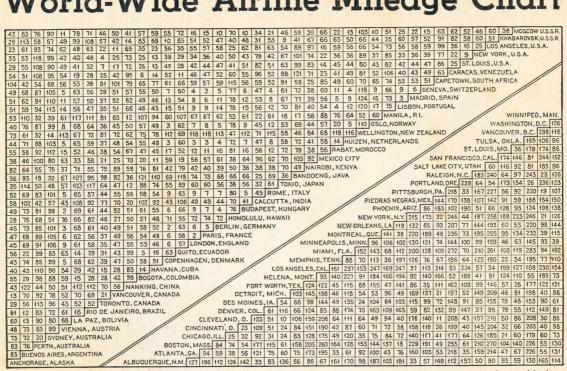


# World-Wide Airline Mileage Chart



To determine mileage between any two of the listed cities in the world, first find these two cities on the world chart (top triangle). Follow the horizontal column across the chart from the upper city, and the vertical column up from the lower city. The box at which these two columns intersect shows the required mileage in hundreds of miles. The same method applies to the U. S. chart (lower triangle) except that mileages are shown in tens. All mileages show the shortest (great circle) paths between points. Courtesy of Radio News

#### This RADIO ATLAS is presented to

by

#### Megacycle-Meter Conversion Guide

Due to the fact that both megacycles and meters are used in reference to radio stations, it is often desirable to convert one into terms of the other.

To find the number of megacycles if meters are given, divide 300 by the number of meters. To find the number of meters if megacycles are given, divide 300 by the number of megacycles.

Copyright, 1935, by Philco Radio & Television Corp., Philadelphia, Pal.

# Foreword to Foreign Broadcast Reception

With a new 1936 American and Foreign Broadcast Philco, you are on the threshold of thrilling adventure and glorious entertainment. You'll be a Marco Polo, a Magellan or a Da Gama, faring forth at a touch of the dial into distant places and strange, exotic lands.

You'll hear voices and music from the farflung corners of the earth that will reveal to you Philco's marvelous engineering perfection. For, properly installed with a Philco All-wave Aerial, a new Philco will bring you programs from across the seas with surprising clarity, regularity and volume! Used with this aerial, the Automatic Aerial Selector—which is built into every short-wave Philco—automatically switches-in the exact electrical values needed to maintain maximum power on each wave band.

Then too, if you are to enjoy short-wave reception to the utmost, you must know when and where to tune. It was to help you in this regard that this new Philco Radio Atlas was written. All the information contained herein is authentic and accurate to the date of going to press. Follow it carefully and you will experience tremendously more exciting reception than those who tune blindly.

Philco dials are calibrated in megacycles. Thus, the station frequencies listed in this Atlas correspond closely to the actual dial settings at which these stations are received. After making sure the station you want to hear is on the air, set the wave band switch of your Philco to the section of the dial in which its frequency is located. Turn the dial to the frequency shown in the station list.

Then with the volume turned up so that you hear a rushing sound, move the dial slowly back and forth until the station comes in. Do not expect to hear a station every time it is on the air for there are many factors which govern short-wave reception such as skip distances, storms, your particular location, etc. But tune slowly and carefully. If the station can be heard at all, your Philco will bring it in.

## TABLE OF CONTENTS

1

PAGE

World-Wide Airline Mileage Chart Megacycle - Meter Conversion Table	Front
Foreword to Foreign Broadcast Recer	ation 1

Radio Map of the WORLD2-3
Short-Wave Stations of the World4-5
Photos and Stories of European
Broadcasts
Radio Map of EUROPE10-11
Photos and Stories of South American Broadcasts
Broadcasts

Radio Map of SOUTH AMERICA 14-15 Photos and Stories of Asiatic Broadcasts...17

Radio Map of ASIA18-19
Photos and Stories of African Broadcasts. 21
Radio Map of AFRICA
Photos and Stories of Australian and
South Seas Broadcasts24-25
Radio Map of OCEANIA (Australia
and South Pacific)
Photos and Stories of North American
Broadcasts
Radio Map of NORTH AMERICA . 30-31
North American Long-Wave Stations32
PHILCO Radio
Advertisement Inside Back Cover

PAGE

# **Principal Short-Wave**

Mega-	Station	Location	Time
cycles			(Eastern Standard)
21.54		Pittsburgh, Pa Prague, Czechoslovakia	.7 to 9 A.M. Schedula Indefinite
17 70	CSC .	Deventry England	b A.M. to Noon
17 70	W2XAI	Bound Brook N	Daily 8 to 9 A.M., Tue, Thur., Fri. 2 to 3 F.M.
17 77	PHI	Huizen, Netherlands (Holland) Nauen, Germany	.7:30 to 10:30 A.M. ex. Tue. and wed.
17 75	HSP	Bangkok Siam	4:30 to 6:30 A.M. Irregular.
15 27	TTAC2	Dudement Unmanny	Sundays 9 to 10 A.M.
15 34	W2XAD	Schenectady, N. Y	Sun. 10:30 A.M. to 4 P.M., Daily 2 to 3 P.M.
15 27	WINE	Warma N I	10 A.M. to 5 P.M.
15 26	CSI	Deventry England	.12:30 to 2:15 P.M. Irregular.
15.25	PCI	Pontoise, France Eindhoven, Netherlands (Holland)	7 to 11 A.M. Irregular.
15 21	WOVL	Ditteburgh Po	IU A.M. to / P.M.
15 20	DID	Zeesen, Germany Daventry, England	3:45 to 7:15. 8 to 11:30 A.M.
16 11	LIVI	Voticon City Italy	10:30 to 10:45 A.M.
14 00	LAV	Manila D I	5 to 7 A.M. and 7 to 8 P.M.
14 60	IVH	Nazaki, (Tokyo) Japan Bucharest, Roumania	4 to 8 A.M. and 8:30 to 9:30 P.M.
12 02	SI 17	Cairo Egypt	Schedule Indefinite
13 07	VP1A	Suva Fiji Islands	. 12:30 to 1:30 A.M., ex. Sat. and Sun.
13 40	CTICO	Rabat, Morocco	The Thur Fri I to 2:15 P. VI., Sun, IV to 11:30 A. VI.
12.00	RNE	Moscow, U. S. S. R.	.Daily 1 to 6 P.M., Sun. 6 to 7 and 10 to 11 A.M., wed. 6 to
			7 A.M.
11 00	FYA	Saigon, French Indo-China	3 to 4 A.M., 10 A.M. to 1:15 P.W. and 2 to 5 P.W.
11 87	W8XK	Pittsburgh, Pa	.5 to 9 P.M.
11 86	GSE	. Daventry, England	. II A.M. to Noon.
11 80	COOWR	Sancti Spiritus, Cuba	.4 to 6 and 9 to 11 P.M.
11 70	WIXAL	Boston, Mass.	Schedule Indefinite.
11 75	CSD	Deventry England	Noon to 4:30 P.M. and 5 to 10:30 P.M. 12:15 to 2:15 A.M., 12:15 to 5:45 P.M.
4 4 77 4	LITANDA	Madallin Colombia	11.30 A. M. TO I P. M. and $0.30$ to $10.30$ F. M.
11 71	FYA	.Pontoise, France	.3 to 4 A.M., 6 to 9 P.M. and 10 P.M. to Midnight.
11 57	HH2T	Port-au-Prince, Haiti	Schedule Indefinite.
11 05	ZLT	Wellington, N. Z.	.1 to 7 A.M.
10.74	JVM	Nazaki, (Tokyo) Japan Nazaki, (Tokyo) Japan	1:30 to 7 A.M. and 7 to 11 P.M.
10 42	XGW	Shanghai China	lests near b A. M.
10.35	LSX	Buenos Aires, Argentina	.6:15 to 7:15 P.M. Irregular.
10 14	OPM	.Brussels, Belgium	
10.05		. Cairo, Egypt	. Schedule Indefinite.
9.87	EAQ	Madrid, Spain	. Daily 5:15 to 7:30 P.M., Sat. 1 to 3 P.M.
9.59	CT1AA	.Rome, Italy	. Tue., Thur., Sat. 3:30 to 6 P.M.
0 50	HBL	.Geneva, Switzerland Philadelphia, Pa	5:30 to 6:15 P.M. Sat.
. 0 50	VK2MF	Sydney Australia	Sun. Midnight to 2 A.M., 5 to 9 A.M.
9.59	HP51	Panama City, Panama	11:45 A.M. to 1 P.M. and $7:30$ to 10 P.M.
9.58	VK 3I P	.Daventry, England	6 to 8 and 10 to 11 P.M. Daily 3:15 to 7:30 A.M.
9 57	LK II	Jelov, Norway	$\dots$ 5 to 8 A.M. and 11 A.M. to 6 P.M.
9957	W1XK	Boston, Mass Bombay, India	6 A.M. to Midnight.
9.57	DIA	.Zeesen, Germany	
0 57	SRI	Poznan Poland	Schedule Indefinite.
9.54	W2XAE	.Zeesen, Germany	. 12:30 to 2:15 A.M., 3:45 to 7:15 A.M., 5 to 10:30 P.M. Daily 5:30 to 11 P.M.
* 9 51	GSB	Daventry, England	12:15 to 2:15 A.M., 12:15 to 5:45 P.M.
0 9 51	VK3ME	Melbourne, Australia	Wed., Thur., Fri., Sat. 5 to 7 A.M.
0 43	COH	Rio de Janeiro, Brazil	. 10 A.M. to Noon, 4 to 6:30 P.M. and 8 to 10 P.M.
9.37	CT3AO	Funchal, Madeira	Schedule Indefinite.
9.12	HAT4	Budapest, Hungary	Sundays 6 to 7 P.M. Daily 11:30 P.M. to 1:15 A.M., Mon. and Thur. 3 to 7 A.M.
8 45	HC2AT	Guavaguil, Ecuador	8 to 10 P.M. Irregular.
8 71	HCIB	Quito, Ecuador	. Daily ex. Mon. 7:50 to 11:50 F.M.
7 86	HC2 ISB.	Rabat, Morocco	8:15 to 11:15 P.M.
7.80	HBP	Geneva, Switzerland	Saturdays 5:30 to 6:15 P.M.
7 52	KKH	. Kauhuku, Hawaii	. Evenings, Irregular.
7.38	XECR	Mexico City	Sundays 6 to 7 P.M.
7 78	HIIABD	Cartagena, Colombia	7:30 to 9 P.M.
7 17	CR6AA	Lobito Angola Africa	Mon. 6 to 7 P.M., Tue. and Fri. 8 to 9 P.M. Wed. and Sat. 2:30 to 4:30 A.M.
7.08	PI1J	Dordrecht, Netherlands (Holland)	Sat. 11:10 A.M. to 12:10 P.M.

4

# Stations of the World

Mega- cycles	Station	Location	<b>Time</b> ( <i>Eastern Standard</i> )
6.97 6.90	HCETC	Cali, Colombia Quito, Ecuador La Romana, D. R.	. Mon., Wed., Sat. 8 to 11:30 P.M. .12:30 to 2 and 7:30 to 9:30 P.M
6.81	HIH	San Pedro de Macoris, D. R	Daily 12:10 to 1:40 P.M. and 6:40 to 7:40 P.M., Sun. 3 to 4 A.M. and 4 to 5 P.M.
6.67 6.62	HC2RL	Guayaquil, Ecuador	Sun. 5:45 to 7:45 P.M., Tue. 9:15 to 11:15 P.M. Thursdays 9 to 11:30 P.M.
6.61	HI4D	Moscow, U. S. S. R. Santo Domingo, D. R. San Jose, Costa Rica	.11:15 A.M. to 1:40 P.M. and 4:40 to 7:40 P.M.
6.55 6.53	TIRCC	San Jose, Costa Rica	.6 to 11:30 P.M. Irregular. .Saturdays 8 to 10 P.M.
6.48	HJ5ABD.	. Valencia, Venezuela . Cali, Colombia . Barranquilla, Colombia	7 to 10 P.M.
6.45 6.37	YN1GG YV4RC	Managua, Nicaragua	.7 to 10:30 P.M. Irregular. .4:30 to 10:30 P.M.
6.25 6.25	HJ4ABC.	. Santo Domingo, D. R	Daily 9:30 to 11 A.M. and 7 to 8 P.M. Wednesdays 7 to 10:30 P.M.
6.20 6.19	CT1GO	Parede, Portugal	.Daily ex. Sat. and Mon. 7:20 to 8:30 P.M. .11:40 A.M. to 1:40 P.M. and 7:40 to 8:40 P.M.
6.17 6.15	HJ3ABF. YV3RC	. Tunja, Colombia Bogota, Colombia Caracas, Venezuela	Daily 6 to 11 P.M 10:30 A M to 1:30 P M and 4:30 to 9:30 P M
6.15	CO9GC	Santiago, Cuba	.8:30 to 10 A.M., Noon to 1:30 P.M., 3:30 to 4:30 and 10 to 11 P.M.
6.14 6.14	CSL	Lisbon, Portugal Pittsburgh, Pa	.1:30 to 7 P.M. Irregular. .9 P.M. to 1 A M.
6.13 6.13		. Kuala Lumpur, Malay States Habana, Cuba Cartagena, Colombia	.10 P.M. to 12:30 A.M. Irregular.
6.12	YDA	Nairobi, Kenya Colony Bandoeng, Java Wayne, N. J.	. 5:45 to 6:15 A.M. and 11 A.M. to 2 P.M. .5 to 11 A.M. Irregular.
6.11 6.11	YV2RC VE9HX	Caracas, Venezuela	.10:30 to 1 P.M. and 5:15 to 10 P M.
6.11 6.10	HJ4ABB.	Calcutta, India Manizales, Colombia Chicago, III.	Daily 9:30 A.M. to Noon, Sat. 11:45 P.M. to 3 A.M.
6.09		. Bound Brook, N. J	Mon., Wed., Sat. 4 to 5 P.M. 3:30  A  M to 7 A M and 9 A M to 4 P M
6.08	W9XAA	. Chicago, Ill	Thur, Fri, Sat. 7 A.M. to 4 P.M., Sun. Noon to 8 P.M. Schedule Indefinite.
6.08 6.07	CP5 VE9CS HIN	La Paz, Bolivia Vancouver, B. C. Borota, Colombia	Daily 8 to 9 P.M. Daily 6 to 9 P.M. Daily 6 to 7 P.M., Sun. 1:45 P.M to 1 A.M.
6.07 6.07	. HH2S . CER2 	Port-au-Prince, Haiti Vienna, Austria	Daily 6:40 to 8:40 A.M. Daily 6 to 9 P.M. Daily 6 to 7 P.M., Sun. 1:45 P.M to 1 A M. 6 to 11 P.M. Irregular. Schedule Indefinite. 1 to 6 and 7 to 10 P.M. Daily 11 A.M. to Noon and 5:30 to 7:30 P.M. Daily 11 to 6 P.M. 5:30 A.M. to 7 P.M. and 10 P.M. to 1 A.M. 7 to 10 P.M. 6 to 10 P.M. 11:30 A.M. to 2 P.M. and 8 P.M. to Midnight.
6.06 6.06	OXY W8XAL	Skamlebaek, Denmark	Daily 11 A.M. to Noon and 5:30 to 7:30 P.M. Daily 1 to $6$ P.M. .5:30 A.M. to 7 P.M. and 10 P.M. to 1 A.M.
6.04 6.04	HJIABG. W4XB. 	Miami, Florida	6 to 10 P.M. .11:30 A.M. to 2 P.M. and 8 P.M. to Midnight.
6.03 6.02	HP5B DJC		Noon to 1 P.M. and 8 to 10:30 P M. Noon to 4:30 P.M. and 9:30 to 10:30 P.M.
6.01 6.01	. HJ3ABH. COC ZHI	Bogota, Colombia Habana, Cuba Singapore Malay States	.6 to 10 P.M. 11:30 A.M. to 2 P.M. and 8 P.M. to Midnight. .2:30 to 8:30 P.M. .Noon to 1 P.M. and 8 to 10:30 P M. .Noon to 4:30 P.M. and 9:30 to 10:30 P.M. .Mon. and Fri. 3 to 5 A.M. .Daily 10:30 A.M. to 2 P.M. and 6 to 11 P.M., Sun. 4 to 9 P.M. .9:30 A.M to 12:30 P.M., 4 to 7, 8 to 10 P.M., Sat. 11:30 P.M. .Mon., W zd., Thur. 5:40 to 8:10 A.M., Sat. 10:40 P.M. to 1:10 A.M.
6.00 5.98	XEBT	Mexico City.	1:10 A.M. .6 P.M. to 3 A.M. Irregular. . Tue. and Fri. 8:10 to 10:10 P.M., Sun. 8:40 to 10:40 A.M. and
5 98	XECW	Mexico City	240 to $440$ P.M. 4 to $430$ P.M. and $1030$ P.M. to Midnight. Daily 2 to $215$ P.M. Sup 5 to $520$ A.M.
5.94	HIIABI	Santa Marta Colombia	11 A M to 1 P M and 7 to 0 P M
5.85	YV5RMO	Medellin, Colombia Cucuta, Colombia Guatemala City Maracaibo, Venezuela	11 A.M. to 2:30 P.M. and 6 to 10 P.M.
5 78	HILI	San Jose, Costa Rica	.6:15 to 11 P.M. Irregular.
5.15 4.60 4.25	PMY HC2ET RV15	Lima, Peru Bandoeng, Java Guayaquil, Ecuador 	.6 A.M. to Noon. Wed. and Sat. 9 to 11 P.M. 1 to 9 A.M.

