

RADIO LOG and LORE

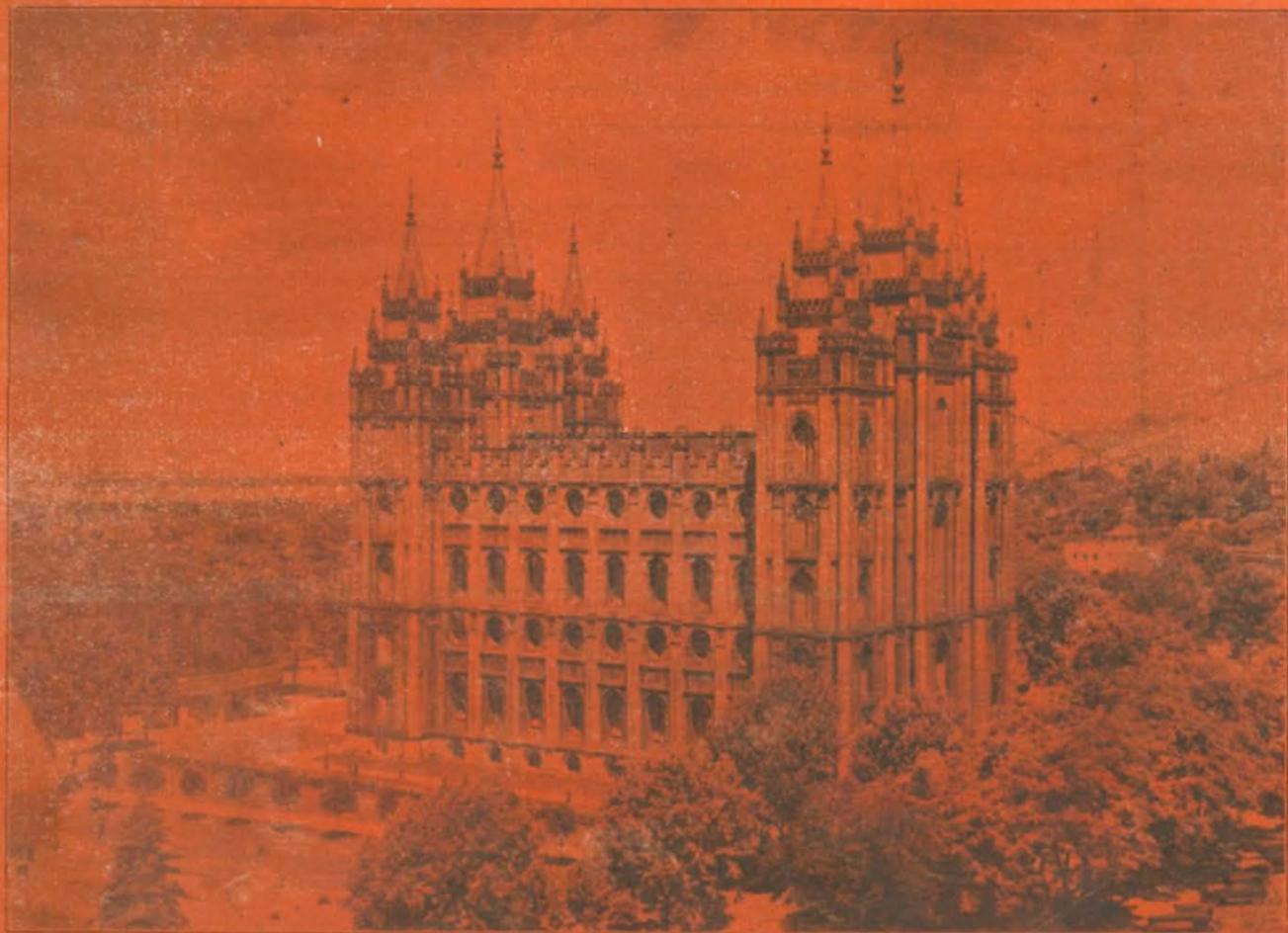
NEWSDEALER PRICE25c

FEBRUARY

By MAIL (for One Year, 12 Issues
Canada & Foreign, \$1.25)\$1

A Dollar Buys a Complete Service for One Year

—a service that is needed in every home where there is a radio. A complete, concise program service of all American networks, lists of all network stations and cross-indexed listings of all North American chain and non-chain stations, as well as all radio stations of the world. Let this magazine help you enjoy your radio more. A subscription coupon, for your convenience, may be found on page 3.



THE SALT LAKE TABERNACLE

"My Favorite"

PROGRAMS

	Time	Channel	Station
Sunday			
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			

Radio Log and Lore

WHITMAN RADIO PUBLISHING CO.
 W. R. WHITMAN, PUBLISHER
 ALICE M. WHITMAN, EDITOR



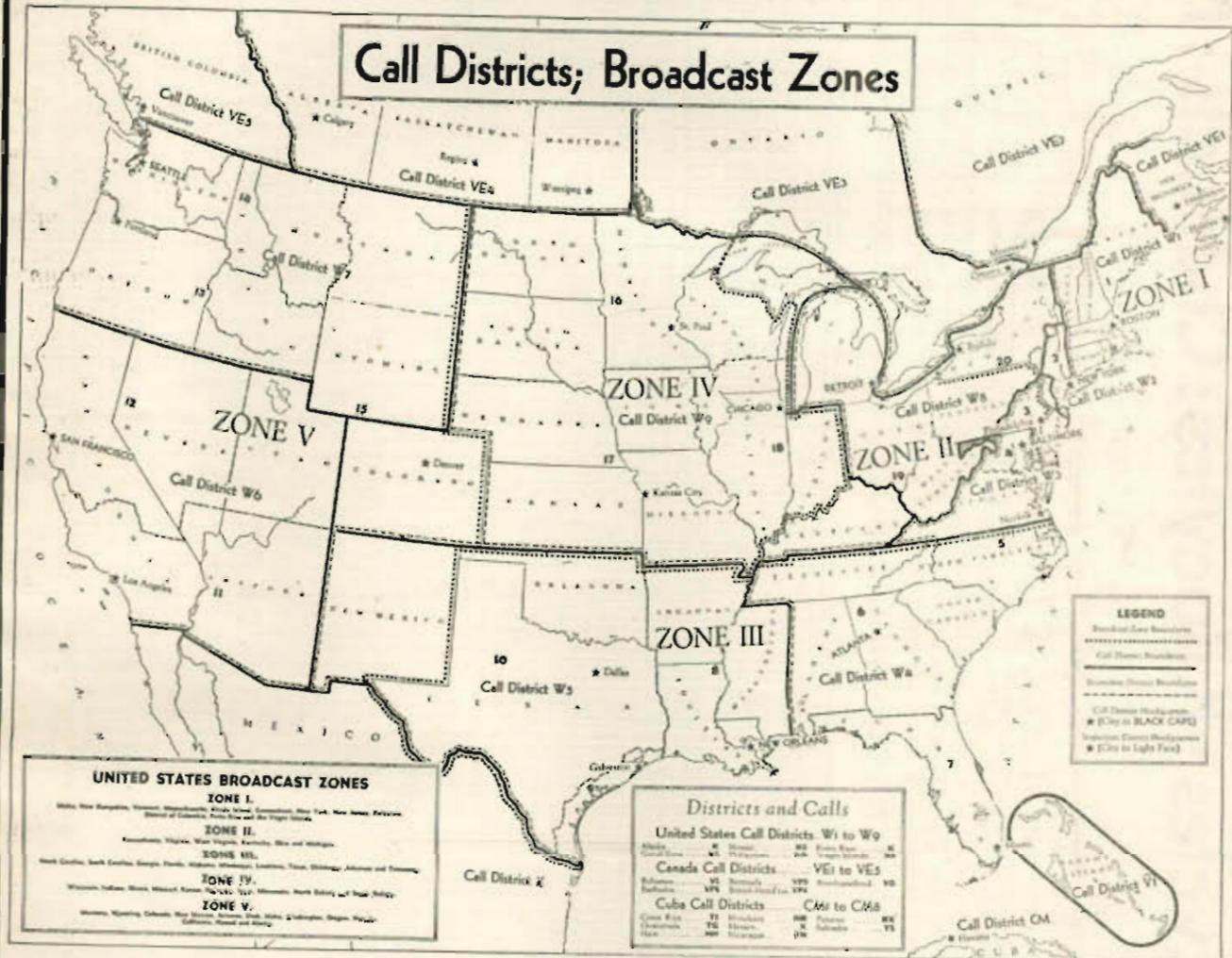
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Calls and Call Districts of NORTH AMERICA



While prefixes or certain letters, designated to distinguish calls of one nation from another, are assigned by the international authorities at Berne, most of the larger countries divide their territory into numbered call districts and these numbers in calls, designate the district in which the station is located. In the United States there are nine call districts and in Canada, five. Long wave broadcasting and commercial station calls do not include call district numbers but amateur and experimental station calls are indicated by a number immediately following the prefix letter denoting nationality.

In the United States, each radio district maintains its headquarters in a centrally located city in charge of a supervisor of radio, a number of branch offices at strategical points and a centrally located constant frequency monitoring station, the manager of which is under the direct supervision of the Washington office. A list of these district headquarters, with the territory under the jurisdiction of each, follows:

A	E	I	M	Q	U	Y
B	F	J	N	R	V	Z
C	G	K	O	S	W	E (French)
D	H	L	P	T	X	(A German)
1	3	5	7	9		
2	4	6	8	0		
. (Period)	, (Comma)	! (Exclamation Point)	— (Fraction Bar)	— — (Break Double Dash)		
- (Hyphen)	: (Colon)	' (Apostrophe)	.. (Inverted Commas)	— — — (End Message Cross)		
? (Interrogation)	; (Semicolon)	() (Parenthesis)	Warning (High Power)	Error		

WHY NOT LEARN MORSE CODE?

