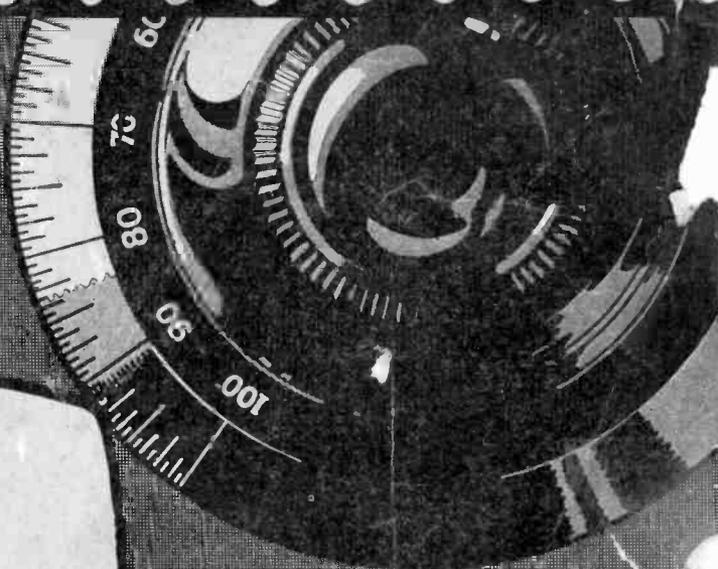


Radiocast 10c Weekly



For Week of

JULY 18

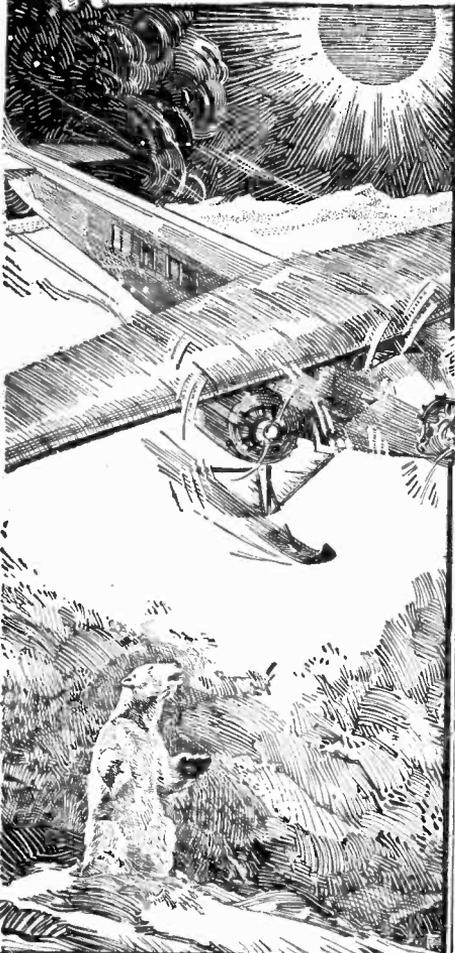
to

JULY 24

*Best
Reliable
Programs
Broadcast
Stations*

U.S. and Canadian Stations

Cardwell Condensers

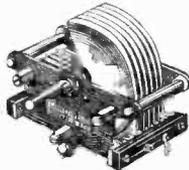


Dependable!

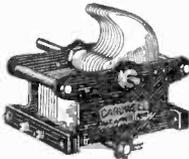
The Special Airplane Transmitter for the Wilkins Expedition had to be dependable. So Cardwell Condensers were used again.

*Straight Frequency!
Concentric! Compact!
Rugged!*

The Taper Plate Type "E"



Modified Straight Wave Length Type "C" for more long wave separation



PRICES			
192E	.0005	\$5.00	173-C
169E	.00035	\$4.75	171-C
168E	.00025	\$4.25	170-C
167E	.00015	\$4.00	168-C

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81

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RADIOCAST WEEKLY

With Which Is Combined

"The Carrier Wave," Salt Lake, Utah "Ye Broadcaster," Sacramento, Calif.
"Radio Broadcast Record," Seattle, Wn. "KTAB News," Oakland, Calif.
"Radio Blue Book Magazine," Hollywood, Calif.

Established 1922 as BROADCAST PROGRAM
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VOLUME 4

SAN FRANCISCO, JULY 17, 1926

NUMBER 42

Congress Fails to Pass Radio Relief Bill

The high hopes raised by the House enactment of the White Bill and the Senate passage of the Dill Bill were dashed to the ground when Congress adjourned without reconciling the two measures. The White Bill legalized governmental control of radio under the supervision of the Secretary of Commerce. The Dill Bill gave the control to a new commission of five men. Otherwise they were much alike in their chief details. But in the short time available for committee conference no agreement could be reached on a compromise measure.

Politics was the fundamental reason for the failure of this much-needed legislation. 'Tis indeed a sad commentary that the straight forward task of regulating an industry that asks to be regulated should become a political football. The only readable signal that rose above the noise level of political static was the general realization that some remedial law is essential to the life of broadcasting.

Even the joint resolution that was passed by Congress does nothing to relieve Secretary Hoover in his helplessness. He has the responsibility of regulation without the authority to enforce his rulings. The courts have denied his right to assign channels and time or to refuse licenses. Even the Department of Justice has advised him that,

under the existing law, he is without authority to control broadcasting by the issuance of definite wavelengths. The individual broadcaster is legally amenable only to himself.

But in the absence of law, equity should rule. And although the hands of the Department of Commerce are tied, the fact that radio broadcasting has been virtually self-regulating during the past five years gives good ground for the belief that any possible infractions of the established code of procedure will be voluntarily corrected without disrupting the present plan of broadcasting. The American spirit of fair play and the knowledge that the real success of a station depends upon the good will of the public should suffice to prevent any one from taking advantage of the legal weakness of the Radio Supervisors.

At the worst, should a number of stations continue to defy public opinion, their apparent success will be short-lived. For the outraged listeners will be aroused from their apathy and radio control will become a real political issue, not alone in Congress, but at the polls. So we counsel patience until Congress meets in fall.

Parentetically, it may be added that no guarantee can be made of the correctness of published wavelengths as some stations may now suddenly change to suit themselves without giving advance notice of the change.

The Loud Speaker



By EARLE ENNIS

He was a minister—and a radio fan. He was performing a wedding ceremony. Something seemed to have gone wrong with the affair. The groom was fumbling in his pockets. He had lost the ring, as grooms always do. The guests grew restless and the minister realized that some explanation must be made. He stepped forward.

"Stand by while the connections are being made," he requested. "We will be back on the air in a few moments!"

This only goes to show that radio is boring into every phase of every day life like the festive toredo into a wharf. Take the old gentleman, who was slightly deaf and who listened to one of our rising opera stars in a program at a residence the other night. He sat with hand cupped behind his antenna picking up stray vocal waves. When the girl had finished, he turned to a neighbor.

"She's got good modulation," he bellowed in what he thought was a whisper.

One the other day a group of spectators in a police court got into a heated argument over certain testimony. It started in whispers and grew in volume. Finally the judge motioned to the bailiff.

"Joe, go down and throw that bunch of static out of here," he commanded.

The bailiff immediately went to the back of the court and waved an official hand.

"Tune out the racket, youse guys," he said.

Said one cop to another cop: "I was in to see the chief just now; I pinched his nephew for speeding and the old man was so mad he nearly blew out a tube."

The other cop nodded. "Yeah—I know. He carries too much "B" on his plate all the time," he said. "He goes into oscillation too blamed easy."

Mrs. Jones, injured wife, takes the witness stand in her own behalf seeking a divorce with profits, children settled out of court.

"Judge," she says, "he came home so drunk he just spilled over like a bootleg lamp."

On Fourth of July a public orator, using both hands, told a stunned world that the American revolutionists had won in 1776.

"Today, this nation transformed, amplified and filtered of tyranny broadcasts to a waiting world, the message of freedom," he declared.

Mrs. Clancy goes to the screen door and yells at Jimmy Clancy, apple of her eye.

"Come in here this minute, you Jimmy, or I'll turn you over my spreader."

Conductor on street car to old lady: "Look out, grandma—one of them taxis will bust your contacts if you get off backwards that way."

Small boy to mother: "Does God have to listen to all the radio everywhere?"

Aged Aunt: "Can you have a radio without a cat in the house?"

And the sheik to his lady fair: "Sister—I've sure got your wavelength. Let's hoof!"

Radio has done all this to a nation of people who call themselves strong minded in less than two or three years. Ten years hence an ordinary conversation will sound like a radio catalog reads.

When you are troubled with noises in a receiving set, be sure that you have checked over the insulation of the battery cases of the B batteries, especially if they are of the storage type, as the wooden cases may absorb moisture and acid, and become partial conductors, which will be noisy and cause sounds that are hard to locate and eliminate.

If battery acid is spilled on cloth, it may be neutralized by pouring some ammonia over it at once. Bicarbonate of soda will answer the purpose if no ammonia is available. This should be sprinkled on and then moistened with a little water. Additional bicarbonates should be added until the fizzing stops.

RADIO WILL BE GOOD THIS SUMMER IF YOU USE

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Kit \$15.00

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"THE HOUSE THAT PARTS BUILT"

Questions and Answers

by *Gerald M. Best* Technical Editor.

Questions not requiring diagrams will be answered without charge in these columns. Where personal answer or circuit diagrams are desired, a charge of 25 cents per question must accompany the letter in order to receive consideration.

Have a two-tube Roberts receiver and have built an audio amplifier, but when I plug it in the set howls. Can you tell me what is wrong? R. S. Berkeley, Cal.