The above information was furnished through the courtesy of the International Short-Wave Radio Club, East Liverpool, Ohio — an organization with members throughout the world. For the PHILCO owner who wishes additional information regarding short-wave reception, including changes in stations and time as they occur, a subscription to the "International Short-Wave Radio" magazine, published monthly by this club, will prove very interesting and helpful.

## COMEDY! DRAMA! SYMPHONIES! You may hear all this and more from the

#### **GREAT BRITAIN**

Location	Station	Freq.	Time (Eastern Standard)
Daventry	GSG	17.79	6 A.M. to Noon
Daventry	GSI	15.26	12:30 to 2:15 P.M. Irregular
Daventry	GSF	15.13	6 A.M. to Noon, 4:15 to 5:45 P.M.
Daventry	GSE	11.86	11 A.M. to Noon
Daventry	GSD	11.75	12:15 to 2:15 A.M., 12:15 to 5:45 P.M.
Daventry	GSC	9.58	6 to 8 & 10 to 11 P.M.
Daventry	GSB	9.51	12:15 to 2:15 A.M., 12:15 to 5:45 P.M.

Nowhere in all Europe is wholly delightful radio entertainment more abundant than in England. The British Broadcasting Corporation sends out a vast wealth of varied programs for the benefit of listeners all over the world. Some are directed toward Africa, others toward India and Australia, but a great many are sent out expressly for listeners in Canada and the United States.



The Wireless Military Band with B. Walton O'Donnell conducting. This famous musical organization is heard frequently by listeners to the big short-wave stations at Daventry, England. They are shown broadcasting from one of the beautiful studios at Broadcasting House London.

When conditions are favorable, you can hear programs frequently, for England broadcasts all day long from early morning until mid-evening. And what programs! Variety shows, brilliant dance music from the smart Hotel Mayfair, the Metropole, and other centers of London night life, splendid symphony concerts from St. George's Hall, news dispatches several times a day, enlightening talks by intern atio nallyknown personages on economic and political topics, c o m e d y sketches and recitals direct f r o m Broadcasting House.



A dramatic sketch being broadcast from the studios of the British Broadcasting Corporation in Broadcasting House, London. Notice the unusual microphone equipment and the modernistic arrangement of clock and signal lights on the wall.

#### **NETHERLANDS** (Holland)

Location	Station	Freq.	Time (Eastern Standard)
Huizen	PHI	17.77	7:30 to 10:30 A.M. ex. Tue. & Wed.
Eindhoven Dordrecht	PCJ PI1J		7 to 11 A.M. Irregular Sat. 11:10 A.M. to 12.10 P.M.

The station at Huizen, PHI, is the one you'll hear most often from this little country. It is known throughout the world as "The Happy Station"— and with good reason. If you have never heard a program from this delightful broadcaster, you have a treat in store. Its programs are made

up of rollicking Dutch folk tunes, modern dance music, light opera selections and the like—music of a care free, lighthearted nature. No wonder PHI is called "The H a p p y Station."

And no small part of its reputation is due to its famous announcer, Eduard Startz, who acts as



Photo Courtesy Radio News Many American listeners hear Station PHI at Huizen, Netherlands, frequently. And here's the studio from which some of its broadcasts come.

IMPORTANT ! To span oceans you need a scientifically designed aerial. Install a Philco All-wave Aerial to get everything your set is capable of giving.

## DANCE MUSIC! NEWS! TALKS! powerful short-wave stations in Europe!

master of ceremonies rather than announcer, on its delightful programs. Mr. Startz speaks seven languages and his happy-go-lucky, informal manner seems to take his audience right into the studio with him. Among regular listeners to his station, he is a distinct personality, a friend.

#### GERMANY

Location	Station	Freq.	Time (Eastern Standard)
Nauen	DJE	17.76	8 to 11:30 A.M. Irregular
Zeesen	DJQ	15.28	8 to 11:30 A.M.
Zeesen	DJB	15.20	3:45 to 7:15, 8 to 11:30 A.M.
Zeesen	DJD	11.77	Noon to 4:30 P.M. & 5 to 10:30 P.M.
Zeesen	DJA	9.57	12:30 to 2:15 A.M. & 5 to 9:15 P.M.
Zeesen	DJN	9.54	12:30 to 2:15 A. M.; 3:45 to 7:15 A.M.; 5 to 10:30 P.M.
Zeesen	DJC	6.02	Noon to 4:30 P.M. & 9:30 to 10:30 P.M.

The big German short-wave stations at Zeesen, just outside Berlin, provide a really tremendous amount of fine entertainment for the radio listener. Germany takes its short-wave radio broadcasting most seriously. As a consequence, no effort is spared to make its programs interesting, educa-

tional and entirely

hear stirring military

band music, gay Ba-

varian folk music

and dances, swinging

German waltzes, fine

symphonic concerts,

recitals by Germany's

most talented in-

strumentalists, news dispatches in Eng-

lish, and plays. In

fact, there's hardly

any type of program

that is not broad-

You'll

enjoyable.



Rudolph Kayssler, eminent German actor, addressing an American audience by way of the German short-wave stations at Zeesen.

cast from one or another of these stations.

Germany utilizes a complicated system of directional antennæ which project several transmissions toward America daily. These programs are sure to be among your favorites.

#### LISTEN TO BOAKE CARTER OVER KEY COLUMBIA STATIONS



This is an unusually striking photograph of the transmitting antennae of the powerful German short-wave stations at Zeesen. A complicated system of directional antennae enable the German programs to be received in America almost daily.

#### BELGIUM

Location	Station	Freq.	Time (Eastern Standard)
Brussels	ORK	10.33	1:30 to 3 P.M.

This little country provides some really fine short-wave entertainment through its principal station at Ruysselede. Like so many of the European nations, Belgium foresaw the advantages of keeping in constant, daily touch with her colonial possessions. Thus, ORK is used extensively to communicate with the Belgian Congo. Tune to this station and you're quite likely to hear news and government reports, in Flemish, as well as delightful Flemish music.



A studio rehearsal at Brussels. Many of the programs you hear from ORK at Ruysselede, Belgium, come from this studio.

#### FRANCE

Location	Station	Freq.	Time (Eastern Standard)
Pontoise	FYA	15.25	Daily 6 to 10 A.M.
Pontoise	FYA	11.90	3 to 4 A.M., 10 A.M. to 1:15 P.M. & 2 to 5 P.M.
Pontoise	FYA	11.71	3 to 4 A.M., 6 to 9 P.M. & 10 P.M. to Midnight

The gay, sprightly broadcasts from France have a sparkling quality. You'll truly delight in the songs of the boulevards, the toe-tickling dance music from the cafes in Montmartre and the happy folk songs that fairly breathe the atmosphere of the French countryside.

Recently the French government improved the transmitters and antenna systems of these three stations with the result that the French broadcasts come in surprisingly well. Whenever your spirits are low and you feel the need of gay music and happy song, by all means tune to France. You'll be more than repaid for your choice.

#### ITALY

Location	Station	Freq.	Time (Eastern Standard)
Vatican City	HVJ	15.11	10:30 to 10:45 A.M.
Rome	2RO	11.81	8:15 to 10:15 A.M. & 2:30 to 5 P.M.
Rome	2RO	9.64	Mon., Wed., Fri. 6 to 9:15 P.M.
Vatican City	HVJ	5.97	Daily 2 to 2:15 P.M., Sun. 5 to 5:30 A.M.

Ever since Station 2RO at Rome came on the air it has been a favorite among American shortwave listeners. However, with the inception of the American Hour, the popularity of this station has greatly increased. No longer does the listener have to unravel yards and yards of rapidfire Italian to identify this station, for the American Hour is broadcast in English.



Photo Courtesy Radio News

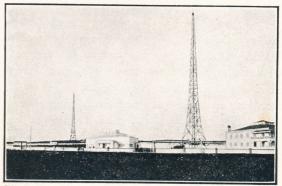
Thousands of American short-wave listeners enjoy the American Hour from Rome three times a week. Above is shown Senator Guglielmo Marconi at the initial broadcast of this program from 2RO, during which he addressed his American audience.

With the first broadcast of this program, Italy put into operation her new transmitting equipment which brought 2RO into many American homes at regular intervals. The programs are of extremely high caliber-opera, as it's sung nowhere else in the world-news-dance musicsymphonic concerts-recitals and even lessons in Italian.

#### PORTUGAL

Location	Station	Freq.	Time (Eastern Standard)
Parede	CT1GO	12.40	Tue., Thur., Fri. 1 to 2:15 P.M. Sun. 10 to 11:30 A.M.
Lisbon	CT1AA -	9.59	Tue., Thur., Sat. 3:30 to 6 P.M.
Parede	CT1GO	6.20	Daily ex. Sat. & Mon. 7:20 to 8:30 P.M. Sun. 11:40 A.M. to 1 P.M.
Lisbon	CSL	6.14	1:30 to 7 P.M. Irregular

No longer is this little country the mighty colonial empire it once was. But the spirit of Portugal still lives, as any listener knows who has tuned to the stirring broadcasts from Lisbon. All the color and care free gaiety which for centuries has characterized the Portuguese is still retained in their music. That is why the radio listener loves to turn his dial to one of these stations.



The Radio Club of Portugal is a thriving organization. The group of buildings shown above belong to the club and house the club's own station, CT1GO, which you'll hear often.

Like many other countries, Portugal has realized the value of favorable publicity and has improved and enlarged the transmitter of the governmentowned station, CT1AA. Portuguese broadcasts now reach America with surprising regularity and volume. The Portuguese Radio Club's station, CT1GO at Parede, is also heard here in the United States.

SWITZERLAND Location Station Geneva HBI Geneva HBP

Freq. Time (Eastern Standard) 9.59 5:30 to 6:15 P.M. Sat. 7.80 Saturdays 5:30 to 6:15 P.M.

Those of you who are interested in events of international importance will appreciate broadcasts you are able to tune in from the League of Nations' stations at Geneva. From them you'll get a clearer insight into the significance of world

happenings. You'll hear the opinions and ideas of world figures. And thus you will be better able to formulate your own thoughts and theories.

The League of Nations' broadcasts go on the air once a week on Saturday afternoon. The program lasts 45 minutes, and consists of a 15-minute talk given in each of three languages, English first, then French, and lastly, Spanish.

#### SOVIET UNION (Russia)

Location	Station	Freq.	Time (Eastern Standard)
Moscow	RNE	12.00	Daily 1 to 6 P.M., Sun. 6 to 7 & 10 to 11 A.M., Wed. 6 to 7 A.M.
Moscow	REN	6.61	1 to 6 P.M.

There's a certain excitement and adventure about tuning in the stations at Moscow. Perhaps it is because of the element of mystery that surrounds the land of the Soviets. Or perhaps it is because of the excellent symphonic and choral music one hears by short-wave from this city. At any rate, Moscow is one of the most sought after stations in all Europe. To hear a broadcast from RNE or REN is a real radio thrill. Also those interested in Soviet activity will find the Moscow stations a prolific source of information and education.



You've heard about collective farmers in the Soviet Union. Here's a group of them listening in the fields to a broadcast from Moscow during a rest interval.

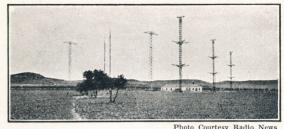
#### SPAIN

Location Madrid

EAO

Freq. Time (Eastern Standard) Station Daily 5:15 to 7:30 P.M., Sat. 1 to 3 P.M. 9.87

Do you feel in the mood for a graceful tango? An exciting fandango or bolero? Or perhaps you'd like a dash of the bizarre as found in the weird melodies of the Spanish mountain folk. Then tune to EAQ at Madrid. The music from this station is thrilling and invigorating-different from



Here is one of the most famous short-wave stations in the world-EAQ. Although its studios are located in Madrid, the transmitter, shown above, is at Aranjuez. You'll get almost

anything broadcast elsewhere in Europe. It is redolent of bright sunshine, gleaming tile roofs, gay, laughing senoritas and the spirit of the fiesta.

daily reception from this station.

Then, of course, you may hear other types of programs, too-classical works, dance music and news dispatches in English. Madrid is another of the European stations that are received with unusual regularity here in America.

#### **DENMARK** and **NORWAY**

Location	Station	Freq.	Time (Eastern Standard)
Skamlebaek	OXY	6.06	Daily 1 to 6 P.M.
Jeloy	LKJ1	9.57	5 to 8 A.M. & 11 A.M. to 6 P.M.

