greenwich Mean Time

	Meridian (West)	h.m.
Alaska	165	11-0
Argentina	60	4-0*
Brazil—Eastern	45	3-0
Central	60	4-0
Western	75	5-0
Canada—Atlantic Time	60	4-0
Eastern Time	75	5-0
Central Time	90	6-0
Mountain Time	105	7-0
Pacific Time	120	8-0
Chile	60	4-0
Jamaica	75	5-0
Mexico	90	6-0
Newfoundland	52-30	3-30
Peru	75	5-0
U.S.A.—Eastern Time... ..	75	5-0
(N. & S. Carolina, Connecticut, Delaware, Dist. Columbia, Florida, Georgia, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Ver- mont, Virginia)		
Central Time	90	6-0
(Alabama, Arkansas, N. & S. Dakota, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nebraska, Oklahoma, Tennessee, Texas, Wisconsin)		
Mountain Time	105	7-0
(Arizona, Colorado, Idaho, Montana, New Mexico, Utah, Wyoming)		
Pacific Time	120	8-0
(California, Nevada, Oregon, Washington)		
Uruguay	45	3-0
Venezuela	67-30	4-30

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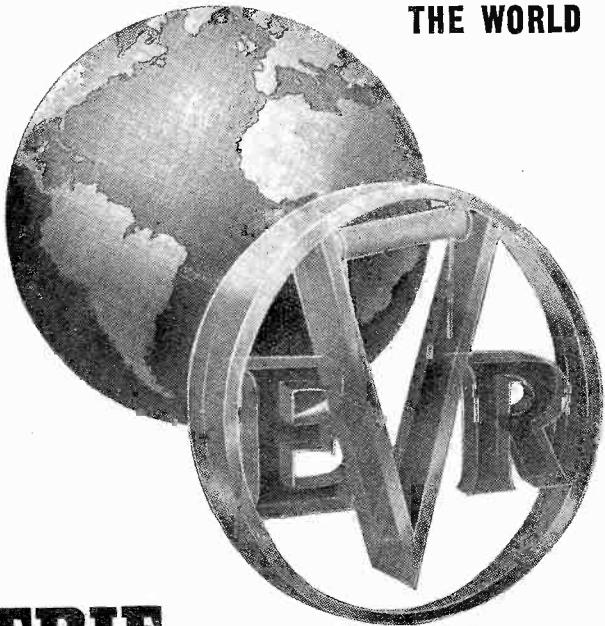
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MIDGET RADIO KIT. Build your own midget radio. A complete set of parts, including valves, loudspeaker and instructions. In fact, everything except cabinet necessary to build 4-valve Medium and Long Wave T.R.F. radio operating on 200-250 v. mains, A/C or D/C. Valve line-up, 6K7, 6J7, 25A6, 25Y6. Wavelengths covered 200-557 and 700-2,000. Size, 10 x 6 x 6in. Completely drilled chassis. Price, including tax, £7 7s. 6d.

SUPERHET MIDGET RADIO KIT. A complete kit of parts for a 5-valve superhet. Covers 16-50 and 200-557 metres, A/D/C 200-250 v. 6K8, 6K7, 6Q7, 25A6, 25Y6. Size 10 x 6 x 6in. Completely drilled chassis. Price including tax, £8 5s. Attractive Bakelite cabinet for either above kits, 25/-.

SHORT-WAVE CONDENSERS. High-grade ceramic insulation, super midget type, single gangs available in 10, 20, 50, 75 (75 pf. has double spindle for ganging). Price 2/6.

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RADIOGRAM CABINETS. Dignified appearance and good workmanship. Size: 31½in. high, 18½ deep, 39 wide. French polished, veneered walnut. Price £26. Available complete with electric motor, auto stop and magnetic pick-up, £32 13s. 4d. Ditto with Rothermel Crystal Pick-up, £35 2s. 1d., or with 8 record-mixer changer, £45 7s. 6d.

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ALUMINIUM CHASSIS. Substantially made of bright aluminium, with four sides.

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20 x 8 x 2in...	10/6	22 x 10 x 2in...	13/6

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Capacity	Working Voltage	Size	Price Each	Per Doz.
2 mf.	1,000	4½ x 1½ x 1	2/6	20/-
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METERS. A huge purchase of military surplus meters allows us to offer the following bargains. All meters are by the best makers and are contained in bakelite cases. Prices are about one-quarter of original cost.

Range	Diam.	Ext.	Res.	Fitting	Type	Price
300 v.	3½"	15K	Flush	M.I.	A.C.	7/6
500 mA.	2"	—	Proj.	M.C.	D.C.	12/6
40 v.	2"	8K	Flush	M.C.	D.C.	7/6
2½ a.	2"	—	Flush	Thermo.		
					H.F.	7/6
4 a.	2½"	—	Proj.	H.W.	H.F.	3/6
3 KV.	3½"	1 meg.	Flush	M.C.	D.C.	20/-
20 a.	2"	—	Flush	M.C.	D.C.	7/6
40 a.	2"	—	Flush	M.C.	D.C.	7/6
25 a.	3½"	—	Flush	M.C.	D.C.	7/6
25 a.	3½"	—	Proj.	M.C.	D.C.	7/6
25 a.	3½"	—	Flush	M.I.	D.C.	7/6

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