International Morse Code and Conventional Signals
To Be Used for All General Public - Service Communication

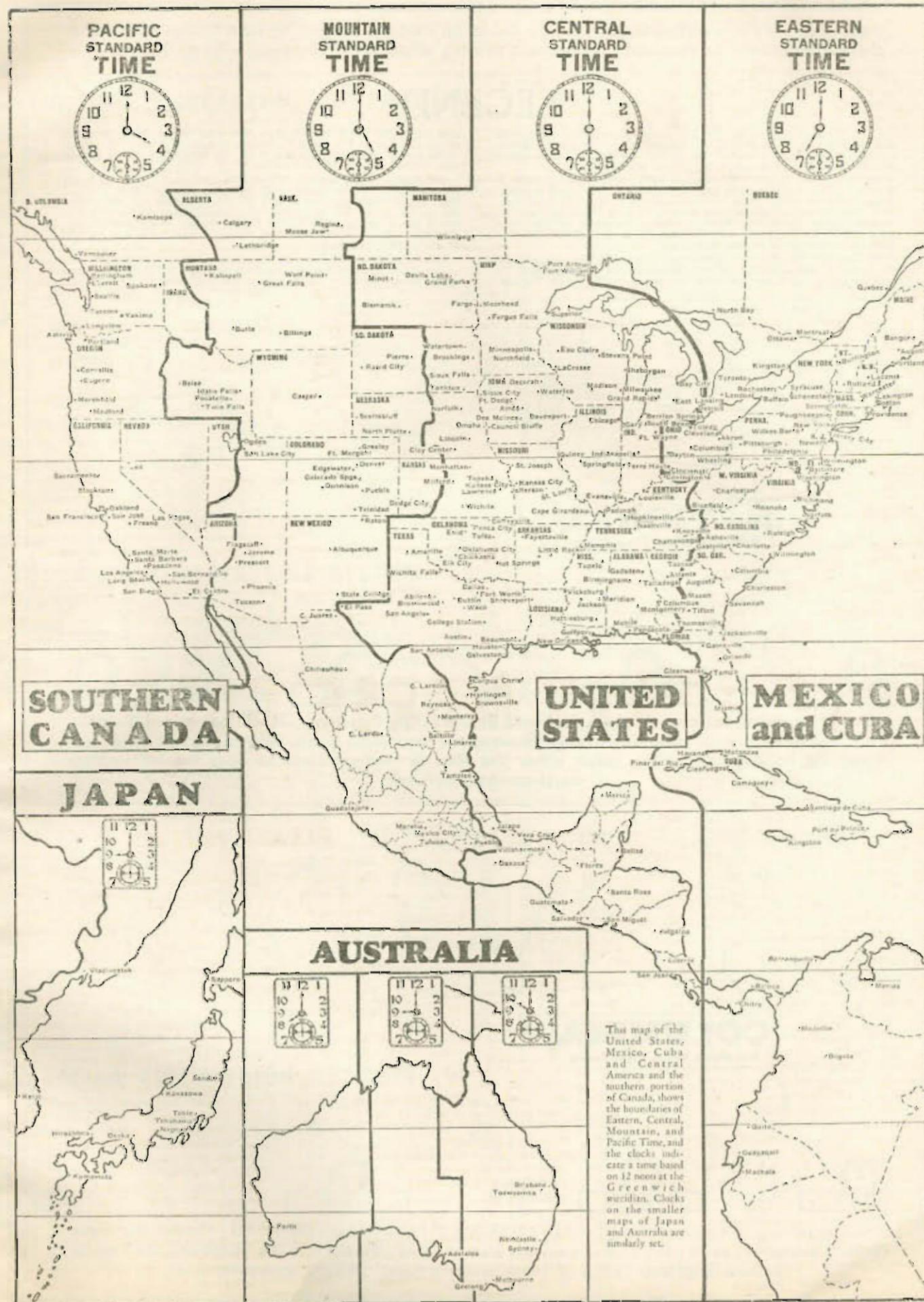
Radio has been instrumental in bringing about a universal understanding of Morse Code. As proficiency in its use is necessary to the securing of an amateur license, thousands upon thousands of "Hams" in all parts of the world have become expert in its use; whereas this knowledge was previously possessed only by persons employed professionally in the transmission of messages by wire.

PLEASE NOTE:

- (1) A Dash Is Equal to Three Dots
- (2) The Space Between Parts of the Same Letter Is Equal to One Dot
- (3) The Space Between Two Letters Is Equal to Three Dots
- (4) The Space Between Two Words Is Equal to Five Dots

This knowledge of the alphabet, acquired by amateurs and others, is the source of much entertainment in gleaning press, weather and other information from the air.

QRA.....What is the name of your station?	QRT.....Must I stop sending?	QSP.....Will you relay to..... free of charge?
QRB.....At what approximate distance are you?	QRU.....Have you anything for me?	QSQ.....Must I send each word or group once only?
QRD.....Where are you going?	QRV.....Must I send a series of V's?	QSX.....Does my wave length (frequency) vary?
QRE.....What is the nationality of your station?	QRW.....Must I advise.....that you are calling him?	QSZ.....Must I send each word or group twice?
QRF.....Where do you come from?	QRX.....Must I wait? When will you call me again?	QTA.....Must I cancel telegram No.....?
QRQ.....Will you indicate my exact frequency in kilocycles?	QRY.....Which is my turn?	QTB.....Do you agree with my word count?
QRH.....What is your exact frequency in kilocycles?	QRZ.....By whom am I being called?	QTC.....How many telegrams have you to send?
QRI.....Is my tone bad?	QSA.....What is the strength of my signals (9 to 5)?	QTD.....Is the word "count" accepted?
QRJ.....Are you receiving me badly? Signals weak?	QSB.....Does the strength of my signals vary?	QTE.....What is my true bearing?
QRK.....Are you receiving me well? Are my signals good?	QSC.....Do my signals disappear entirely at intervals?	QTH.....What is your position in latitude and longitude?
QRL.....Are you busy?	QSD.....Is my keying bad?	QTI.....What is your true course?
QRM.....Are you being interfered?	QSE.....Are my signals distinct?	QTJ.....What is your speed?
QRN.....Are you troubled by atmospherics?	QSF.....Is my automatic transmission good?	QTK.....What is true bearing of..... relative to you?
QRO.....Must I increase my power?	QSK.....Must I suspend traffic? When will you call?	QTP.....Are you going to enter the dock?
QRP.....Must I decrease my power?	QSL.....Can you give me acknowledgment of receipt?	QTR.....What is the exact time?
QRQ.....Must I send faster?	QSM.....Have you received my acknowledgment?	QTS.....What is true bearing of your station relative to me?
QRS.....Must I send slowly?	QSN.....Can you receive me now? Must I listen?	QTU.....What are hours during which your station is open?



This map of the United States, Mexico, Cuba and Central America and the southern portion of Canada, shows the boundaries of Eastern, Central, Mountain, and Pacific Time, and the clocks indicate a time based on 12 noon at the Greenwich meridian. Clocks on the smaller maps of Japan and Australia are similarly set.

Let These Pages Help You Find the Programs You Will Enjoy

Because most of the interest in radio programs is in the transcontinental features, attention is paid in these pages only to these releases. An orchestra begins to play in New York City; far away in another time zone, you listen to the music. You hear it regularly each day until you come to fix in your mind a certain hour; yet others are listening in other zones at a different time, and both are still different from the time in the studio where the orchestra is playing. Yet the music that is going across the continent is going on the air at precisely the same second and the answer to this is the changes in standard time that have a great deal to do with radio programs. Time-zone network maps are published frequently in this magazine, showing the time changes that occur, while program time (for the Evening programs that go across the continent) are given in each of the five zones.

Just as the day begins first in the East, so do the first programs appear. On this page are listed the afternoon chain releases, from noon to six in the evening (Eastern time). A few of these programs go across the continent, but in the main it is too early for Coast-to-Coast releases. Following these are the Evening Programs, listed on the following double page. Practically this is the entertaining guide of the nation, and the programs listed include radio's most important. From six in the evening until midnight (Eastern Time) all releases on four networks are shown, the majority of which go from Coast to Coast. The period, however, is a little too early for the Pacific Coast (three in the afternoon to nine in the evening). So on the following page the Pacific Coast networks are shown from four in the afternoon to midnight (seven to three in the morning Eastern time). While these schedules over-

lap the Evening Program schedules, the Coast networks do not carry all of the Eastern releases, supplanting a part of them with their own attractions. All three schedules are based on 15-minute periods—four in the hour. Three simultaneous releases are listed, one for Columbia and two for NBC (the Blue and Red in the East; the Orange and Gold in the West). The Evening Program schedule includes a fourth network—the Canadian chain. This schedule also gives, where possible, the point of origination of each program, and the zones covered. NBC has but one chain on the Coast (the Orange) but a second program schedule is maintained alternately by the two San Francisco key stations, KGO and KPO, the one broadcasting singly while the other heads the chain on which are carried either Coast NBC programs or Eastern Blue and Red releases.

Table with 7 columns (Sunday to Saturday) and 5 rows (12:00 to 5:45). Each cell contains program details including station call letters, program titles, and performers.

Table with 7 columns (Sunday to Saturday) and 5 rows (4:00 to 11:45). Each cell contains program details including station call letters, program titles, and performers.

This table covers six hours of evening broadcasting for each day of the week, each day being in a vertical panel and the six hours of each day are in black horizontal panels, from six to midnight New York time (5 to 9 Pacific Coast). Consider only the time in your own time zone.

IF YOU LIVE IN NORTH AMERICA, HERE'S YOUR

EVENING PROGRAM

SIX HOURS OF NETWORK RELEASES IN ALL ZONES

Each hour is divided into quarter hour periods and each of the four transcontinental broadcasts running simultaneously, are listed—the Blue and Red Channels. The origin of each program is at the left; the zones at the right.

In this column time is shown in five zones, each hour divided into quarter hour periods and each of these showing the four chains whose programs are listed on these pages.

