

Listen to the Voices



of the

W
O
R
L
D

Stations, programs and personalities currently heard on the short-wave bands



Well-known personalities include Miss Gun Hagglund, who announces for Radio Sweden, and Edward Startz, shown having his famous "nice cup of tea" during the Happy Station program of Radio Netherlands.

DO YOU WANT to take a trip around the world at the speed of light and never leave your comfortable armchair? The opportunity is yours with the aid of a short-wave radio receiver. Most countries broadcast on the short waves and many of them have English language programs that can be heard in North America. So just sit back and start tuning the dial of your receiver. You'll enjoy the interesting programs of news, music and entertainment from these far-off and fascinating lands.

Generally speaking, there are two types of listeners to short-wave broadcasts: (1) those relaxing after a hard day's work who want programs of entertainment and information; and (2) those listening for far off stations so that they can send in a reception report and receive a QSL, or verification card for their collection. This article has been written with both groups in mind.

With the information contained on these pages, you will know when and where to

By **STEWART WEST**

listen for certain stations. Of course, it would take a book to list all the stations that can be heard, so I have tried to select a representative cross section. Best-heard stations for listeners in Eastern North America are listed on pages 42 to 44; those for listeners in Western North America will be found on pages 45 to 47. News and "Mailbag" programs are listed under each station for easy reference. And the following paragraphs will give you a sampling of the various programs and personalities that can be heard on the short waves.

THIRTY YEARS ON THE AIR

One of the most colorful personalities of the radio world, the originator and polyglot speaker-producer of the world-wide "Happy Station" program is Edward Startz of *Radio Netherlands' Overseas Service*. Startz

ENGLISH LANGUAGE SHORT-WAVE BROADCAST STATIONS BEST HEARD IN EASTERN NORTH AMERICA

Readers in the eastern part of the United States and Canada will find the following list of stations helpful in tuning the short-wave broadcast bands. The left-hand column lists the hour in Eastern Standard Time for broadcasts in English only; in the middle column, the city and country from which the broadcasts originate are listed with the name the station uses for identification in parentheses; and on the right are the frequencies and call letters for stations using them during their broadcasts. When an asterisk appears before the name of the city, it indicates transmissions specifically beamed to North America; generally these will be the best-heard stations, though the others are often very well heard.

TIME (EST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
4:45- 5:45 a.m.	Georgetown, British Guiana (<i>Radio Demerara</i>)	5980
5:00- 6:00 a.m.	Port-of-Spain, Trinidad (<i>Radio Trinidad</i>)	6085, 3275
5:00- 6:00 a.m.	Cap-Haitien, Haiti (<i>The Evangelistic Voice</i>)	15400, 9630, 6105
5:50- 7:30 a.m.	Kingston, Jamaica (<i>Radio Jamaica</i>); News—7:00 a.m.	4950
6:00- 6:30 a.m.	Buenos Aires, Argentina (<i>Radio El Mundo</i>); News—6:25 a.m.	15290 (LRU)
6:00- 7:00 a.m.	Djakarta, Indonesia (<i>The Voice of Indonesia</i>); News—6:15 a.m.	9710
6:00- 1:00 p.m.	Johannesburg, South Africa (<i>South African Broadcasting Corp.</i>) English on Tuesday, Thursday, and Saturday only; News—11:00, 12:00 noon	25800
7:10- 8:45 a.m.	*Melbourne, Australia (<i>Radio Australia</i>); News—7:15, 8:15 a.m.; Mailbag—8:00 a.m. Sunday	11810 (VLC11)
7:15- 8:15 a.m.	*Warsaw, Poland (<i>Radio Warsaw</i>); News—7:15, 7:45 a.m.	15120, 11755, 11740
8:00- 9:30 a.m.	*Cap-Haitien, Haiti (<i>The Evangelistic Voice</i>)	15400, 9630
8:30- 9:00 a.m.	Lisbon, Portugal (<i>Lisbon Calling</i>); News—8:30 a.m.	21495, 17880
8:30- 9:30 a.m.	Delhi, India (<i>All India Radio</i>); News—8:35 a.m.	21580, 17845
9:00- 9:30 a.m.	*Stockholm, Sweden (<i>Radio Sweden</i>); News—9:00 a.m.	17840

TIME (EST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
5:15- 5:30 p.m.	Belgrade, Yugoslavia (<i>Radio Belgrade</i>); News—5:15 p.m.	6100
5:15- 5:35 p.m.	Dakar, Senegal (<i>Radio Dakar</i>) Tuesday, Thursday, and Saturday only; News—5:15 p.m.	4951
5:30- 6:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Sunday, Tuesday, Thursday, and Friday	15335, 11720, 11850 (ORU)
5:30- 6:00 p.m.	Leipzig, East Germany (<i>Democratic Germany Speaking</i>)	9730
5:30- 7:00 p.m.	Caracas, Venezuela (<i>Radio Libertador</i>); News—6:10 p.m.	3245 (YVKT)
6:00- 6:50 p.m.	*Tokyo, Japan (<i>Radio Japan</i>); News—6:00, 6:40 (Saturday only) p.m.	17855 (JOA23), 15325 (JOB21)
6:00-10:03 p.m.	*London, England (<i>General Overseas Service</i>); News—6:00; 9:00, 10:00 p.m.	15310, 11930, 9825
6:00- 1:00 a.m.	*Moscow, U.S.S.R. (<i>Radio Moscow</i>); News—Every hour on the hour	11940, 11890, 11820, 11740, 9665
6:00-11:10 p.m.	Kingston, Jamaica (<i>Radio Jamaica</i>); News—6:00, 6:50, 8:10, 10:00, 11:00 p.m.	4950
6:15- 7:00 p.m.	*Ankara, Turkey (<i>Radio Ankara</i>); News—6:15 p.m.	9515
6:15- 7:45 p.m.	*Monrovia, Liberia (<i>Radio Station ELWA</i>) Tuesday only; News—6:55 p.m.	21535, 15200
6:15- 8:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Saturday only; Mailbag—7:00 p.m.	11850, 9705 (ORU), 9655 (OTC)
6:30- 7:00 p.m.	Port-au-Prince, Haiti (<i>Radio Commerce</i>) Sunday only	9545 (4VC)
7:00-10:35 p.m.	Belize, British Honduras (<i>B.H.B.S.</i>); News—8:00, 10:30 p.m.	3300
7:00- 7:45 p.m.	Sao Paulo, Brazil (<i>Radio Aparecida</i>) Saturday only	9635 (ZYR83)
7:00- 9:15 p.m.	Grenada, Windward Islands (<i>Windward Islands Broadcast-ing Service</i>); News—9:00 p.m.	3365

