# **BROADCASTING STATIONS**

THIS list is not intended to be a complete guide to the many hundreds of short wave broadcasting stations in operation, but it does indicate the stations which, in normal conditions, are most easily heard.

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	Wavelength	Station
(kc s) 5930	(metres) 50.57	Prague, Czechoslovakia
5960	50.34	Rome, Italy
5990	50.08	Bucharest, Roumania*
6005 6010	49·96 49·92	R.I.A.S., Berlin, Germany Rome, Italy
6025	49.79	Radio Nederland, Holland
6025	49.79	Lisbon, Portugal
6030	49.75	Muhlacker, W. Germany
6035 6055	49·71 49·55	Monte Carlo, Monaco Schwarzenburg, Switzerland
6065	49.46	Horby, Sweden
6070	49-42	Sofia, Bulgaria
6075 6090	49·38 49·26	Osterloog, W. Germany Radio Luxembourg
6100	49.18	Belgrade, Yugoslavia
6140	48.86	Voice of America, Tangier
6145	48·82 48·70	Allouis, France Voice of America, Munich, W. Germany
6165	48.66	Schwarzenburg, Switzerland
6175	48.58	Allouis, France
6190	48·47 48·47	Bremen, W. Germany Vatican City
7050	42.55	Cairo, Egypt
7105	42.22	Madrid, Spain
7125 7135	42·11 42·05	Warsaw, Poland Monte Carlo, Monaco
7180	41.78	Baghdad, Iraq
7195	41.70	Bucharest, Roumania
7200 7220	41.67	Belgrade, Yugoslavia Budapest, Hungary
7255	41.35	Sofia, Bulgaria
7275	41.24	Rome, Italy
7280 7285	41.18	Allouis, France Ankara, Turkey
9009	33-03	Tel Aviv, Israel
9410	31-88	B.B.C. Overseas Service
9475 9505	31.66 31.56	Cairo, Egypt Prague, Czechoslovakia
9510	31.55	B.B.C Overseas Service
9515	31.53	Rome, Italy
9520 9535	31·51 31·46	Voice of America, Tangier Schwarzenburg, Switzerland
9540	31-45	Warsaw, Poland
9570	31-35	Shepparton, Australia
9575 9585	31.33	Rome, Italy Allouis, France
9620	31.19	Horby, Sweden
9630	31-15	Sackville, Radio Canada
9645 9665	31·10 31·04	Vatican City Schwarzenburg, Switzerland
9675	31.01	Warsaw, Poland
9700	30.93	Sofia, Bulgaria
9715	30.88	Radio Nederland, Holland
9720 9735	30·86 30·82	Radio Nacional, Rio de Janeiro, Brazil Deutsche Welle, W. Germany
9745	30.78	Ankara, Turkey
9770	30.71	Vienna, Austria
9780 9865	30·67 30·40	Cairo, Egypt Djakarta, Indonesia
11705	25.63	Horby, Sweden
11715	25.61	Schwarzenburg, Switzerland
11720	25·60 25·52	Sackville, Radio Canada Leopoldville, Congo
11800	25.42	Accra, Ghana
11810	25·40 25·38	Rome, Italy B.B.C. Overseas Service
11830	25.36	Voice of America, Munich, W. Germany
11005		and Tangier
11835	25·35 25·28	Algiers, Algeria Schwarzenburg, Switzerland
11865	25.28	Havana, Cuba
11900	25.21	Paradys, South Africa
11910	25-19	Armed Forces Radio Service, Greenville, U.S.A.
11915	25-18	Voice of the Andes, Quito, Ecuador
11920	25.17	Allouis, France
11925	25·16 25·06	Radio Bandeirantes, Sao Paulo, Brazil Conakry, Guinea
11990	25.02	Prague, Czechoslovakia
12095	24.80	B.B.C. Overseas Service B.B.C. Overseas Service
15070 15080	19.91	Paradys, South Africa
15115	19.85	Voice of the Andes, Quito, Ecuador
15125	19.83	Lisbon, Portugal ELWA, Monrovia, Liberia
15155 15165	19·80 19·78	Damascus, Syria
15190	19.75	Brazzaville, Congo
15205 15220	19.73	Voice of America, Greenville, U.S.A. Shepparton, Radio Australia
15250	19-67	Voice of America, Bethany, U.S.A.
15260	19-66	B.B.C. Far Eastern Station, Malaya
15280	19-63	Armed Forces Radio Service, Greenville, U.S.A.
15290	19-62	Voice of America, Tangier
15305	19.60	Voice of America, Greenville, U.S.A.
15320 15330	19·58 19·57	Sackville, Radio Canada Voice of America, Greenville, U.S.A.
15370	19.52	Radio Tupi, Rio de Janeiro, Brazil
15385	19.50	WRUL, Boston, U.S.A.
15400 15445	19·48 19·43	Rome, Italy Brazzaville, Congo
15475	19.38	Cairo, Egypt
17695	16·95 16·87	B.B.C. Overseas Service Voice of America, Bound Brook, U.S.A.
17780 17795	16.86	Schwarzenburg, Switzerland
17820	16.84	Sackville, Radio Canada
17895 17920	16·76 16·74	Lisbon, Portugal Cairo, Egypt
21470	13.97	B.B.C. Overseas Service
21495 21560	13·96 13·91	Lisbon, Portugal Rome, Italy
21300	13.71	Home, italy