Because of its lively rhythm and happy character, Scandinavian music is most appealing. And, of course, the logical places to hear such music are Denmark and Norway. Both have short-wave

stations that are occasionally heard here in America. Many a listener has experienced the thrill of hearing the clock in the century-old town hall of Copenhagen strike out the close of Denmark's broadcasting activities for the day, or delighted in programs of gay music

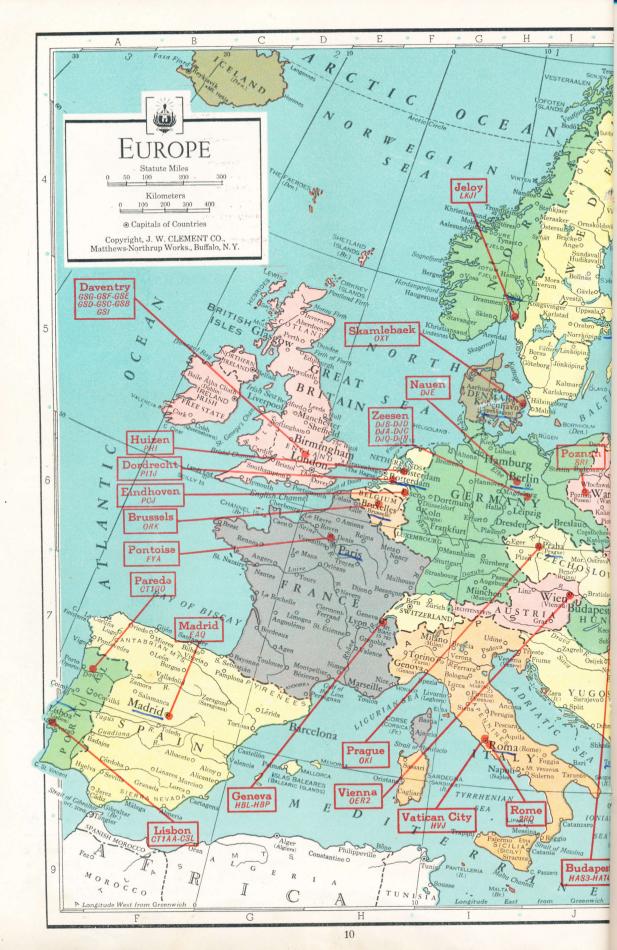


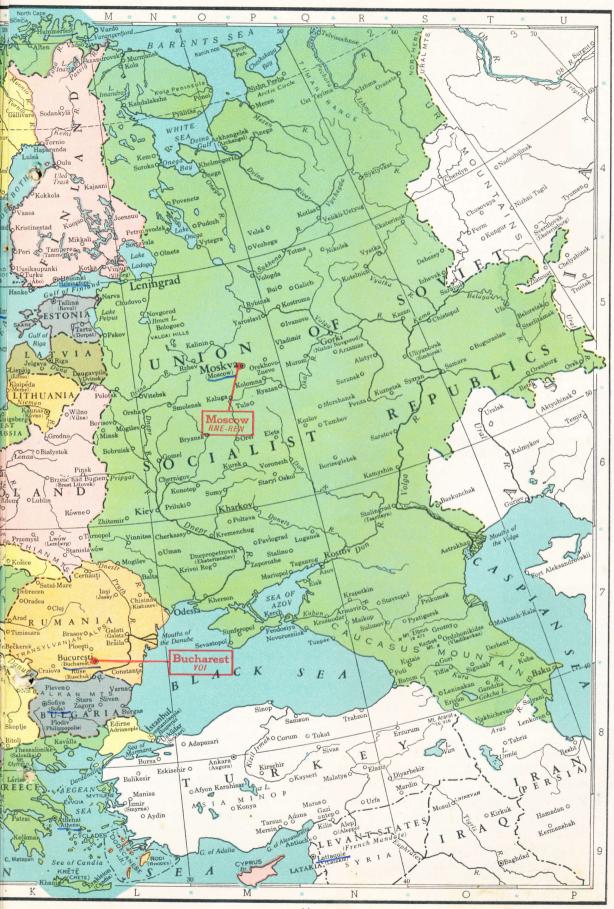
Grethe Otto, pleasant-voiced announcer at Copenhagen—one of the reasons why masculine listeners tune for this station.

from Jeloy, Norway. Once you hear these stations, you'll try for them often.

(Continued on page 20)

IMPORTANT! To span oceans you need a scientifically designed aerial. Install a Philco All-wave Aerial to get everything your set is capable of giving.





## FOR PULSE-STIRRING RHYTHMS

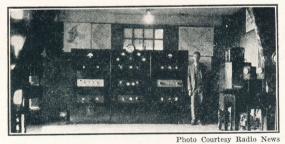
There's a vast wealth of fine entertainment

#### COLOMBIA

Location	Station	Freq.	Time (Eastern Standard)
Medellin	HJ4ABA	11.71	Noon to 2 P.M. & 6 to 11 P.M.
Bogota Cartagena	HJ3ABD HJ1ABD	7.40 7.28	7:30 to 11 P.M. 7:30 to 9 P.M.
Bogota	HKE	7.22	Mon. 6 to 7 P.M. Tue., Fri. 8 to 9 P.M.
Cali	HJ5ABC	7.03	Mon., Tue., Wed., Fri. 7 to 9:30 P.M.
Cali	HJ5ABD	6.48	7 to 10 P.M.
Barranquilla	<b>HJ1ABB</b>	6.45	Daily 4:30 to 10 P.M.
Periera	HJ4ABC	6.25	Daily 9:30 to 11 A.M. & 7 to 8 P.M.
Tunja .	HJ2ABA	6.17	1 to 2 & 7 to 10 P.M.
Bogota	<b>HJ3ABF</b>	6.17	Daily 6 to 11 P.M.
Cartagena	HJ1ABE	6.13	Daily 7:30 to 9 P.M. Mon. 10:30 P.M.
Manizales	HJ4ABB	6.10	Daily 11 A.M. to Noon & 5:30 to 7:30 P.M.
Bogota	HJN	6.07	6 to 11 P.M. Irregular
Manizales	HJ4ABL	6.06	Daily 11 A.M. to Noon & 5:30 to 7:30 P.M.
Barranquilla	<b>HJ1ABG</b>	6.04	6 to 10 P.M. Irregular
Rogota	HJJABH	6.01	Daily 10:30 A.M. to 2 P.M.
- Bern			& 6 to 11 P.M., Sun. 4 to 9 P.M.
Santa Marta	HJ1ABJ	5.94	11 A.M. to 1 P.M. & 7 to 9 P.M.
Medellin	HJ4ABE	5.93	5 to 11 P.M.
Cucuta	HJ2ABC	5.89	11 A.M. to Noon & 6 to 9:30 P.M.

As you can see from the size of the station listings above, Colombia has gone in for shortwave broadcasting in a big way. Practically every city of any size in this country has one or more short-wave stations that can be heard in America. Many give station announcements in both Spanish and English for easy identification.

And what programs! Melodic tangos! Rhythmic rhumbas! Pulse-stirring paso dobles! Fascinating native folk songs played and sung by native musicians!



One of the many fine stations you may hear from Colombia, South America. It is HJ4ABB at Manizales. Its operator, Albert Hoyn, stands beside the control panel.

You'll find Colombia a most prolific source of enjoyable entertainment. The stations at Barranquilla, Medellin, and Cali, especially, are sure to be among your favorites for evening entertainment because they are received almost nightly with splendid volume and clarity. For sparkling, rhythmic music tune to Colombia.

#### VENEZUELA

Location	Station	Freq.	Time (Eastern Standard)
Valencia	YV6RV	6.52	Noon to 2 P.M. & 6 to 10 P.M.
Caracas	YV4RC	6.37	4:30 to 10:30 P.M.
Caracas	YV3RC	6.15	10:30 A.M. to 1:30 P.M. & 4:30 to 9:30 P.M.
Caracas	YV2RC	6.11	10:30 A.M. to 1 P.M. & 5:15 to 10 P.M.
Maracaibo	YV5RMO	5.85	11 A.M. to 12:30 P.M. & 5 to 9 P.M.

There's romance in the very sound of such names as Caracas, Valencia and Maracaibo! And there's plenty of romantic entertainment broadcast by the short-wave stations in these Venezuelan cities!

The South Americans are a music-loving people. Music is their principal means of recreation and relaxation. So, when you tune to Venezuela, you can be sure you'll hear programs that are full of color and rhythm.

South American music has enjoyed an even-increasing wave of popularity among Americans during the past few years. Listen to any dance



The little dark-eyed lady who is cuddling the microphone so affectionately is Josefina Carcano, actress and singer, who has helped so greatly in making YV2RC, Caracas, one of the most popular of all South American stations.

program right here at home and notice how many tangos, rhumbas and paso dobles are included.

Venezuela is a mountainous country. Thus, the transmitting towers of its principal shortwave stations are located at very high altitudes. Perhaps this explains why the Venezuelan stations are heard consistently by listeners here in America. Venezuelan time is almost the same as that of the eastern part of the United States and therefore these stations are excellent sources of delightful evening entertainment.

Many short-wave fans make it a practice to send the stations reports of reception in order to receive verification cards which they can display to their friends. The Caracas stations oblige such writers with handsome cards bearing a picture of the transmitter.

# -TUNE TO SOUTH AMERICA!

#### broadcast from below the blue Caribbean!



13

Rosario Lozada, one of the reasons why thousands of shortwave receivers are tuned to YV2RC, Caracas, each evening.

TOUTTOOD

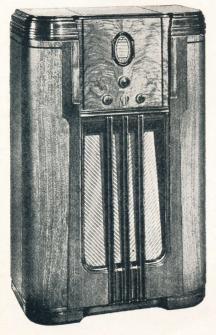
ECUADOR					
Location	Station	Freq.	Time (Eastern Standard)		
Guayaquil Quito	HC2AT HCJB	8.45 8.21	8 to 10 P.M. Irregular Daily ex. Mon. 7:30 to 11:30 P.M.		
Guayaquil Quito	HC2JSB HCETC	7.86 6.97	8:15 to 11:15 P.M. Mon., Wed., Sat. 8 to 11:30 P.M.		
Guayaquil	HC2RL	6.67	Sun. 5:45 to 8 P.M., Tue. 9:15 to 11:45 P.M.		
Riobamba Guayaquil	PRADO HC2ET	6.62 4.60	Thur. 9 to 11:30 P.M. Wed. & Sat. 9 to 11 P.M.		

Of all the South American countries which broadcast by short-wave, none provides finer entertainment than this little nation lying right on the equator. Through HC2RL at Guayaquil, for instance, almost every type of program is provided, from splendid operas to modern dance music and folk tunes. Many a Philco owner makes it a point to tune to the stations at Guayaquil, Riobamba and Quito regularly. These stations have adequate power and surprising volume.

PERU						
Location	Station	Freq.	Time (Eastern Standard)			
Lima Lima	OAX4B OAX4D	6.25 5.78	Wed. 7 to 10:30 P.M. Wed. & Sat. 8 to 11:30 P.M.			

It has been only during the past few months that stations in Peru have been heard consistently in America. The Peruvians evidently have been envious of the manner in which the short-wave broadcasts of their neighbors have been enthusiastically welcomed by listeners throughout the Western World, and as a result have improved their broadcasting equipment and adopted more regular schedules. For now the Peruvian stations are providing fine entertainment regularly. You'll find them another delightful source of rhythmic music. (Continued on page 16)

# SPAN THE OCEANS



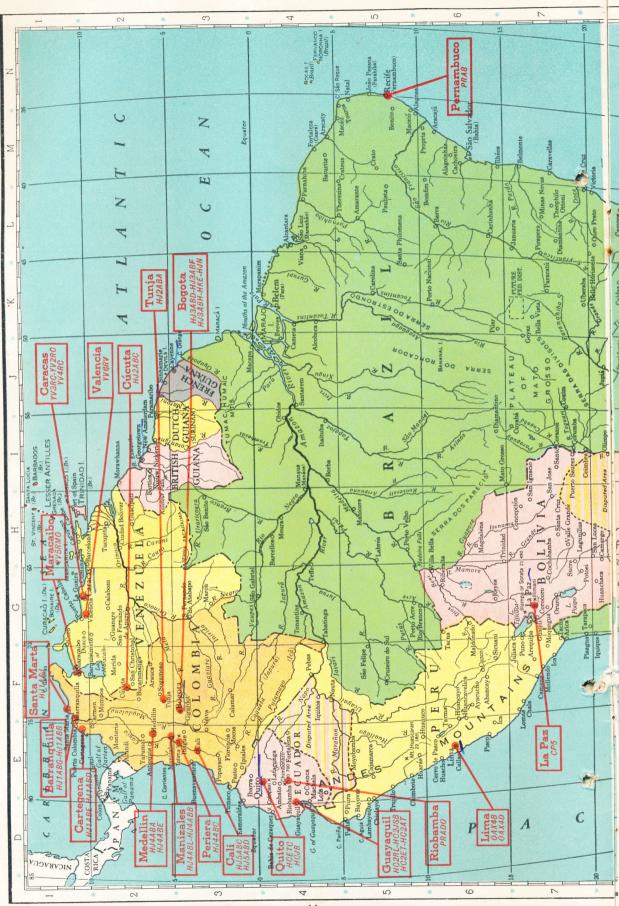
with this New 1936



Enjoy the most exciting reception in all radio history! From Rome to Rio — from Melbourne to Madrid — a new 1936 Philco, properly installed with a Philco Allwave Aerial, brings you foreign programs more perfectly than ever before! Unequaled tone — exquisite beauty ! Every worth while feature in radio !

**PHILCO 660X** An Inclined Sounding Board model that includes such outstanding features as Program Control, Shadow Tuning, Automatic Aerial Selector, Precision Radio Dial, Automatic Bass Compensation, Super Class A Audio System, etc. Beautiful hand-rubbed cabinet of selected Butt Walnut.

EASY TERMS - Liberal Trade-in Allowance





SOUTH AMERICA (Continued from page 13)

#### BRAZIL

Location	Station	Freq.	Time (Eastern Standard)
Rio de Janeiro	PRF5	9.50	Daily 5:30 to 6:15 P.M.
Pernambuco	PRA8	6.04	2:30 to 8:30 P.M.

While Brazil is not the prolific short-wave broadcaster that many of its South American neighbors are, its powerful station at Rio de Janeiro, PRF5, broadcasts some highly interesting entertainment every day. When this station first went on the air, its identity was unknown for several weeks because of its varying announcements entirely in Portuguese. However, the Radio Club of Brazil began to broadcast programs over it and announcements were then made in English and the mystery solved.



Photo Courtesy Radio News

Entrance to Station PRF5 at Rio de Janeiro—for some time a mystery station to the world's short-wave listeners. Thick jungle was cleared to build this popular broadcaster.

Location<br/>La PazStation<br/>CP5Freq.<br/>6.08Time (Eastern Standard)<br/>Daily 8 to 9 P.M.

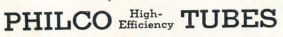
Located high up in the Andes Mountains, station CP5 at La Paz is said to be the highest broadcasting station in the world. It puts out daily transmissions and its splendid situation has made its programs heard throughout the North American continent. Like programs from other South American countries, those from Bolivia are filled with the sparkle and gaiety inherent in the Latin race.

#### Today's LOW Prices

make it advantageous to

**RE-TUBE NOW** 

Improve the performance of your radio with



#### ARGENTINA

 Location
 Station
 Freq.
 Time (Eastern Standard)

 Buenos Aires
 LSX
 10.35
 6:15 to 7:15 P.M. Irregular

When Commander Byrd and his expedition were in the Antarctic, station LSX at Buenos Aires,

Argentina, provided some of the most fascinating short-wave entertainment the listener could possibly wish for. Now, however, the Argentine stations are heard only during special test programs and when special events are being broadcast.