9:00-10:00 a.m.	*Quito, Ecuador (<i>The Voice of the Andes</i>)	17890, 15115, 11915 (HCJB)	7:15- 7:35 p.m.	*Rome, Italy (<i>Italian Broadcasting and Television System</i>); News—7:15 p.m.	11905, 9575
9:00- 1:15 p.m.	*London, England (<i>North American Service</i>); News—12:00 noon	17700, 15310	7:30- 8:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Sunday, Monday, Tuesday, Thursday, Friday	9655 (OTC), 11850, 9705 (ORU)
10:30-11:30 a.m.	Peking, China (<i>Radio Peking</i>); Dictation News—10:30 a.m.	17860, 17680, 15095,	7:30- 8:00 p.m.	*Budapest, Hungary (<i>Radio Budapest</i>)	11910, 9833
12:15- 1:00 p.m.	Lisbon, Portugal (<i>Lisbon Calling</i>); News—12:15 p.m.	21690, 17895	7:30- 8:00 p.m.	*Prague, Czechoslovakia (<i>Radio Prague</i>); News—7:30 p.m.	11835, 9550
12:30-12:45 p.m.	Athens, Greece (<i>Radio Athens</i>); News—12:30 p.m.	17745, 15345	7:30- 8:30 p.m.	*Warsaw, Poland (<i>Radio Warsaw</i>); News—7:30 p.m.	15120, 11740, 9525
2:00- 3:00 p.m.	Djakarta, Indonesia (<i>The Voice of Indonesia</i>); News—2:30 p.m.	11770, 9865	7:55- 8:45 p.m.	*Montreal, Canada (<i>Radio Canada</i>); News—8:00, 8:30 p.m.; Mailbag—8:15 p.m. Sunday	15190 (CKCX), 11720 (CHOL)
2:45- 3:45 p.m.	Delhi, India (<i>All India Radio</i>); News—2:45 p.m.	17860, 15290, 15105, 11710	8:00- 8:15 p.m.	Karachi, Pakistan (<i>Pakistan Calling</i>); News—8:00 p.m.	15335, 11885
3:00- 3:20 p.m.	Cairo, Egypt (<i>Cairo Calling</i>); News—3:00 p.m.	17915	8:00- 8:30 p.m.	*Sofia, Bulgaria (<i>Sofia Calling</i>); News—8:00 p.m.	9700
3:00- 3:30 p.m.	Teheran, Iran (<i>Teheran Calling</i>); News—3:00 p.m.	15100 (or 17775)	8:00- 9:20 p.m.	*Oslo, Norway (<i>Radio Norway</i>) Sunday only; Norway This Week—9:00 p.m.	15175, 11735, 9540
3:00- 3:30 p.m.	Damascus, Syria (<i>Damascus Calling</i>); News—3:15 p.m.	15165	8:00- 9:30 p.m.	*Monrovia, Liberia (<i>Radio Station ELWA</i>) Tuesday only; News—8:40 p.m.	9650
3:00- 4:00 p.m.	*London, England (<i>North American Service</i>); News—3:00 p.m.	17700	8:00-10:30 p.m.	*Cap-Haitien, Haiti (<i>The Evangelistic Voice</i>); News—9:30 p.m. Saturday; Mailbag—9:30 p.m. Monday	15415 (4VWV), 9602 (4VEH), 6105 (4VE)
3:00- 5:00 p.m.	Tangier, Morocco (<i>Voice of Tangier</i>)	9415 (WTAN)	8:05- 8:30 p.m.	Recife, Brazil (<i>Radio Jornal do Comercio</i>)	9565
3:00- 5:15 p.m.	Accra, Ghana (<i>Ghana Broadcasting Service</i>); News—3:00, 4:00 p.m.	9640, 4915, 3366	8:15- 9:00 p.m.	*Brazzaville, French Equatorial Africa (<i>Radio Brazzaville</i>); News—8:15 p.m.	11975
3:30- 4:00 p.m.	Leipzig, East Germany (<i>Democratic Germany Speaking</i>)	9730	8:30- 9:00 p.m.	*Stockholm, Sweden (<i>Radio Sweden</i>); News—8:30 p.m.	11810 (or 9620)
4:00- 5:00 p.m.	Jerusalem, Israel (<i>The Voice of Zion</i>); News—4:00 p.m.	9008	8:30-10:15 p.m.	*Berne, Switzerland (<i>Switzerland Calling</i>); News—8:35 p.m.	11865 (HER5), 9535 (HER4),
4:00- 6:00 p.m.	*London, England (<i>General Overseas Service</i>)	17700, 15310			
4:00- 6:00 p.m.	Villa Louvigny, Luxembourg (<i>Radio Luxembourg</i>)	6090			
4:15- 4:45 p.m.	Tangier, Morocco (<i>IBRA—Radio Netherlands</i>); News—4:18 p.m.	14850, 11342, 9900			
4:15- 4:55 p.m.	*Hilversum, Holland (<i>Radio Netherlands</i>); News—4:18 p.m.	17775, 15425, 15220			
4:30- 5:00 p.m.	Peking, China (<i>Radio Peking</i>); News—4:30 p.m.	11650, 9460			
5:00- 5:30 p.m.	Port-au-Prince, Haiti (<i>Radio Commerce</i>) Sunday only; Mailbag—5:15 p.m.	9545 (4VC)			

(Continued on page 44)

ENGLISH LANGUAGE SHORT-WAVE BROADCAST STATIONS BEST HEARD IN EASTERN NORTH AMERICA

(Continued from page 43)