# When and Where To Listen

THIS is a far from easy task on which to give specific information. Forecasting propagation on short waves is, in some ways, as difficult as forecasting the weather. There are certain overall patterns but there are very many variable factors which can affect conditions at any one time. The main changes to be borne in mind are the seasonal ones, the difference between daytime and night-time conditions and, above all, the 11-year

From now until around 1966 conditions will not change greatly in their main features as we are in a period of low sunspot numbers, and the information given below is meant to apply to this period. Once sunspot numbers begin to increase,

the pattern of band usage will change in many ways.

One useful pointer to remember is that broadcasting stations will beam their transmissions to Britain at the time and on the frequencies giving the best chance of good reception. Thus, if Radio Australia broadçasts to us around 07.00 G.M.T. on the 31 and 25 metre bands, that is when expert opinion expects best conditions for the path, although reception from Australia may be possible at other times.

All times quoted below are in G.M.T., using the 24-hour clock system. Let us consider various areas of the world and suggest the best times and frequencies for receiving stations in those areas.

North America and Caribbean area The best time for this area is between 15.00 and 23.00 during the whole year; in winter the peak is around 18.00 but in summer it is around 20.00/21.00. Western North America is harder to hear, and usually best around 15.00 to 18.00. For broadcast stations, the best bands in winter are 19 metres in the afternoon, then 25 metres after dark. In the summer period, 19 metres is usually best. For the amateur bands, 20 metres is the most reliable all the year, during the winter 40 metres and 80 metres can provide North American stations between 23.00 and 05.00.

2. Central America This can be an awkward area to hear and the best times are similar to those for North America. For the broadcast bands, as there are not many stations in this area which use the higher frequencies, the best band tends to be 49 metres around 04.00 to 06.00. On the amateur bands, 20 metres is again the most useful, but this area can come through on 15 metres at times when no North Americans can

3. South America The best times are around 09.00 to 11.00 and from 17.00 to 01.00. The Pacific coast tends to be best around 07.00 to 10.00 and later around 20.00 to 02.00. On the broadcast bands, during spring, winter and autumn, 19 metres is best for the morning period, with 25 and 31 metres best for the evening and night. In summer, the early period is not usually feasible, and 19 metres is best for the evening, but this area is not usually heard too well during the summer. On the amateur bands, 20 metres is usually best, with 40 metres possible later at night, and 15 metres is also a good possibility

T has become the usual practice to use some type of code for

amateur bands is a Readability/Signal Strength code, using a scale from I to 5 for readability and from I to 9 for signal strength. These are not always used correctly and often when

incorrectly adjusted "signal strength meters" are used, reports such as "S9 plus 40 dB" are heard. As will be seen below, S9 means "extremely strong" which can hardly be improved on! Following are the scales for readability and signal strength:

Only just readable, and only occasional words heard Readable, but with considerable difficulty