Chile also possesses short-wave stations, one of which,



Bibita Bravo, charming young pianist, whose playing of both American and Latin-American selections has endeared herself to listeners to Station YV2RC at Caracas.

at Santiago, has been heard occasionally by listeners in the United States. However, it does not have a definite broadcasting schedule and is used primarily for commercial phone communication.

#### SPANISH IN ONE LESSON

A knowledge of Spanish is invaluable to those who listen to South American short-wave stations. However, to those who do not have this knowledge, the following table showing how the letters and numerals sound when pronounced in Spanish, should be helpful.

A-ah B-bay C-say D-day E-av F-effay G-hay H-ah-hay I—ee I-hotah K-kah L-ellay M-emmay N-ennay 0-0 P-pay Q-coo R-erray

S-essav T-tav U-00 V-vay W-dooblevay X-ekis Y-egrey Z-zed 1—uno 2-doce 3-trace 4-kuahtro 5-sinko 6-sase 7-sate 8-acho 9-nuayvay 10-deeze

# ETHIOPIA AND ITS HISTORY

The true origin of the Ethiopian people is shrouded in the mists of antiquity. It is generally accepted, however, that Ethiopia was the Biblical Land of Kush, mentioned so many times in the Old Testament. The first ruler of which we have any record is the half legendary, half real Queen of Sheba, who in approximately 1000 B. C. journeyed to Jerusalem where she fell in love with King Solomon and bore him a son, Menelik. The child was educated by the King in Jerusalem and when of age returned to Ethiopia to rule as Menelik I. So universally consistent are the records concerning the Queen of Sheba and Menelik that many students of Ethiopia are inclined to believe it historically accurate. Added authenticity is supplied by the fact that Ethiopia's central province, Shoa, is also known as Shoba and Sheba.

It is from Menelik I that the reigning families of Ethiopia have descended in an unbroken line. The present ruler, Emperor Haile Selassie, is one of this line.



Wide World Photo

Aksum, Ethiopia-Scene as the High Priests gather for the annual religious fete at the Zion Church here. This edifice is but one of many located in this Ethiopian holy city. Aksum is one of the cities which have been captured by the Italians.

In the early history of this empire, Egypt was the controlling power and Ethiopia had to pay heavy tribute to the pharaohs. In about 800 B. C., however, Ethiopia conquered the Egyptians and became a free and independent nation. As such, it has remained ever since.

For several centuries Ethiopia controlled Egypt and the entire northeastern part of Africa. The Assyrian, Esarhaddon, finally overran Egypt in 672 B. C. and Ethiopian rule was thenceforth confined to their own country. In approximately 300 A. D., Christianity was introduced in Ethiopia by two Phoenician missionaries, Aedesius and St. Frumentius, who were shipwrecked and made pris-



Wide World Photo

Addis Ababa—Emperor Haile Selassie of Ethiopia reviews his troops at the parade grounds just outside the city. Many of the Emperor's troops are completely equipped with uniforms but few wear shoes, the great majority going barefoot.

oners by the Ethiopians. While in slavery, St. Frumentius taught the Christian religion and was finally consecrated a bishop.

During the next few centuries little is known of Ethiopia except that it was engrossed in repelling the invasions of the Moslems and in trying to bring back under Ethiopian rule various provinces which seceded and declared themselves independent.

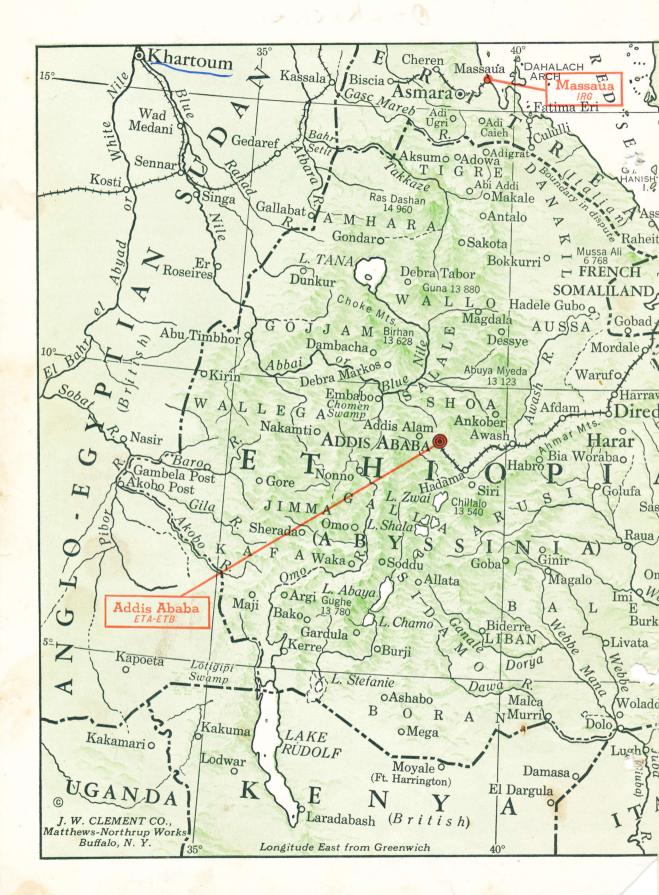
Under Theodore II, however, the empire was moulded once more into a cohesive unit. Theodore was followed by Menelik II who continued to hold the empire together. After an extremely weak ruler, Lij Yasu, was overthrown, the present emperor, Haile Selassie, took the reins of government.

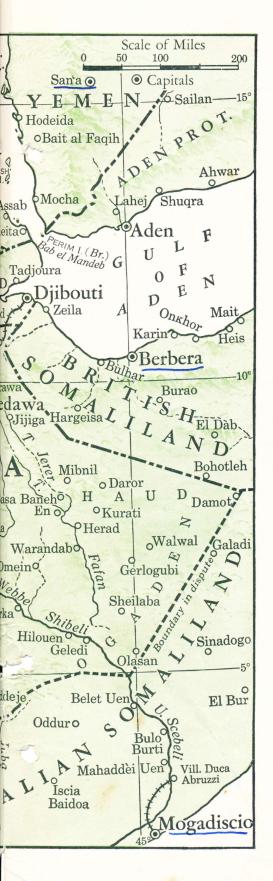
Haile Selassie has done more for Ethiopia than any of his predecessors. He has modernized his domain tremendously, building roads, installing

modern plumbing and electric lights, and constructing modern buildings. One of his children has attended school in Europe, absorbing the knowledge and culture of today and it is the emperor's intention that all of his children shall enjoy the same opportunity. Thus, the future progress of his country is assured.

Wide World Photo A soldier of the old school-Ras Fiturari of Abbie, a fearless and loyal warrior who holds a position in the Ethiopian army equal to that of a colonel. Note his lion mane headdress, one of his many trophies of the "kill".

The present war is not the only time Italy has invaded Ethiopia. The first attempt was in 1887 when the Italians were mercilessly defeated (Continued on back page)





### FOLLOW DAILY DEVELOPMENTS ON THIS MAP OF ETHIOPIA

You can add greatly to your knowledge of the Italo-Ethiopian situation by using this map in connection with newspaper and radio reports. When battles take place you can see just where they are fought. When gains are made you can follow them and better understand their significance. And because this map shows the topography of the country as well as the towns and cities, you can appreciate at all times the natural hazards with which the armies are contending. Use this map daily. It will make the happenings in Ethiopia tremendously more interesting and understandable.

#### Listen To Foreign Broadcast Stations on a New 1936

# PHILCO

You can hear history in the making with a powerful new Philco. For there are several stations in Europe from which you can get almost daily reports on the situation in Africa and the efforts of the League of Nations to secure peace. Here is a list of the most important stations together with their frequencies and the times of their news broadcasts:

			megacycles	7:45	P. M.	(Eastern	Time)	
GSA	London	6.05	megacycles	7:45	P. M.	(Eastern	Time)	
GSC	London	9.58	megacycles	10:45	P. M.	(Eastern	Time)	
GSL	London	6.11	megacycles	10:45	P. M.	(Eastern	Time)	
DJA	Berlin	9.56	megacycles			(Eastern		
DJN	Berlin	9.54	megacycles	8:15	P. M.	(Eastern	Time)	
DJC	Berlin	6.02	megacycles	8:15	P. M.	(Eastern	Time)	
EAQ	Madrid	9.87	megacycles	5:15	P. M.	(Eastern	Time)	
2RO	Rome	9.64	megacycles	M, 1	W, F,	6 to 7:30	P. M.	
						(Eastern	Time)	
HBP	Geneva	7.80	megacycles	Sat.	5:30	to 6:15	P. M.	
						(Eastern	Time)	
HBL	Geneva	9.59	megacycles	Sat.	5:30	to 6:15	P. M.	
			1			(Eastern	Time)	

In addition to these, there is Station IRG at Massaua, Eritrea, on 14.74 megacycles and Station ETA at Addis Ababa, Ethiopia, on 11.98 megacycles which may be picked up occasionally sending news bulletins to Europe. A Station ETB also at Addis Ababa on 7.62 megacycles is likewise reported to be on the air.

#### (Continued from front page)

at Aduwa. Following that defeat, Italy recognized the independence of Ethiopia. In 1906, Great Britain, Italy and France agreed to protect the independence of this country and in 1925, Great Britain and Italy stipulated more completely their intentions regarding Ethiopia. Italy was to give



Wide World Photo

The arrival in Addis Ababa of a minor chief with his retinue of riflemen. Under the feudal system in Ethiopia, each chief has to supply so many men to the army in case of national necessity, the number depending upon his importance.

Great Britain a free hand in its irrigation projects at Lake Tana, while Great Britain agreed not to oppose Italy's projected railroad between Eritrea and Italian Somaliland. In 1928, Italy and Ethiopia signed a twenty-year treaty in which Ethiopia was to have free use of the Italian port of Assab in Eritrea.

The country itself, approximately 350,000 miles in area, consists chiefly of an irregular, elevated table-land with a general elevation of 6,500 feet and rising in some parts to 10,000 feet. Its mountains rise to nearly 15,000 feet. One of the distinctive features of Ethiopia, and one that has been largely responsible for its independence for

centuries, is the high escarpment that surrounds practically the entire central portion of the country. This escarpment rises almost sheer in some places to a height of 8,000 to 10,000 feet, forming a vast retaining wall along the

Wide World Photo An Ethiopian soldier wearing his rifle beneath the peak of his cape where it is protected from wet and damp weather. Note the white tunic and trousers and the shoeless feet—all characteristic of the average Ethiopian.



top of which are located many of the important towns. This wall of rock is broken only in places by deep, rocky, almost impassable ravines and gorges. Thus, Ethiopia is naturally isolated on all sides and this is the reason why it has been unconquered for thousands of years.

There are two seasons, the rainy which lasts from June to September and the dry which comprises the rest of the year.

Its climate is determined by altitude. The lowlands are terrifically hot and unhealthy and are shunned by the natives. In Danakil province, a temperature of  $160^{\circ}$  has been recorded. The vegetation here is tropical, consisting of sugar cane, cotton, coffee, indigo, aloe, baobab, tamarind, banana, sycamore, fig and acacia. In the uplands, bamboo, palms, bananas, wheat, tobacco, pomegranates, oranges, lemons, olives and peaches are grown. In the highlands, where the elevation rises to nearly 10,000 feet, wheat, barley and oats are raised. Here also great numbers of cattle graze.



Addis Ababa—Here at the capital of Ethiopia, natives are pounding war drums, the primitive means of communication still used throughout the country. These drums beat out the first warning that Ethiopia was being invaded by the Italians.

Animal life is represented in the lowlands by the elephant, rhinocerous, hippopotamus, zebra, giraffe, gazelle and many birds, reptiles and insects; and in the highlands by the buffalo, antelope, lynx, hyena and lion. Minerals found in Ethiopia are iron, gold, coal, saltpetre, sulphur, copper and silver.

Because the interior of this African kingdom is so inaccessible, little is known about it and its estimated 10,000,000 inhabitants. Consequently few travelers have visited it. It was only in 1917 that the French completed the present railroad from Djibouti to the capital, Addis Ababa, a city of 60,000-70,000. It is the only railroad in the country, running 487 miles across French Somaliland into the interior. The only other entrances to the country are faintly defined trails or caravan routes.

## LIKE ADVENTURE? TRY ASIA!

#### Here's a fertile field for radio exploration!

#### JAPAN

Location	Station	Freq.	Time (Ea
Nazaki(Toky	o) JVH	14.60	4 to 8 A. P.M.
Nazaki(Toky	D) JVM	10.74	1:30 to 7
Nazaki(Toky	o) JVN	10.66	3 to 8 A.M

 
 Freq.
 Time (Eastern Standard)

 14.60
 4 to 8 A.M. & 8:30 to 9:30 P.M.

 10.74
 1:30 to 7 A.M. & 7 to 11 P.M.

 10.66
 3 to 8 A.M.

A good example of how short-wave broadcasting is slowly but surely improving, enabling the listener to hear programs from the other side of the world, is found in the broadcasts from Japan. A year ago short-wave broadcasts from Tokyo were intercepted but rarely by listeners here in America. But now, several of the Tokyo stations are heard more regularly. In fact, special broadcasts are being sent out for listeners in America.



Photo Courtesy Radio News

Young Nippon listens-in. These little Japanese are children of Rear Admiral Yamamoto. They are listening to their father's voice as he broadcasts by short-wave from London.

And the programs from Tokyo are like nothing you ever heard before! Many a Philco owner, under favorable conditions, finds a particular delight in listening to quaint Japanese music.

#### INDIA

Location	
Bombay	
Calcutta	

Station

VUY-

VUB

VUC

atic

 
 Freq.
 Time (Eastern Standard)

 9.57
 Wed. & Sat. 11 A.M. to 12:30 P.M.

 6.11
 Daily 9:30 A.M. to Noon, Sat. 11:45 P.M. to 3 A.M.

India, unfortunately, is one of the sections of the world from which short-wave entertainment cannot be obtained with any degree of regularity. For some unknown reason, the English have not given their Indian broadcasting stations anywhere near the power of those in England or Australia. The result is that reception of either the Bombay or the Calcutta stations is a real event in the life of any short-wave fan.

#### SIAM and INDO-CHINA

Location	Station	Freq.	Time (Eastern Standard)
		SIA	M
Bangkok	HSP	17.75	4:30 to 6:30 A.M. Irregular
	FREM	ICH IN	DO-CHINA
Saigon	FZS	11.99	Phones Paris mornings
	STRAI	<b>IS SET</b>	TLEMENTS
Penang	ZHJ	6.08	Daily 6:40 to 8:40 A.M.
		ALAY S	STATES
Kuala Lumpur	ZGE	6.13	Sun., Tues., Fri. 6:40 to 8:40 P.M.
Singapore	ZHI	6.01	Mon., Wed., Thurs. 5:40 to 8:10 A.M. Sat. 10:40 P.M. to 1:10 A.M.