TIME (EST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)	TIME (EST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
8:30-8:40 p.m.	Paramaribo, Surinam (AVROS) Monday only	15407, 4850	10:30-11:00 p.m.	News—10:15 p.m.; Mailbag—10:40 p.m. Thursday, Sunday *Copenhagen, Denmark (Voice of Denmark) No English on Sunday; News—10:30 p.m. Monday, Wednesday, and Friday; Mailbag—10:30 p.m. Saturday	9585, 6130
9:00-9:15 p.m.	*Port-au-Prince, Haiti (Radio Commerce) Tuesday, Thursday, and Friday	5980 (4VB)	11:00-11:15 p.m.	Forest Side, Mauritius (Mauritius Broadcasting Service)	9520 (OZF)
9:00-9:30 p.m.	*Copenhagen, Denmark (Voice of Denmark) No English on Sunday; News—9:00 p.m. Monday, Wednesday, and Friday; Mailbag—9:00 p.m. Saturday	9520 (OZF)	11:00-12:00	San Jose, Costa Rica (Lighthouse of the Caribbean)	15055
9:00-12:00	*Quito, Ecuador (The Voice of the Andes); News—10:15 p.m. Tuesday	15115, 11915, 9745 (HCJB)	11:15-12:00	*Madrid, Spain (Voice of Spain); News—11:15 p.m.; Mailbag—11:40 p.m. Thursday, Sunday	9645, 6037 (TIFC)
9:25-9:45 p.m.	*Rome, Italy (Italian Broadcasting and Television System); News—9:25 p.m.	11905, 9575	11:15-12:00	*Berne, Switzerland (Switzerland Calling); News—11:20 p.m.	9585, 6130
9:30-9:40 p.m.	*Cologne, Germany (Voice of Germany); News—9:30 p.m.	11795, 9640	11:30-11:45 p.m.	Buenos Aires, Argentina (Radio Nacional); News only	11865 (HER5), 9535 (HER4)
9:30-10:00 p.m.	*Port-au-Prince, Haiti (Radio Commerce) Wednesday only	5980 (4VB)	12:15-12:30 a.m.	*Brazzaville, French Equatorial Africa (Radio Brazzaville); News only	9690 (LRA)
9:30-11:00 p.m.	Port-au-Prince, Haiti (Radio Haiti) Thursday only	6195 (4VHW)	1:00-2:00 a.m.	Accra, Ghana (Ghana Broadcasting Service); News—1:00 a.m.	15440, 9730, 5970
9:30-10:00 p.m.	*Warsaw, Poland (Radio Warsaw); News—9:30 p.m.	11740, 9525	1:15-5:45 a.m.	Wellington, New Zealand (Radio New Zealand); News—3:30, 5:30 (except Sundays) a.m.	4915, 3366
9:30-10:10 p.m.	*Hilversum, Holland (Radio Netherlands); News—9:33 p.m. except Sunday	9590, 6025	2:00-3:00 a.m.	Lagos, Nigeria (Nigerian Broadcasting Service)	9540 (ZL2)
9:30-11:00 p.m.	*Hilversum, Holland (The Happy Station) Sunday only	9590, 6025	2:00-3:00 a.m.	Kaduna, Nigeria (Nigeria Broadcasting Service)	4990
9:55-10:35 p.m.	*Montreal, Canada (Radio Canada); News—10:00 p.m.; The Northern Messenger—10:20-11:20 p.m. Sunday	15320 (CKCS), 9585 (CKLP)	2:30-2:45 a.m.	Papeete, Tahiti (Radio Tahiti, the Voice of France in the Pacific)	3326
10:00-10:30 p.m.	*Bucharest, Rumania (Bucharest Calling); News—10:00 p.m.	11937, 9570	4:00-4:15 a.m.	Manila, Philippines (The Call of the Orient) News only	6135
10:00-11:45 p.m.	Guatemala City, Guatemala (TGNA)	9668, 5952	4:00-6:00 a.m.	Port Moresby, New Guinea (The A.B.C.); News—4:00 a.m.	15300, 11855, 9730
10:15-11:00 p.m.	*Madrid, Spain (Voice of Spain);		4:30-5:00 a.m.	Hanoi, North Vietnam (Voice of Vietnam)	6130 (VLT6)

ENGLISH LANGUAGE SHORT-WAVE BROADCAST STATIONS BEST HEARD IN WESTERN NORTH AMERICA

Readers in the western part of the United States and Canada will find the following list of stations helpful in tuning the short-wave broadcast bands. The left-hand column lists the hour in Pacific Standard Time for broadcasts in English only; in the middle column, the city and country from which the broadcasts originate are listed with the name of the station uses for identification in parentheses; and on the right are the frequencies and call letters for stations using them during their broadcasts. When an asterisk appears before the name of the city, it indicates transmissions specifically beamed to North America; generally these will be the best-heard stations, though the others are often very well heard.

TIME (PST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
6:00-8:00 a.m.	Manila, Philippines (<i>The Call of the Orient</i>); News—7:00 a.m.; Mailbag—7:15 a.m. Wednesday	17805, 15300, 11855, 9730
6:00-10:00 a.m.	Johannesburg, South Africa (<i>South African Broadcasting Corp.</i>) Tuesday, Thursday, and Saturday only	25800
6:00-7:00 a.m.	*Quito, Ecuador (<i>The Voice of the Andes</i>)	17890, 15115, 11915 (HCJB)
6:15-7:15 a.m.	Rangoon, Burma (<i>Burma Broadcasting Service</i>); News—7:00 a.m.	11765
6:30-7:30 a.m.	*Djakarta, Indonesia (<i>Voice of Indonesia</i>); News—6:45 a.m.	9710, 4910
6:45-7:15 a.m.	Hanoi, North Vietnam (<i>Voice of Vietnam</i>)	15020, 11895, 9465
7:15-8:15 a.m.	*Melbourne, Australia (<i>Radio Australia</i>); News—7:30 a.m.; Mailbag—7:45 a.m. Sunday	11770 (VLC11)
7:30-8:30 a.m.	Peking, China (<i>Radio Peking</i>); Dictation News—7:30 a.m.	17860, 17680, 15095
7:40-8:20 a.m.	Tokyo, Japan (<i>Radio Japan</i>); News—7:50 a.m.	15325 (JOB21), 11705 (JOA4)
9:15-10:00 a.m.	Lisbon, Portugal (<i>Lisbon Calling</i>); News—9:15 a.m.	21690, 17895
12:00-1:00 p.m.	*London, England (<i>North American Service</i>)	17700
1:00-3:00 p.m.	*London, England (<i>General Overseas Service</i>)	17700, 15310
1:15-1:55 p.m.	*Hilversum, Holland (<i>Radio Netherlands</i>); News—1:18 p.m.	17775, 15425, 15220