For reporting on telegraphy (CW) signals, an additional scale

for "tone" is used to indicate the quality of the note. This is

(If the note seems to be crystal controlled, an "x" is added, if

The readability/strength code can be used for reporting to

broadcasting stations, but a better system for this purpose is the SINPO code. This has five scales, each of I to 5, as indicated

by the letters S (Signal Strength), I (Interference), N (Noise, i.e.

static), P (Propagation Disturbance, i.e. fading) and O (Overall

The scale for signal strength is: I—barely audible; 2—poor; 3—fair; 4—good; 5—excellent. The scales for Interference,

Noise and Propagation Disturbance are: 1—extreme; 2—severe; 3—moderate; 4—slight; 5—nil. The scale for Overall quality is: 1—unusable; 2—poor; 3—fair; 4—good; 5—excellent.

Thus, in the SINPO code, a perfectly received signal would be

S5 Fairly good signals

S6 Good signals
S7 Moderately strong signals S8 Strong signals
S9 Extremely strong signals

T6 Modulated note, slight

smooth ripple

Good note, slight ripple

FH FK

FO

FP

FR

FW

GB

GD

HBØ

HC8 HH

HK

HP HR

HS

HV

HZ

JA

JZØ K

KA KB

KC4

whistle

Readable with almost no difficulty

giving signal reports. The most usual system in use on the

**Signal Reporting Systems** 

Readability:

R5 Perfectly readable Signal Strength:

Signals only just

perceptible Very weak signals

also a 1 to 9 scale, as follows:

TI Extremely rough note

T3 Rough, low pitched note

T5 Musically modulated note T8

the note is chirpy, a "c" is added.)

Rather rough note

T2 Very rough note

quality of reception).

Weak signals S4 Fair signals

4. North Africa and Near East This area is best around 12.00 to 23.00, although it is possible to hear it almost round the clock. On the broadcast bands, 16, 19 and 25 metres are usually good in daylight, with 31 and 41 metres being better after dark. On the amateur bands, 15 and 20 metres are usually best, on 15 metres 08.00 to 11.00 is often a good time.

5. Central and South Africa The best times for this area are between 13.00 and 22.00. On the broadcast bands, during daylight 19 metres is best, but after dark 25 and 31 metres are better, especially in the winter half. On the amateur bands 15 metres is likely to be useful, with 20 metres best around 17.00 to 20.00. This area is possibly one of the few which will be heard during any openings on 10 metres.

6. North Asia The best times are around 06.00 to 09.00 and around 20.00, this is not an easy area to hear, especially Japan. On the broadcast bands, 19 and 25 metres are the best. On the amateur bands, 20 metres is probably the only worthwhile recommendation

7. South and South-East Asia This is usually best around 11.00 to 17.00. The best broadcast bands are 16 and 19 metres for the earlier part, with 25 metres being most useful later towards the end of the best period. On the amateur bands 20 metres must again be the best suggestion, with just a chance that 15 metres might occasionally open in that direction. During the winter half it is likely that the best period may extend on to around 21.00 with the 31 and 41 metre broadcasting bands being best for this.

8. Australasia The best times for this area are 06.00 to 10.00 and, in winter, around 14.00 to 17.00 and around 22.00. New Zealand is not too easy to hear, and is usually better around 09.00 to 11.00. Reception is much better in the spring, winter and autumn than in the summer. In the better seasons the best broadcast bands are 25 and 31 metres for the morning, 31 and 41 metres in the afternoon and 19 metres for the night opening which is less reliable. On the amateur bands, 20 metres? is the favourite with 40 metres useful in winter in the mornings.

9. Pacific This is a difficult area usually, and is best around 06.00 to 11.00. There are few high power broadcasting stations the area, and 19 and 25 metres are the most likely bands. Of the amateur bands, 20 metres is best.