SUNDAY EVENING PROGRAMS

Origin	TITLE	Zones
NBC Blue	Cadillac Concerts	East
NBC Red	Catholic Hour	ECMP
COLUM	Songs My Mother Sang	East
CANADA	Origin of Our Indians	AtOP
NBC Blue	Cadillac Concerts	East
NBC Red	Catholic Hour	ECMP
COLUM	Songs My Mother Sang	East
CANADA	Leonard Woolsey, Vocal Recital	AtOP
NBC Blue	Cadillac Concerts	East
NBC Red	Our American School	ECMP
COLUM	Smiling Ed McConnell	East
CANADA	Atlantic Nocturne	AtOP
NBC Blue	Cadillac Concerts	East
NBC Red	Our American School	ECMP
COLUM	Charles Carille, Tenor	East
CANADA	Atlantic Nocturne	AtOP

MONDAY EVENING PROGRAMS

Origin	TITLE	Zones
Wash. U. S. Army Band	Xavier Cupat's Orchestra	East
NY	Buck Rogers in 25th Century	ECMP
Wash. U. S. Army Band	Xavier Cupat's Orchestra	East
NY	Al and Pete	ECMP
Wash. U. S. Army Band	Three X Sisters	East
NY	Irene Beasley	ECMP
Wash. U. S. Army Band	Enoch Light's Orchestra	East
NY	Que. Musicale	AtOP
Wash. U. S. Army Band	Lowell Thomas; News	East
NY	Cherico Musical Mosaics	ECMP
Wash. U. S. Army Band	Enoch Light Orchestra	East
NY	Que. Musicale	AtOP

TUESDAY EVENING PROGRAMS

Origin	TITLE	Zones
Wash. U. S. Army Band	Stage Relief Broadcast	East
NY	Miss. Frances Aida	ECMP
Wash. U. S. Army Band	Buck Rogers in 25th Century	East
NY	To Be Announced	ECMP
Wash. U. S. Army Band	Miss. Frances Aida	East
NY	Al and Pete	ECMP
Wash. U. S. Army Band	The Ivory Stamp Club	East
NY	Mid-Week Hymn Sing	ECMP
Wash. U. S. Army Band	Charles Carille, Tenor	East
NY	Ham. Carefree Harmony	AtOP
Wash. U. S. Army Band	Lowell Thomas; News	East
NY	Cherico Musical Mosaics	ECMP
Wash. U. S. Army Band	"Little Italy"	East
NY	Ham. Carefree Harmony	AtOP

WEDNESDAY EVENING PROGRAMS

Origin	TITLE	Zones
Phil. Westminster Choir	Xavier Cupat's Orchestra	East
NY	Buck Rogers in 25th Century	ECMP
Phil. Westminster Choir	Xavier Cupat's Orchestra	East
NY	Al and Pete	ECMP
Phil. Westminster Choir	Irene Beasley	East
NY	George R. Holmes, News	ECMP
Phil. Westminster Choir	Enoch Light's Orchestra	East
NY	Children's Corner	AtOP
Phil. Westminster Choir	Lowell Thomas; News	East
NY	Cherico Musical Mosaics	ECMP
Phil. Westminster Choir	Tito Guizar, Mexican Tenor	East
NY	Children's Corner	AtOP

THURSDAY EVENING PROGRAMS

Origin	TITLE	Zones
Richard Humber Orchestra	Xavier Cupat's Orchestra	East
NY	Buck Rogers in 25th Century	ECMP
Richard Humber Orchestra	Xavier Cupat's Orchestra	East
NY	Al and Pete	ECMP
Richard Humber Orchestra	The Ivory Stamp Club	East
NY	John B. Kennedy	ECMP
Richard Humber Orchestra	Arthur Herbert, Songs	East
NY	Mont. Canadian Capers	AtOP
Richard Humber Orchestra	Lowell Thomas; News	East
NY	Grandmother's Trunk	ECMP
Richard Humber Orchestra	"Little Italy"	East
NY	Mont. Canadian Capers	AtOP

FRIDAY EVENING PROGRAMS

Origin	TITLE	Zones
To Be Announced	Xavier Cupat's Orchestra	East
NY	R. V. Kallenborn	ECMP
To Be Announced	Xavier Cupat's Orchestra	East
NY	Al and Pete	ECMP
To Be Announced	Three X Sisters	East
NY	Irene Beasley, Contralto	ECMP
To Be Announced	Edith Murray, Songs	East
NY	Que. Musicale	AtOP
To Be Announced	Lowell Thomas; News	East
NY	Mountain Music	ECMP
To Be Announced	Zoe Parenteau's Orchestra	East
NY	Que. Musicale	AtOP

SATURDAY EVENING PROGRAMS

Origin	TITLE	Zones
StanP. Al Pearce and His Gang	Human Side of the News	East
NY	Meet the Artist	ECMP
StanP. Al Pearce and His Gang	Human Side of the News	East
NY	Mildred Bailey, Songs	ECMP
StanP. Al Pearce and His Gang	Mary Small, Juvenile Songs	East
NY	Half Hour for Men	ECMP
StanP. Al Pearce and His Gang	Wife on the Political Situation	East
NY	Ernest Dainty, Organ	AtOP
StanP. Al Pearce and His Gang	Flying with Capt. Al Williams	East
NY	Half Hour for Men	ECMP
StanP. Al Pearce and His Gang	George Scherban's Ensemble	East
NY	Ernest Dainty, Organ	AtOP

76543 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

87654 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

98765 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

109876 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

1110987 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

12111098 :00
Atlantic Time
Eastern Time
Central Time
Mountain Time
Pacific Time

Chl. Ted Weems' Orchestra	Dramatic Sketch	East
Mon. The American Revue	Le Vieil Album	AtOP
Chl. Ted Weems' Orchestra	Dramatic Sketch	East
Mon. Ace Brigade Orchestra	Le Vieil Album	AtOP
NY. The Bakers' Broadcast	Dramatic Sketch	East
NY. H. V. Kallenborn	Masters of Music	ECMP
NY. The Bakers' Broadcast	The Fitch Program	East
NY. Rin Tin Tin Thrillers	Masters of Music	AtOP

To Be Announced	Chase & Sanborn Hour	East
NY. Evening in Paris	Chateau Laurier	AtOP
To Be Announced	Chase & Sanborn Hour	East
NY. Evening in Paris	Chateau Laurier	AtOP
To Be Announced	Chase & Sanborn Hour	East
NY. Dramatic Guild	Angelus Vocal Ensemble	AtOP
To Be Announced	Chase & Sanborn Hour	East
NY. Dramatic Guild	Angelus Vocal Ensemble	AtOP

NY. Gulf Headliners	Manhattan Merry-Go-Round	East
NY. The Seven Star Revue	Operetta	AtOP
NY. Gulf Headliners	Manhattan Merry-Go-Round	East
NY. The Seven Star Revue	Operetta	AtOP
NY. Walter Winchell	American Album Familiar Music	ECMP
NY. The Seven Star Revue	Operetta	AtOP
NY. Nat Shilkret, Orchestra	American Album Familiar Music	ECMP
NY. The Seven Star Revue	Operetta	AtOP

To Be Announced	Chevrolet Program	East
NY. "Pat's" Drama of Childhood	Artist Series	AtOP
To Be Announced	Chevrolet Program	East
NY. The Meistersingers	Artist Series	AtOP
NY. C. Gardel, Baritone	Hall of Fame	ECMP
NY. Conclave of Nations	Artist Series	AtOP
NY. C. Gardel, Baritone	Hall of Fame	ECMP
NY. Conclave of Nations	Artist Series	AtOP
NY. Mendelssohn Choir	To Be Announced	ECMP

NY. Girls Harmony Trio	To Be Announced	East
NY. Little Jack Little	Twilight Echoes From the Fires	ECMP
Chl. Ennio Bolognini	John Fogarty, Tenor	East
NY. Little Jack Little	Twilight Echoes From the Fires	ECMP
NY. Buddy Rogers Orchestra	Master Singers	East
NY. Henry Busse Orchestra	To Be Announced	ECMP
NY. Buddy Rogers Orchestra	Master Singers	East
NY. Henry Busse Orchestra	To Be Announced	ECMP

Chl. Amos 'n' Andy	Trio Romantique	East
Chl. Myrt and Marge	Organ Recital	AtOP
Tor. Rex Battle's Orchestra	Baby Rose Marie, Songs	East
NY. Billy Batchelor	Vicent Travers Orchestra	East
Phil. Rex Battle's Orchestra	Organ Recital	AtOP
NY. Radio in Education	The Mollie Show	East
NY. Fox Fur Trappers Orchestra	Oliver Naylor Orchestra	East
Phil. Inter-University Debates	Gus Van, Arlene Jackson	East
NY. The Goldbergs	Boake Carter, News	East
NY. Inter-University Debates	Conservatory String Quartet	AtOP

Chl. Sealed Power Side Show	Societyland Sketches	East
NY. Happy Bakers	Al Oliver's Hawaiians	AtOP
Chl. Sealed Power Side Show	Societyland Sketches	East
NY. Edwin C. Hill, News	Al Oliver's Hawaiians	AtOP
NY. Dier Kiss Recital	The Voice of Firestone	East
NY. Bing Crosby	Music, Chatter and Song	AtOP
NY. Red Davis, Dramatic Sketch	The Voice of Firestone	East
NY. Bing Crosby	Music, Chatter and Song	AtOP

Chl. Sinclair Greater Minstrels	A & P Gypsies	East
Chl. L. Stokowski, Philadelphia Orch.	Gaiety and Romance	AtOP
NY. Sinclair Greater Minstrels	Andre Kostelanetz, Orchestra	East
NY. Capt. Dobbsie, Ship of Joy	The Big Show	ECMP
NY. Jack Frost's Melody Moments	Capt. Dobbsie, Ship of Joy	ECMP
NY. The Big Show	Gaiety and Romance	AtOP

To Be Announced	Wayne King's Orchestra	East
NY. Herring Marimba Band	Contented Program	ECMP
Chl. Wayne King's Orchestra	Herring Marimba Band	AtOP
NY. Herring Marimba Band	Contented Program	ECMP
Chl. Henri Deering, Piano	Kay-Sevin	East
NY. Columbia News	Moonlight on the River	AtOP
NY. Father Finn, Choral Music	Kay-Sevin	East
NY. Myrt and Marge	Moonlight on the River	AtOP

Chl. Amos 'n' Andy	John Fogarty, Tenor	East
NY. Evan Evans, Baritone	The Call of the North	ECMP
NY. The Post Prince	Ted Weems Orchestra	East
NY. Baswell Sisters	The Call of the North	ECMP
NY. Phil Harris Orchestra	Clyde Lucas Orchestra	East
NY. Abe Lyman Orchestra	Call of the North	ECMP
NY. Phil Harris Orchestra	Clyde Lucas Orchestra	East
NY. Abe Lyman Orchestra	Call of the North	ECMP

Chl. Amos 'n' Andy	Piano Duo	East
Chl. Myrt and Marge	Beautiful Lady	AtOP
Tor. Rex Battle's Orchestra	Gems of Melody	East
NY. Billy Batchelor	Vicent Travers' Orchestra	East
Phil. Rex Battle's Orchestra	Beautiful Lady	AtOP
NY. Radio in Education	Putash and Perimutter	East
NY. Fox Fur Trappers Orchestra	The Mollie Show	East
Phil. Oliver Naylor Orchestra	Inter-University Debates	AtOP
NY. Gus Van, Arlene Jackson	The Goldbergs	East
NY. Boake Carter, News	Inter-University Debates	AtOP