TIME (PST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
2:30-3:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Sunday, Tuesday, Thursday, Friday	15335, 11720, 11850 (ORU)
3:00-3:50 p.m.	*Tokyo, Japan (<i>Radio Japan</i>); News—3:00, 3:40 (Saturday) p.m.	17825 (JOA20), 15325 (JOB21)
3:00-7:03 p.m.	*London, England (<i>General Overseas Service</i>); News—3:00, 6:00, 7:00 p.m.	15310, 11930, 9825
3:00-12:00	*Moscow, U.S.S.R. (<i>Radio Moscow</i>); News—Every hour on the hour	17870, 17820, 15100, 11850
3:15-4:45 p.m.	*Monrovia, Liberia (<i>Radio Station ELWA</i>) Tuesday only; News—3:55 p.m.	21535, 15200
3:15-5:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Saturday only; Mailbag—4:00 p.m.	11850, 9705 (ORU), 9655 (OTC)
4:30-5:00 p.m.	*Brussels, Belgium (<i>WFR—World's Fair Radio</i>) Sunday, Monday, Tuesday, Thursday, Friday	11850, 9705 (ORU), 9655 (OTC)
4:55-5:45 p.m.	*Montreal, Canada (<i>Radio Canada</i>); News—5:00, 5:30 p.m.; Mailbag—5:15 p.m. Sunday	15190 (CKCX), 11720 (CHOL)
5:00-5:15 p.m.	Karachi, Pakistan (<i>Pakistan Calling</i>); News—5:00 p.m.	15335, 11885
5:00-6:30 p.m.	*Monrovia, Liberia (<i>Radio Station ELWA</i>); News—5:40 p.m.	9650
5:00-7:30 p.m.	*Cap-Haitien, Haiti (<i>The Evangelistic Voice</i>); News—6:30 p.m. Saturday; Mailbag—6:30 p.m. Monday	15415 (4VWI), 9602 (4VEH), 6105 (4VE)
5:00-9:20 p.m.	*Oslo, Norway (<i>Radio Norway</i>) Sunday only; Norway This Week—9:00 p.m.	15175, 11735, 9540
5:15-6:00 p.m.	*Brazzaville, French Equatorial Africa (<i>Radio Brazzaville</i>); News—5:15 p.m.	11975
5:30-7:15 p.m.	*Berne, Switzerland (<i>Switzerland Calling</i>); News—5:35 p.m.	11865 (HER5), 9535 (HER4), 6165 (HER3)

(Continued on page 46)

ENGLISH LANGUAGE SHORT-WAVE BROADCAST STATIONS BEST HEARD IN WESTERN NORTH AMERICA

(Continued from page 45)

TIME (PST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)	TIME (PST)	CITY, COUNTRY (NAME)	FREQUENCIES (kc.)
5:30-8:30 p.m.	Colombo, Ceylon (<i>Commercial Service</i>); News—6:00 p.m.	15265	7:30-8:00 p.m.	*Copenhagen, Denmark (<i>Voice of Denmark</i>); News—7:30 p.m.	
6:00-6:15 p.m.	Port-au-Prince, Haiti (<i>Radio Commerce</i>) Tuesday, Thursday, and Friday	5980 (4VB)	8:00-8:30 p.m.	Monday, Wednesday, and Friday; Mailbag—7:30 p.m. Saturday, No English on Sunday	9520 (OZF)
6:00-7:35 p.m.	Belize, British Honduras	3300	8:00-8:30 p.m.	*Budapest, Hungary (<i>Radio Budapest</i>); News—8:00 p.m.	11910, 9833
6:00-9:00 p.m.	*Quito, Ecuador (<i>The Voice of the Andes</i>); News—7:15 p.m. Tuesday	15115, 11915, 9745 (HCJB)	8:00-9:00 p.m.	*Sofia, Bulgaria (<i>Sofia Calling</i>); News—8:00 p.m.	9700
6:25-6:45 p.m.	*Rome, Italy (<i>Italian Broadcasting and Television System</i>); News—6:25 p.m.	11905, 9575	8:00-9:20 p.m.	San Jose, Costa Rica (<i>Lighthouse of the Caribbean</i>)	9645, 6037 (TIFC)
6:30-6:40 p.m.	*Cologne, Germany (<i>Voice of Germany</i>); News—6:30 p.m.	11795, 9640	8:15-9:00 p.m.	*Oslo, Norway (<i>Radio Norway</i>)	
6:30-7:00 p.m.	*Warsaw, Poland (<i>Radio Warsaw</i>); News—6:30 p.m.	15120, 11740, 9525	8:15-9:00 p.m.	Sunday only; Norway This Week—9:00 a.m.	15175, 11735, 9540
6:30-7:00 p.m.	Port-au-Prince, Haiti (<i>Radio Commerce</i>) Wednesday only	5980 (4VB)	8:15-9:00 p.m.	Berne, Switzerland (<i>Switzerland Calling</i>); News—8:20 p.m.	11865 (HER5), 9535 (HER4)
6:30-7:10 p.m.	*Hilversum, Holland (<i>Radio Netherlands</i>); News—6:33 p.m. except Sunday	9590, 6025	8:30-8:45 p.m.	*Madrid, Spain (<i>Voice of Spain</i>); News—8:15 p.m., Mailbag—8:40 p.m. Thursday	9585, 6130
6:30-8:00 p.m.	*Hilversum, Holland (<i>The Happy Station</i>) Sunday only	9590, 6025	8:30-9:00 p.m.	Buenos Aires, Argentina (<i>Radio Nacional</i>); News only	9690 (LRA)
6:55-7:35 p.m.	Montreal, Canada (<i>Radio Canada</i>); News—7:00 p.m.; The Northern Messenger—7:20-8:20 p.m. Sunday	15320 (CKCS), 9585 (CKLP)	9:00-9:30 p.m.	*Bucharest, Romania (<i>Bucharest Calling</i>); News—8:30 p.m.	11937, 9570
7:00-7:30 p.m.	*Bucharest, Romania (<i>Bucharest Calling</i>); News—7:00 p.m.	11937, 9570	9:00-9:30 p.m.	Tokyo, Japan (<i>Radio Japan</i>); News—9:00 p.m.	17855 (JOA23), 15325 (JOB21)
7:00-7:30 p.m.	Peking, China (<i>Radio Peking</i>); News—7:00 p.m.	17745, 15118	9:00-9:30 p.m.	Taipei, Taiwan; News—9:05 p.m.	15225, 11815
7:00-7:30 p.m.	*Prague, Czechoslovakia (<i>Radio Prague</i>); News—7:00 p.m.	11935, 9550	9:15-9:30 p.m.	Brazzaville, French Equatorial Africa (<i>Radio Brazzaville</i>); News—9:15 p.m.	15440, 9730, 5970
7:00-7:30 p.m.	*Stockholm, Sweden (<i>Radio Sweden</i>); News—7:00 p.m.	11810 (or 9620)	9:15-10:00 p.m.	*Madrid, Spain (<i>Voice of Spain</i>); News—9:15 a.m., Mailbag—9:40 p.m. on Thursday, Sunday	9585, 6130
7:00-8:45 p.m.	Guatemala City, Guatemala (TGNA)	9668, 5952	9:30-10:00 p.m.	*Warsaw, Poland (<i>Radio Warsaw</i>); News—9:30 p.m.	11740, 9550
7:00-10:00 p.m.	Wellington, New Zealand (<i>Radio New Zealand</i>)	15280 (ZL4)	10:15-2:45 a.m.	Wellington, New Zealand (<i>Radio New Zealand</i>); News—12:30, 2:30 (except Sunday) a.m.	9540 (ZL2)
			11:30-11:45 p.m.	Papeete, Tahiti (<i>The Voice of France in the Pacific</i>); News—11:30 p.m.	6135