When adding a second stage of audio to any receiver, the proper power tube should be used. In your case you have used but 45 volts plate and probably the "C" battery you have installed is too large for the plate voltage used. For 45 volts plate the "C" battery can be but $1\frac{1}{2}$ volts. For 90 volts plate it should be $4\frac{1}{2}$ volts, and if a type 112 power-tube is used with 150 volts plate, the "C" battery voltage is $10\frac{1}{2}$. Try grounding the case or core of the audio transformer to the negative "A" battery. If this does not cure the trouble, shunt the secondary of the transformer with a $\frac{1}{2}$ megohm grid-leak.

My Superheterodyne gives me increased volume when my hand is either on the dials or the loop antenna. Is this caused by insufficient shielding and is it a usual thing in a Superheterodyne? Can I do anything to remedy it? I operate the entire outfit from the lighting socket.

C. A. M., San Francisco, Cal.

The placing of the hands near a loop antenna is bound to make a change in its characteristics and consequently affects the tuning. The loop is provided with means for turning it without having to touch the wires with the hands, and hence the trouble should not be experienced when the set is being operated normally. As the oscillator condenser is susceptible to body capacity, it is usually shielded, but from your description it is apparently not sufficiently shielded and you are changing the frequency of the oscillator tube output. Shielding the back of the panel would eliminate some of the trouble, but if this is found to be necessary, it would be advisable to have it done by reliable service men, who should inspect the set to make sure there is no mechanical trouble or loose connections causing the difficulty with the tuning control.

What is the capacity of the condenser found in the ordinary automobile spark coil. Is it suitable for radio use and for "B" eliminator use?

H. B. P., Morgan Hill, Cal.

As a rule these condensers are from .1 to .5 mfd. and can be used in any radio circuit where the voltage is not excessive. If the "B" eliminator voltage is 150 volts or more it is doubtful whether the condenser would stand up for a long period of time, but for use as a by-pass or stopping condenser it is O. K.

I have been having trouble with moisture affecting my head-phones and audio frequency transformers. I often take my set into localities where the humidity is high, and I would like to know if there are any transformers now on the market which do not have this trouble?

A. R. H., Parral, Mexico.

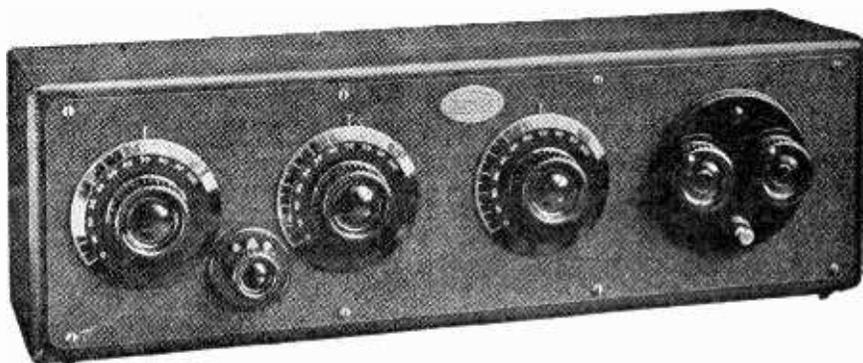
If your headphones are of the ordinary metal diaphragm type, you can fill the case of each receiver with beeswax or paraffine, being careful not to bring the level of the wax above the top of the coils. In this manner all moisture is kept out of the electro-magnets and no trouble should be experienced. There are any number of audio frequency transformers now available which are impregnated with wax or other compound, which makes them moisture proof. All the new transformers which are being introduced this season are built in this manner.

Have a variocoupler with a range from 175 to 2600 meters, and would like to know what capacity variable condenser should be used with it.

A. C. F., San Francisco, Calif.

As the coupler is undoubtedly equipped with taps to obtain the various wavebands within the range mentioned, a .0005 mfd. condenser should be used.

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Amplification

NATURE is noted for the simplicity of its laws as well as their limited number. In the field of radio we find no exception to this statement. Few are the actual principles by which reception is accomplished. Despite the large number of "dynes" and "plexes" now found among recognized receivers of good performance all make use, broadly speaking, of two main processes, viz.: (1) detection and (2) amplification. It is the purpose of this article to discuss the latter of the two in its usual forms, the former, as the reader doubtless knows, being simply that process by which the radio frequency alternations may be changed into such form that they may be useful in the telephone receiver, and this is accomplished by either the crystal rectifier or vacuum tube detector.

The radio current coming into your receiver is alternating in nature; that is, it is constantly reversing its direction of flow, just as a clock pendulum reverses, except that the radio alternations are far more numerous in a given time interval. When such reversals take place from twenty times to twenty thousand times per second they are termed audio frequency alternations because they will cause the head telephones or loud speaker to emit an audible sound which is transmitted to the brain by the auditory nerve. But when the received current has reversals (cycles) on the order of 500,000 or even several million per second, it is incapable of producing sound directly and is termed radio frequency in nature.

It is a very interesting fact that these audio frequency and radio frequency alternations are merely a very small portion of the vastly greater domain of physical impulses, the former being known as sound to our ordinary sensations of sound, while the latter are unknown to the human organization directly, having been first dis-

covered and explored by Dr. Hertz, the German physicist. Light, both the visible and the invisible, consisting also of vibrations of tremendous frequencies, goes with the X-rays and the radio waves to make up the broad band of vibrations in the natural world. Figure 1 gives a graphical representation of their relation to each other.



Fig 1

Since radio frequency currents are neither audible nor visible some means must be provided to change them into such form that our senses may perceive them in some way. This is accomplished in modern radio by either the vacuum tube detector or the crystal detector. But since the impulses themselves are quite weak, it would be of considerable advantage to amplify them first.

It is a well known fact that every alternating current conductor has associated with it an inductive field which may influence an adjacent conductor so that any changes in the current in the first conductor will be reproduced in the second. This finds its common application in the "pole transformers" of the power companies and in the ordinary "bell ringing transformer" used in modern home construction. In both these devices we have the delivering of an output which is smaller in voltage and greater in current value than the input. Such are

(Continued on page 61)

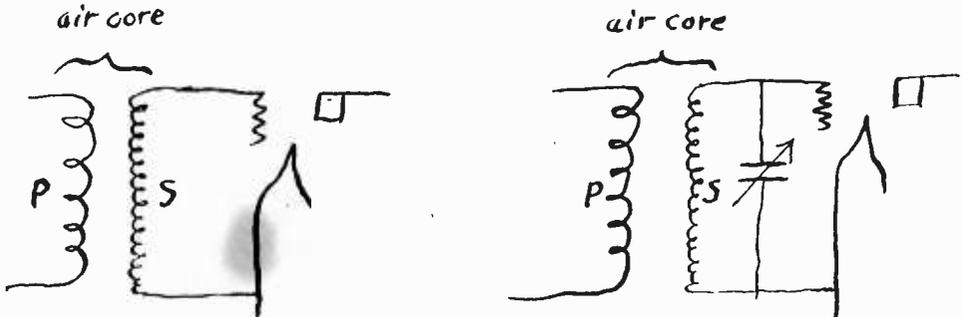
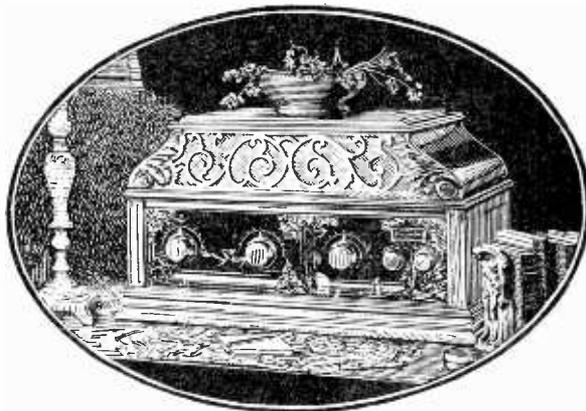