NY. Eno Crime Clues	The Royal Gelatine Review	East
NY. Happy Bakers	The Sereaders	AtOP
NY. Eno Crime Clues	The Royal Gelatine Review	East
NY. Edwin C. Hill, News	The Sereaders	AtOP
NY. Dangerous Paradise	Lady Esther Serenade	East
NY. Nat Shilkret Orchestra	Studio Presentation	AtOP
NY. Red Davis, Dramatic Sketch	Lady Esther Serenade	East
NY. Albert Spalding, Violin	Studio Presentation	AtOP

NY. Warden Laws, Dramatic Sketch	The Igana Troubadors	East
NY. L. Stokowski, Philadelphia Orch.	Mont. One heure pres de vous	AtOP
NY. Warden Laws, Dramatic Sketch	The Igana Troubadors	East
NY. Stoopnagle and Budd, Comedians	Mont. One heure pres de vous	AtOP
NY. John McCormack, Tenor	Fred Allen's Revue	East
NY. Guy Lombardo's Orchestra	Mont. One heure pres de vous	AtOP

Chl. Vincent Lopez Orchestra	Corn Cob Pipe Club	East
NY. Old Gold Program	Echoes from the Old World	AtOP
Chl. Vincent Lopez Orchestra	Corn Cob Pipe Club	East
NY. Old Gold Program	Echoes from the Old World	AtOP
To Be Announced	Wash. National Radio Forum	East
NY. Columbia News Service	Joe De Courcy's Orchestra	ECMP
To Be Announced	Wash. National Radio Forum	East
NY. Myrt and Marge	Joe De Courcy's Orchestra	ECMP

Chl. Amos 'n' Andy	John Fogarty, Tenor	East
NY. Evan Evans, Baritone	Inter-University Debates	ECMP
NY. The Post Prince	The King's Jesters	East
NY. Baswell Sisters	Dell Campo, Songs	ECMP
NY. Phil Harris Orchestra	Richard Humber Orchestra	East
NY. Abe Lyman Orchestra	Paul Whiteman Orchestra	East
NY. Phil Harris Orchestra	Ozzie Nelson's Orchestra	ECMP
NY. Abe Lyman Orchestra	Paul Whiteman Orchestra	East
NY. Ozzie Nelson's Orchestra	Paul Whiteman Orchestra	East

Chl. Amos 'n' Andy	Mary Small, Juvenile Songs	East
Chl. Myrt and Marge	Beautiful Lady	AtOP
Tor. Rex Battle's Orchestra	Gems of Melody	East
NY. Billy Batchelor	Vicent Travers' Orchestra	East
Phil. Rex Battle's Orchestra	Beautiful Lady	AtOP
NY. Radio in Education	Putash and Perimutter	East
NY. Fox Fur Trappers Orchestra	The Mollie Show	East
Phil. Oliver Naylor Orchestra	Inter-University Debates	AtOP
NY. Gus Van, Arlene Jackson	The Goldbergs	East
NY. Boake Carter, News	Inter-University Debates	AtOP

NY. Eno Crime Clues	The Royal Gelatine Review	East
NY. Happy Bakers	The Sereaders	AtOP
NY. Eno Crime Clues	The Royal Gelatine Review	East
NY. Edwin C. Hill, News	The Sereaders	AtOP
NY. Dangerous Paradise	Lady Esther Serenade	East
NY. Nat Shilkret Orchestra	Studio Presentation	AtOP
NY. Red Davis, Dramatic Sketch	Lady Esther Serenade	East
NY. Albert Spalding, Violin	Studio Presentation	AtOP

NY. Warden Laws, Dramatic Sketch	The Igana Troubadors	East
NY. L. Stokowski, Philadelphia Orch.	Mont. One heure pres de vous	AtOP
NY. Warden Laws, Dramatic Sketch	The Igana Troubadors	East
NY. Stoopnagle and Budd, Comedians	Mont. One heure pres de vous	AtOP
NY. John McCormack, Tenor	Fred Allen's Revue	East
NY. Guy Lombardo's Orchestra	Mont. One heure pres de vous	AtOP

Chl. Vincent Lopez Orchestra	Corn Cob Pipe Club	East
NY. Old Gold Program	Echoes from the Old World	AtOP
Chl. Vincent Lopez Orchestra	Corn Cob Pipe Club	East
NY. Old Gold Program	Echoes from the Old World	AtOP
To Be Announced	Wash. National Radio Forum	East
NY. Columbia News Service	Joe De Courcy's Orchestra	ECMP
To Be Announced	Wash. National Radio Forum	East
NY. Myrt and Marge	Joe De Courcy's Orchestra	ECMP

Chl. Amos 'n' Andy	John Fogarty, Tenor	East
NY. Evan Evans, Baritone	Inter-University Debates	ECMP
NY. The Post Prince	The King's Jesters	East
NY. Baswell Sisters	Dell Campo, Songs	ECMP
NY. Phil Harris Orchestra	Richard Humber Orchestra	East
NY. Abe Lyman Orchestra	Paul Whiteman Orchestra	East
NY. Phil Harris Orchestra	Ozzie Nelson's Orchestra	ECMP
NY. Abe Lyman Orchestra	Paul Whiteman Orchestra	East
NY. Ozzie Nelson's Orchestra	Paul Whiteman Orchestra	East

NY. Hands Across the Border	Paul Whiteman's Orchestra	East
NY. Camel Caravan	Hands Across the Border	AtOP
NY. Hands Across the Border	Paul Whiteman's Orchestra	East
NY. Camel Caravan	Hands Across the Border	AtOP
NY. Echoes of the Palisades	Paul Whiteman's Orchestra	East
NY. Columbia News Service	Bert Antic's Mountain Boys	AtOP
NY. Echoes of the Palisades	Paul Whiteman's Orchestra	East
NY. Columbia News Service	Bert Antic's Mountain Boys	AtOP

NY. Hands Across the Border	Paul Whiteman's Orchestra	East
NY. Camel Caravan	Hands Across the Border	AtOP

Airline Distances

(Western Hemisphere)

TABLE NO. 2

It is possible to arrange only a limited number of cities in a distance table, for quick finding and on this page is a table that is one of a series that embraces

No. 1: United States-Canada Distances
No. 2: Western Hemisphere Distances

No. 3: Eastern Hemisphere Distances
No. 4: All-World Distances

It will be noted that 48 cities are included in this chart and the arrangement places 48 on each side and 24 each on top and bottom. The diagonal row of hands in the upper and lower halves divides the figures applying to the cities at the left and those at the right.

FROM TO	FROM TO	FROM TO	FROM TO
Anchorage, Alas.	Bogota, Col'mbia	Boston, Mass.	Bowmanville, O.
Buenos Aires, Ar.	Calgary, Alta.	Caracas, Venez.	Chicago, Ill.
Cincinnati, Ohio	C. Juarez, Mex.	Denver, Colo.	Drum'ndville, Q.
Dallas, Texas	Guatemala, Gua.	Havana, Cuba	Halifax, N. S.
Heredia, C. Rica	Honolulu, Hawaii	Juneau, Alaska	Lima, Peru
Los Angeles, Cal.	Mexico City, Mex.	Miami, Fla.	Monterrey, Mex.
Montevideo, Ur.	Montreal, Que.	New Orleans	New York
Philadelphia, Pa.	Pittsburgh, Pa.	Port au Pr., Haiti	Quito, Ecuador
Reykjavik, Ico.	Reynosa, Mex.	Rio de Janeiro	St. Johns, Nwf.
St. Louis, Mo.	San Francisco	San Jose, C. Rica	San Juan, P. Rico
San Salvador, Sal.	S. Do m., D. Rep.	Seattle, Wash.	Tegucigalpa, Hn.
Toronto, Ont.	Vancouver, B. C.	Villa Acuna, Mex.	Winnipeg, Man.

ULTRA SHORT; ULTRA LONG

THE SHORT WAVES

This Line Illustrates a 6-Meter (50,000-Kilocycle) Wave Traveling 100 Cycles of 6 Meters Each or 600 Meters

This Line Illustrates a 60-Meter (5,000-Kilocycle) Wave Traveling 10 Cycles of 60 Meters Each or 600 Meters

This Line Illustrates a 100-Meter (3,000-Kilocycle) Wave Traveling 6 Cycles of 100 Meters Each or 600 Meters

THE LONG WAVES

This Line Illustrates a 200-Meter (1,500-Kilocycle) Wave Traveling 3 Cycles of 200 Meters Each or 600 Meters

This Line Illustrates a 300-Meter (1,000-Kilocycle) Wave Traveling 2 Cycles of 300 Meters Each or 600 Meters

This Line Illustrates one 600-Meter (500-Kilocycle) Wave for Purposes of Comparison

These lines are correct reproductions of the relative length of radio waves—from the ultra short (50,000 kilocycles) to the ultra long (500 kilocycles) just outside the broadcast band.

In North America, long wave broadcasting begins at 550 and ends at 1500 kilocycles; but in Europe, stations are assigned as high as 155 kilocycles. Short wave is generally known as the frequencies below 3000 kilocycles.