1:00-1:15 a.m.	Manila, Philippines (<i>The Call of the Orient</i>); News—1:00 a.m.	17805, 15300, 11855, 9730
1:00-2:30 a.m.	Suva, Fiji Islands (<i>Fiji Broadcasting Commission</i>)	3980
1:00-4:45 a.m.	Port Moresby, New Guinea (<i>The A.B.C.</i>); News—1:00, 3:00 a.m.	6130 (VLT6)
1:00-7:05 a.m.	Tokyo, Japan (<i>Far East Network</i>); News—1:00, 4:00, 6:00, 7:00 a.m.	11750
1:30-2:00 a.m.	Hanoi, North Vietnam (<i>Voice of Vietnam</i>)	15020, 11895, 9465
2:00-3:00 a.m.	Cap-Haitien, Haiti (<i>The Evangelistic Voice</i>)	15400, 9630, 6105
2:25-3:30 a.m.	Bangkok, Thailand (<i>Radio Thailand</i>); News—2:30, 3:20 a.m.	11670 (HSK9)
2:50-3:30 a.m.	Kingston, Jamaica (<i>Radio Jamaica</i>)	4950
4:00-6:15 a.m.	Kuching, Sarawak (<i>Radio Sarawak</i>); News—5:00 a.m.	5052

BUYING A SHORT-WAVE RECEIVER

If you are "new" to the joys of short-wave listening (or SWL'ing), you may be considering the purchase of a receiver. There is now a variety of short-wave receivers immediately available across the counter at most radio parts jobber stores. They range in price from \$54.95 (Hallicrafters S-38D) and \$59.95 (National SW-54) to well into the hundreds of dollars.

Obviously, you get what you pay for—as in all things—in a short-wave receiver. The more money you invest, the better the performance in terms of station-to-station separation and "pulling in the distant stations" power. For a start, the Hammarlund, National and Hallicrafters receivers advertised in the pages of POPtronics offer a wide variety of models to suit all purses. The beginning SWL should seriously consider a receiver of from \$125 to \$175 more than adequate for all present-day needs. The SWL specialist can use to full advantage a receiver costing over \$200, but the budget-watching beginner can often hear the voices of the world for under \$100.

If you're an old-timer, it might be worth your while to consider a retirement for that old "inhaler." Numerous radio stores now have a trade-in plan to enable you to take advantage of modern equipment. Also, keep in mind that most of the larger houses work an installment buying plan, if you need help to get over the Christmas season.

is a Dutchman who, for nearly 30 years, has been closely linked with the "Peace, Cheer and Joy" station (international call letters PCJ), broadcasting from Holland on the short waves. Startz's mission in life is, and always was, to spread peace, cheer, and joy, and he has made his one-man music, information and contact show known all over the world.

His career, like his personality, is a most colorful one. As a young man, after completing his studies of the classical languages, he left his home in Holland and went to the United States. For the next few years he was a wanderer on the face of the earth, going through the "mill of life," making his living by taking on all kinds of odd jobs from dishwasher to interpreter and commercial traveler.



Keith Glover conducts Radio Australia's "North American Mailbag" Sunday mornings.

In 1928 Startz returned to Holland where preparations were being made for short-wave broadcasts—which at that time were still a novelty. Having a clear voice and speaking seven languages fluently, Startz was the ideal selection as announcer and commentator when Station PCJ, then owned by the famous firm of Philips, went on the air with an experimental international radio service, the first on the continent. Since then he has never left the microphone—except during World War II—and for over 29 years has been the magic attraction that has made *Radio Netherlands* so popular.

At the outbreak of war in 1940, Startz retired from radio for the duration and went "underground." How he squirmed through the intricate net of Nazi trickery during occupation time is a story in itself. In the Dutch starvation winter of '44-'45, the retreating enemy pillaged and looted everything they could lay their hands on. The station's ample file of fine recordings, collected from all over the globe for the benefit of an international audience, were carried away, never to be seen again.

After Holland's liberation a huge task lay ahead—rebuilding the transmitters and recapturing the audience that for over five years had searched in vain for the lost signals from Holland. When PCJ became the Netherlands' official voice over the world



Graham Hutchins has prepared Radio Australia's popular "DX'ers Calling" for the past 12 years.

air, operating under the auspices of the Netherlands Ministry of Education, Arts and Science, Startz resumed his work as "Good-Will Ambassador of the Air," to broadcast once more his message of peace, cheer, and joy to the world, with even more stress than before. He made many trips abroad, and told his listeners about his experiences each time he returned.