Siam is another of the Asiatic countries from which reception is uncertain. However, the station at Bangkok has been logged by more than one persevering Philco owner. And the peculiar type of Oriental entertainment to which they have been treated, has more than amply repaid them for their early morning exploration of the dial. Saigon, in French Indo-China, has been heard a little more frequently, for the French use this station to communicate directly with Paris.

#### **OTHER COUNTRIES**

Location	Station	Freq. Time (Eastern Standard)
Shanghai Hongkong	XGW ZCK	CHINA 10.42 Tests near 6:00 A.M 8.75 Daily 11:30 P.M. to 1:15 A.M. Mon. & Thurs. 3 to
Macau	CQN	7 A.M. 6.02 Mon. & Fri. 3 to 5 A.M.
Khabarovsk	RV15	SIBERIA 4.25 1 to 9 A.M.

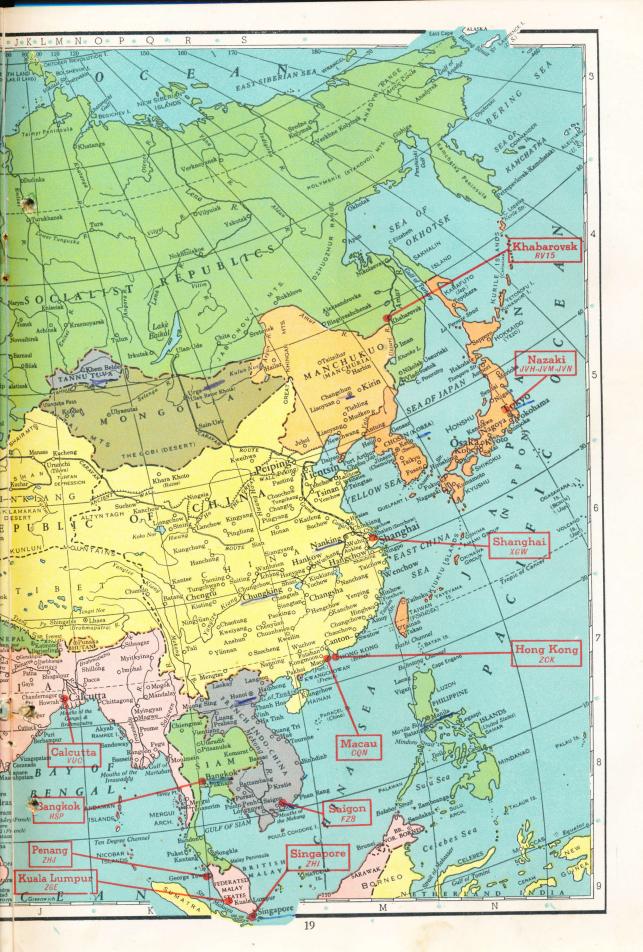
The Orient is full of exciting adventure for those who have the true spirit of exploration within them—for those who like to travel unbeaten



Comrade Ikramov, lute player, who is attached to the Tashkent Radio Centre, in Tadjikistan, Central Asia. Many unusual broadcasts come from stations in the U. S. S. R.

aerial highways that lead to Siberia, China, the Malay States and other far-off lands. The average listener, however, should not expect to hear these stations because of the many factors involved.





#### EUROPE (Continued from page 9)

#### HUNGARY

Location	Station	Freq.	Time (Eastern Standard)
Budapest	HAS3	15.37	Sundays 9 to 10 A.M.
Budapest	HAT4	9.12	Sundays 6 to 7 P.M.

Until only recently, Hungary could not be heard on the short-waves. Now, however, it is on the air with a regular broadcasting schedule. While not received here in America as regularly or as strongly as other European stations, excellent music



Almost every conceivable type of music is sent out by the short-wave stations of the world. For instance, here is a group of Blaa Mountain pipers broadcasting through the Vienna station.

# First Choice! New 1936 PHILCO

You must see and hear the brilliant new 1936 Philcos to fully appreciate their remarkable tone, performance, beauty and value! Then you will understand why Philco is the "World's Fastest Selling Radio" — "first choice" of the nation!

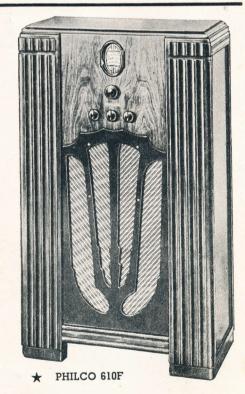
Come in — see this Philco 610F today! It's a full-sized floor type model that, properly installed with a Philco All-wave Aerial, gives thrilling American and Foreign reception at an amazingly low price! Latest features beautiful satin-finish Walnut cabinet.

is occasionally heard from the two stations HAS-3 and HAT-4. Hungary has become musically famous through Liszt's Hungarian Rhapsodies and through countless Hungarian dances by other composers. And this is in large part the type of music one may hear from Budapest—ranging all the way from somber symphonies to joyous, lilting gypsy music.

#### OTHER COUNTRIES

Location	Station	Freq.	Time (Eastern Standard)
	CZI	ECHOSL	OVAKIA
Prague	OKI	21.02	Schedule Indefinite
		AUST	RIA
Vienna	OER2	6.07	1 to 6 & 7 to 10 P.M.
		ROUM.	ANIA
Bucharest	YOI	13.94	Schedule Indefinite
		POLA	ND
Poznan	SRI	9.57	Schedule Indefinite

The stations listed above are those which, because of insufficient power or irregular broadcasting schedules, are not heard regularly here in America. Don't expect to hear these stations, therefore, every time they are supposed to be on the air. However, when atmospheric conditions are extremely favorable, you may suddenly find one or more of them coming in.



EASY TERMS LIBERAL TRADE-IN ALLOWANCE

#### EXPLORE AFRICA BY RADIO! There's adventure in reception from the Dark Continent

#### MOROCCO

Location Rabat Rabat Station<br/>RABAT<br/>CNRFreq.Time (Eastern Standard)12.83<br/>8.05Sundays 7:30 to 9 A.M.<br/>Sundays 2:30 to 5 P.M.

When you tune for African stations, you stand upon the threshold of the great unknown. For African stations have considerably lower power than most of the other stations you'll hear. Consequently, you'll need a plentiful supply of luck as well as a powerful receiver to log this elusive continent. Take Morocco for example. Some time ago this station was heard almost weekly but recently it has been received but rarely. The stations at Rabat are owned by the French government and send programs to France in return for programs from the stations at Paris. If you hear "Radio-Maroc," be prepared for anything from scintillating French dance music to exciting desert songs broadcast by native musicians.

#### EGYPT

Station

SUZ SUV

Location Cairo Cairo Freq. Time (Eastern Standard) 13.83 Schedule Indefinite 10.05 Schedule Indefinite

Egypt is one part of Africa which is heard from more often than other sections. Although the short-wave stations in this country are primarily phone stations used for radiophone communication between Cairo and the rest of the world, occasionally you may hear unusual broadcasts. Both SUV and SUZ will verify reception reports if you enclose an International Reply Coupon with your report. Thus these stations are tuned for regularly by the fan who would add Africa to his list of continents received.



"Camel bells from Cairo!" Many a short-wave listener has heard them from just such a camel train as this. For this unique broadcast was just one that has been heard from the stations at Cairo.

#### **BELGIAN CONGO**

 Location
 Station
 Freq.
 Time (Eastern Standard)

 Leopoldville
 OPM
 10.14
 9 to 11 A.M.; 3 to 6 P.M.

What thrilling stories the Belgian Congo has given the world! It was here, in the very heart of "darkest Africa," that one of the greatest adventures of all time was staged—Stanley's search for Livingstone. The world waited for years after Stanley's entrance into the jungle before it knew the results of that expedition. Now, however, the Belgian government has a fairly powerful short-wave station at Leopoldville which maintains a regular schedule with ORK, Brussels.



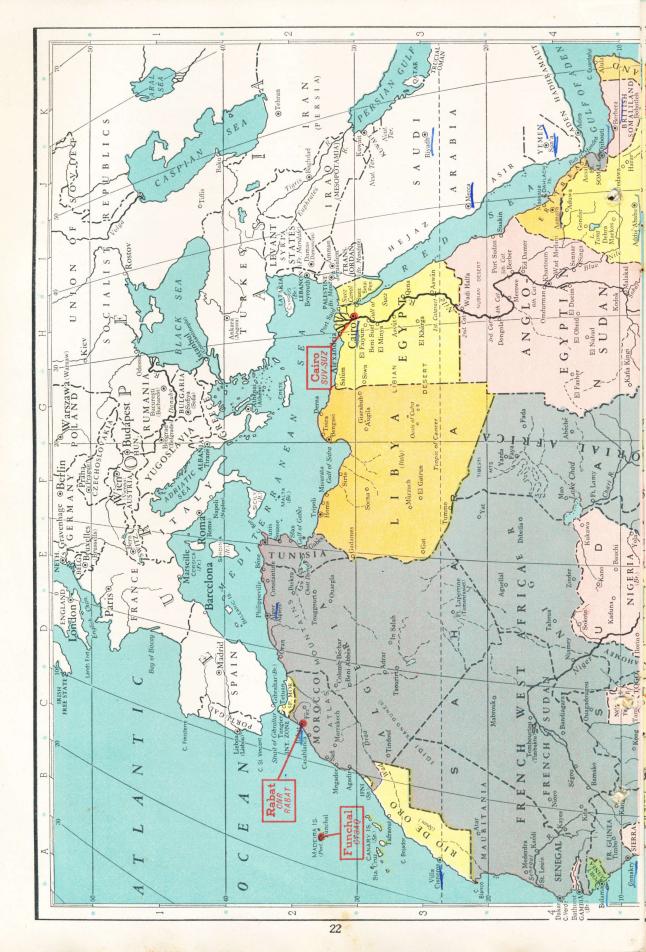
Photo Courtesy Radio News

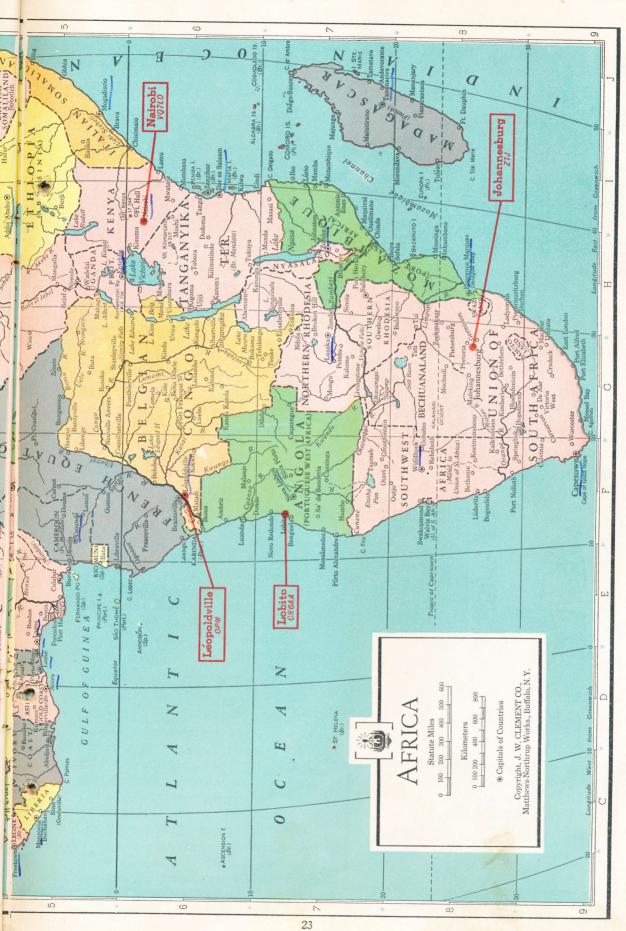
This little station, located at Lobito, Angola, in Portuguese West Africa, is the object of diligent tuning by avid shortwave fans all over the world. Call letters are CR6AA.

#### **OTHER AFRICAN STATIONS**

Location	Station	Freq. Time (Eastern Standar	d)
Funchal	MAI CT3AQ	9.37 Schedule Indefinite	
Johannesbu		OF SOUTH AFRICA 6.09 3:30 A.M. to 7 A.M. A.M. to 4 P.M.	& 9
Lobito	CR6AA	ANGOLA 7.17 Wed. & Sat. 2:30 to A.M.	4:30
Nairobi	KE VQ7LO	NYA COLONY 6.12 5:45 to 6:15 A.M. & 11 to 2 P.M.	A.M.

You'll have to wait until reception conditions are extremely favorable to "catch" these stations. Nairobi, Johannesburg and Lobito operate on regular schedules, but they are not large transmitters and, as a consequence, are heard only by the avid fan who is willing to tune for them regularly, usually in the small hours of the morning. If you are successful in picking them up, you'll experience a thrill few others have enjoyed.





### LISTEN TO ENTERTAINMENT Australia and the islands of the South Seas

#### AUSTRALIA

Location	Station	Freq.	Time (Eastern St.
Sydney	VK2ME	9.59	Sun. Midnight to to 9 A.M.
Melbourne Melbourne	VK3LR VK3ME	9.58 9.51	Daily 3:15 to 7:30 Wed., Thurs., Fi to 7 A.M.

(andard) o 2 A.M., 5 A.M. Fri., Sat. 5

No matter how many times you might receive the delightful broadcasts from Australia, you'll always feel excited at hearing voices and music from the other side of the globe! And that means many a thrill, because the Australian stations have the happy faculty of reaching America with surprising regularity. In fact, many experienced shortwave fans look upon the two principal stations, VK2ME and VK3ME, as "locals" because of the frequency with which their programs are heard. Experience counts in getting these stations.

Stirring symphonies, light opera selections, news



from the mother country though it is, Australia is typically British in speech, music, and customs. Unfortunately, however, to hear the Australian stations at their best, you'll have to get up early, for their broadcasts are strongest between

dispatches, dance

music, and variety

programs are broad-

cast. And, of course,

announcements are

in the broadest of

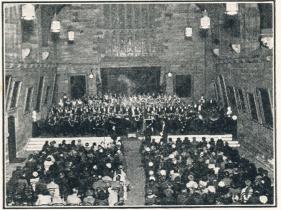
British accents. For,

thousands of miles

Captain Atkins, whose band is broadcast from VK2ME, Sydney, Australia.

5 and 8 A. M., Eastern Standard Time.





The Sydney Symphony Orchestra which plays occasional concerts over the Australian short-wave station, VK2ME.

#### **JAVA**

Location	Station	Freq.	Time (Eastern Standard)
Bandoeng	YDA	6.12	5 to 11 A.M. Irregular
Bandoeng	PMY	5.15	6 A.M. to Noon

Next to Australia, Java is probably the most productive of short-wave entertainment from the other side of the world. Java is but a small island compared to neighbors like Sumatra and Borneo. Yet it is said to have more short-wave stations for its size than any other country. One or two of these stations provide fairly consistent broadcasting.

Java belongs to the Netherlands. Consequently the language is Dutch. But the entertainment which comes from Java may be anything from the latest dance tune to strange, ceremonial music played by Javanese natives. Tune your Philco to Java for some of the greatest thrills short-wave radio has to offer.