Fig. 2



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Complete in This Issue

AROUND THE DIAL

Corrected Weekly

Wave Lgth.	Pwr.	Call	Location	Dls. from S.F. L.A.	Wave Lgth.	Pwr.	Call	Location	Dls. from S.F. L.A.
202.6	500	KFXB	Big Bear Lake, Cal	340 70	226	1500	WBMM	Chicago, Ill.	1854 1732
	20	WIBS	Elizabeth, N. J.	2556 2420		10	KFIU	Juneau, Alaska	
	10	WABS	Evanston, Ill.	1854 1732	1000	WIBO	Chicago, Ill.	1854 1732	
	10	WABB	Harrisburg, Pa.	2360 2250		50	KFOB	Burlingame, Cal.	18 309
205.4	10	KFFV	Oxnard, Cal.	279 45	150	WDAD	Nashville, Tenn.	1875 1716	
	50	WPDQ	Buffalo, N. Y.	2292 2065		50	KFQZ	Hollywood, Cal.	325
	50	KFFY	Flagstaff, Ariz.	573 350		10	KFKZ	Kirkville, Mo.	1505 1390
	100	WFRL	Brooklyn, N. Y.	2566 2430		10	WEBQ	Harrisburg, Ill.	1750 1605
	10	KFXD	Logan, Utah	570 591		10	WFBE	Seymour, Ind.	1880 1750
	150	WIBX	Utica, N. Y.	2415 2330	100	WEBL	Portable Station		
	50	KFVD	San Pedro, Cal.	361 18	100	KFOR	David City, Neb.	1260 1170	
206.8	250	KFWM	Oakland, Cal.	5 328		10	KFGV	Boone, Iowa	1440 1350
	50	WJBA	Joliet, Ill.	1745 1645	227	100	KFQD	Anchorage, Alaska	
	50	WABW	Wooster, Ohio	2090 1980		500	WOWO	Fort Wayne, Ind.	1910 1800
	50	KGTT	San Francisco, Cal.	325		50	KFVN	Fairmont, Minn.	1415 1350
208.2	250	KNRC	Los Angeles, Cal.	325	100	WDBK	Cleveland, Ohio	2161 2020	
209.7	500	WBNY	New York, N. Y.	2566 2430		50	WJBR	Omo, Wis.	1700 1630
	10	KFYO	Texarkana, Tex.	1515 1305	229	10	WGBR	Marshfield, Wis.	1635 1570
	100	WCWS	Providence, R. I.	2697 2550		10	WSAU	Chesham, N. H.	
	100	WCBR	Providence, R. I.	2697 2550	250	WSAJ	Grove City, Pa.	2185 2080	
	100	KSMR	Santa Maria, Cal.	205 130		50	KPPC	Pasadena, Cal.	325 7
	1000	WSSC	Chicago, Ill.	1854 1732	100	WSAN	Allentown, Pa.	2435 2330	
	30	WIBH	New Bedford, Mass	2655 2565	100	WBBL	Richmond, Va.	2385 2250	
211.1	250	KFWO	Avalon, Cal.	358 45	100	KFLV	Rockford, Ill.	1670 1598	
	50	KFWC	San Berdo, Cal.	2350 2250	50	WDBJ	Roanoke, Va.	2240 2100	
	100	WJBU	Lewisburg, Pa.	2441 2262	10	WAIT	Taunton, Mass.	2650 2565	
212.6	100	WMAL	Washington, D. C.	2441 2262		50	WCBM	Baltimore, Md.	2400 2275
	500	WVGL	Rich. Hill, N. Y.	2566 2430	1000	KMMJ	Clay Center, Neb.		
	50	KFWV	Portland, Ore.	500 775	231	500	KUT	Austin, Texas	1395 1137
214.2	100	WKBE	Joliet, Ill.	1745 1645		50	WCLO	Camp Lake, Wis.	
	15	KFXR	Oklahoma, Okla.	1285 1095		50	WTAX	Streator, Ill.	1710 1605
	150	WCLS	Joliet, Ill.	1745 1645	100	WKBE	Webster, Mass.	2595 2505	
	250	KFWF	St. Louis, Mo.	1740 1565		10	WIBZ	Montgomery, Ala.	1985 1785
215.7	250	WRST	Bay Shore, N. J.	2400 2465	20	WHBG	Harrisburg, Pa.	2360 2250	
	100	WPRC	Harrisburg, Pa.	2360 2250	100	WBRE	Wilkes-Barre, Pa.	2415 2300	
	10	KFXJ	Denver, Colo.	946 825	500	KFPF	Los Angeles, Cal.	325	
	50	WBZ	Chicago, Ill.	1854 1732		50	KFOT	Wichita, Kan.	1266 1110
	100	WKBG	Chicago, Ill.	1854 1732		10	KFDZ	Minneapolis, Minn.	1591 1512
	10	WIBM	Chicago, Ill.	1854 1732		5	KDLR	Devil's Lake, N. D.	1272 1290
	50	WHBL	Logansport, Ind.	1854 1735	232.4	10	WJBC	Ypsilanti, Mich.	1980 2335
	50	WIBJ	Chicago, Ill.	1854 1732		50	WOKO	New York, N. Y.	2566 2430
	100	WHBW	Philadelphia, Pa.	2516 2360	500	KFON	Long Beach, Cal.	340 19	
	50	KFQV	North Bend, Wash.	630 885		50	WHBQ	Memphis, Tenn.	1797 1585
	50	KFBC	San Diego, Cal.	430 105		10	WDBZ	Kingston, N. Y.	2490 2400
	20	WBHM	Chicago, Ill.	1854 1732		10	KFEY	Kellogg, Idaho	690 880
217.3	500	WOK	Homewood, Ill.	1854 1732	234	100	WFDF	Flint, Mich.	1975 1890
	100	KFQU	Holy City, Cal.	54 300		100	WQAC	Amarillo, Texas	1060 855
	500	WFKB	Chicago, Ill.	1854 1732	100	WJBC	La Salle, Ill.	1695 1590	
	50	KFAF	San Jose, Cal.	42 290		50	WHBJ	Fort Wayne, Ind.	1910 1800
218.8	250	WJBI	Red Bank, N. J.	2515 2407		50	KFUP	Denver, Colo.	946 825
	50	WVSU	Buffalo, N. Y.	2292 2065		5	WFBD	Philadelphia, Pa.	2516 2360
	10	WHBU	Anderson, Ind.	1890 1770		50	KMJ	Fresno, Cal.	147 192
	50	WIBI	Flushing, N. Y.	2566 2430	236	100	WRMU	New York, N. Y.	2566 2430
	10	KFJC	Junc. City, Kans.	1285 1150		50	WTAD	Carthage, Ill.	1581 1470
	50	KFRW	Olympia, Wash.	600 867		100	WBQQ	Rich. Hill, N. Y.	2566 2430
220	5	KJBS	San Francisco, Cal.	325		100	WGMU	Rich. Hill, N. Y.	2566 2430
	50	KFUU	Oakland, Cal.	5 328	250	KFOO	Salt Lake City, U.	598 570	
	100	WIBW	Logansport, Ind.	1845 1735		100	KWKC	Kansas City, Mo.	1501 1340
	500	WQAA	Parkersburg, Pa.	2420 2310	500	WGBF	Evansville, Ind.	1810 1665	
222	200	WIRU	Poynette, Wis.	1680 1590		15	KFNG	Independence, Kan.	1356 1200
	50	KZRQ	Manila, P. I.		100	WIBA	Madison, Wis.	1762 1650	
	50	WIBG	Elkins Park, Pa.		100	WFBJ	Collegeville, Minn.	1440 1400	
	100	WCMA	Culver, Ind.	1845 1740	250	WFBI	Camden, N. J.	2465 2355	
	250	WCOA	Pensacola, Fla.	1980 1765	100	WBAW	Nashville, Tenn.	1875 1720	
	100	WHBF	Rock Island, Ill.	1605 1500	100	KFLU	San Benito, Texas.	1555 1265	
	20	WHBD	Bellefontaine, Ohio	1992 1875	238	3500	WHT	Chicago, Ill.	1854 1732
	100	WBES	Takoma, Park, Md.	2441 2262		10	KFYJ	Houston, Texas	1625 1360
	50	WBBW	Norfolk, Va.	2460 2315		15	KFB5	Trinidad, Colo.	900 740
224	10	WNRC	Charlotte, N. C.	2250 2085		100	KFWU	Pineville, La.	1650 1430
	250	WODA	Paterson, N. J.	2500 2385		10	WHBN	St. Petersburg, Fla.	2310 2085
	50	WKAV	Laconia, N. H.	2600 2530	200	WBPP	Petoskey, Mich.	1905 1845	
	50	KFVS	Cape Gir'deau, Mo.	1695 1545	500	KMTR	Hollywood, Cal.	325	
	50	KFUR	Ogden, Utah	620 600	100	KFCB	Phoenix, Ariz.	605 330	
	100	WRAF	Laporte, Ind.	1825 1725	10	WRAW	Reading, Pa.	2405 2300	
	100	KFBL	Everett, Wash.	652 915					
	10	KFQP	Iowa City, Iowa	1652 1525					
	50	WAGM	Royal Oak, Mich.	2005 1915					