10. Europe Obviously, this area can be heard 24 hours a day. On the broadcast bands, 25 and 31 metres are best for Southern Europe with 41 and 49 metres best for Northern Europe, 19 metres can provide European reception during the day. On the amateur bands 20 metres during the day, and 40 and 80 metres after dark are best, but in summer short skip occurs on 15 and 10 metres at times

## THE "Q" CODE

"HE "Q" Code is used by aeronautical and maritime services and other commercial services and is very comprehensive in its full form. In its correct use, each group (made up of Q and two letters) can stand either for a question (e.g. QTH? means 'what is your location?"), or the answer (e.g. QTH means "my location is . . . . "). Amateurs have adopted certain of the code groups to their own use and the following list shows the more

usual	ones with their meanings		
QRA	Full address	QRX	Wait
QRH	Your frequency varies	OSA	Readability of signal
QRK	Signal strength (also	QSB	Fading
	price or value, humor- ously)	QSL	Acknowledgement of receipt; confirmation
QRL	Busy		contact
QRM	Man-made interference	OSO	Contact
QRN	Atmospheric interfer-	QSP	Pass on a message
2.500.000	ence; static	OSY	Change frequency
QRO	High power	QTC	Telegram, message
ORP	Low power	QTH	Location
ORT	Closed down	OTR	Time check
ORU	Nothing further to say	~	Time ender
QRV	Ready to operate		

#### STANDARD FREQUENCY STATIONS

THE frequencies 2500, 5000, 10000, 15000, 20000 and 25000 kc/s are set aside for station transmitting accurate frequency standards and also time signals in many cases. Some of these stations are:

ATA, New Delhi, India, operating on 10000 kc/s. BPV, Peking, China, operating on 5000, 10000 and 15000 kc/s. FFH, Paris, France, operating on 2500 kc/s. HBN, Neuchatel, Switzerland, operating on 5000 kc/s. IAM, Rome, Italy, operating on 5000 kc/s.

IBF, Turin, Italy, operating on 5000 kc/s JJY, Tokyo, Japan, operating on 2500, 5000, 10000 and LOL, Buenos Aires, Argentina, operating on 5000, 10000 and 15000 kc/s.

MSF, Rugby, England, operating on 2500, 5000 and 10000 kc/s. OMA, Prague, Czechoslovakia, operating on 2500 kc/s. RWM, Moscow, U.S.S.R., operating on 5000, 10000 and WWV, Washington, U.S.A., operating on 2500, 5000, 10000, 15000, 20000 and 25000 kc/s.

WWVH, Hawaii, operating on 5000, 10000 and 15000 kc/s. ZUO, Johannesburg, South Africa, operating on 5000 and 10000 kc/s. In addition, CHU, Ottawa, Canada, transmits on 3330, 7335

and 14670 kc/s. Most of these stations make speech announcements at intervals, and give their callsigns in morse code. WWV gives time checks and also propagation forecasts.

## THE SHORT WAVE SPECTRUM

THE International Telecommunications Union is the controlling body over the whole of the radio frequency spectrum and allocations have been made from 10 kc/s to 40 kc/s. The accompanying chart shows the allocations between 1605 kc/s and 30000 kc/s, which is the range generally known as the "short waves". The I.T.U. divides the world into three regions for frequency allocation purposes; Region I comprises Europe, Africa, the Near East and the whole of the U.S.S.R.; Region 2 is made up of North America, Central America, South-America and Greenland; and Region 3 contains Asia (except the U.S.S.R.) Australasia and the Pacific.

In the main, the allocations in the s.w. range are fairly uniform over all three Regions, but there are a few differences which should be noted.

1. The amateur band 1800 to 2000 kc/s is only available in a

limited number of countries.

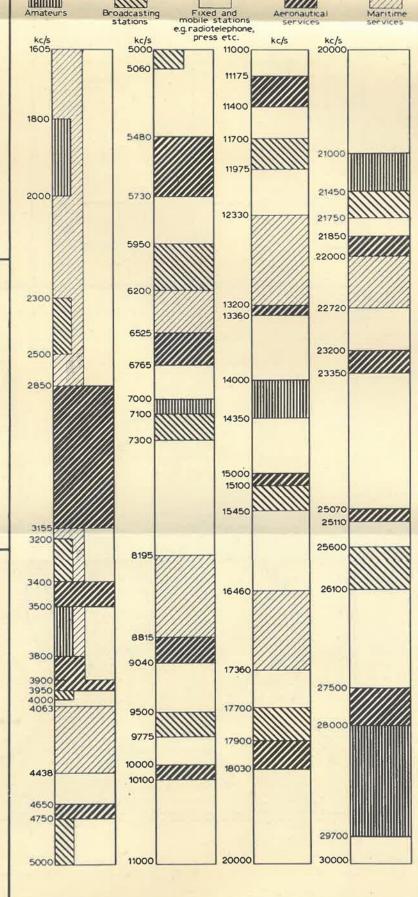
2. The broadcasting bands 2300 to 2500 kc/s, 3200 to 3400 kc/s and 4750 to 5060 kc/s are classed as "tropical" and are limited

to countries in these regions.