Startz took an active part in the inauguration broadcasts from Holland at the occasion of Queen Juliana's ascension to the throne, for the Columbia Broadcasting System in America, and was on the spot when Holland was struck with the tragic catastrophe of the flood. In 1953, upon completion of his 25th year in radio broadcasting, Juliana bestowed a Knighthood (in the Order of the Royal House of Orange-Nassau) upon him for his outstanding work of promoting good will and understanding among the peoples of the world.

"Keep in touch with the Dutch" has been Startz's well-known slogan since the "Happy Station" began broadcasting. He himself continues to keep in touch with his listeners by visiting their countries and learning their characteristics, customs, likes and dislikes, so as to keep his programs constantly tuned to the pulse of the world. A colorful calendar, pictures, and other materials are sent to listeners who write to the Happy Station, P. O. Box 137, Hilversum, Holland.

INVITE JACKO IN FOR BREAKFAST

At breakfast time each morning Jacko, the Kookaburra, is heard starting the *Radio Australia* programs for the day. These programs from "down under" have been favorite morning listening in many American homes for years.

"My Song Goes Round the World" is a very popular live-artist program presenting listeners' requests every Saturday at 7:25 a.m. EST. And on Sunday mornings the "North American Mailbag," conducted by Keith Glover, and the "DX'ers Calling," prepared by Graham Hutchins, are programs that most short-wave listeners don't want to miss.

Many of *Radio Australia's* transmissions are heard well in this part of the world, though only those beamed to North America have been listed here. The latest program booklet, available from *Radio Australia*, Melbourne, Australia, has a colored photograph of Jacko on the cover.

ACROSS THE CONTINENTS

The following are some of the most popular short-wave broadcasts the world over
(Continued on page 110)

DX PROGRAMS

Several stations put on programs which give listeners the latest news from stations all over the world. These DX programs are being listed here separately in order to help you remember when they can be heard.

"DX'ers Calling" on *Radio Australia* has been prepared by Graham Hutchins every Sunday for the past 12 years, which is proof of its popularity with listeners.

Denmark's DX program is prepared by O. Lund Johansen, editor of the *World Radio Handbook*, and is presented each Tuesday evening.

"Sweden Calling DX'ers" is heard weekly as the last part of the Monday transmissions from *Radio Sweden*. Arne Skoog edits this program and also issues a bulletin for contributors.

Switzerland has a monthly program with Russell Henderson in charge. Germany and New Zealand also present monthly DX programs, and Germany issues a bulletin for contributors.

The times at which these DX programs may be heard are given at right for easy reference.

Australia (Every Sunday)

8:30 a.m. EST on 11,810 kc.

8:00 a.m. PST on 11,770 kc.

Denmark (Every Tuesday)

9:15 and 10:45 p.m. EST on 9520 kc.

6:15 and 7:45 p.m. PST on 9520 kc.

Germany (Second Monday of each month)

9:00 p.m. EST or 6:00 p.m. PST on 11,795, 9640 kc.

New Zealand (First Wednesday of each month)

4:30 a.m. EST or 1:30 a.m. PST on 9540 and 6080 kc.

Sweden (Every Monday)

9:25 a.m. EST on 17,840 kc.

8:55 p.m. EST on 11,810 kc. (or 9620 kc.)

7:25 p.m. PST on 11,810 kc. (or 9620 kc.)

Switzerland (First Thursday of each month)

8:50 p.m. EST or 5:50 p.m. PST on 11,865, 9535, 6105 kc.

11:35 p.m. EST or 8:35 p.m. PST on 11,865, 9535 kc.

You'll enjoy... THE CHALLENGING NEW THEME OF THIS YEAR'S PHOTOGRAPHY ANNUAL!



The 1958 edition of the PHOTOGRAPHY ANNUAL is the brightest and most imaginative ever published. Its theme, its contributors, its 250 pages of striking photographs are certain to delight you! "WHAT IS A CAMERA?" is the exciting theme.

In answer to that question, the Editors of POPULAR PHOTOGRAPHY have compiled "an illustrated definition of photography"—including a selection of the most entertaining and original pictures you've ever seen.

The wonderful world of photography will be yours to enjoy through the lens of:

- The Exciting Camera
- The Playful Camera
- The Workaday Camera
- The Romantic Camera
- The Realistic Camera
- The Intimate Camera
of Harold Feinstein
- The Story-Telling Camera
- The Portrait Camera
- The Nature Camera
- The Glamour Camera
of Don Ornitz
- The Casual Camera
- The Color Camera
- The Action Camera
- The Imaginative Camera

BEST OF ALL—you'll profit from a special section on the most important camera of all—*Your Camera*. A helpful guide to learning from the photo masterpieces of others!

**BUY YOUR COPY OF THE
1958 PHOTOGRAPHY ANNUAL
on sale everywhere
only \$1.00**



Curing Auto Radio Noises

(Continued from page 69)

noisy, replacement will usually correct the trouble.

You might also check your vibrator and buffer capacitor. The buffer is wired across the secondary of the high-voltage winding, and usually has a 1600-volt rating. The vibrator points may be pitted and replacement may be necessary. (It's good practice, whenever a vibrator is replaced, to change the buffer capacitor also.)

If, when "revving" up your motor in the generator noise check, you find that not only does the noise level increase, but your radio plays louder, check your rectifier tube (usually a 6X5 or 0Z4).

A word of advice—when trouble-shooting radio interference, it's best to be methodical. Eliminating possibilities one at a time is generally the fastest way to isolate the trouble.

—50—



Voices of the World

(Continued from page 46)

which you can tune in on your short-wave receiver.

Europe—*Radio Sweden* has three 30-minute transmissions beamed to North America over one of their powerful 100-kw. transmitters. These programs of news and weather, press comments and features, mirror daily life and developments in Sweden and acquaint listeners with Scandinavian music. *Radio Sweden* is always glad to hear from those who have heard the broadcast. They have an attractive QSL to send you for a correct reception report, and a colorful schedule pamphlet.

World's Fair Radio (WFR), in conjunction with the 1958 Fair at Brussels, Belgium, can be heard nightly except Wednesday and has a nice variety of lively programs. They are on the order of those that made OTC, Leopoldville, Belgian Congo, famous several years ago. WFR has a special QSL card and wants reports. If you expect to be in Europe in 1958, plan to go to the Brussels World's Fair.