#### FIJI ISLANDS

Location Suva

VP1A

Freq. Time (Eastern Standard) Station 12:30 to 1:30 A.M. ex. Sat. 13.07 & Sun

Here is another fascinating part of the world! The Fiji Islands have only recently been "discovered" by the short-wave listener, for only recently have they had a short-wave broadcasting station with sufficient power to reach American listeners. Every night finds hundreds of shortwave fans turning their dials toward Suva in the South Seas in search of radio adventure and romance. Why not join them? You'll have lots of fun.

## FROM "WAY DOWN UNDER"!

broadcast fascinating, thrilling programs!

#### OTHER SOUTH PACIFIC SHORT-WAVE STATIONS

Location	Station	Freq.	Time (Eastern Standard)
		EW ZE.	ALAND
Wellington	ZLT	11.05	1 to 7 A.M.
			ISLANDS
Manila	KAY	14.98	5 to 7 A.M. & 7 to 8 P.M.
		HAW	
Kauhuku	KKH	7.52	Evenings Irregular

Although New Zealand possesses several shortwave broadcasting stations, this country is not one upon which you'll depend for everyday entertainment. It is one of those which you can hear only when conditions are extremely favorable.

The Philippines have several high-powered stations, the most frequently heard of which is KAY at Manila. Hawaii also is heard through any of several stations at Kauhuku. But they are phone stations used primarily for communication work between these points and the United States. Occasionally, however, they may be picked up relaying special broadcasts to or from America.

#### AERIAL DESIGN NOW HIGHLY IMPORTANT

For reception of stations on the other side of the world, the importance of having a Philco Allwave Aerial cannot be emphasized too strongly. Signals from stations like Melbourne, Bandoeng and Suva are extremely faint after traveling thousands of miles and it is absolutely essential that you have not only a powerful receiver but an aerial system that is especially designed to pull in these faint signals.

The Philco All-wave Aerial is specially engineered for this purpose. And in addition, it reduces to a minimum man-made static and local electrical interference. This aerial, then, does two things: it pulls in weak stations from really tremendous distances and it cuts down the noise so that you can identify these stations with greater ease and get more enjoyment from your armchair travels.

# **Travel Abroad**

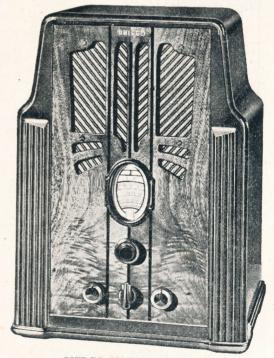
with this New 1936



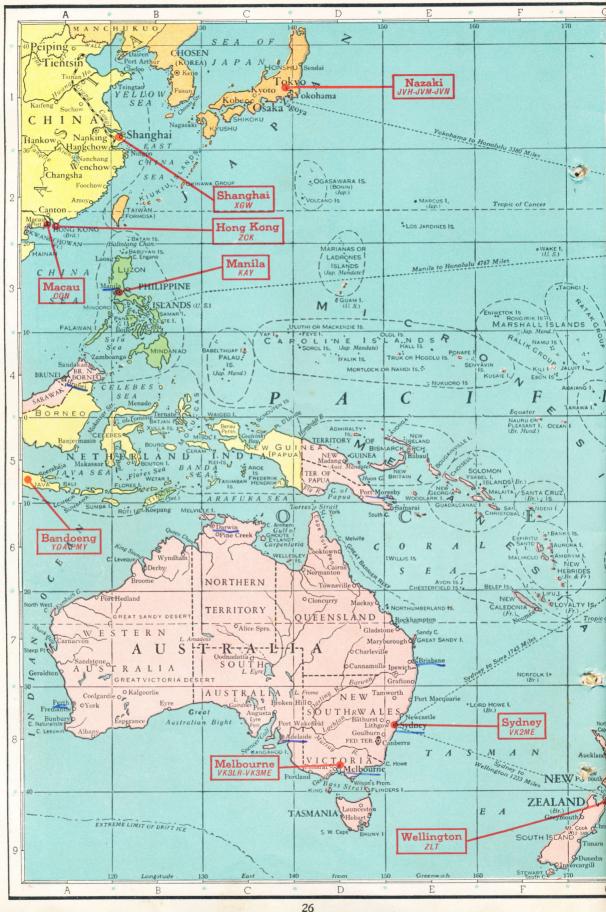
You'll be delighted with the unusually clear tone, power and foreign reception of this latest Baby Grand Philco, properly installed with a Philco All-wave Aerial! You'll admire the beauty and grace of its newly designed cabinet — and you'll be amazed at its remarkably low price! Only Philco gives you every worth while feature in radio!

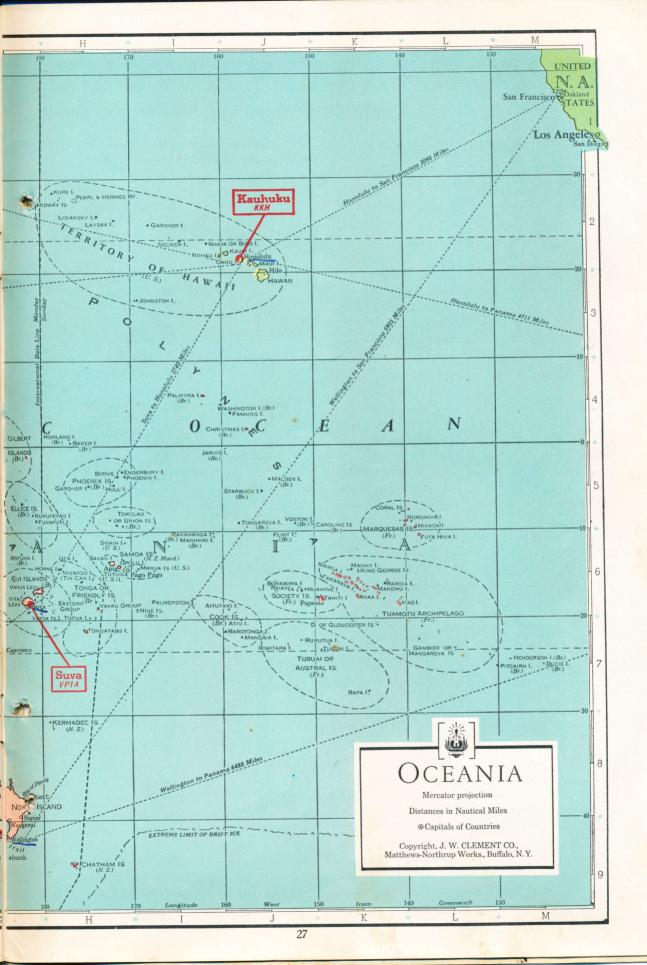
EASIEST TERMS

Liberal Trade-in Allowance



PHILCO 630 BABY GRAND LISTEN TO BOAKE CARTER OVER KEY COLUMBIA STATIONS





## IF YOU LIKE VARIETY, North American Stations give you every

#### MEXICO

Location	Station	Freq.	Time (Eastern Standard)
Mexico City Mexico City Mexico City	XECR XEBT XECW		Sundays 6 to 7 P.M. 6 P.M. to 3 A.M. Irregular 4 to 4:30 P.M. & 10:30 P.M. to Midnight



Photo Courtesy Radio News Pedro el Gaucho—Peter the Tango Singer. He is featured on the short-wave programs from XEBT, Mexico City.

There's a happy, carefree quality about the Mexican short-wave broadcasts that intrigues all who hear them. If vou love fascinating rhythm and beautiful melody, don't fail to make the Mexican stations a frequent visit. The Mexicans have given the world some of the loveliest songs ever written. How wonderful to be able to tune your Philco direct to the very

heart of old Mexico and listen almost at will.

#### **CENTRAL AMERICA**

Location	Station	Freq.	Time (Eastern Standard)
		COSTA	RICA
San Jose	TIEP	6.71	5 to 10 P.M. Irregular
San Jose	TIPG	6.55	8:30 to 11 P.M. Irregular
San Jose	TIRCC	6.55	6 to 11:30 P.M. Irregular
San Jose	TIGPH	5.82	6:15 to 11 P.M. Irregular
	(	GUATE	MALA
Guatemala City	TGX	5.89	11 A.M. to 2:30 P.M. & 6 to 10 P.M.
		NICAR	AGUA
Managua	YN1GG	6.45	7 to 10:30 P.M. Irregular
Managua	YNLF	5.96	6 P.M. to 1 A.M. Irregular
		PANA	MA
Panama City	HP5J	9.59	11:45 A.M. to 1 P.M. & 7:30 to 10 P.M.
Panama City	HP5B	6.03	Noon to 1 P.M. & 8 to 10:30 P.M.

Starting from Mexico, you can make a radio tour right down through Central America, for there are short-wave stations in almost every one of these little countries. The music you'll hear will be Span'sh in character, of course, with tangos and folk songs predominating. Costa Rica and Panama broadcast regularly, with Guatemala and Nicaragua coming in less often.

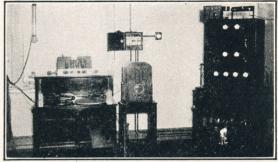


Photo Courtesy Radio News

"La Voz del Tropico"—the Voice of the Tropics. In other words, Station TIEP at San Jose, Costa Rica.

#### CARIBBEAN ISLANDS

Location	Station	Freq.	Time (Eastern Standard)
Sancti		CUB	Α .
Sancti Spiritus	CO9WR	11.80	4 to 6 & 9 to 11 P.M.
Habana	СОН	9.43	10 A.M. to Noon, 4 to 6:30 P.M. & 8 to 10 P.M.
Santiago	CO9GC	6.15	8:30 to 10 A.M., Noon to 1:30 P.M., 3:30 to 4:30 & 10 to 11 P.M.
Habana	COCD	6.13	10 P.M. to 12:30 A.M.
Habana	COC	6.01	9:30 A.M. to 12:30 P.M., 4 to
			7 & 8 to 10 P.M. Sat., 11:30 P.M.
	DOM	INICAN	REPUBLIC
La Romana	HI3C	6.90	12:30 to 2 & 7:30 to 9:30 P.M.
San Pedro de Macoris	HIH	6.81	Daily 12:10 to 1:40 P.M. & 6:40 to 7:40 P. M., Sun 3 to 4 A.M. & 4 to 5 P.M.
Santo Domingo	HI4D	6.61	11:55 A.M. to 1:40 P.M. & 4:40 to 7:40 P.M.
Santo Domingo	HIL	6.53	Saturdays 8 to 10 P.M.
Santo Domingo	HIZ	6.31	7 to 10 P.M. Irregular
Santiago de Caballeros	HIIA	6.19	11:40 A.M. to 1:40 P.M. & 7:40 to 8:40 P.M.
Santo Domingo	HIX	5.98	Tues. & Fri. 8:10 to 10:10 P.M. Sun. 8:40 to 10:40 A.M. & 2:40 to 4:40 P.M.
San Pedro de Macoris	HI1J	5.78	7 to 9:30 P.M. Irregular
		HAI	TI
Port-au- Prince	HH2T	11.57	Schedule Indefinite
Port-au- Prince	HH2S	6.07	-Schedule Indefinite

Here's a fascinating part of the world for the short-wave listener. As you tune to the multitude of stations you'll find here, you can easily imagine yourself as one of the early explorers upon a voyage of discovery. What exciting adventure you'll have! For these islands are full of tales of the old days when swashbuckling pirates and buccaneers

# YOU'LL FIND IT HERE

#### thing from rhumbas to network programs

plundered Spanish galleons filled with gold and silver from the mines in Mexico. But the old order has changed, and now a dozen or more shortwave stations nightly offer delightful entertainment to the Western Hemisphere.

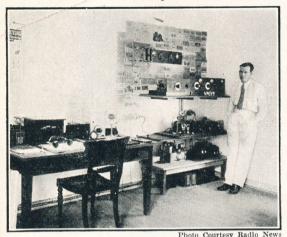


Photo Courtesy Radio News Station VP6YP at Bridgetown, Barbados, British West Indies. Tune for this station on the 14 megacycle band.

#### UNITED STATES and CANADA

Location	Station	Freq.	Time (Eastern Standard)
	UN	ITED S	STATES
Pittsburgh	W8XK	21.54	7 to 9 A.M.
Bound Brook	W3XAL	17.78	Daily 8 to 9 A.M., Tues.,
			Thurs., Fri., 2 to 3 P.M.
Schenectady	W2XAD	15.34	Sun. 10:30 A.M. to 4 P.M.,
			Daily 2 to 3 P.M.
Wayne	W2XE	15.27	10 A.M. to 5 P.M.
Pittsburgh	W8XK	15.21	10 A.M. to 7 P.M.
Pittsburgh	W8XK	11.87	5 to 9 P.M.
Boston	W1XAL	11.79	Schedule Indefinite
Philadelphia	W3XAU	9.59	Noon to 6:45 P.M.
Boston	W1XK	9.57	6 A.M. to Midnight
Schenectady	W2XAF	9.53	Daily 5:30 to 11 P.M.
Pittsburgh	W8XK	6.14	9 P.M. to 1 A.M.
Wayne	W2XE	6.12	5 to 10 P.M.
Chicago	W9XF	6.10	8 to 9 P.M. & Midnight to
			1 A.M.
Bound Brook	W3XAL	6.10	Mon., Wed., Sat., 4 to 5
			P.M.
Chicago	W9XAA	6.08	Schedule Indefinite
Cincinnati	W8XAL	6.06	5:30 A.M. to 7 P.M. & 10
			P.M. to 1 A.M.
Philadelphia	W3XAU	6.06	7 to 10 P.M.
Miami	W4XB	6.04	11:30 A.M. to 2 P.M. & 8
			P.M. to Midnight
		CANA	DA
Winnipeg	CJRX	11.70	7 to 10 and 10:30 to 11 P.M.
Winnipeg	CJRO	6.15	7 to 10 and 10:30 to 11 P.M.
Halifax	VE9HX	6.11	8:30 to 11:30 A.M. & 5 to
			10 P.M.
Bowmanville	VE9GW	6.09	Thurs., Fri., Sat. 7 A.M. to
			4 P.M. Sun. Noon to 8 P.M.
Vancouver	VE9CS	6.07	Daily 6 to 7 P.M. Sun. 1:45
	2020		P.M. to 1 A.M.