3. In Region 2 the amateur band beginning at 3500 kc/s extends

4. In Region 2 the amateur band beginning at 7000 kc/s extends through to 7300 kc/s and the allocation 7100 to 7300 kc/s is not available for broadcasting.

The chart obviously has to leave out several minor points of difference, but these are mainly confined to the lower frequencies. The main classes of service are indicated as follows:



#### AMATEUR CALLSIGN PREFIXES

will usually be heard on several frequencies in each band.

N.B.-No frequencies are given for Radio Moscow or Radio Free Europe as the schedules of these stations vary more often than others, but they

A MATEUR radio stations, in common with all other com-munications stations, have to identify themselves by callsigns. Each station has an individual officially allocated callsign which follows a standard pattern, being made up of a prefix, a numeral, and a suffix. The prefix may be one letter, two letters or a numeral and letter, but it is derived from the international list of callsign allocations. The numeral may have some geographical significance, but this is not always so. The suffix may be one, two or three letters; in the bigger countries they are issued in alphabetical order, but in smaller countries they are often issued haphazardly, a popular idea being to allow the operator to use his initials as his call.

To take an example of a callsign-G3AKA. The G is the prefix allocated to England, the figure 3 has no special meaning and the AKA is the suffix. In another case—say W7XYZ. Here the W is the U.S.A. prefix, but in this case the figure 7 indicates that the station is located in a particular area of the U.S.A., and the XYZ is the suffix. One final example—say 5N2ABC. In this case 5N is the prefix for Nigeria, the figure 2 has no significance, and the ABC is the suffix.

The following is an up-to-date list of prefixes, the numeral is only given here where it is necessary to distinguish between countries, for instance VQ is the general prefix for Commonwealth countries in East Africa, but VQI is Zanzibar and VQ2 is Northern Rhodesia, so the numeral is virtually part of the prefix in these cases. This list is not intended to be an "official" list of countries, the various clubs and societies each issue their own lists of this kind, which only differ where some of the more out of the way places are concerned.

Occasionally, stations can be heard with additional letters, such as /P or /M after the callsign. Examples of these and their meanings are: /A indicates the station is being operated from another address than that given in the licence. /P means the

AC3	Sikkim	CO	Cuba
AC4	Tibet	CP	Bolivia
AC5	Bhutan	CR4	Cape Verde Islands
AP	Pakistan	CR5	Portuguese Guinea,
BY	China		Principe Is., and Sao
BV.	Taiwan		Thome
CE	Chile	CR6	Angola
CE9	Chilean Antarctic	CR7	Mozambique
CEØ	Saster Island	CR8	Portuguese Timor
CM	Cuba	CR9	Macao
CN	Morocco	CTI	Portugal

station is being operated "portable", i.e. not from a mains electricity supply; 'this letter is usually heard when Field Day contests are being held. /M means that the station is "mobile", i.e. in a car or other vehicle. /MM means "maritime mobile" on board a ship. /AM is "aeronautical mobile", on an aircraft In the U.S.A., however, /P and /A are not used; instead, the call area in which the station is temporarily operating is added, for instance W2ZZZ operating portable in the W2 area would sign W2ZZZ/2, if he went over to California he would sign W2ZZZ/6. If he crossed into Canada, he might sign W2ZZZ/ VE3 and so on.

As mentioned above, in certain countries, there is a subdivision into call areas, indicated by the figure in the callsign. Most of the South American countries use this system, and it also applies in Australia, Canada, New Zealand and the U.S.A. Details for these latter four countries are:

Australia VKI-Canberra; VK2-New South Wales; VK3-Victoria; VK4—Queensland; VK5—South Australia; VK6—Western Australia; VK7—Tasmania; VK8—Northern Terri-

Canada VEI-Nova Scotia, New Brunswick and Prince Edward Island; VE2—Province of Quebec; VE3—Ontario; VE4—Manitoba; VE5—Saskatchewan, VE6—Alberta; VE7—British Columbia; VE8—Yukon and North West Territories; VO1—Newfoundland; VO2—Labrador.