Asia and Africa—*Radio Japan* now has two transmissions to North America. Varied and interesting programs such as "Glimpses of Japan," "Tokyo Jockey," "Japanese Classic Music Appreciation," the "Japan Guidebook," and "Singing Voices of Japan" can be heard when you tune to *Radio Japan*. This station also sends out several profusely illustrated publications and QSL cards of outstanding beauty. *Radio Japan* endeavors to make friends with as many listeners as possible and to acquaint

this.....

makes

this

.....

when
you buy
the
fabulous



AUDAX TONEARM KIT

A screwdriver . . . 15 minutes of your time . . . and the fabulous Audax tonearm kit — that's all you need to own your own compass-pivot Audax Professional Tonearm *at a big saving!* You'll find accurate assembly of this exclusive kit a very simple affair — with assurance that the final result will be as fine as factory-assembled units! Use any cartridge with your Audax arm. Thrill to the wonderful new difference it makes in your high fidelity system — a difference that confirms your wise choice in owning one of the finest tonearms ever made!

At your dealer { 12" Tonearm Kit \$14.55
 { 16" Tonearm Kit \$17.55

BEST RECORD PROTECTION INSURANCE —



Audax "Micro-pulse" . . . the gram weight scale with "prescription" accuracy! \$3.95

AUDAX • Div. of Rek-O-Kut Co., Inc.

Dept. PE 38-19 108 St., Corona 68, N. Y.

them with life in Japan. (While in the Navy in 1954, I had the opportunity to visit *Radio Japan* and spent a pleasant afternoon touring the six floors of the NHK Building. I was in the studio when the North American transmission was on the air.) Try to tune in *Radio Japan* and write them about your reception. You'll find it well worth your while.

Radio Station ELWA at Monrovia, Liberia, broadcasts primarily for listeners in Africa. This year they have inaugurated a special service to North America which can be heard twice on Tuesdays. At 6:30 and 8:15 p.m. EST (3:30 and 5:15 p.m. PST), you can "Meet The Staff" and hear of the different work each of the missionaries is doing. The happenings of the week are given on ELWA Time, for those who are interested in the operation of a missionary short-wave station (7:20 and 9:05 p.m. EST, 4:20 and 6:05 p.m. PST).

The South African Broadcasting Corporation is heard three mornings a week in the 11-meter band with an interesting variety of programs in the African Service. On the other days the programs are in Afrikaans.

Latin America—There are a few stations with programs in English in South and Central America. But very few of these stations are beamed to North America and thus reception is not always good. HCJB (*The Voice of the Andes*) Quito, Ecuador, is the strongest station with English in South America.

Radio Commerce, at Port-au-Prince, Haiti, has a program called "Glimpses of Haiti," which presents four different looks into various aspects of Haitian life each week. These are heard Sundays at 5:00 p.m. EST, and Tuesdays, Thursdays, and Fridays at 9:00 p.m. EST (6:00 p.m. PST).

The *Evangelistic Voice* of the West Indies presents English programs daily except Thursdays. Your author is on the staff of this station and answers the mail from SWL's on the "Listeners' Post" every Saturday at 5:00 and 9:30 a.m. EST (2:00 and 6:30 a.m. PST) and every Monday at 9:30 p.m. EST (6:30 p.m. PST).

North America—Canada has a program of news and features for listeners in the United States beginning at 7:55 p.m. EST, 4:55 p.m. PST. Later in the evening, The Northwest Territories Service is beamed to listeners in Northern Canada from 9:55 p.m. EST, 6:55 p.m. PST. This program is extended during the winter to include the "Northern Messenger," in which greetings are broadcast to the listeners in the north.

There are several low-powered short-wave stations in Canada which operate in parallel with the regular medium-wave

LEARN ELECTRICITY



**THE EASY WAY
with this NEW
SAMS BOOK!**

**"LEARNING
ELECTRICITY FUNDAMENTALS"**

This easy-to-understand new book covers the complete story of electricity: historical development; electron theory; static electricity; electrical fundamentals; types and uses of fuses and switches; Ohm's Law; magnetism; electro-magnetism; work, energy and power; theory and use of transformers; operation and uses of generators and motors (DC and AC); circuits and controls; practical wiring and electrical apparatus. Fascinating, complete, authoritative. 416 pages; 5½ x 8½"; \$5.95 illustrated. Only

own these SAMS "BEST SELLERS"

USE THIS HANDY ORDER FORM

LEARNING ELECTRICITY FUNDAMENTALS . \$5.95

Transistors. The complete, practical book on Transistors and their application in TV-Radio-Electronics. Explains theory, circuitry, installation, test techniques and servicing. 100 pages; 5½ x 8½"; illustrated. Only \$1.50

Pinpoint TV Troubles in 10 Minutes. Amazingly practical procedures for finding and solving TV troubles. Over 50 timesaving check charts, dozens of diagrams and tests, explanations of circuits and designs. 299 pages; 5½ x 8½". Only \$3.95

Radio Receiver Servicing. Covers all basic receiver types—gives time-saving hints for solving common troubles, such as dead set, weak set, noisy set, etc.. 192 pages; 5½ x 8½"; illustrated. Only \$2.50

Hi-Fi Handbook. Invaluable data on Hi-Fi design, selection and installation. Covers sound theory; fidelity; every type of component; system designs, selection and installation. Really covers Hi-Fi in all its phases. 240 pages; 5½ x 8½"; illust. Only \$3.00

Tape Recorders. Explains recorder theory, tape characteristics, how recorders work; covers all parts used in recorders. Complete, practical data. 176 pages; 5½ x 8½"; illustrated. Only \$2.75

TV Servicing Guide. Quick-repair guide illustrates trouble symptoms by picture-tube screen photos; tells trouble-shooting procedures to be used for repair of every circuit section. An extremely useful TV repair guide. 132 pages; 8½ x 11". Only . . \$2.00

HOWARD W. SAMS & CO., INC.

Order from your Radio-TV Supplier-Wholesaler, or mail to Howard W. Sams & Co., Inc., Dept. 14-L7, 2201 E. 46th St., Indianapolis 5, Ind.

Send books checked above. My (check) (money order) for \$ is enclosed.