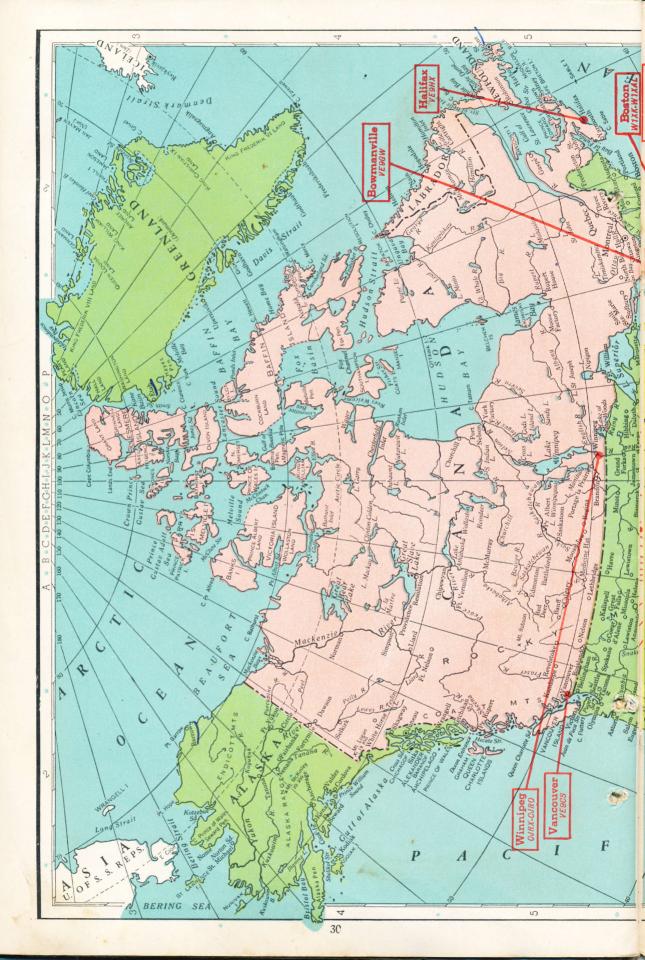
The great majority of the stations listed above are short-wave relay stations operated in conjunction with network stations on the regular broadcast band. Their programs are for the most part identical with those of the long-wave stations. However, this broadcasting of network programs by short-wave stations has one great advantage to the owner of an American and Foreign Broadcast Philco. Very often when conditions on the standard broadcast band are so unfavorable as to prevent satisfactory reception of a favorite network program, you can drop down to one of the Canadian or United States short-wave stations and hear the same program perfectly. For reception conditions are often much better on the shortwaves than on the broadcast band. Remember this the next time static prevents enjoyable reception of network programs.

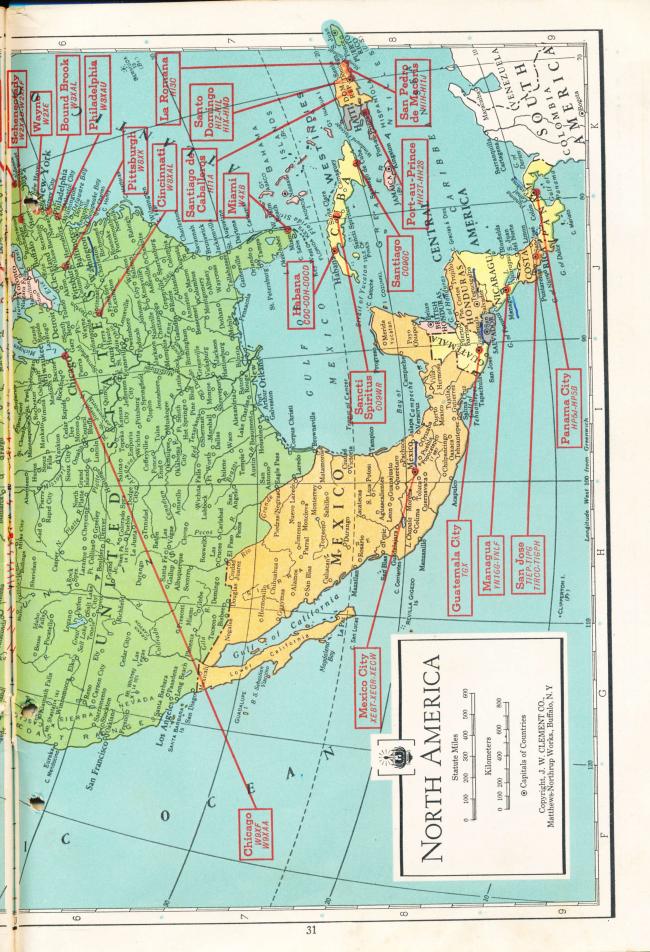
#### RADIO INSTITUTE AIDS PROGRAM LISTENERS

The Radio Institute of the Audible Arts was founded by Philco Radio & Television Corporation as a public service to the American people, to act as a clearing house of information on the broad phases of radio as an instrument of entertainment and culture and to stimulate public recognition and appreciation of the best in radio. Accordingly, the Institute has prepared various publications which it is distributing to members of organizations and individuals who are interested in the development of the audible arts through radio.

These publications include announcements of forthcoming important programs with comments on their contents, manuals that will aid in the appreciation of the types of programs that engage your special interest, special articles and talks on radio subjects, and a brochure on how to utilize radio in the teaching of music. If you would be interested in receiving such material, you may obtain it either from your Philco dealer or by writing The Radio Institute of the Audible Arts, 80 Broadway, New York City.

Periodically, Philco publishes in advertisements in the Saturday Evening Post and Collier's, a partial list of the programs recommended by the Institute. Many listeners use these advertisements as guides in their search for the more outstanding programs on the air.





The numbers in large type in the table below correspond to the dial settings on your Philco radio. Thus, this list is an accurate guide to you in your broadcast journeys. The small zeros after these figures convert these dial settings into kilocycles, the form in which stations are most often listed by newspapers.

FOWER         F30         250 </th <th>FOWER         Iso 2008         <thiso 2008<="" th="">         Iso 2008         <th< th=""><th>15000 25000 50000 W V W</th><th>EASTERN Mass., N. Y., Pa., N. C., Etc.</th><th>Fredericton, N.B.M</th><th>aterbury Vt M</th><th>Maml. Fla.</th><th>ew York (+ WSYR) M</th><th>339</th><th></th><th>3</th><th>- 1</th><th>eensburg. Pa</th><th></th><th>1</th><th></th><th>WEAF New York City. W</th><th>ileigh, N C. S</th><th>*CFRB Toronto, Ont S</th><th></th><th>CWALK, N J</th><th>*CKAC Montreal, Que S</th><th>•WHEB Portsmouth. N H M</th><th>WIT Now Vort Weat</th><th></th><th>•WEAN Providence, R. I. M.</th><th>TWGY Schenectady, N. Y W WTBO Cumberland Md</th><th></th><th></th><th>mira.N.Y</th><th>York</th><th>OAN Scranton, Pa M</th><th>etersburg, Va M</th><th>uffalo, N Y O</th><th>CRCM Montreal, Que. S</th><th>PEN PhiladelphiaK</th><th>anoke, Va0</th><th>Bey City, N. J. M</th><th></th><th>WIBG Glenside, Pa H</th><th>:</th><th>KUKA Pittsburgh, Pa. W</th></th<></thiso></th>	FOWER         Iso 2008         Iso 2008 <thiso 2008<="" th="">         Iso 2008         <th< th=""><th>15000 25000 50000 W V W</th><th>EASTERN Mass., N. Y., Pa., N. C., Etc.</th><th>Fredericton, N.B.M</th><th>aterbury Vt M</th><th>Maml. Fla.</th><th>ew York (+ WSYR) M</th><th>339</th><th></th><th>3</th><th>- 1</th><th>eensburg. Pa</th><th></th><th>1</th><th></th><th>WEAF New York City. W</th><th>ileigh, N C. S</th><th>*CFRB Toronto, Ont S</th><th></th><th>CWALK, N J</th><th>*CKAC Montreal, Que S</th><th>•WHEB Portsmouth. N H M</th><th>WIT Now Vort Weat</th><th></th><th>•WEAN Providence, R. I. M.</th><th>TWGY Schenectady, N. Y W WTBO Cumberland Md</th><th></th><th></th><th>mira.N.Y</th><th>York</th><th>OAN Scranton, Pa M</th><th>etersburg, Va M</th><th>uffalo, N Y O</th><th>CRCM Montreal, Que. S</th><th>PEN PhiladelphiaK</th><th>anoke, Va0</th><th>Bey City, N. J. M</th><th></th><th>WIBG Glenside, Pa H</th><th>:</th><th>KUKA Pittsburgh, Pa. W</th></th<></thiso>	15000 25000 50000 W V W	EASTERN Mass., N. Y., Pa., N. C., Etc.	Fredericton, N.B.M	aterbury Vt M	Maml. Fla.	ew York (+ WSYR) M	339		3	- 1	eensburg. Pa		1		WEAF New York City. W	ileigh, N C. S	*CFRB Toronto, Ont S		CWALK, N J	*CKAC Montreal, Que S	•WHEB Portsmouth. N H M	WIT Now Vort Weat		•WEAN Providence, R. I. M.	TWGY Schenectady, N. Y W WTBO Cumberland Md			mira.N.Y	York	OAN Scranton, Pa M	etersburg, Va M	uffalo, N Y O	CRCM Montreal, Que. S	PEN PhiladelphiaK	anoke, Va0	Bey City, N. J. M		WIBG Glenside, Pa H	:	KUKA Pittsburgh, Pa. W
Sowera         Sowera           Cone         Cone           Con	B         1 80         501         500         1 Mag           B         M         N         D         CODE         1 MBC         Blote         BloteBlote         Blote         Blote	00 5000 1 8 5 AMutual	Etc.	2	aunton Va M WDEV Wa	noxville, Tenn	lumbus, Ohio. 0 WMCANe			a sea l	E	00	Σ×	E	N.	3	ACQHavanaCubao ; WPTF Raleigh, N	0	3	M	s s	N	*	X	00	×	İ	3			30	ΣX	20.8		-	2	-	2	P		· · · · · · · · · · · · · · · · · · ·
	<pre>sa saa saa saa saa saa saa saa saa saa</pre>	1500 F TNBC Red	No.	540	550	560	570	580	040	600	610	620							1						++			*								•  ++					

With this log, you can identify any station almost instantly by its dial setting, its power and the network with which it is affiliated. It also facilitates your tuning to any city you desire insamuch as stations are grouped geographically, according to the part of the country in which they are located.