New Zealand ZLI-Auckland; ZL2-Wellington; ZL3-Canterbury; ZL4-Otago.

United States of America K/KN/W/WA/WB/WN/WV prefixes: -Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont. 2-New Jersey and New York. 3—Delaware, Maryland, Pennsylvania and District of Columbia. 4—Alabama, Florida, Georgia, Kentucky, North Carolina, South Carolina, Tennessee, Virginia. 5-Arkansas, Louisiana, Mississippi, New Mexico, Oklahoma and Texas. 6—California. 7—Arizona, Idaho, Montana, Nevada, Oregon, Utah, Washington and Wyoming. 8—Michigan, Ohio and West Virginia. 9—Illinois, Indiana and Wisconsin. O—Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

CT2 CT3	Azores Islands Madeira Islands	EAØ	Spanish Guinea and Fernando Poo
CX	Uruguay	El	Eire
DJ	Germany (West)	EL	Liberia
DL	Germany (West)	EP	Iran
MC	Germany (East)	EQ	Iran
UC	Philippine Islands	ET	Ethiopia
A	Spain	F	France
A6	Balearic Islands	FB	Amsterdam and St. P
BA.	Canary Islands		ls., Crozet and
A9	Ceuta, Melilla and Ifni		Kerguelen Is.

_									
				TL	Central African		and a second		
	Corsica	KC6	Caroline Islands	1.2	Republic		Northern Rhodesia	ZBI	Malta
	Guadeloupe	KGI	Greenland (U.S. Forces)	TNI		VQ4	Kenya	ZB2	Gibraltar
	Comoro Islands	KG4		TN	Republic of Congo	VQ7	Aldabra Islands	ZC5	North Borneo
	New Caledonia	KG6		TR	Gabon	VO8	Mauritius	ZD3	Gambia
		KGO		TT	Tchaid	VQ9	Seychelles	ZD6	Nyasaland
	French Somaliland		and Marcus Islands	TU	Ivory Coast	VRI	Gilbert & Ellice Islands,	ZD7	
	Martinique	KH	Hawaiian Islands			AIVI			St. Helena
	Marquesas Is., Society	KJ	Johnston Island	TY	Dahomey		Ocean Islands, British	ZD8	Ascension Island
	ls., Tuamoto, Tubuai Is.,	KL	Alaska	TZ	Mali		Phoenix Islands	ZD9	Tristan da Cunha and
	Clipperton Is.	KM	Midway Islands	UA	U.S.S.R.	VR2	Fiji Islands		Gough Islands
	St. Pierre and Miquelon	KN	United States of	UB	Ukraine	VR3	Line Islands	ZE	Southern Rhodesia
	ls.	KIN		UC	White Russia	VR4	Solomon Islands	ZKI	Cook Islands
	Reunion Islands		America (novice	UD	Azerbaijan	VR5	Tonga	ZK2	Niue
			stations)	UF		VR6	Pitcairn Island	ZL	New Zealand
	St. Martin Island	KP4	Puerto Rico	F. A. W. Santa	Georgia	VSI			
2	New Hebrides	KP6	Palmyra and Jarvis Is.	UG	Armenia	100000000000000000000000000000000000000	Singapore	ZLØ	New Zealand Antarc-
	Wallis and Fortuna Is.	KR	Ryukyu Islands	UH	Turkoman	VS4	Sarawak		tica
	French Guiana and Inini			UI	Uzbek	VS5	Brunei	ZM6	Western Samoa
	England	KS4	Swan Island	UJ	Tadzhik	VS6	Hong Kong	ZM7	Tokelau Islands
	United Kingdom	KS6	American Samoa	UL	Kazakh	VS9	Aden, Socotra, Maldive	ZP	Paraguay
	(special stations)	KV	American Virgin	UM	Kirghiz	51000	Islands, Kamaran Islands	ZS	South Africa
			Islands	UO	Moldavia	VU	India	ZS3	South West Africa
	Channel Islands		isiands	UP		W	United States of		
•	Isle of Man	KW	Wake Island		Lithuania	VV	TO A A CONTROL OF THE PARTY OF	ZS7	Swaziland