Name

Address

City Zone State

(outside U.S.A. priced slightly higher)

stations. These are well heard in parts of the United States and Canada within 600 miles or so of their location. Some of them are: CBNX, St. Johns, Newfoundland, on 5970 kc.; CJCX, Sydney, Nova Scotia, on 6010 kc.; CFVP, Calgary, Alberta, on 6030 kc.; CFRX, Toronto, Ontario, on 6070 kc.; CKFX, Vancouver, British Columbia, on 6080 kc.; CHNX, Halifax, Nova Scotia, on 6130 kc.; CBUX, Vancouver, British Columbia, on 6160 kc.; and VE9AI, Edmonton, Alberta, on 9540 kc. For more distant listeners, reception may be good at times, but is not regular due to the low power of the stations.

In the United States, there are four organizations broadcasting on the short waves: The *Voice of America*, The United Nations, The Armed Forces Radio and Television Service, and The World Wide Broadcasting System (WRUL). Since most of our readers want to listen to short-wave stations in other countries, we will not include detailed information on these stations here.

With a short-wave receiver, the correct time can be obtained by tuning in either WWV of the National Bureau of Standards located near Washington, D. C., or CHU of the Dominion Observatory at Ottawa, Canada. WWV gives a voice announcement of the time in Eastern Standard Time every five minutes over 2500 kc., 5000 kc., 10,000 kc., 15,000 kc., and 20,000 kc. CHU has a voice announcement each minute in Eastern Standard Time on 3330 kc., 7335 kc., and 14,670 kc. Both of these stations operate 24 hours a day.

HELPFUL PUBLICATIONS FOR SWL'S

The *World Radio Handbook* is now considered a "must" by most short-wave listeners. It is published annually and contains a wealth of information on stations around the world. The 1958 edition is expected to be obtainable from Gilfer Associates, Box 239, Grand Central Station, New York 17, N. Y., on the first of January. The price is \$2.00 plus postage and it is well worth it. *World Radio Handbook* also publishes a bulletin every two weeks and a booklet called "How to Listen to the World." In May/June, 1958, a small summer-supplement to the *Handbook* is to be published.

There also are several clubs which publish excellent bulletins to keep you informed of the latest short-wave information. Write to these clubs for further information, if you would like to become a member and receive their bulletins. The Newark News Radio Club, 215 Market St., Newark 1, N. J., covers every type of radio and television DX-listening in a monthly

bulletin of over 60 pages. The International Short Wave Club, 100 Adams Gardens Estates, London SE 16, England, lists the latest short-wave news in a four-page bulletin that is sent airmail anywhere in the world by the first of the month. The Universal Radio DX Club, 21446 Birch St., Hayward, Calif., also publishes a bulletin of short-wave information 19 times each year.

And don't forget the *Short-Wave Report*, which appears regularly in POPULAR ELECTRONICS with the latest news on the short-wave broadcasting bands. Read it each month . . . and "Listen to the Voices of the World." -30-

They're Putting TV on Tape

(Continued from page 50)

up tiny particles of the coating. When this happens, the particles get between the tape and the head and drop-out occurs. The head is therefore ground and polished—the term is "lapped in"—before use.

In the Ampex video recorder, four heads are used, mounted on the outside of a wheel and projecting like the teeth of a rotary saw. The wheel rotates at a speed of 14,400 rpm, pressing against the tape in a cross-wise manner and recording in a crosswise pattern to give the tremendous footage of tape that will take the wide video signal. The tape is pressed against the heads with a pressure of 20,000 pounds per square inch. This creates such friction that previously it softened the binder that held the oxide on the tape. Better binders have now been developed by Minnesota Mining and Manufacturing.

New Oxide Pattern. Another major change forced on the tape manufacturer was a special cross-orientation of the magnetic oxide particles. The particles are rod-shaped, and on ordinary tapes they run the long way. This results in improved magnetic characteristics. However, since the video recorder records crosswise on the tape, it was necessary to swing the particles 90° to bring them approximately parallel to the sweep the head makes across the tape.

The networks don't believe that the video tape recorder will completely supplant the use of film. The cost of the recorder is one major drawback; smaller stations just won't be able to afford it unless the price is reduced drastically. Despite all such problems, however, you can be sure that more and more programs will appear on tape, which may end viewer complaints on the quality of the picture, if not the quality of the program. -30-

November, 1957

the *Most Popular*

NOVICE TRANSMITTER IN THE COUNTRY!

From "the World's Largest Distributor of Amateur Radio Eqpt!"

Globe Chief 90



A completely bandswitching, 90 watt transmitter for 10-160M.

Here's a compact, 8x14x8", sturdy rig with well-filtered, built-in power supply. Pi-network matches most antennas from 52-600 ohms. Modified grid-block keying is employed for maximum safety. Has provisions for VFO input and operation. Kit form includes complete manual and all tubes and parts. Meter and cabinet carefully shielded for reduction of unwanted TVI.

Just

\$6.75 Down

\$547
per mo.

Net: \$67.50

Kit: \$54.95

AND WRL'S TRIED AND TESTED . . .

Globe Scout 680



65 watts CW; 50 watts on fone, plate modulated.

Net: \$109.95

Kit: \$89.95

\$11.00 Down

\$891
per mo.

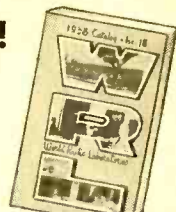
A compact, self-contained, bandswitching transmitter for operation of the 6 through 80 meter bands, with built-in power supply. High level modulation is maintained. TVI-suppressed cabinet. Pi-network output on 10-80M; link-coupled on 6M, matching into low impedance beams. New type, shielded meter. Globe Scout 66 is identical, except bandswitching 10-160M. Size: 8x14x8".

PRINTED CIRCUIT SCREEN MODULATOR

Designed to permit radio-telephone operation with the Chief and similar CW Xmtrs. Seft contained. Kit: \$13.95.

FREE 1958 CATALOG!

New 200 page catalog with hundreds of illustrations of over 15,000 quality items from the nation's leading manufacturers. Everything for the ham, hi-fi enthusiast, experimenter and serviceman! Send for your copy today!



Free Catalog! Info on Chief Scout

Name:

Address:

City & State:

WORLD'S MOST PERSONALIZED RADIO SUPPLY HOUSE

World Radio

LABORATORIES

341 S. W. BROADWAY, CO. BLUFFS, IA. Phone 2-0277