Image: Construction of the construction of	F I H D A	K L M N O	CODE KILO Dial No	P Q R S	M A A A
KFTHS         Constraints, March         Constraints, March <thconstraints< th=""> <thconstraints< th=""> <thc< td=""><td></td><td>× 1</td><td>-</td><td>E Laneine Mich</td><td></td></thc<></thconstraints<></thconstraints<>		× 1	-	E Laneine Mich	
WEAT Statustical III.     100 </td <td></td> <td></td> <td>1050</td> <td>A. Louising, MIGH.</td> <td></td>			1050	A. Louising, MIGH.	
<ul> <li>WEAT Cardinater, III.</li> <li>WENT Cardinater, III.&lt;</li></ul>		THTHS Hot Springs Ark	000		WEAT Double due.
Image: Neuropean All and All an	17	WCAZ Carthage, Ill	1070		
KMMCX St.         KMCX			1080	WMB1 Chicago, Ill. (WCBD) S	*WBT Charlotte, N.
KWKH Subscreet.Lat.     1     100       XEN Marcery. Max.     1     10       XEN Montery. Max.     1     10       Max.     1     10       MUD EN MUX.     10     <		*KMOX St. Louis, Mo	060		
KKOO Slong Statut, Str., No. Collarge Statut, Str., Xery Nicker, Biandingon, Ont.       ••••••••••••••••••••••••••••••••••••	C.	*KWWH Shreveport, La.	1100		*WPG Atlantia City NT
XMAT Wolter Stating, Free     CKNO Distance Stating, Free       XMAT Wolter Jarren, Mist.     N       XFA Montery, Mist.     N       XFA Montery, Mist.     N       XFA Montery, Mist.     N       XFO Conduction Also.     N       XMOD Tass, Olia		KSOO Sloux Falls, S D.	011		TWRVA Dishmond Yo
XET AL MARRING AND ALL     MULD CLIERMAN ALL       XET AL MARRING ALL     MULD CLIERMAN ALL       XET Claudialian Alls     110       WOOT Tala, Otha     110       WOOT STATE ALL     110       WERK FERT ALL     120       WERK FERT ALL </td <td>KFIO-KRSC Washington. H</td> <td>WTAW College Station, Tex I</td> <td>1120</td> <td>N.</td> <td>WMFH Boston, Mass.</td>	KFIO-KRSC Washington. H	WTAW College Station, Tex I	1120	N.	WMFH Boston, Mass.
KVOD         Tube         TH         Tube         T	KSL Salt Lake City. Utah W	XEH Monterey, Mex.	130	X	-
XED Claudhajnen, Nicks     110     WOWO FL, WAYAR, MAIN, MAIN		<b>TKVOO</b> Tulsa, Okla	140	Ala	-
KED Condutition Micro         HO         WO DF / WOWD FL Wargen, Ind.           WDAI Schneiden Mith         1         New X Manuelling Micro         New X Manuelling Micro           WDAI Schneiden         WI         New X Manuelling Micro         New X Manuelling Micro           WDAI Schneiden         WI         New X Manuelling Micro         New X Manuelling Micro           MERE AFFORMER WILL         WILL         WALE WARD WARD         New X Manuelling Micro           MERE AFFORMER Micro         WILL         WALE WARD WARD         New X Manuelling Micro           MERE AFFORMER Micro         WILL         WALE WARD         Micro           MERE AFFORMER Micro         Zabano, Ten.         WILL         Micro           MERE AFFORMER MICRO         Zabano, Ten.         WILL         Micro         Micro           MERE AFFORMER MICRO         Zabano, Ten.         WILL         WIRL         Micro         Micro           MERE AFFORMER MICRO         Zabano, Micro         Zabano, Ten.         WILL         Micro         Micro         Micro           MERE AFFORMER MICRO         Zabano, Micro         Zabano, Micro			150		LWHAM Rochoster N V
III 70 WORT MILLERLING, WILL WERT MILLERLING, WILL WORT WILLERLING, WILL WERT MILLERLING, WILL WERT MILL WERT MILLERLING, WILL WERT MILLERLING, WILL WERT MILLE		Mex	160	Ind.	*WWVA Wheeling W Vo
WODEY MILITIE State of the state o		1	170		*WCAII Philadelphile Do w
WOAT IS an atom, res         WIST Sector         West Sector <thwest sector<="" t<="" td=""><td></td><td>WDGY Minneapolis, Minn.</td><td>1180</td><td></td><td></td></thwest>		WDGY Minneapolis, Minn.	1180		
MARD ALAL         WARD ALAL <t< td=""><td></td><td>TWOAI San Antonio. Tex. W</td><td>190</td><td>WSAZ Huntington, W. Va D</td><td>WATS Waterhum Com</td></t<>		TWOAI San Antonio. Tex. W	190	WSAZ Huntington, W. Va D	WATS Waterhum Com
Rescie         Resci         Resci         Resci <td>KWG-KVOS-KFXJ-K00S</td> <td>KADA Ada, Uklahoma.</td> <td>-00</td> <td>WJBW-WBNO*WFAM</td> <td>WABI-WNRI-CKTB-WLVA</td>	KWG-KVOS-KFXJ-K00S	KADA Ada, Uklahoma.	-00	WJBW-WBNO*WFAM	WABI-WNRI-CKTB-WLVA
<ul> <li>WEAT FART MARTA WIRLS, WALEN WIRLS, WILL WORK FT MARTA WIRLS, WILLS, WALEN WIRLS, WALEN</li></ul>	KSUN-KGEK-KGFJ-KFXD	KGDE-KFJB-KBTM-KGHI	007	WCLO-WHBY-WBHS	WKJC-WHBC-WRBL-WCAX
High F-Month     Water Andrew Netson, Mail       WHE F-MONT, Press     Water Netson, Mail       CERX FRIVE KENUS, France, Mail     Water Nether Mail       WAT PR. WYCH, Millongella, Mo, Millongella, Ind.     Water Nether Mail       KATA PR. WYCH, Millongella, Mo, Millongella, Ind.     Water Nether Millongella, Mo, Millongella, Millongella, Mail, Mollongella, Millongella,	KGY-KFJI-KASA-KFUH KIEM-KFXM-KPPC Cal H	KFVS-KWEA-KDLR-WEBQ	210	WJW-WALR-WMFN-WKFI WCOL-WHBU-WSIX-WJBY	WBRB-WGBB-WBBL-WFAS
ATT ALL Constraints of the second system of the second	KWFV-KIUL	WHBF-WOMT-KVS0-WIBU		WSBC-WCRW-WEDC-WJIM	WJEJ*WMBG1WSOC-WOC
Acconnection         Acconnection<	CJOC Lethbridge, Alta H	KGBX Soringfield, Mo. M	077	0	t WCAE Pittsburgh, Pa 0
ATTA FR. Willonsenia     [246]     **XY FR. Willonsenia       ACAL NATTA FR. Millonsenia     [250]     **XF M. Hundsenia       ORLAL NATTA FR. Millonsenia     [260]     **YF M. Hundsenia       VORE CARGE Statistic field.     [270]     **YF M. Hundsenia       VARA VARAN MARRA FRIANCIA     [270]     **YF M. Marra FRIANCIA       MER Maladian, Wis.     [270]     **YF WARAN MARRA FRIANCIA       MER Maladian, Wis.     [270]     **YF WARAN WARF MARRA FRIANCIA       MER Maladian, Wis.     [270]     **YF WARAN WARF MARRA FRIANCIA       MER MARANANANANANANANANANANANANANANANANANANA	KYA San Francisco, Cal	KGGM Albuquerque,N.M. K	230	0	-
MCRT WT CA MCRT WT CA WT CA State International International International International International Content of the Internationalinterinternational International International Internatio	KTFI Twin Falls, Idaho M	•KTAT Ft. Worth, Tex0	240		WKAQ San Juan, P. R.
Cond. Council Millin, Jan., Solution, Cond., Tena, New Dollar, Tena, New Dollar, Tena, New Solution, New Solution, Solut		WCAL Northfield Minn. O	250	La.	WNEW-WHBI Newark NJ.
KVME KAGE, Stendard, Statesam, Market, Warder, Marder, Warder, Warder, Warder, Warder, Marder, Warder, Marder, Warder, Marder, Warder, Marder, Warder, Marder,		+KOIL Council Bluffs, Ia. 0	260	00	WNBX Springfield Vt M
Miter Support         Miter Su		KWLC-KGCA Decorah, IA H	270	r. Rpds. M	
Mem Data         200         Text. Text.         200           WFFH Allowed, Text.         0         200         WFFE Constraints, Fill           KFTH Allowed, Text.         0         300         WFFE Constraints, Fill           KFTH Path, Colo, Text.         Mem Constraint, Fill         WFFE Constraints, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         WFFE Constraints, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         WFFE Constraints, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Colo           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Fill           KFT Path, Colo, Text.         Mem Constraint, Fill         Mem Constraint, Colo           KFT Path, Colo, Text		#WIBA Madison, Wis. 0			*WORC Wornester Mass
Kirkh Hönstein, Tax.     2/20     WFBE Greenville SLC.       Krowskawster, Weith, Kan.     1300     WFBE Greenville SLC.       Krowskawster, Weith,		• WRR Dallas, Tex.	007	- 1	WTNJ-WCAM-WCAPNJ N
KHW WIGHT, KLS.     0     1300     WIGE WARE WARE WARE WARE WARE WARE WARE WAR	ADVL Salt Lake CityO	KTRH Houston, Tex.			WNEL San Juan. P. R.
Merger, wate Same Rev water wat	KFAC Los Angeles, Cal 0	*KFH Wichita, Kas. 0	300	TWIOD-WMBF Miami, Fla. 0	WERB-WFAB New York
Arm. Artimos. Workin.     WHOLV WRING. WRING. WORL WORL WORL WORL WORL WORL WORL WORL	KMED-KINY-KXRO-KFYO KGCX-KFPL-KGEZ-KIUJ	MROC-WLBC-WBEO-WISC	310	WTRC WRAW WBRE WTAL	WOL-WLNH-WEBR-WTEI WGH-WHAT*WCIC WHD
<ul> <li>Kater Frank, Calloure, M. (2014)</li> <li>Water Stand, M. (20</li></ul>	KCRJ-KIT-KGFW-CFJC	WAML-KRMD-WDAH		WBOW-WMBO-WROL KVOL	WJAC-WFBG-WSAJ-CJLS
WEAT Short, View, Older Star, Charlmark Load, Older Weat Short, Name, Older Star, Charles, Marker Star, Data Marker	KGMB Honolulu.	KGHF Pueblo, Colo M	320	TWADC AKTON, Ohio	CMCY Havana, Cuba.
1340     ••••••••••••••••••••••••••••••••••••	KGB San Diego, Cal 0	**************************************	330	+ WSAI Cincinnati, Ohio 0	* WDRC Hartford, Conn. 0
Kerke St. John, John, Kerke St. State, Jin, Kerke St. State, Jin, Kerke St. State, St.	KGIR Butte, Mont. M		1340	0	*WFEA Manchester N.HM
McdRe Faul, Miss.         McdRe Fault, Miss.         McdRe Fa					WEUA Pensacola, Fla
Recent Marker Structure     170     WHER PLACE Structure     WHE	Cal.			WGES Chicago, III.	*WFBL Syracuse, N. Y.
Reduct Arr.         Display         Windle Arr.         Display         Windle Arr.         Display         Windle Arr.         Display         Display <thdisplay< th=""> <thdisplay< th="">         Display<!--</td--><td>KGAR-KFJM-KRKO-KICA</td><td>-</td><td></td><td>WHDF-WPAY-WIBM-WPFB</td><td>WCSC Charleston, S. C N WLLH-WSVS-WCBM-WRDd</td></thdisplay<></thdisplay<>	KGAR-KFJM-KRKO-KICA	-		WHDF-WPAY-WIBM-WPFB	WCSC Charleston, S. C N WLLH-WSVS-WCBM-WRDd
WART AL Cross. Wile, of 380           KUL TUBL, DRL, ARK         320         WART AL Cross. Mail of 410         WART AL Cross. Mail of 410           WUL TUBL, ORL, ARK         130         WART AL CROSS. Mail of 410         WART AL CROSS. Mail of 410           WUL TUBL, ORL, ARK         1410         WART AL CROSS. Mail of 410         WART AND CROSS. Mail of 410           WUL TUBL, ONL, WART AND CROSS. MAIL OLD ONL         WART AND CROSS. MAIL OLD ONL         WART AND CROSS. MAIL ONL           WART AND CROSS. MAIL ONL         1410         WART AND CROSS. MAIL ONL         WART AND CROSS. MAIL           WART AND CROSS. MAIL ONL         1410         WART AND CROSS. MAIL ONL         WART AND CROSS. MAIL         WART AND CROSS. ONL           WART AND CROSS. TO CROSS. MAIL ONL         WART AND CROSS. MAIL ONL         WART AND CROSS. ONL         MAIL ONL           WART AND CROSS. TAND CROSS. MAIL ONL         WART AND CROSS. MAIL ONL         WART AND CROSS. ONL         MAIL ONL           WART AND CROSS. TAND CROSS. MAIL ONL         WART AND CROSS. ONL         MAIL ONL         MAIL ONL           WART AND CROSS. TAND CROSS. MAIL ONL         WART AND CROSS. ONL         MAIL ONL         MAIL ONL           WART AND CROSS. TAND CROSS. MAIL ONL         WART AND CROSS. ONL         MAIL ONL         MAIL	KRE-KVL-KUJ•KERN	-		WGL-WHBQ-WRJN-WJTL	WRAK-WDAS-WRAM-WBTN
KTUL TUBA: OBL.     0190       WHI K ALILIE ROB. AIX:     0190       KTUL TUBA: OBL.     0110       WENE Simple Structure TuBA: OBL.     01       WENE Simple Structure TuBA: OBL.     WHI KE TUBA: OBL.       WENE Simple Structure TuBA: OBL.     WHI KE TUBA: OBL.       WENE Simple Structure TuBA: OBL.     WHI KE TUBA: OBL.       WENE Simple Structure TuBA: OBL.     WHI KE TUBA: OBL.       WENE Simple Structure TuBA: OBL.     WHI KE TUBA: OBL.       WATE THE Structure TuBA: OBL.     1430       WATE TH		*WKBH La Crosse, Wis.		•WALA Mobile Ala.	KQV Plttsburgh, Pa.
WHU TURNO, Olia     M (40)       WHU TURNO, Olia     M (40)       WHU RURNO, Olia		*KLRA Little Rock. Ark		• WHK Cleveland, Ohio 0	
WIREY LENGER'III."         MI   10         WHERY AND TOWN TARE TO	-	WIB Shohoman Wis	400	t WIRE Indianapolis, Ind. M	WARD-WVFW-WBBCNYM
MPEH-WILE: MARC. WILE: MARC. WARC. WARC. WEARS. WILE: MARC. WARC. W	KGNC Amarillo, Tex 0	WROK Rockford, III.	410	•WSFA Montgomerv.Ala. M	WHIS Bluefield. (WRBX) 1
Keep Des Montes Ja., Keep Des Montes Ja., KWEP Proving Ja., KWEP Proving Ja., KWEP St. Paul-Minnold.     H40     WHER Monthis Trem., WHER Monthis Trem., H40       KTF St. Paul-Minnold.     H40     WHER Monthis Trem., WHER Monthis Trem., H40     WHER Monthis Trem., WHER Monthis Trem., H40       KTF St. Paul-Minnold.     H40     WHER Monthis Trem., WHER Monthis Trem., H40     WHER Monthis Trem., WHER Monthis Trem., H40       KOMA Ostahoma City Ost H41     H40     WHER Contention., WHER Monthis Trem., H41     WHER Contention., WHER Monthis Trem., H41       KOMA Ostahoma City Ost H42     WHER Content., H42     WHER Content., WHER WARD-WORD-WORD-WORD-WORD., H42     St. Content., H42	KGFF-KUMA-KORE-KBPS KGGC-KXL-KGIW-KIDW	KFIZ-KCMC*WACO-KALB	420	WELL-WMBC-WPAD-WPAR WKBI-WHFC-WEHS-WCBS	WLEU-WILM-WJMS-WEH
XVEX.D: Yesting for the intervention of the intervention of the intervent of the inte	CFCT Victoria, B. C.	t KSO Des Moines. Ia. K	430	WBNS Columbus, Ohio M	*WHEC Rochester(*WOKO)
KFSTP         St.T meterint, Lat.         0         45.0         1 WEAR Chereland, Olio         MM           KSTP         St.Paul-Minnpular         446.0         1 WEAR Chereland, Olio         MM           KSTP         St.Paul-Minnpular         446.0         1 WEAR Chereland, Olio         MM           KOMA Oliahoma City.Oks         1 440.0         1 470.0         WLAC Nathenda, Olio         MM           KOMA Oliahoma City.Oks         1 490.0         WWEX Workson, Version, St. Methodson, Version, St. Methodson, St	KDFN Casper, Wyo.	*WMBD Poorla, III	440	•WBIG Greenshoro, N. C. M.	WCRA-WSAN Allentown M
**         *         **         *         * <td>FLT Vistoria B C</td> <td>HATE Chouse is a</td> <td></td> <td>Z</td> <td></td>	FLT Vistoria B C	HATE Chouse is a		Z	
Area         Area <th< td=""><td></td><td>Sureveport, La.</td><td>000</td><td>Σ</td><td>WHOM Jersey City, N. J. M</td></th<>		Sureveport, La.	000	Σ	WHOM Jersey City, N. J. M
* KOMA Oklahoma City, Ox5         1480           * 5         * WOKY Contington, K2           bise <sup>th</sup> WATF-KEOW KFIT, WKW         1490           MATF-KEAK*KET-WKW         500           WATF-KEAK*KET, WKW         1500           WATF-KEAK*KET, WKW         1510           WATF-KEAK*CHARA         1530           L. 0         1530	KGA Spokane. Wash. S	the sect and within points.	470	10	
s kieł Mater-kóck-krół wrzew 1500 Warz-wrsu-woru kry. s warzenie i 1510 Warz-wrsu-wrou kry. król warzenie ont H wyzeł Kansas City Mo. 0 1530 0 1530		*KOMA Oklahoma City, Oks	480	2	*WKBW Buffalo, N.Y.
IN THE PREAM WITH AND	KFRK Sacramento, Cal . S		1490	S	
W9XBY Kansaw City Mo         [5]0         CKCR Waterloo Ont.         H           0         [153	KREG-KDB California. H KXO-KGFK-KPQ-KGKB		1500	WJBK-WKEU-WRDW WKBZ-WKBV-WOPI-CHGS	WWSW-WRGA WNBF-WCNV WSYB-WMBO-WWRL
0 W9XBY KADSAK CIty. M0 0 1530			1510	CKCR Waterloo Ont H	CFRC Kingston, Ont 1
0			530		WIXBS Waterbury, Conn. 0
			550		W2XR Long Island City, NYO

Copyright 1935, by Haynes' Radio Log, 161 W. Harrison St., Chicago (it)

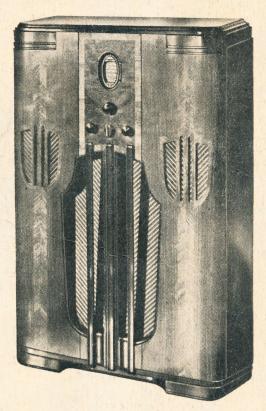
1753

32

The New 1936 PHILCO

ever before!

By all means see and hear the new 1936 Philcos — radio's finest musical instruments. Every worth while feature in radio, giving you thrilling American and Foreign reception. You will be amazed when you hear Philco's glorious tone — when you see the exquisite new cabinets — when you compare Philco's exceptional values !



PROGRAMS

E and ABROAD

#### PHILCO 116X

This new Philco is a true High-Fidelity instrument with vastly extended musical range bringing you the overtones which identify and distinguish the many and varied musical instruments . . . NEW and exclusive Acoustic Clarifiers automatically prevent unpleasant barrel-like boom . . . ALL the clarity of tone produced by the Acoustic Clarifiers and all the extended musical range of Philco High-Fidelity are preserved and projected up to ear level by the large area and slope of the famous Philco Inclined Sounding Board.

In addition, every other advance of radio

science and invention ... Shadow Tuning ... Two-speed Station Selector ... Program Control ... Automatic Volume Control. Receives every broadcast service in the air ... American Stations ... both daytime and night-time Foreign Stations ... Police Calls ... Amateur, Ship and Aircraft Stations ... even the new U. S. Government Weather Forecasts.

And its built-in Aerial Selector, used with the Philco All-wave Aerial, automatically maintains maximum power on each wave band ... In effect, five aerials in one.

Select Your Radio from 43 New 1936 Philcos Liberal Trade-in Allowance — EASY TERMS