Why [WAVE LENGTHS (METERS) DECREASE] As FREQUENCIES (CYCLES) INCREASE] As

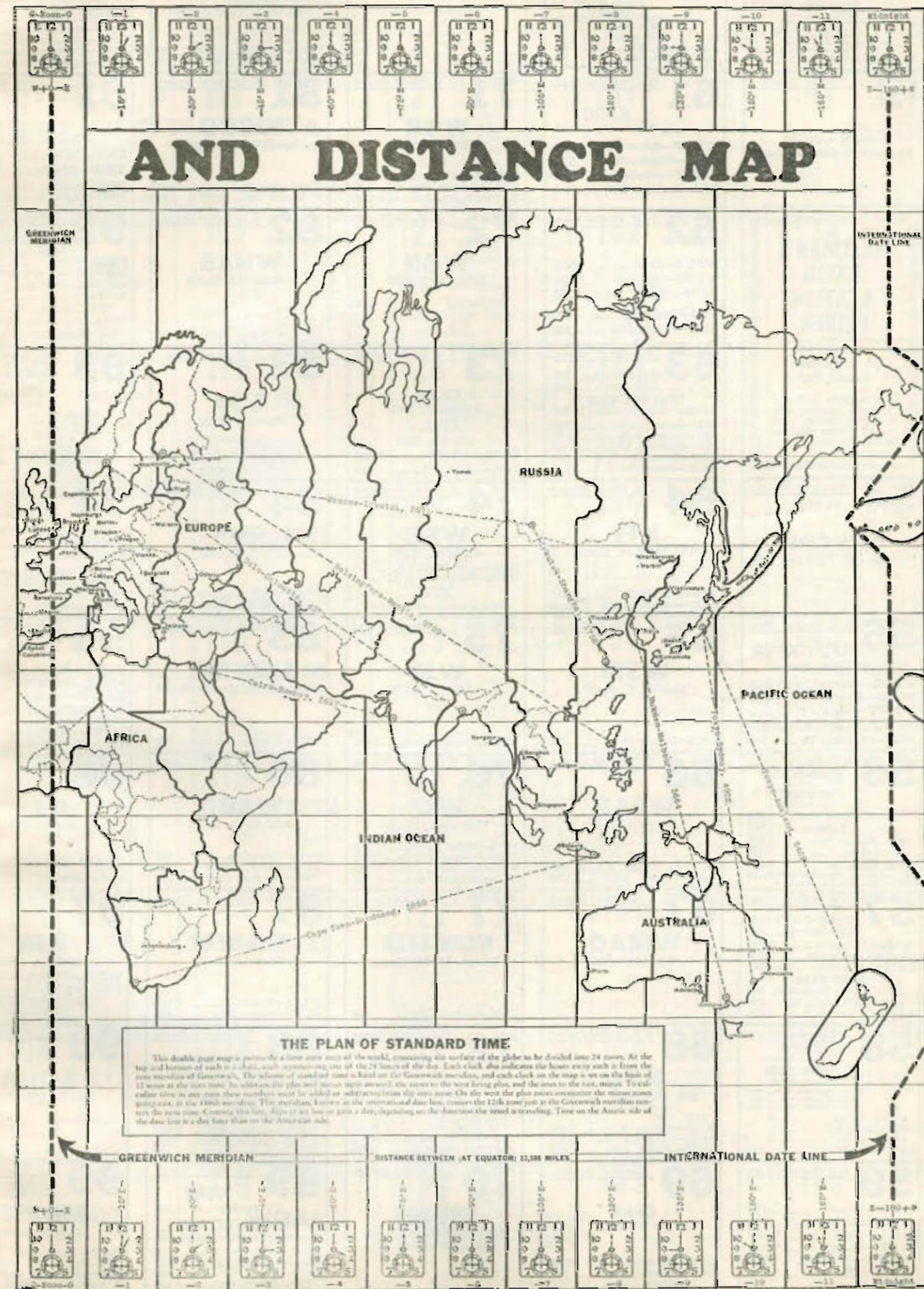
Meters Multiplied By Cycles Must Equal Distance the Wave Travels Per Second

As a kilocycle is equivalent to one thousand cycles, it will readily be seen that the ultra short wave illustrated at the top of this page, known as the 50,000 kilocycle wave, is in reality a 50,000,000 cycle wave, meaning that 50,000,000 is the number of cycles it makes in one second. As radio waves are known to travel 300,000,000 meters per second, it follows that a wave making 50,000,000 cycles per second must travel in cycles or waves of 6 meters each in order to travel at its given speed of 300,000,000 meters per second. This particular ultra-short wave is known either as a 50,000,000 cycle (or 50,000 kilocycles) wave, from the number of waves it makes a second, or as a 6-meter wave, the length of each wave so covered. Thus it is in each of the waves illustrated above. The number of cycles described by the wave multiplied by meters (the length of each wave) must equal the 300,000,000 meters each wave must travel in one second, bearing in mind that one kilocycle is the equivalent of 1,000 cycles. Thus do wavelengths (meters) and frequencies (kilocycles) increase and decrease conversely, not unlike the tall and the short man walking side by side. The latter takes more steps (kilocycles) but shorter ones (meters) than the tall man who takes fewer but longer steps and reaches his destination at the same time.

This illustration is presented, however, not to emphasize the theory of meter and kilocycle designation, but to illustrate the great difference between even the short waves themselves—the 100-meter wave and the ultra short 6-meter wave, which descends into an almost straight line of tiny pulsations.

So called short waves are below 100 meters and long waves, utilized for program broadcasting, above. Practically all broadcasting assignments are between the 500 kilocycle (600 meter) wave at the bottom and the 1500 kilocycle (200 meter) wave above, while practically all short wave broadcasting and commercial communications are carried on between the 6 and 100 meter bands.

It is interesting to note that the six waves, from the ultra-short to the ultra-long, actually travel the 600 meters as pictured above in a five hundred thousandth part of a second.



Alabama (10)
Anniston, WAMC 142
Birmingham, WBRC 93
WAPI 114
WKBC 131
WJBT 137
WJTV 137
WVTV 142
Gadsden, WJBY 121
Huntsville, WBNS 120
Mobile, WODX 141
Montgomery, WWSA 141
Muscogee Shoals, WNRA 142

Georgia (12)
Athens, WTFI 145
Atlanta, WSB 79
WGST 84
WJTL 137
WENC 142
Augusta, WRDW 150
Columbus, WRBL 120
La Grange, WKUW 150
Macon, WMAZ 118
Rome, WFDW 150
Savannah, WTOG 126
Thomasville, WQDX 121

Please Read

Every radio station in America is listed and cross-indexed, as follows: First, by channels (Whitman's Rapid Station Finder on preceding pages); Second, by sections (countries, states, and cities on this double page); and Third, alphabetically by call letters on the four following pages. Thus each station is listed three. Each has its own purpose. The channel listing, most used, enables you, by noting the dial setting on your radio and finding the corresponding number on the Station Finder, to identify the station to which you are listening. The sectional listing, principally for reference, lists all stations by cities and states, on the continent, with channel numbers. The alphabetical list gives station information; call, city, owner, power, for reference, and also furnishes identification where the listener has been able to hear the call.

United States Stations, 587; Canada, 72; Mexico, 48;

SECTIONAL LIST

Table listing radio stations by state: N. Hampshire (3), N. Carolina (8), N. Dakota (6), Ohio (20), Oklahoma (11), New Jersey (12), New Mexico (4), New York (44), Pennsylvania (40), Rhode Isl. (3), S. Carolina (4), S. Dakota (9), Tennessee (12), Texas (32), Virginia (11), Washington (22), West Virginia (5), Wisconsin (16), Wyoming (1).

LOCAL CHAN

These Channels Continued From

Table listing local channels and their corresponding stations: CHAN 100, CHAN 120, CHAN 121, CHAN 122, CHAN 123, CHAN 124, CHAN 125, CHAN 126, CHAN 127, CHAN 128, CHAN 129, CHAN 130, CHAN 131, CHAN 132, CHAN 133, CHAN 134, CHAN 135, CHAN 136, CHAN 137, CHAN 138, CHAN 139, CHAN 140, CHAN 141, CHAN 142, CHAN 143, CHAN 144, CHAN 145.

This First

Channels, based on kilocycles, are the only values indicated on these pages; meters are long since obsolete, and channel numbers (kilocycles with the final cipher dropped) occupy less space on the dial and are in almost universal use. These tables are so clear and simple as to be practically self-explanatory. But the instantaneous dialing of Whitman's Rapid Station Finder (channel listing) will become more apparent with a little study and use. It will be noticed that all channels in the broadcast range are set off in columns of 10 each. Hence, the eye can find the desired number quickly. While the power of every station is shown, the larger stations are printed in larger type; thus conditions in the channel, whether it be cleared, regional or local, are clearly shown. The six local channels are marked with a star and the listing of these are continued below.

Cuba, 58; Others, 39; Total North American Stations, 804

OF NORTH STATIONS

Table listing radio stations by state: Oregon (13), Philadelphia, WCAU 117, College Sta., WTAW 112, Corpus Christi, KGF 150, Dallas, WFAA 80, KRLD 104, WRR 128, WJAS 129, WJAX 138, WWSW 150, WRAW 131, WQAN 88, WNBQ 120, WKOK 121, WBRE 131, WYRK 100, WJAX 138, WWSW 150, WRAW 131, WQAN 88, WNBQ 120, WKOK 121, WBRE 131, WYRK 100, WJAX 138, WWSW 150, WRAW 131, WQAN 88, WNBQ 120, WKOK 121, WBRE 131, WYRK 100.

Table listing radio stations by province: Alberta (7), Ontario (22), B. Columbia (11), Manitoba (4), N. Brunswick (4), Nova Scotia (5), P. E. Island (3), Saskatchewan (7), Quebec (9), Ontario (22), B. Columbia (11), Manitoba (4), N. Brunswick (4), Nova Scotia (5), P. E. Island (3), Saskatchewan (7), Quebec (9).

Table listing radio stations by state: W. Virginia (5), Wisconsin (16), Wyoming (1), Costa Rica (15), Hildalgo (1), Mexico (1), Yucatan (2), CUBA, Newfoundland (6), Salvador (1), Guatemala (1), Haiti (1), Honduras (2).

MEXICO

Table listing radio stations by state: Baja Calif. (3), Jalisco (2), Chihuahua (3), Neuvo Leon (5), Coahuila (4), Puebla (1), Queretaro (1), S. Luis Potosi (1), Sonora (1), Tamaulipas (6), Veracruz (3), Yucatan (2), CUBA, Newfoundland (6), Salvador (1), Guatemala (1), Haiti (1), Honduras (2).

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like CFAC, CFBO, CFCF, etc.

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like CKMG, CKMU, CKNC, etc.

Complete for North America Alpha Call

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like CMHW, CMJC, CMJE, etc.

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like KOYL, KECA, KELW, etc.