	Northern Ireland	KX	Marshall Islands	UQ	Latvia		America	ZS8	Basutoland
	Scotland	KZ		UR	Estonia	WA	United States of	ZS9	Bechuanaland
٧	Wales		Panama Canal Zone	UT	Ukraine		America		Protectorate
	Hungary	LA	Norway	UV	U.S.S.R.	WB	United States of	3A	Monaco
	Switzerland	LU	Argentina	UW	U.S.S.R.		America	3V	Tunisia
~		LX	Luxembourg	VE		WG	Mariana Is. (novice	3W	
Ø	Liechtenstein	LZ	Bulgaria		Canada	440		Contract of the Contract of th	Vietnam
	Ecuador	MP4	Bahrain, Muscat and	VK	Australia		stations)	3X	Guinea
8	Galapagos Islands		Omain Octor & Tavaial	VK9	New Guinea, Papua,	WL	Alaska (novice stations)	45	Ceylon
	Haiti		Oman, Qatar & Trucial		Norfolk Island, Nauru,	WN	United States of	4U	United Nations
	Dominican Republic		Oman		Cocos Is., Lord Howe	4414		4W	Yemen
	Colombia	OA	Peru		Islands		America (novice	4X	Israel·
	Korea	OD	Lebanon	VKO	Australian Antarctica,		stations)	5A	Libya
	1000	OE	Austria	1100		WP4	Puerto Rico (novice	5B4	
	Korea	OH	Finland		Heard Island and Mac-		stations)		Cyprus
	Panama	OK	Czechoslovakia		quarie Islands	WS6	American Samoa	5H3	Tanganyika
	Honduras	ON	Belgium	VO	Canada (Newfoundland		(novice stations)	5N2	Nigeria
	Thailand				and Labrador)	wv	United States of	5R	Malagasy Republic
	Vasican	OX	Greenland	VPI	British Honduras	***		5T	Mauretania
	Vatican	OY	Faroe Islands	VP2	Anguilla, Antigua, Bar-		America (novice	5U	Niger
	Saudi Arabia	OZ	Denmark	N. S. State	buda, Brit. Virgin Is.,	1202	stations)	5V	Togolese Republic
	Italy	PA	Netherlands		Dominion Consider		Mexico	5W	Western Samoa
	Pelagian Islands	PI	Netherlands		Dominica, Grenada,	XT	Upper Volta		
	Pantellaria Island	PJ	Netherlands Antilles		Montserrat, St. Kitts,	XU	Cambodia	5X5	Uganda
	Sardinia	PK	Indonesia		Nevis, St. Lucia, St.	XV	Vietnam	60	Somali Republic
	Sicily	PX			Vincent	XW	Laos	6T	Sudan
			Andorra	VP3	British Guiana	XZ	Burma	6W	Senegal
	Japan	PY	Brazil	VP4	Trinidad and Tobago			6Y	Jamaica
	Mongolia	PZ	Surinam	VP5	Cayman & Turks &	YA	Afghanistan	7X	Algeria
	Jordan	SL	Sweden (Forces)		Caicos Islands	YI	Iraq	9A	San Marino
)	Netherlands New	SM	Sweden	VP6		YJ	New Hebrides		
	Guinea	SP	Poland		Barbados	YK	Syria	9G	Ghana
	United States of	SU	Egypt	VP7	Bahama Islands	YN	Nicaragua	9K	Kuwait
	America	SV		VP8	Falkland Islands and	YO	Roumania	9L	Sierra Leone
			Greece		Dependencies,	100000000000000000000000000000000000000		9M	Federation of Malaya
	Japan (U.S. Forces)	TA	Turkey		Grahamland, South	YS	El Salvador	9N	Nepal
	Baker, Howland and	TF	Iceland		Georgia	YU	Yugoslavia	90	Congo Republic
	American Phoenix Is.	TG	Guatemala	VP9	Bermuda	YV	Venezuela	90	Burundi
1	U.S. Antarctic and	TI	Costa Rica	and the second second		ZA	Albania		
	Navassa Island	TJ	Cameroon	VQI	Zanzibar			9X	Ruanda
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