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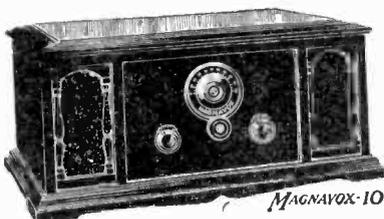
Wave	Lgth.	Pwr.	Call	Location	Dis. from S.F.	Wave	Lgth.	Pwr.	Call	Location	Dis. from S.F.
					L.A.						L.A.
240	50		KZM	Oakland, Cal.	5	250	50		WFBC	Knoxville, Tenn.	2045
	100		KFUM	Colo. Sprgs. Colo.	875		250		KLS	Oakland, Cal.	5
	100		WABI	Bangor, Maine	2730		100		WRCO	Raleigh, N. C.	2355
	100		KTAB	Oakland, Cal.	5	252	500		KMA	Shenandoah, Iowa	1462
	10		KFVI	Houston, Texas	1525		50		KWUC	Le Mars, Iowa	1325
	10		KFHL	Oskaloosa, Iowa	1505		50		WRHM	Minneapolis, Minn.	1591
	10		KFLX	Galveston, Texas	1575		150		WNJ	Newark, N. J.	2556
	500		KFVE	St. Louis, Mo.	1740		500		WGCP	Newark, N. J.	2556
	50		WCAT	Rapid City, S. D.	995		500		KFWB	Hollywood, Cal.	325
	500		WDBO	Winter Park, Fla.	2360		100		WGBX	Orono, Maine	2725
	10		WGBI	Scranton, Pa.	2405		100		WSRO	Hamilton, Ohio	1955
	500		WHAP	New York, N. Y.	2566		100		WFBL	Syracuse, N. Y.	2370
	500		WOAX	Trenton, N. J.	2480		50		KFOY	St. Paul, Minn.	1600
	20		WSMH	Owosso, Mich.	1950		10		WTAL	Toledo, Ohio	1990
242	500		KSO	Clarinda, Iowa	1380		200		KOCW	Chickasha, Okla.	1270
	50		KFFP	Moberly, Mo.	1521		50		WBBS	New Orleans, La.	1900
	10		KFFM	Greenville, Texas	1419		15		KFPL	Dublin, Texas	1310
	50		WABY	Philadelphia, Pa.	2516		50		KFHA	Gunnison, Colo.	770
	50		WCBH	Oxford, Miss.	1745		50		KFJZ	Fort Worth, Texas	1458
	100		WBCB	Superior, Wis.	1556	254	10		WJBB	St. Petersburg, Fla.	2310
	500		WOOD	Gr'd Rapids, Mich.	1870		15		WCBA	Allentown, Pa.	2435
	50		WTAP	Cambridge, Ill.			20		WABC	Asheville, N. C.	2135
	500		WWAE	Plainfield, Ill.	1745		100		KFWH	Chico, Cal.	130
	50		KFXH	El Paso, Texas	920		500		WCAJ	University Pl. Neb.	1290
	250		WBZA	Boston, Mass.	2691		500		WNAD	Norman, Okla.	1285
244	100		WNAX	Yankton, S. D.	1266		500		WEAI	Ithaca, N. Y.	2360
	100		WATT	Boston, Mass.	2691		10		WHBC	Canton, Ohio	2115
	100		WRAM	Galesburg, Ill.	1620		100		WIAS	Burlington, Iowa	1580
	50		WSAZ	Pomeroy, Ohio	2100		20		WFBZ	Galesburg, Ill.	1620
	50		WEBR	Buffalo, N. Y.	2282		100		WFER	Baltimore, Md.	2400
	250		KUOM	Missoula, Mont.	705		100		KFLR	Albuquerque, N. M.	825
	500		WAMD	Minneapolis, Minn.	1591		50		KFEL	Denver, Colo.	946
	100		WGBB	Freeport, N. Y.	2545		100		WREB	Coldwater, Miss.	1715
246	50		KDYL	Salt Lake City	598		100		WTAQ	Eau Claire, Wis.	1580
	50		WIBR	Weirton, W. Va.			50		WJAK	Greentown, Ind.	1870
	500		WRR	Dallas, Texas	1488		100		WSAR	Fall River, Mass.	2640
	500		KFSD	San Diego, Cal.	430	256	500		KTNT	Muscataine, Iowa	1590
	10		KFJI	Astoria, Ore.	545		50		WRHF	Washington, D. C.	2441
	500		WABX	Mt. Clemens, Mich.	2020		100		WRAK	Escanaba, Mich.	1800
	50		KGY	Lacey, Wash.	590		1000		WRVA	Richmond, Va.	2385
	50		WQAE	Springfield, Vt.	2550		500		KOWW	Walla Walla, Wn.	565
	500		WSOE	Milwaukee, Wis.	1755		100		WMBC	Detroit, Mich.	2085
	15		WEED	Anderson, Ind.	1890		50		KFUS	Oakland, Cal.	5
	50		KFJY	Fort Dodge, Iowa	1425		100		KRE	Berkeley, Cal.	8
1000	1000		WBAL	Baltimore, Md.	2400		500		WCSH	Portland, Maine	2660
248	1000		WAPI	Auburn, Ala.	2030		500		WDOD	Chattanooga, Tenn.	1986
	1000		WIOD	Miami Beach, Fla.	2562		100		WHBP	Johnstown, Pa.	2250
	10		KFYR	Bismark, N. D.	1165		100		KFIQ	Yakima, Wash.	570
	75		CFCK	Thorold, Ont.	2205		100		WBAX	Wilkes-Barre, Pa.	2415
	50		WBRC	Birmingham, Ala.	1935		500		WBDC	Gr'd Rapids, Mich.	1870
	50		KWVG	Stockton, Cal.	57		100		KFIQ	Spokane, Wash.	675
	100		WCSSO	Springfield, O.	1995		500		WLTS	Chicago, Ill.	1854
	100		KFBK	Sacramento, Cal.	63	258	100		WRNY	New York, N. Y.	2556
	100		WMAY	St. Louis, Mo.	1740		20		KFPW	Carterville, Mo.	1430
	1000		WEW	St. Louis, Mo.	1740		500		WADC	Akron, Ohio	2100
	100		KFIF	Portland, Ore.	500		100		WHBC	Rochester, N. Y.	2290
	250		KFRB	Beeville, Texas	1460		500		WPCC	Chicago, Ill.	1954
	50		KFEC	Portland, Ore.	500		50		WNAL	Omaha, Neb.	1426
	100		KFOX	Omaha, Neb.	1426		50		KFUL	Galveston, Texas	1575
	10		WGAL	Lancaster, Pa.	2400		25		WAAD	Cincinnati, Ohio	2038
	100		KFJB	Marshalltown, Iowa	1490		250		KOCH	Omaha, Neb.	1426
	100		WNBH	N. Bedford, Mass.	2655	261	500		WKAF	Milwaukee, Wis.	1755
	500		WMBB	Chicago, Ill.	1854		500		Kennonwood, La.		
250	500		KFWI	San Francisco, Cal.			250		WEAM	N. Plainfield, N.J.	
	20		KZBI	Manila, P. I.			500		KPUT	Salt Lake City, U.	598
	50		WHBY	W. De Pere, Wis.	1745		50		WDAY	Fargo, N. D.	1345
	500		KFXE	Colorado Springs	875		100		WSKC	Bay City, Mich.	1960
	10		KFVY	Albuquerque, N. M.	825		500		KFWA	Ogden, Utah	620
	100		WNAB	Boston, Mass.	2691		100		WSSH	Boston, Mass.	2691
	500		WGES	Chicago, Ill.	1854		100		WARC	Medford, Mass.	2691
	100		WLAL	Tulsa, Okla.	1350		100		WBAQ	Haverford, Pa.	2516
	100		WLAD	Philadelphia, Pa.	2516		500		WPSC	State College, Pa.	2300
	100		WCAX	Burlington, Vt.	2495		500		KFJF	Oklahoma City, Ok.	1285
	100		WHBA	Oil City, Pa.	1755		100		WTRF	Norfolk, Va.	2460
	100		KMO	Tacoma, Wash.	605		15		WTAZ	Lambertville, N. J.	2470
	100		KFXD	Shreveport, La.	1550		100		KFMR	Sloucy, Iowa	1310
	100		WQAN	Scranton, Pa.	2405		100		KFQA	St. Louis, Mo.	1740
	100		WNAT	Philadelphia, Pa.	2516						1565

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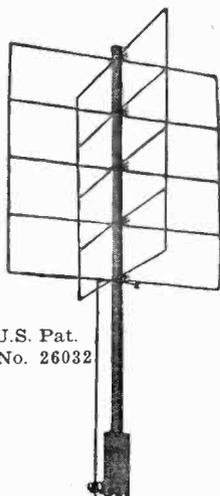
SAN FRANCISCO
 OPEN EVENINGS