Every Station Listed Here betical List

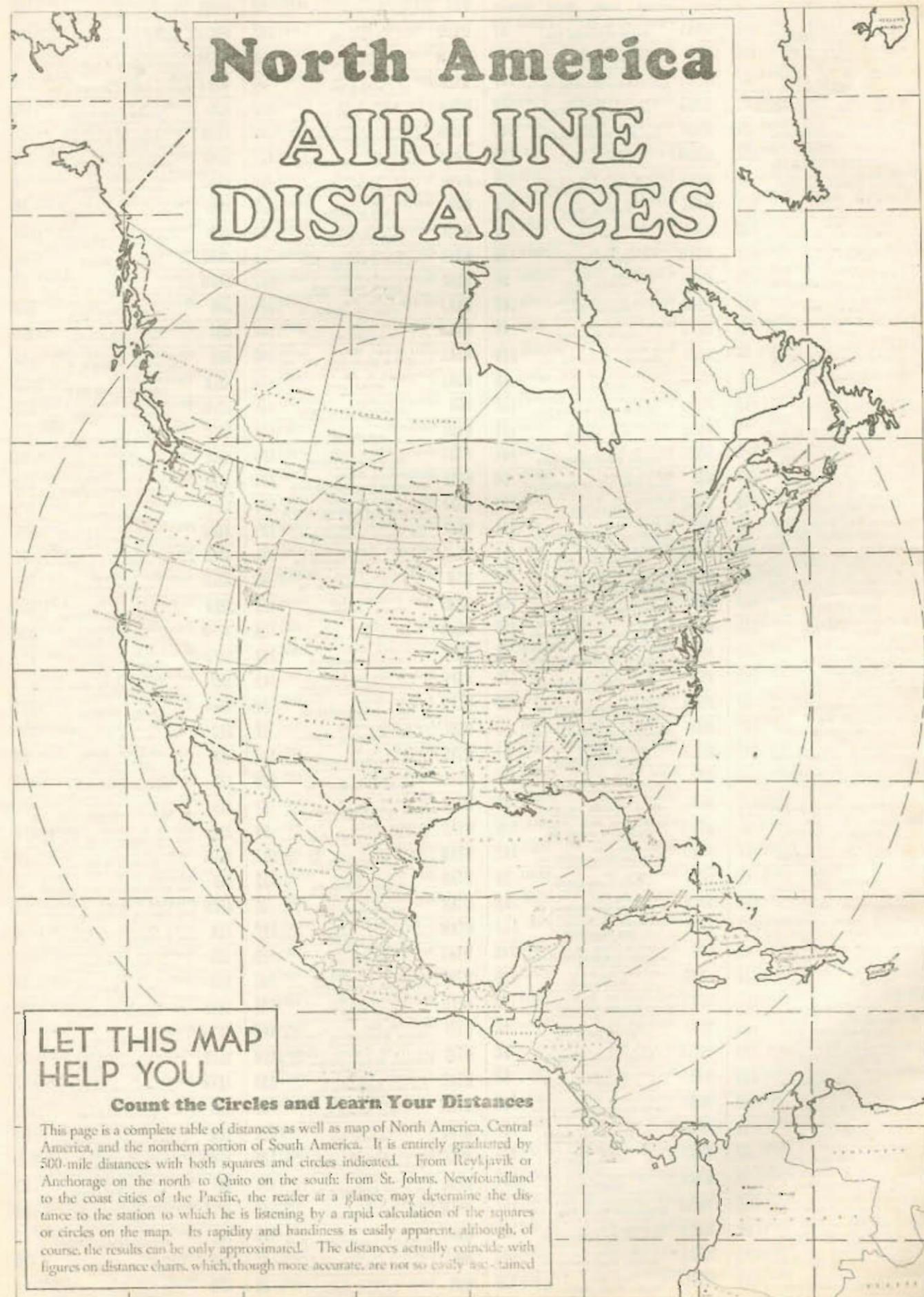
Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like KFWI, KFXD, KFXF, etc.

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like KGKO, KGKY, KGMB, etc.

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like KNX, KOA, KOAC, etc.

Table of radio stations with columns: Call, Location, Owner, Watts, Channel. Includes stations like KUMA, KUOA, KUSD, etc.

North America AIRLINE DISTANCES



LET THIS MAP HELP YOU

Count the Circles and Learn Your Distances

This page is a complete table of distances as well as map of North America, Central America, and the northern portion of South America. It is entirely graduated by 500-mile distances with both squares and circles indicated. From Reykjavik or Anchorage on the north to Quito on the south; from St. John's, Newfoundland to the coast cities of the Pacific, the reader at a glance may determine the distance to the station to which he is listening by a rapid calculation of the squares or circles on the map. Its rapidity and handiness is easily apparent, although, of course, the results can be only approximated. The distances actually coincide with figures on distance charts, which, though more accurate, are not so easily obtained.

Airline Distances

(United States-Canada)

TABLE NO. 1

It is possible to arrange only a limited number of cities in a distance table, for quick finding and on this page is a table that is one of a series that embraces

No. 1: United States-Canada Distances
No. 2: Western Hemisphere Distances

No. 3: Eastern Hemisphere Distances
No. 4: All-World Distances

It will be noted that 48 cities are included in this chart and the arrangement places 48 on each side and 24 each on top and bottom. The diagonal row of hands in the upper and lower halves divides the figures applying to the cities at the left and those at the right.

FROM TO	Albuquerque	Atlanta, Ga.	Baltimore, Md.	Bismarck, N. D.	Boise, Idaho	Boston, Mass.	Butte, Mont.	Calgary, Alta.	Casper, Wyo.	Charlotte, N. C.	Chicago, Ill.	Cincinnati, Ohio	Cleveland, Ohio	Dallas, Texas	Denver, Colo.	Des Moines, Iowa	Detroit, Mich.	Edmonton, Alta.	Hot Springs, Ark.	Kansas City, Mo.	Los Angeles, Cal.	Louisville, Ky.	Miami, Fla.	Milwaukee, Wis.	Minneapolis	Montreal, Que.	Nashville, Tenn.	New Orleans, La.	New York, N. Y.	Omaha, Nebr.	Philadelphia, Pa.	Phoenix, Ariz.	Pittsburgh, Pa.	Portland, Me.	Portland, Ore.	Regina, Sask.	Richmond, Va.	St. Louis, Mo.	Salt Lake City	San Antonio, Tex.	San Francisco	Schenectady	Seattle, Wash.	Toronto, Ont.	Tulsa, Okla.	Vancouver, B. C.	Washington, D. C.	Winnipeg, Man.																																																																																																																																																																																																																																																																																																																																																																	
Albuquerque	1142	1697	1173	664	725	774	1389	1339	835	338	590	1412	1241	1130	1455	835	1185	835	1985	794	872	1671	1267	1903	1706	946	1830	1251	590	1130	1965	1869	368	2050	1320	653	1648	664	565	1400	780	2378	2262	1340	533	249	2255	786	1070	670	602	2084	2941	1819	1055	344	762	1560	356	2475	418	1009	2335	2190	1210	1900	147	2100	1334	288	860	1819	1039	780	2689	529	1279	2440	2138	897	1707	1395	1770	1400	1221	1420	885	614	730	418	2094	302	941	1850	1585	497	1438	1250	1032	1390	780	725	479	934	2000	1886	485	2050	1351	135	479	1630	417	492	1665	738	307	1549	1550	1092	563	492	2511	350	1042	2340	2177	1130	2670	2047	111	2260	1495	460	1051	2011	1780	1880	480	1855	1125	190	541	1500	1251	899	2283	762	1105	1990	1340	323	2000	1920	271	2110	1359	92	674	1743	1085	892	1279	1038	455	1020	824	725	2015	1955	190	2142	1390	170	762	1819	1910	1651	1378	1720	1301	1009	424	1027	1689	1500	946	1633	1032	598	221	1114	1680	1850	271	2970	1290	479	1009	1869	1031	935	1119	1130	381	934	922	983	1835	796	1601	430	639	1742	639	664	2588	1279	2750	1290	1100	2840	972	1941	1880	700	1940	510	877	2016	479	1009	362	2442	1032	2168	1285	1168	2290	1523	1500	1105	1501	848	215	1340	916	761	1650	1180	1770	671	203	1889	934	1093	1280	1841	607	1678	1505	553	2002	725	2009	468	1918	254	810	1979	399	672	1550	1009	1462	736	399	1536	896	614	846	1610	1032	1340	634	1142	1488	767	1489	1428	1698	1210	239	1820	1188	1191	2160	406	2022	202	849	2078	307	971	2035	608	1960	418	851	2030	406	890	1855	700	1731	443	597	1791	597	744	2291	669	2290	614	848	2355	344	1329	922	1642	848	1393	725	941	1549	809	1039	1940	442	1670	1361	442	1960	712	1800	479	1851	1107	559	1851	737	2280	2475	424	1389	2508	392	1378	725	2340	1819	1191	548	2040	971	2243	276	2061	786	1055	1315	252	1455	1250	1328	1025	2378	30	1267	860	2370	135	2095	1665	553	1320	2420	325	2320	356	1050	2362	1130	1480	1229	1123	964	965	1135	1270	1130
FROM TO	Minneapolis	Montreal, Que.	Nashville, Tenn.	New Orleans, La.	New York, N. Y.	Omaha, Nebr.	Philadelphia, Pa.	Phoenix, Ariz.	Pittsburgh, Pa.	Portland, Me.	Portland, Ore.	Regina, Sask.	Richmond, Va.	St. Louis, Mo.	Salt Lake City	San Antonio, Tex.	San Francisco	Schenectady	Seattle, Wash.	Toronto, Ont.	Tulsa, Okla.	Vancouver, B. C.	Washington, D. C.	Winnipeg, Man.																																																																																																																																																																																																																																																																																																																																																																																									

HERE'S YOUR POLICE CALLS

NUMERICALLY BY MEGACYCLES

Call	City	Frequency	Call	City	Frequency	Call	City	Frequency	Call	City	Frequency	Call	City	Frequency			
.19 Megacycles (190 Kilocycles; 1570 Meters)																	
WBA	Harrisburg, Pa.	.19	WBR	Butler, Pa.	.19	WDX	Wyoming, Pa.	.19	WJL	Greensburg, Pa.	.19	WMB	West Reading, Pa.	.19			
1.53 Megacycles (1534 Kilocycles; 196.1 Meters)																	
KGHO	Des Moines, Iowa	1.53															
1.56 Megacycles (1558 Kilocycles; 192.5 Meters)																	
WEY	Boston, Mass.	1.56	WKDT	Detroit, Mich.	1.56												
1.57 Megacycles (1570 Kilocycles; 191.2 Meters)																	
KGPN	Baton Rouge, La.	1.57	WMP	Framingham, Mass.	1.57	WPEL	Middleboro, Mass.	1.57	WPEV	Portable, Mass.	1.57	WPEW	N'thampton, Mass.	1.57	WRDS	E. Lansing, Mich.	1.57
1.71 Megacycles (1712 Kilocycles; 175.1 Meters)																	
KGJX	Paradise, Cal.	1.71															