Complete in This Issue

AROUND THE DIAL

Corrected Weekly

Wave	Lgth.	Pwr.	Call	Location	Dis. from S.F. L.A.	Wave	Lgth.	Pwr.	Call	Location	Dis. from S.F. L.A.
261	500		WMAZ	Macon, Ga.	2120 1935	275	250		WBT	Charlotte, N. C.	2250 2085
263	100		KTBR	Portland, Ore.	500 775	250		WSBT	South Bend, Ind.	1840 1740	
	100		WRAV	Yellow Springs, O.		100		WKY	Oklahoma City, Ok.	1285 1095	
	250		WQAO	Houghton, Mich.	1735 1700	500		WHAD	Milwaukee, Wis.	1755 1675	
	100		WQAM	Miami, Fla.	2562 2300	500		WCAC	Mansfield, Conn.	2580 2490	
	500		WGXY	Minneapolis, Minn.	1591 1512	50		WABZ	New Orleans, La.	1900 1675	
	500		WBPI	Newark, N. J.	2556 2420	500		KFSB	Los Angeles, Cal.	325	
	250		WCAD	Canton, N. Y.	2405 2335	500		WBAK	Harrisburg, Pa.	2360 2250	
	50		KFMW	Houghton, Mich.	1735 1700	100		WCAO	Baltimore, Md.	2400 2275	
	250		WSDA	New York, N. Y.	2566 2430	20		WLDP	Louisville, Ky.	1893 1810	
	50		WABR	Toledo, Ohio	1990 1890	100		WVL	New Orleans, La.	1900 1675	
	500		WCAR	San Antonio, Tex.	1489 1200	15		WOCL	Jamestown, N. Y.	2215 2120	
	50		KFJR	Portland, Ore.	500 775	500		WSMK	Dayton, Ohio	1975 1857	
	5		WCBE	New Orleans, La.	1900 1675	50		KFKU	Lawrence, Kan.	1370 1235	
	100		WDAG	Amarillo, Texas	1060 855	50		WPAK	Agri. College, N.D.	1345 1335	
	50		WNBZ	Savannah, Ga.	2283 2095	500		WJAS	Pittsburgh, Pa.	2255 2140	
266	1000		KFNF	Shenandoah, Iowa.	1462 1325	500		KQV	Pittsburgh, Pa.	2255 2140	
	1000		WENR	Chicago, Ill.	1854 1732	100		WMAC	Cazenovia, N. Y.	2385 2300	
	500		WBCN	Chicago, Ill.	1854 1732	50		KFBB	Havre, Mont.	900 1015	
	250		KLZ	Denver, Colo.	946 825	100		WEAU	Sioux City, Iowa.	1310 1230	
	100		KFPY	Spokane, Wash.	675 877	500		WFAU	Lincoln, Neb.	1285 1185	
	100		WDEL	Wilmington, Del.	2445 2325	500		KOIL	Council Bluffs, Iowa	1432 1310	
	500		WDL	Dearborn, Mich.	2080 1970	500		WGBU	Fulford, Fla.		
	500		WMAK	Lockport, N. Y.	2230 2145	1000		WQQ	Kansas City, Mo.	1501 1340	
	500		WGHB	Clearwater, Fla.	2295 2070	10		WGBC	Memphis, Tenn.	1797 1585	
	100		WTAB	Fall River, Mass.	2640 2550	500		WCAU	Philadelphia, Pa.	2516 2360	
	100		KFIO	Spokane, Wash.	675 877	50		KFDD	Boise, Idaho	518 670	
268	50		KFRG	San Francisco, Cal.	675 325	500		KWWG	Brownsville, Tex.	1560 1275	
	500		KFH	Wichita, Kan.	1266 1110	500		WHD	Minneapolis, Minn.	1591 1512	
	50		WDAH	El Paso, Tex.	920 650	100		KFJM	Grand Forks, N. D.	1350 1355	
	20		CFMC	Kingston, Ont.	2340 2265	50		WMAN	Columbus, Ohio	2038 1920	
	500		CFRC	Kingston, Ont.	2340 2265	500		WAAW	Omaha, Neb.	1426 1305	
	500		KFEQ	Oak, Nebraska	1215 1100	100		WABO	Rochester, N. Y.	2290 2205	
	500		WTAG	Worcester, Mass.	2600 2510	100		WFBG	Altoona, Pa.	2275 2165	
	100		WSAX	Chicago, Ill.	1854 1732	100		WHAM	Rochester, N. Y.	2290 2205	
	500		WNOX	Knoxville, Tenn.	2045 1885	100		KUSD	Vermillion, S. D.	1282 1215	
	250		WFBM	Indianapolis, Ind.	1845 1740	100		WDZ	Tuscola, Ill.	1745 1620	
	500		WBEW	Beloit, Wis.	1700 1600	200		WAAF	Chicago, Ill.	1854 1732	
	100		WDRG	New Haven, Conn.	2560 2460	500		WRBC	Valparaiso, Ind.	1812 1700	
	100		WJBO	New Orleans, La.	1900 1675	500		KWCR	Cedar Rapids, Ia.	1555 1465	
	100		WBBY	Charleston, S. C.	2325 2145	500		WLBL	Stevens Point, Wis.	1665 1605	
	100		WJAM	Cedar Rapids, Ia.	1555 1465	500		WLB	Minneapolis, Minn.	1591 1512	
	500		WRAX	Glouc'tr City, N.J.	2516 2360	280.2		WNAU	Boston, Mass.	2691 2575	
270	750		WOI	Ames, Iowa	1445 1360	750		KFAU	Boise, Idaho	518 670	
	100		KZKZ	Manila, P. I.		1500		KMOX	St. Louis, Mo.	1740 1565	
1500	WGHP		Detroit, Mich.	2085 1955	500		KOAC	Corvallis, Ore.	435 726		
	100		WDBE	Atlanta, Ga.	2135 1915	282.8	1000	WSM	Nashville, Tenn.	1875 1720	
	500		WJBL	Decatur, Ill.	1705 1580	500		WOAN	Lawrenceb'g, Ten.	1920 1725	
	500		KFBW	Laramie, Wyo.	840 787	285.5	500	WEMC	Berrien Spr., Mich.	1795 1740	
	100		WBAO	Decatur, Ill.	1705 1580	1000		WKAR	E. Lansing, Mich.	1935 1845	
	500		KGU	Honolulu, Hawaii	2402 2510	500		WREO	Lansing, Mich.	2015 1890	
	10		WOWL	New Orleans, La.	1900 1675	288.3	3500	WLWL	New York, N. Y.	2566 2430	
	500		WGST	Atlanta, Ga.	2135 1915	5000		KFKX	Hastings, Neb.	1296 1162	
	500		WTAW	College, St. Texas	1465 1220	20		CFXC	N. Westm'ter, B.C.	735 1005	
	200		WJAG	Norfolk, Neb.	1254 1170	500		CJVC	Scarboro Sta., Ont.	2205 2130	
	100		WRK	Hamilton, Ohio	1955 1830	500		CNRV	Vancouver, B. C.	2205 2130	
	500		WEAN	Providence, R. I.	2679 1550	293.9	500	WAU	Columbus, Ohio	2038 1920	
273	1000		WHK	Cleveland, Ohio	2161 2020	750		KTBI	Los Angeles, Cal.	325	
	500		WBRR	Rossville, N. Y.		500		WEO	Columbus, Ohio	2038 1920	
	100		KFAD	Phoenix, Ariz.	605 330	296.9	500	KPRC	Houston, Texas	1625 1360	
	500		KFBH	New York, N. Y.	2566 2430	299.8	1000	KSL	Salt Lake City, Utah	598 570	
	250		WIL	St. Louis, Mo.	1740 1565	750		KUOA	Fayetteville, Ark.	1600 1355	
	250		WSEF	St. Louis, Mo.	1740 1565	500		WFG	Atlantic City, N.J.	2565 2400	
	100		KFDY	Brookings, S. D.	1300 1255	302.8	4000	WLIB	Elgin, Ill.	1820 1695	
	10		WFAM	St. Cloud, Minn.	1446 1410	1000		WGN	Chicago, Ill.	1854 1732	
	100		KFLZ	Anita, Iowa	1395 1290	305.9	1000	KTCL	Seattle, Wash.	679 950	
	100		KFIZ	Fondulac, Wis.	1730 1650	500		WJAR	Providence, R. I.	2679 2550	
	50		KFKR	Greeley, Colo.	878 800	309.1	var.	KDKA	E. Pittsburgh, Pa.	2255 2140	
	250		WBAA	W. Lafayette, Ind.	1820 1700	312	1000	CKCK	Regina, Sask.	1268 1312	
	500		WRW	Tarrytown, N. Y.	2570 2435	500		CNRR	Regina, Sask.	1268 1312	
	500		WBJ	New York, N. Y.	2566 2430	315.6	500	WGBS	New York, N. Y.	2566 2420	
	500		WRM	Urbana, Ill.	1750 1632	1000		KPSN	Pasadena, Cal.	325 7	
	250		WDAE	Tampa, Fla.	2310 2085	5000		WAHG	Richmond Hill	2566 2430	
275	1000		WSWS	Woodale, Ill.	1820 1695	500		KFDM	Beaumont, Texas	1685 1420	
	500		WHAR	Atlantic City, N.J.	2565 2400	319	750	WGR	Buffalo, N. Y.	2292 2065	
	500		WAFD	Port Huron, Mich.	2040 1955	500		WSMB	New Orleans, La.	1900 1675	
	5000		WORD	Batavia, Ill.	1735 1635	1000		KOIN	Portland, Ore.	500 775	
						322.4	5000	KOA	Denver, Colo.	946 825	



U.S. Pat.
No. 26032

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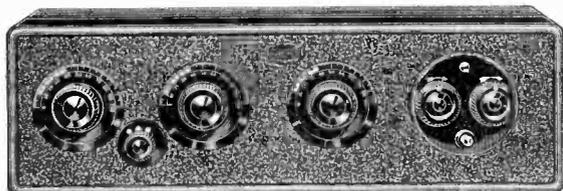
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Complete in This Issue **AROUND THE DIAL** Corrected Weekly