ALPHABETICALLY BY CITIES

MUNICIPAL POLICE STATIONS

City	Call	Frequency	City	Call	Frequency	City	Call	Frequency	City	Call	Frequency	City	Call	Frequency
Akron, Ohio	WPDO	2.46	Coffeyville, Kans.	KGZP	2.45	High Park, Mich.	WMO	2.41	New York, N. Y.	WPEE	2.45	Shreveport, La.	KGZL	1.71
Arlington, Mass.	WPED	1.71	Columbus, Ohio	WPDI	2.43	High Park, Ill.	WFFD	2.43	New York, N. Y.	WPEF	2.45	Sioux City, Iowa	KGPK	2.47
Arlington, Mass.	WPEP	1.71	Columbus, Ga.	WPFJ	2.41	Honolulu, T. H.	KGPO	2.45	New York, N. Y.	WPEG	2.45	Somerville, Mass.	WPEH	1.71
Ashville, N. C.	WFFS	2.46	Dallas, Tex.	KVP	1.71	Houston, Tex.	KGZB	1.71	Omaha, Neb.	KGPI	2.47	St. Louis, Mo.	KGPC	2.43
Atlanta, Ga.	WPDY	2.41	Dayton, Ohio	KGPN	2.47	Indianapolis, Ind.	WMDZ	2.44	St. Paul, Minn.	WPD5	2.47	Spartanburg, Pa.	WPFQ	2.46
Auburn, N. Y.	WPDN	2.46	Dayton, Ohio	WPDN	2.43	Jacksonville, Fla.	WPFQ	2.47	Syracuse, N. Y.	WPEA	2.46	Tacoma, Wash.	KGZM	2.41
Bakersfield, Cal.	KGPS	2.41	Denver, Colo.	KGFX	2.44	Johnson, Tenn.	WPFQ	2.47	Tampa, Fla.	WPEA	2.46	Tampa, Fla.	WPEA	2.46
Baltimore, Md.	WPFH	2.41	Des Moines, Iowa	KGHO	2.45	Kansas City, Mo.	WPEE	2.45	Tennessie, Tenn.	WPEE	2.45	Tennessie, Tenn.	WPEE	2.45
Belle Isle, Mich.	WCK	2.41	Des Moines, Iowa	KGZG	2.47	Klamath Falls, Ore.	KGZB	2.44	Texas, Wash.	KGZM	2.41	Texas, Wash.	KGZM	2.41
Berkeley, Calif.	KSW	1.71	Detroit, Mich.	WKDT	1.56	Knoxville, Tenn.	WPD5	2.47	Tokyo, Kans.	KGZC	2.42	Tokyo, Kans.	KGZC	2.42
Beaumont, Tex.	KGPI	1.71	Detroit, Mich.	WPD5	2.41	Kokomo, Ind.	WPD5	2.47	Tolono, Ohio	WRDQ	2.43	Tolono, Ohio	WRDQ	2.43
Birmingham, Ala.	WPFM	2.41	E. Lansing, Mich.	WRDS	1.57	Lansing, Mich.	WPD5	2.47	Tomball, N. J.	WPFQ	2.46	Tomball, N. J.	WPFQ	2.46
Boston, Mass.	WEY	1.56	East Providence, R.I.	WPEI	1.71	Lansing, Mich.	WPD5	2.47	Tonka, Wash.	KGZM	2.41	Tonka, Wash.	KGZM	2.41
Buffalo, N. Y.	WJL	2.42	East Providence, R.I.	WPEI	1.71	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Cedar Rapids, Ia.	KGZG	2.47	El Paso, Tex.	KGZM	2.41	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Chambers, Kans.	KGZF	2.45	Fairhaven, Mass.	WPFN	1.71	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Charlotte, N. C.	WPDV	2.46	Fresno, Calif.	KGZA	2.41	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Chicago, Ill.	WPD5	1.71	Gary, Ind.	WPFJ	2.47	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Chicago, Ill.	WPD5	1.71	Grand Rapids, Mich.	WPEB	2.44	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Chicago, Ill.	WPD5	1.71	Gary, Ind.	WPFJ	2.47	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Cincinnati, Ohio	WKDU	1.71	Grand Rapids, Mich.	WPEB	2.44	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
C'ris'gh, W. Va.	WPFQ	2.41	Hammond, Ind.	WPFJ	1.71	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47
Cleveland, Ohio	WRDH	2.46	Hammond, Ind.	WPFJ	1.71	Lansing, Mich.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47	Tulsa, Okla.	WPD5	2.47

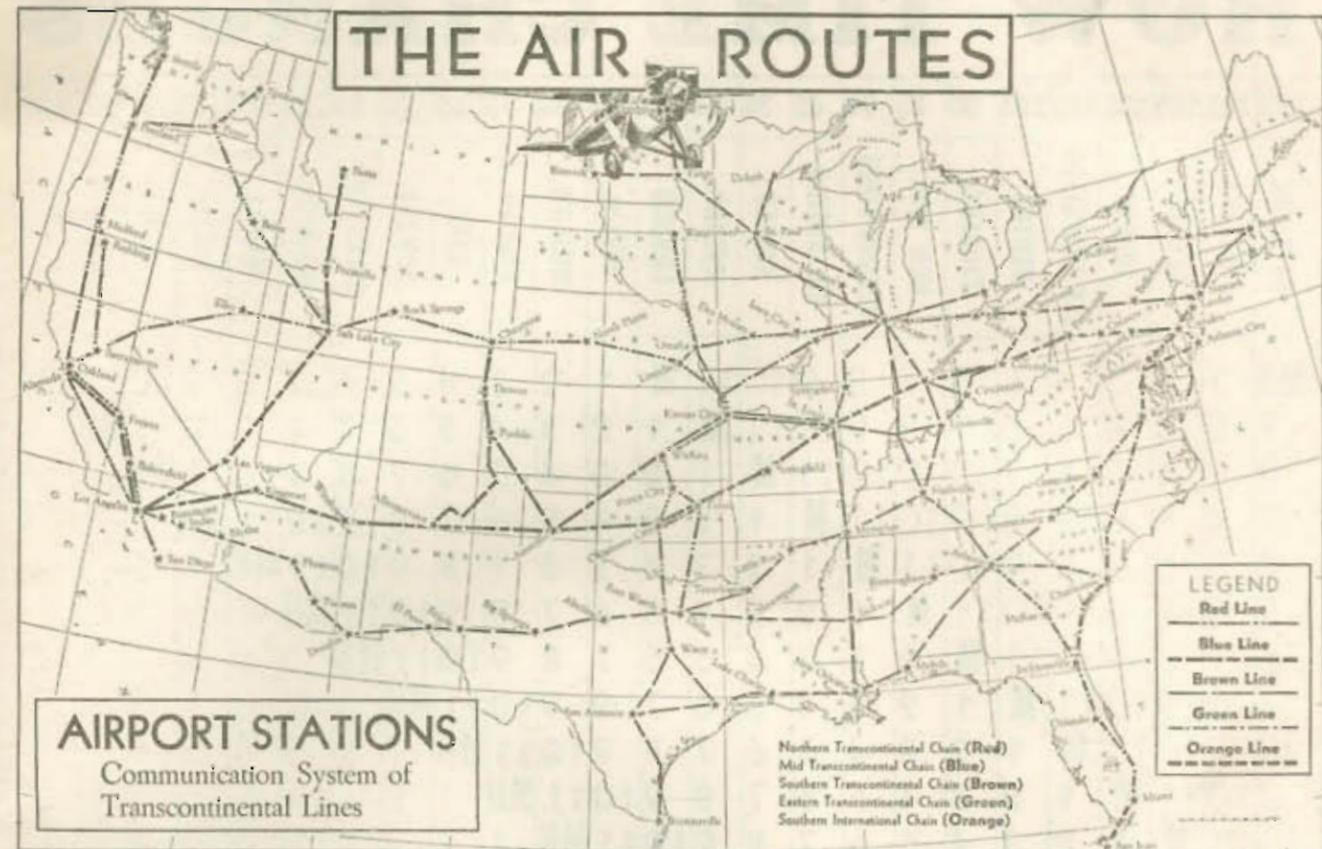
STATE POLICE STATIONS

Baton Rouge, La.	KGPN	1.57	Framingham, Mass.	WMP	1.57	Harrisburg, Pa.	WBA	.19	N'thampton, Mass.	WPEW	1.57	Wyoming, Pa.	WDX	.19
Butler, Pa.	WBR	.19	Greensburg, Pa.	WJL	.19	Middleboro, Mass.	WPEL	1.57	St. Antonio, Tex.	KGZE	2.51	West Reading, Pa.	WMB	.19

ALPHABETICALLY BY CALLS

Call	City	Frequency	Call	City	Frequency	Call	City	Frequency	Call	City	Frequency	Call	City	Frequency
KGHO	Des Moines, Iowa	2.45	KGZB	Houston, Tex.	1.71	WKDT	Detroit, Mich.	1.56	WPD5	Pittsburgh, Pa.	1.71	WPFQ	High Park, Ill.	2.43
KGJX	Paradise, Cal.	1.71	KGZC	Topeka, Kans.	2.42	WKDU	Cincinnati, Ohio	1.71	WPDV	Charlotte, N. C.	2.46	WPFQ	Reading, Pa.	2.44
KGZG	Cedar Rapids, Ia.	2.47	KGZD	San Diego, Calif.	2.43	WMB	West Reading, Pa.	.19	WPDW	Washington, D. C.	2.42	WPFQ	Tomball, N. J.	2.46
KGPA	Seattle, Wash.	2.41	KGZE	St. Antonio, Tex.	2.51	WMDZ	Indianapolis, Ind.	2.44	WPD5	Detroit, Mich.	2.41	WPFQ	Jacksonville, Fla.	2.44
KGPN	Minneapolis, Minn.	2.43	KGZF	Chambers, Kans.	2.45	WJL	Greensburg, Pa.	.19	WPDY	Atlanta, Ga.	2.41	WPFH	Baltimore, Md.	2.41
KGPC	St. Louis, Mo.	1.71	KGZG	Des Moines, Iowa	2.47	WMO	High Park, Mich.	2.41	WPDZ	Fort Wayne, Ind.	2.47	WPFJ	Columbus, Ga.	2.41
KGPD	San Francisco, Calif.	2.41	KGZH	Klamath Falls, Ore.	2.44	WMP	Framingham, Mass.	1.57	WPEA	Syracuse, N. Y.	2.46	WPFJ	Hammond, Ind.	1.71
KGPE	Kansas City, Mo.	2.42	KGZI	Whitita, Kans.	2.43	WPD5	Tulsa, Okla.	2.47	WPEB	Grand Rapids, Mich.	2.44	WPFK	Hackensack, N. J.	2.43
KGPF	Vallejo, Calif.	2.42	KGZJ	Phoenix, Ariz.	2.43	WPD5	Chicago, Ill.	1.71	WPEC	Memphis, Tenn.	2.47	WPFM	Birmingham, Ala.	2.41
KGPH	Oklahoma City, Okla.	2.45	KGZK	Shreveport, La.	1.71	WPD5	Chicago, Ill.	1.71	WPEE	Arlington, Mass.	1.71	WPFN	Fairhaven, Mass.	1.71
KGPI	Omaha, Neb.	2.47	KGZL	Shreveport, La.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPK	Sioux City, Iowa	2.47	KGZM	El Paso, Tex.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPL	Los Angeles, Cal.	1.71	KGZN	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPN	San Jose, Cal.	2.47	KGZO	St. Barbara, Cal.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPN	Jacksonville, Fla.	2.47	KGZP	Coffeyville, Kans.	2.45	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPO	Tulsa, Okla.	2.45	KGZQ	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPP	Portland, Ore.	2.44	KGZR	Salem, Ore.	2.44	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPR	Portland, Ore.	2.44	KGZS	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPS	Bakersfield, Cal.	2.41	KGZT	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPT	Denver, Colo.	2.44	KGZU	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGPU	Honolulu, T. H.	2.45	KGZV	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGQV	Sioux City, Iowa	2.47	KGZW	Waco, Tex.	1.71	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGQW	Sioux City, Iowa	2.47	KGZM	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGQX	Denver, Colo.	2.44	KGZM	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGQY	Baton Rouge, La.	1.57	KGZM	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGQZ	Wichita, Kans.	2.42	KGZM	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57
KGZ1	Fresno, Calif.	2.41	KGZM	Tacoma, Wash.	2.41	WPD5	Chicago, Ill.	1.71	WPEF	New York, N. Y.	2.45	WPFQ	Baton Rouge, La.	1.57