Wave Lgth.	Pwr.	Call	Location	Dis. from S.F. L.A.	Wave Lgth.	Pwr.	Call	Location	Dis. from S.F. L.A.
325.9	5000	WSAI	Mason, Ohio	2048	1872	1000	WJY	New York, N. Y.	2566
325.9	1500	WJAZ	Mt. Prospect, Ill.	1855	1735	500	WOR	Newark, N. J.	2566
	1000	WKRC	Cincinnati, Ohio	2038	1862	1650	CFCF	Montreal, Que.	2532
330	500	CFCT	Victoria, B. C.	735	1020	500	CFYC	Vancouver, B. C.	851
	500	CFQC	Saskatoon, Sask.	1140	1280	850	CHYC	Montreal, Que.	2535
	50	CHUC	Saskatoon, Sask.	1140	1280	1200	CKAC	Montreal, Que.	2535
	50	CJGC	London, Ont.	2110	2025	1000	CKCD	Vancouver, B. C.	851
	250	CJWC	Saskatoon, Sask.	1140	1280	50	CKFC	Vancouver, B. C.	851
	500	CNRS	Saskatoon, Sask.	1140	1280	1000	CNRM	Montreal, Que.	2535
333.1	2000	WBZ	Springfield, Mass.	2625	2480	416.4	5000	WCCO	S. Paul-Minneapolis
	500	KQW	San Jose, Cal.	42	290	422.3	1000	WKRC	Cincinnati, Ohio
336.9	500	WCAL	Northfield, Minn.	1550	1580	5000	WLW	Harrison, Ohio	1950
	1000	KNX	Hollywood, Cal.	325		428.3	1000	WSB	Atlanta, Ga.
	500	KFMX	Northfield, Minn.	1550	1500	1000	KPO	San Francisco, Cal.	325
	1000	WJAX	Jacksonville, Fla.	2295	2085	435	500	CFAC	Calgary, Alta.
340.7	1000	KFAB	Lincoln, Neb.	1285	1185	1800	CFCN	Calgary, Alta.	935
	500	WMCA	Hoboken, N. J.	2565	2430	250	CHXC	Ottawa, Ont.	2434
	500	WKAQ	San Juan, P. R.	3563	3315	1000	NAA	Arlington, Va.	
	500	KSAC	Manhattan, Kan.	1300	1170	100	CKCO	Ottawa, Ont.	2434
	500	CFCU	Hamilton, Ont.	2175	2090	500	CNRO	Ottawa, Ont.	2434
	500	CHCS	Hamilton, Ont.	2175	2090	1000	CHBC	Victoria, B. C.	735
	50	CKOC	Hamilton, Ont.	2175	2090	500	CKCX	Calgary, Alta.	935
344.6	5000	WBCD	Zion, Ill.	1859	1720	436	750	CNRC	Calgary, Alta.
	5000	WLS	Crete, Ill.	1775	1625	440.9	500	WOS	Jefferson, City, Mo.
348.6	1000	KOB	State College, N. M.	950	660	500	WLSI	Cranston, R. I.	2620
	500	KWSC	Pullman, Wash.	630	830	1000	KLDS	Independence, Mo.	1505
	500	WBEI	Boston, Mass.	2691	2575	500	WDWF	Cranston, R. I.	2625
350	1000	CZE	Mexico City	1888	1570	1000	WMAF	Dartmouth, Mass.	2655
352.7	500	WJAD	Wasco, Texas	1475	1228	447.5	500	WQJ	Chicago, Ill.
	1000	WVJ	Detroit, Mich.	2085	1955	1000	WMAQ	Chicago, Ill.	1854
357	500	CFCA	Toronto, Ont.	2262	2135	454.3	1000	KTW	Seattle, Wash.
	500	CHIC	Toronto, Ont.	2262	2135	40,000	WJZ	New York, N. Y.	2566
	500	CHNC	Toronto, Ont.	2262	2135	1000	KFOA	Seattle, Wash.	679
	500	CJBC	Toronto, Ont.	2262	2135	461.3	500	WCAE	Pittsburgh, Pa.
	50	CJCD	Toronto, Ont.	2262	2135	467	4000	KFI	Los Angeles, Cal.
	500	CJSC	Toronto, Ont.	2262	2135	468.5	500	WCAP	Washington, D. C.
	500	CKCL	Toronto, Ont.	2262	2135	1000	WRC	Washington, D. C.	2441
	500	CKNC	Toronto, Ont.	2262	2135	475.9	500	WFAA	Dallas, Texas
	500	CNRT	Toronto, Ont.	2262	2135	1500	WBAP	Fort Worth, Texas	1458
	100	WQAO	New York, N. Y.	2566	2430	500	WTIC	Hartford, Conn.	2560
361.2	4000	KGO	Oakland, Cal.	5	328	480	500	CYL	Mexico City, Mexico
	500	KZUY	Baguio, P. I.			483.6	5000	WOC	Davenport, Iowa
	500	WHN	New York, N. Y.	2566	2430	500	WSUI	Iowa City, Iowa	1652
365.6	500	WDAF	Kansas City, Mo.	1501	1340	491.5	5000	WEAF	New York, N. Y.
	500	WHB	Kansas City, Mo.	1501	1340	1000	KGW	Portland, Ore.	500
370.2	2000	WEBH	Chicago, Ill.	1854	1732	499.7	500	KFRU	Columbia, Mo.
	500	WJJD	Mooseheart, Ill.			500	CFCH	Iroquois Falls, Ont.	2105
374.8	750	KTHS	Hot Springs, Ark.	1650	1420	500	WMC	Memphis, Tenn.	1797
	500	KVOO	Bristow, Okla.	1425	1230	500	WOO	Philadelphia, Pa.	2516
379.5	5000	WGY	Schenectady, N. Y.	2543	2415	500	WIP	Philadelphia, Pa.	2516
	1000	WHAZ	Troy, N. Y.	2556	2428	1000	KFQB	Fort Worth, Texas.	1548
384	500	CKY	Winnipeg, Man.	1395	1430	500	KLX	Oakland, Cal.	5
	500	CNRW	Winnipeg, Man.	1395	1430	516.9	5000	WJR	Pontiac, Mich.
	500	WMBF	Miami Beach, Fla.	2562	2300	5000	WCX	Pontiac, Mich.	2002
	1000	KJR	Seattle, Wash.	679	950	100	CFCK	Edmonton, Alta.	1245
389.4	1000	WEAR	Cleveland, Ohio	2161	2020	500	CJCA	Edmonton, Alta.	1245
	3500	WTAM	Cleveland, Ohio	2161	2020	500	CNRE	Edmonton, Alta.	1245
394.5	2000	WOAL	San Antonio, Texas	1489	1200	526	5000	WHO	Des Moines, Iowa
	500	WLIT	Philadelphia, Pa.	2516	2360	1000	WNYC	New York, N. Y.	2566
	500	WFL	Philadelphia, Pa.	2516	2360	1000	WOAW	Omaha, Neb.	1426
	1000	KHQ	Spokane, Wash.	675	877	535.4	750	WHA	Madison, Wis.
399.8	500	WHAS	Louisville, Ky.	1983	1810	3500	KYW	Chicago, Ill.	1854
	3500	WHT	Chicago, Ill.	1854	1732	545.1	500	KFUO	St. Louis, Mo.
	500	PWX	Havana, Cuba	3566	2315	500	KSD	St. Louis, Mo.	1740
405.2	500	KHJ	Los Angeles, Cal.	325					

A complete list of U. S. and Canadian stations See Page 62 for alphabetical list of stations

RADIO CABINETS—We Make Them Right

Fabricoid-covered cabinets. Very attractive. Made to your own design and measurement
Cabinets ordered today can be delivered tomorrow. Prices are reasonable

Phone us for an estimate—Sutter 637

MUHS MANUFACTURING CO.

272 TRHAMA STREET, near Fourth

SAN FRANCISCO, CALIFORNIA

"THE HOUSE THAT PARTS BUILT"

"THE HOUSE THAT PARTS BUILT"

These Facts Are of Interest

To the **non-technical** man: The new Silver-Marshall No. 650-B power supply provides unflinching "B" and "C" current for the entire set and also "A" current for amplifier tubes. Its output is sufficient for any number or combination of tubes, including power tubes. Plug it in the lamp socket or base receptacle like a toaster. Furnished complete with cord and plug and new **type** Raytheon tube for \$42.00.

To the **technical** man: S-M No. 650-B power supply incorporates S-M No. 330 power transformers (\$6.00) with two 300-volt secondaries and a 7.5 volt filament lighting winding; S-M No. 331 uni-choke (\$6.00), a two-winding filter choke licensed under the Clough Patent Application; S-M No. 332 condenser bank (\$10.00), and Clarostat voltage regulator controls. The new type BH Raytheon tube is used, with a rated out put of 85 m. a. This power supply eliminator will deliver 25 m. a. at 300 volts to 90 m. a. at 190 volts, sufficient for any combination of tubes, beside "C" bias current and filament current for amplifier tubes. It will withstand an 100% overload over reasonable periods. It is unequalled for power out put, voltage regulation and freedom from hum.

DEALERS:—We can furnish the individual parts used in this power supply eliminator, or the assembled eliminator as described above. We are headquarters for Silver-Marshall and the other lines listed below:

Apex Sets	Cunningham Tubes	HAMMERLUND	Packard
Amsco	Celatsite	Harkness	Penetrola, Sets and Kits
All American	Celoron	Hoyt	Precise
Airex Speakers	C. R. L.	Jewell	Pyrex
Aero Coils	Cutler-Hammer	Jefferson	Precision Coils
Aalco Loops	DUBILIER	Jones	Remler
Aero Loops	Daven	Karas	Rauland Lyrics
Acme	Dongan	Kellogg	Radiall
Amertran	Durham	Kurz-Kasch	SILVER-MARSHALL
Amperites	Dudlo	Kester	Sangamo
"A1" Crystals	Eby	Leaf Burkhart	Samson
BALKITE	Exide	Speakers	Signal
BREMER-TULLY	Electrad	Majestic Speakers	TELEPHONE SPEAKERS
Bradley	Enchanter Speaker	Mueller Clips	Timmons Speakers
Benjamin	Eveready	Microdensers	Thordarson
Bruno	Formica	Morrison	Tobe
Belden	Federal	Mogul Tubes	Thorola
Bodine	Fleron	Musselman Tubes	Trimm
Carter	Fynur Dials	Na-ald	Tungar
Chelten	GENERAL RADIO	Philco	Variodensers
Carborundum	G. G. H.	Pitts Under Ground	Weston
Crowe Panels	Goodrich Panels	Antennas	Yaxley

Northern California distributors for the "BREMER-TULLY COUNTERPHASE SIX"

UNITED RADIO SUPPLIES COMPANY

693 MISSION STREET
SAN FRANCISCO

"Radio Exclusively"
(WHOLESALE ONLY)

Phones: Douglas 8357
Douglas 8358
Electric 41

"THE HOUSE THAT PARTS BUILT"

"THE HOUSE THAT PARTS BUILT"

(PATENT PENDING)