THE AIR ROUTES



AIRPORT STATIONS Communication System of Transcontinental Lines

The government designates the radio communication chain of each of the transcontinental aviation systems by a color, and these communication chains are shown on the map above. The airport stations are grouped by chains, with the frequencies of each chain in megacycles. They are also listed alphabetically by calls. Aside from

relaying company messages, these stations are in constant contact with the planes enroute, receiving location of the plane, sending weather warnings, etc. They come on the air without notice and while this list comprises airport stations only, plane transmitters can be heard on the same frequencies.

Red Line STATIONS & Frequencies	Brown Line STATIONS & Frequencies	Blue Line STATIONS & Frequencies
2.49 2.61 2.61 3.16 3.17 3.18 3.32 4.12 5.57 5.58 5.59 5.66 6.49 6.50	2.32 2.36 2.67 2.67 2.70 2.85 2.94 3.00 3.13 3.23 3.24 3.26 3.45 3.46 3.47 3.47 3.48 4.74 4.92 5.38 5.60 5.61 5.63 5.82 6.54 6.55 6.56 8.01	2.72 2.73 2.90 3.07 3.09 4.11 5.51 5.54 5.67 5.69 6.51 6.52 6.53 8.01
KGX - Bakersfield, Cal. WNAW - Bellingham, Pa. KRA - Boise, Idaho KOE - Cheyenne, Wyo. WUGG - Chicago, Ill. WNAK - Cleveland, Ohio KNAT - Dallas, Tex. KKM - Des Moines, Iowa KKO - Elko, Nev. KGUT - St. Louis, Mo. KGT - Fresno, Cal. KQO - Iowa City, Iowa KNAS - Kansas City, Mo. KRF - Lincoln, Neb. KEU - Los Angeles, Cal. KGE - Mefford, Ore. WNAU - Melrose, Ill. WNAO - Newark, N. J.	KMR - No. Platte, Neb. KFO - Oakland, Cal. KNAV - Omaha, Neb. KMP - Omaha, Neb. KRD - Pasco, Wash. KGU - Ponca, Okla. KVO - Portland, Ore. KTV - Redding, Cal. KOC - Rock Springs, Wyo. KFM - Sacramento, Cal. KQD - Salt Lake, Utah KQZ - San Diego, Cal. KJZ - Seattle, Wash. KGTZ - Spokane, Wash. WNAJ - Toledo, Ohio KNAU - Tulsa, Okla. KGTC - Watertown, S. D. KGTE - Wichita, Kans.	KAS - Alameda, Cal. KSI - Albuquerque, N. M. KSV - Amarillo, Tex. KBTY - Butte, Mont. WAEE - Camden, N. J. KGT - Cheyenne, Wyo. WNG - Columbus, Ohio WAEC - Pittsburgh, Pa. KGSP - Denver, Colo. WAED - Harrisburg, Pa. WHM - Indianapolis, Ind. KST - Kansas City, Mo. KGTL - Kingman, Ariz.
Orange Line STATIONS & Frequencies	Green Line STATIONS & Frequencies	Blue Line STATIONS & Frequencies
2.65 2.87 3.08 3.08 5.40 5.95 6.57 6.58 8.01 8.22 12.33 16.24 16.44	2.38 2.92 2.95 2.99 4.12 4.74 5.65 6.59 6.60	2.72 2.73 2.90 3.07 3.09 4.11 5.51 5.54 5.67 5.69 6.51 6.52 6.53 8.01
WKDL - Miami, Fla. KGJW - Brownsville, Tex.	WEEA - Atlanta, Ga. WEEB - Baltimore, Md. WEEC - Charleston, S. C. WEEG - Greensboro, S. C. WEEJ - Jacksonville, Fla.	KGTJ - Las Vegas, Nev. KSI - Los Angeles, Cal. WAEF - Newark, N. J. KGTX - Pocatello, Ida. KGSR - Pueblo, Colo. KGTR - St. Louis, Mo. KGTH - Salt Lake, Utah KGTT - Springfield, Mo. KSY - Tulsa, Okla. KST - Kansas City, Mo. WEEF - Spartanburg, S. C.

AIRPORT STATIONS [Alphabetically By Calls]

KBTY - Butte, Mont.	KGTL - Las Vegas, Nev.	KGUK - Shreveport, La.	KNWA - St. Paul, Minn.	KSY - Tulsa, Okla.	WEEG - Greensboro, S. C.	WQDD - New Orleans, La.
KEU - Los Angeles, Cal.	KGTL - Kingman, Ariz.	KGUL - Abilene, Tex.	KNWB - Fargo, N. D.	KTV - Portland, Ore.	WEEH - McRae, Ga.	WSDR - Jackson, Miss.
KFM - Sacramento, Cal.	KGTV - Springfield, Mo.	KGUM - Frisco, Tex.	KNWC - Pembana, N. D.	KVO - Seattle, Wash.	WEEJ - Jacksonville, Fla.	WSDC - Newark, N. J.
KFO - Oakland, Cal.	KGTR - St. Louis, Mo.	KGUN - Douglas, Ariz.	KNWD - Bismark, N. D.	KZZ - Seattle, Wash.	WEEM - Miami, Fla.	WSDO - Boston, Mass.
KGE - Mefford, Ore.	KGTS - Omaha, Neb.	KGUP - Tucson, Ariz.	KOC - Cheyenne, Wyo.	WAEK - Camden, N. J.	WEEN - Linden, N. J.	WSDP - Birmingham, Ala.
KGJW - Brownsville, Tex.	KGTT - Cheyenne, Wyo.	KGUP - Phoenix, Ariz.	KOC - Rock Springs, Wyo.	WAED - Harrisburg, Pa.	WEEO - Orlando, Fla.	WSDF - Louisville, Ky.
KGQZ - San Diego, Cal.	KGTV - Lake Charles, La.	KGUO - Indio, Cal.	KOD - Salt Lake, Utah	WAEE - Newark, N. J.	WEEQ - Atlantic C., N. J.	WSDG - Chicago, Ill.
KGSA - Alameda, Cal.	KGTV - Beaumont, Cal.	KGUR - Los Angeles, Cal.	KQM - Des Moines, Iowa	WAEE - Newark, N. J.	WEER - Richmond, Va.	WSDH - Nashville, Tenn.
KGSC - Okla. City, Okla.	KGTX - Pocatello, Ida.	KGUS - Blythe, Cal.	KQO - Iowa City, Iowa	WAEE - Newark, N. J.	WEER - Miami, Fla.	WSDI - Cincinnati, Ohio
KGSP - Denver, Colo.	KGTY - Pocatello, Wash.	KGUT - St. Louis, Mo.	KQUU - Little Rock, Ark.	WAEE - Newark, N. J.	WEER - Richmond, Va.	WSDK - Memphis, Tenn.
KGSR - Pueblo, Colo.	KGUA - El Paso, Texas	KGUZ - Ponca, Okla.	KQX - Bakersfield, Cal.	WAEE - Newark, N. J.	WEER - Richmond, Va.	WSDL - Duluth, Minn.
KGST - Fresno, Cal.	KGUB - Houston, Texas	KKQ - Elko, Nev.	KRA - Boise, Idaho	WAEE - Newark, N. J.	WEER - Richmond, Va.	WSDM - Albany, N. Y.
KGTA - Winslow, Ariz.	KGUC - Brownsville, Tex.	KKR - Pasco, Wash.	WAEK - Wabale, Ala.	WAEE - Newark, N. J.	WEER - Richmond, Va.</	

HOW TIME CHANGES

180	165	150	135	120	105	90	75	60	45	30	15	0	15	30	45	60	75	90	105	120	135	150	165	180
DATE LINE	UNALASKA	SEWARD	JUNEAU	SAN FRANCISCO	DENVER	CHICAGO	NEW YORK	BUENOS AIRES	RIO JANEIRO	AZORES	ICELAND	LONDON	BERLIN	MOSCOW	BAGDAD	BAKU	BOMBAY	CALCUTTA	BANGKOK	MANILA	TOKYO	SYDNEY	AUCKLAND	DATE LINE
MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN
1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1
2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2
3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3
4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4
5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5
6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6
7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7
8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8
9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9
10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10
11	M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11
M	1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M
1	2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1
2	3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2
3	4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3
4	5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4
5	6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5
6	7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6
7	8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7
8	9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8
9	10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9
10	11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10
11	MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11
MN	1	2	3	4	5	6	7	8	9	10	11	M	1	2	3	4	5	6	7	8	9	10	11	MN
12P	11P	10P	9P	8P	7P	6P	5P	4P	3P	2P	1P	0	1M	2M	3M	4M	5M	6M	7M	8M	9M	10M	11M	12M

This table contains the changes in time, in plainly marked figures, that take place as the time zones of the earth are traversed, and is designed for instant reckoning of time as given in another zone. In this chart, it will be noticed that Greenwich meridian, from whence standard time is reckoned, is in the center and the International Date Line is on either side. While identical in principle and operation with the time zone map, it affords easier reckoning. M indicates noon and MN midnight; the AM figures (from midnight to noon) are printed in lightface type, while the PM figures are dark. The degree figures at the top indicate the meridian while the plus and minus figures (at the bottom) show the hours to be added to or taken from Greenwich time.