SCHEDULES FOR SUNDAY

JULY 18, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KFUS		
9:30-10:00	KTAB KPO KQW KFWM		
10:00-10:30	KLS KRE KPO KFWM KQW	KFI KIJ KNX KTBI CFCN	
10:30-11:00	KLS KRE KPO KQW KFWM	KFI KIJ KNX KTBI KFSG KPSN KPCC KGW	KTW CFCN
11:00-11:30	KGO KPQU KQW KTAB	KIJ KTBI KNX KFI KFSG KPSN KPCC	KTW KFQI KGW KJR KHQ KTCL
11:30-12:00	KGO KPQU KQW KTAB	KPSN KPCC KHJ KTBI KFSG KFI	KTW KFQI KGW KJR KHQ KTCL
12:00-12:30	KQW	KIJ KTBI KFSG	KTW KJR KHQ KTCL
12:30-1:00		KFWO KNX	KFOA KTCL
1:00-1:30	KFWM	KFWO	KFOA
1:30-2:00	KFWM		
2:00-2:30	KFWM	KNX	
2:30-3:00	KGTT KPO	KFSG KFON KNX	
3:00-3:30	KGTT KPO	KFSG KFON KNX KFSD	KTW CFCN
3:30-4:00	KGTT KPO	KFSG KFON KNX KFSD	KTW
4:00-4:30	KGTT KPO KGO	KFSG KFI KIJ	KTW
4:30-5:00	KGTT KPO KGO KFUS	KFI KHJ KNX	
5:00-5:30	KPO KFUS KGO	KFWO KFON	
5:30-6:00	KPO	KFWO KFON	
6:00-6:30	KPO	KTBI KFSD KFWO	CFAC KHQ KTCL
6:30-7:00	KFRC KPO KRE KGO	KFI KTBI KFWO KNX KFSD KPSN	CJCA CFAC CFCN KHQ KTCL
7:00-7:30	KPO KRE KGO	KTBI KFWO KFI KFSG KNX KPSN KMTR KFON KFSD	CJCA CFAC CFCN KHQ
7:30-8:00	KQW KPO KTAB KGO	KFI KFSG KNX KTBI KFON KMTR KMTR KFWO	KTW KFQI CJCA KGW CFCN KHQ
8:00-8:30	KRE KPO KTAB KQW KGO KGTT	KFI KHJ KFON KNX KFSG KTBI KFSD KFWO KPQZ KMTR	KTW KFQI KJR CKCK KHQ KOIN KGW KTCL
8:30-9:00	KGO KTAB KGTT KPO KQW KRE	KFI KHJ KTBI KFON KFSG KNX KFWO KFQZ KMTR KFSD	KTW KFQI KJR KGW KGY CKCK CFCN KOIN KHQ KTCL
9:00-9:30	KGTT KPO KGO KQW	KFI KIJ KNX KFWS KFQZ KFON KMTR KFSG KTBI KFSD	KTW KJR KTCL KGW CFCN KOIN KQP KGY CFCN
9:30-10:00	KPO KGTT KGO	KFI KIJ KFWS KFSG KNX KFSD KFQZ KMTR KFON	KTW KGW KTCL KJR KOIN
10:00-10:30	KFRC	KFWB KFSG KFI KFQZ KFON	KJR
10:30-11:00	KFRC	KFWB KFSG KFI KFQZ KFON	
11:00-11:30	KFRC	KFQZ	
11:30-12:00	KFRC	KFQZ	

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CFAC	435	Calgary Herald, Canada	2000
CFCN	435	W. W. Grant, Calgary	3000
CFCT	330	Geo. W. Deaville, Victoria	2000
CJCA	517	Journal, Edmonton, Canada	5000
CKCK	312	Leader Pub. Co., Regina	1000
KFI	467	Earl C. Anthony, Inc., L. A.	4000
KFIQ	256	M. E. Church, Yakima, Wash.	100
KFON	232	Echophone Radio, Long Beach	100
KPQU	217	Holy City, California	500
KPQZ	226	Taft Radio, Hollywood, Cal.	50
KFRC	248	City of Paris D. G. Co., S. F.	50
KFSD	246	Air Fan Corp., San Diego, Cal.	500
KFSG	275	Angelus Temple, Los Angeles	500
KFUS	256	Gospel Radio, Oakland, Cal.	50
KFWB	252	Warner Bros., Hollywood, Cal.	500
KFWO	211	Lawrence Mott, Avalon, Cal.	250
KFWM	207	Oakland Educational Society	250
KGO	361	Gen. Elec. Co., Oakland, Cal.	4000
KGTT	207	Glad Tidings Temple, S. F.	50
KGW	491	The Oregonian, Portland, Ore.	500
KGY	246	St. Martin's Col., Lacey, Wn.	50
KHJ	405	The Times, Los Angeles, Cal.	500
KHQ	394	L. Wasmer, Spokane	1000
KJBS	220	Julius Brunton & Sons, S. F.	5
KJR	384	N. W. Radio Service, Seattle	1000
KLS	250	Warner Bros., Oakland, Cal.	250
KMTR	238	K. M. Turner, Hollywood, Cal.	500
KNX	337	L. A. Express, Hollywood	500
KOIN	319	H. B. Read, Portland, Ore.	1000
KPO	428	Hale Bros. & Chronicle, S. F.	1000
KPPC	229	Pasadena Pres. Church	50
KPSN	316	The Star-News, Pasadena	1000
KQW	333	1st Baptist Church, San Jose	500
KRE	256	The Gazette, Berkeley	100
KTAB	240	Associated Broadcasters, Oak.	1000
KTBI	294	Bible Institute, Los Angeles	750
KTCL	306	Am. Radio Tel. Co., Seattle	1000
KTW	454	1st Pres. Church, Seattle	1000

HOW TO REACH RADIOCASTERS BY TELEPHONE

KFI	TRinity	5147
KFOB	Burlingame	4565
KFON		614-60
KFQZ	GLadstone	3196, 3197
KFRC	Douglas	4500
	After 6 p.m.	Douglas 4509
KFSG	Dunkirk	5737
KFUS	Elmhurst	4709
KFWB	GLadstone	9461
KFWI	Graystone	466
KGO	Fruitvale	5980
KHJ	MEtropolitan	0700
KJBS	Graystone	356 or 456
KLS	Lakeside	6223
KLX	Lakeside	6000
	After 9 p.m.	Lakeside 6015
KMTR	HOLLYWOOD	3026
KNRC	WESTmore	1319
	Night phones, WESTmore	1317, 18, 19
KNX	HOLLYWOOD	4603
KPO	Sutter	5600
	After 5:30 p.m.	Kearny 5777
KPSN	Wakefield	3111
KRE	Thornwall	1
	During broadcasting	Berkeley 9300
KTAB	Merritt	246
KTBI	MEtropolitan	4601
KZM	Lakeside	100

(PATENT PENDING)

SCHEDULES FOR SUNDAY

JULY 18, 1926

Pacific Time

Inland Stations

Corrected Weekly

a.m.	Inland
9:00-9:30	KTHS KYW KOIL
9:30-10:00	KTHS KYW KOIL KLDS
10:00-10:30	KTHS KLDS KOA KSL
10:30-11:00	KOA
11:00-11:30	WOC KOIL
11:30-12:00	WOC KOIL WOAW
12:00-12:30	
12:30-1:00	WGN WOAW
1:00-1:30	WGN KDKA WBAP WJQ
1:30-2:00	WGN KDKA WBAP WJQ
2:00-2:30	WDAF WCCO KDKA KFAB WGN KYW
2:30-3:00	KFAB WGN KYW WDAF KDKA
3:00-3:30	WSB
3:30-4:00	WSB KDKA
4:00-4:30	KDKA WOAW WFAA KLZ
4:30-5:00	WFAA WOC WGY WJZ KDKA WJZ KLZ
5:00-5:30	KDKA KYW WGY WJAZ WJZ WKRC KOIL WJZ
5:30-6:00	WGY WQAI KOIL WKRC WSM WSB KDKA KYW WJZ WFAA WJAZ KOA
6:00-6:30	WIB WSB WFAA WCCO WEAR WGY WCBQ KOIL WJZ KYW WOC WLW WQAI WJZ WGR WCAP WCAU WIB WBZ WLS WSM WJAZ PWX KSD KMOX KOA
6:30-7:00	WIB WCCO WGBS WJAZ KOIL WGY WCBQ WJZ KYW WSB WCAP WCAU WBZ KOA WEAR WLW WJZ WGR PWX WFAA KSD WLS KMOX
7:00-7:30	WIB WOAW KTHS WGN WLW WJZ WEBH WCBQ WBZ KOA WGBS WFAA KSL KLDS WJZ KYW WEAR KFAB WOK WKRC CZE WIIT KMOX
7:30-8:00	WJZ KYW WGBS KSL WJZ WEBH KLDS WENR WGN WQAI WCBQ KOA WOAW WKRC WOK KFAB KTHS KPRC WHT KMOX
8:00-8:30	WKRC KTHS WOAW WIP KLZ WOC WQAI KSL KFAB WENR KYW WJZ WOK WGBS KPRC WIIT KOA
8:30-9:00	WOC KSL WENR WGBS WIIT KTHS WKRC WJZ WOK KPRC
9:00-9:30	WBAP WOC WIB KFUR WKRC KOIL WFAA WOK WENR KPRC
9:30-10:00	WBAP WIB KFUR KOIL WFAA WOK WENR WKRC KPRC
10:00-10:30	KFUR KGU WKRC WIB WOK
10:30-11:00	KFUR KGU WKRC WIB WOK
11:00-11:30	KGU
11:30-12:00	

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CZE	350	Dept. of Educ., Mexico City	1000
KDKA	309	Westinghouse, E. Pittsburgh	10,000
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFUR	224	Ogden, Utah, Peery's Bldg.	50
KGU	270	The Advertiser, Honolulu, Ha.	500
KLDS	441	Ch. of Christ, Independ'ce, Mo.	1000
KLZ	266	Reynolds Radio Co., Denver	250
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
OIL	278	Mona Motor Oil, Coun. Bl., Iowa	500
KPRC	297	Post-Dispatch, Houston, Tex.	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1750
KTHS	375	Arlington Hotel, H. Spgs., Ark.	500
KYW	536	Westinghouse Elec., Chicago	3500
PWX	400	Int. T. & T. Co., Havana, Cuba	500
WBAP	476	Star-Telegram, Ft. Worth	1500
WBZ	333	West. Elec., Springfield, Mass.	2000
WCAP	469	C & P. Tel. Co., Washington	500
WCAU	278	Hotel Pennsylvania, Phila.	500
WCBQ	345	W. G. Voliva, Zion, Ill.	5000
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAR	389	Goodyear Tire & Rubber Co.	1000
WEBH	370	Edgewater Hotel, Chicago	1500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGBS	316	Gimbel Bros., New York	500
WGN	303	Chicago Tribune, Chicago	1000
WGR	319	Federal Radio Corp., Buffalo	750
WGY	380	Gen. Elec. Co., Schenectady	5000
WHB	366	Sweeney Auto Sch. K. C., Mo.	500
WHT	400	Radiophone Corp., Chicago	3500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJY	405	R. C. A., N. Y. City	1000
WJZ	455	R. C. A., N. Y. City	40,000
WKRC	326	Kodol Radio, Cincinnati	1000
WLS	345	Sears, Roebuck, Chicago	5000
WLW	422	Crosley Co., Cincinnati	500-5000
WQAI	394	S. Equip. Co., San Ant., Tex.	2000
WOAW	526	W. C. W., Omaha, Neb.	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Neutrowood, Homewood, Ill.	5000
WQJ	448	Cal. Bak. Powder Co., Chicago	500
WSB	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500
WWJ	353	Detroit Evening News	1000

BLUE PRINTS
and **INSTRUCTION BOOK**
for building the new
INFRADYNE
will be ready for distribution
on July 25th. Radio Dealers
and Jobbers are invited to
write for trade proposition.

L. C. RAYMENT
1200 Franklin St., Oakland, Cal.

PROGRAMS FOR SUNDAY

JULY 18, 1926



Gwynfi Jones
KTAB—11 a.m.



Marshall W. Geiselman
KPO—5 p.m.



Rev. Geo. W. Phillips
KTAB—11 a.m.



Dr. James L. Gordon
KGO—11 a.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles

General Electric Company, Oakland, Calif.

- 11 a. m.—First Congregational Church service, San Francisco, Rev. James L. Gordon, D.D., preacher; A. H. Cammack, organist
4 p. m.—Vesper service, Grace Cathedral, San Francisco
6:30 to 7:30 p. m.—Concert by Bem's Little Symphony Orchestra, Hotel Whitcomb, San Francisco
7:40 p. m.—Weather bureau report
7:45 p. m.—First Congregational church service, San Francisco, Rev. James L. Gordon, D.D., pastor; A. H. Cammack, organist
9 to 10 p. m.—Concert by Bem's Little Symphony Orchestra, Hotel Whitcomb, San Francisco

384 Meters **KJR** 1000 Watts
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.

- 11 to 12:30 p. m.—Church services from First M. E. Church, Dr. J. Ralph Magee, pastor
7:45 to 8 p. m.—Organ recital played by Mrs. Montgomery Lynch
8 to 9:15 p. m.—Evening services First M. E. Church, Dr. J. Ralph Magee, pastor
9:15 to 10:45 p. m.—Puget Sound Savings and Loan Ass'n Orchestra, Henry Damski, director

232 Meters **KFON** 500 Watts
1290 Kilocycles

Nichols & Warinner, Inc., Long Beach, Calif.

- 2:30 to 4 p. m.—Municipal band concert
5 to 6 p. m.—KFON Concert Orchestra
7 to 7:30 p. m.—Program by Hewitt's Bookstore
7:30 to 7:45 p. m.—Band box program
7:45 to 9 p. m.—Services from First Church of Christ, Scientist
9 to 11 p. m.—KFON Concert Orchestra

252 Meters **KFWB** 500 Watts
1190 Kilocycles

Warner Brothers, Hollywood, California

- 9 to 11 p. m.—Program featuring Peggy Mathews, Albert Keglovich, 13-year-old violinist; Julius H. Phillips, tenor; June Parker; Art Pabst, banjo and Bill Hatch's Orchestra

467 Meters **KFI** 4000 Watts
640 Kilocycles

Copyright 1926, E. C. Anthony, Inc., L. A.

- 10 a. m.—Morning services, direction Los Angeles Church Federation
11 a. m.—Temple Baptist Church
4 p. m.—Vesper services arranged by Federated Church Musicians
6:30 p. m.—KFI nightly doings
6:45 p. m.—Music appreciation chat and Father Ricard's sun spot weather forecast
7 p. m.—Jim, Jack and Jean Trio
8 p. m.—Aeolian organ recital
9 p. m.—Badger's Hollywood Californians; Mert Denman and his uke
10 p. m.—Packard Six Orchestra. Dolly MacDonald, soloist

322 Meters **KOA** 5000-Watts
930 Kilocycles

General Electric Company, Denver Colorado

- 10 a. m.—Service of Augustana Lutheran Church, Denver. Sermon, "Jesus Glorified" by Rev. E. G. Knock, pastor; music, vocal duets, Edith Rasmussen, soprano, and Elizabeth Alexander Rundquist, contralto; vocal solos, Florence Schack, soprano; Mrs. S. Clarence Trued, organist
5:30 p. m.—Early evening studio concert by KOA Choristers, Freeman H. Talbot, director
7 p. m.—Open-air concert, Denver Municipal Band. Henry Sachs, director

294 Meters **KTBI** 750 Watts
1020 Kilocycles

The Bible Institute, Los Angeles, California

- 10 a. m. to 12:30 p. m.—Regular service of the Church of the Open Door. solos, choir selections and Congregational singing; sermon by Dr. John M. McInnis, D.D., Dean of the Bible Institute of Los Angeles
6 to 7 p. m.—Radio vesper service, inspirational sermon by Rev. Albert S. Reitz, pastor Rose Hill Baptist Church; Glenn Smith, organist
7:15 to 9:30 p. m.—Regular evening service of Church of the Open Door; organ prelude by Prof. Alfred A. Butler; Gospel song service under direction of Prof. John B. Trowbridge; sermon by Dr. John M. McInnis, D.D.

Sunday Programs—Continued

428 Meters **KPO** **1000 Watts**
700 Kilocycles

Hale Bros. & The Chronicle, San Francisco

9:45 to 10:45 a. m.—Undenominational and non-sectarian church service. Talk, "The Twenty Third Psalm" by Dr. M. H. Alexander, pastor Wesley Methodist Church

Tenor solos, James O. Greenwell—
 Blessed Are the Pure in Heart.....Huhn
 A Familiar Hymn
 Wm. E. Corris, organist

10:45 a. m.—Ye Towne Cryer giving the U. S. weather forecast; amusement and general information

2:45 p. m.—Play by play of baseball game to 6 p. m.—Organ recital by Marshall W. Giselman at the California Palace of the Legion of Honor

6 to 6:30 p. m.—States Restaurant Orchestra, Waldemar Lind, director

6:30 p. m.—Ye Towne Cryer giving baseball scores; amusement and general information

6:35 to 8:35 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobbs, director

8:35 to 10 p. m.—Rudy Seiger's Fairmont Hotel Orchestra

333 Meters **KQW** **500 Watts**
900 Kilocycles

First Baptist Church, San Jose, California

9:40 to 12:30 p. m.—Services of First Baptist Church of San Jose

7:30 to 9:30 p. m.—Services of First Baptist Church of San Jose

238 Meters **KMTR** **500 Watts**
1260 Kilocycles

K. M. Turner Corp., Hollywood, California

7 p. m.—Miller's Lafayette Cafe, Sam Messenheimer's String Orchestra

8 to 10 p. m.—KMTR Concert Orchestra

316 Meters **KPSN** **1000 Watts**
950 Kilocycles

The Star-News, Pasadena, California

10:30 a. m.—Family altar service by the United Church Brotherhoods

10:50 a. m.—Services from First Church of Christ, Scientist

6:30 to 7:30 p. m.—Sunday night dinner concert by the Maryland Artists' Ensemble, Henri I. van Praag, director, from the Maryland Hotel, Pasadena

337 Meters **KNX** **500 Watts**
890 Kilocycles

L. A. Evening Express, Los Angeles, Calif.

10 a. m.—1st Presbyterian Church, Rev. Stewart P. MacLennan

12:30 p. m.—Franklin Bldg. and Loan Ass'n present Paul Finstein's Concert Orchestra

2 to 4 p. m.—City Park Board musical program

4:30 p. m.—Cinema chit-chat by Helen Sullivan

6:30 p. m.—Unitarian Church of Hollywood

7 p. m.—Circle Theater Symphony, Carl D. Elinor, director and organ recital by Fred Scholl

8 p. m.—1st Presbyterian Church, Rev. Stewart P. MacLennan

9 p. m.—Read Brothers courtesy program

240 Meters **KTAB** **1000 Watts**
1250 Kilocycles

The Associated Broadcasters, Oakland, Cal.

9:45 a. m.—Prof. E. G. Linsley's Bible Class

11 a. m.—Church service of 10th Ave Baptist Church

Organ prelude, Ida M. Fording, organist—
 Cantilene.....Woodman

Solo and ensemble numbers by quartet, Laura Broderick, soprano; Mary Groom Richards, contralto; E. Harold Dana, baritone; Gwynfi Jones, tenor

Address, Rev. Geo. W. Phillips
 Organ Postlude, Ida M. Fording—

March.....Hill

7:45 p. m.—Church service of 10th Ave Baptist Church

Organ prelude, Ida M. Fording, organist—
 Chant du Matin.....Guilmant

Address
 Selections by KTAB Quartet

Address, Rev. Geo. W. Phillips
 Organ Postlude, Ida M. Fording—

Grand Chorus.....Stover

211 Meters **KFWO** **250 Watts**
1420 Kilocycles

Major Lawrence Mott, Avalon, California

12:30 to 1:30 p. m.—St. Catherine Orchestra

5 to 6 p. m.—Miss Hewitt's golden hour

6 to 6:30 p. m.—Chimes

6:30 to 7:30 p. m.—St. Catherine Orchestra

7:30 to 9 p. m.—Band concert

229 Meters **KPPC** **50 Watts**
1310 Kilocycles

Presbyterian Church, Pasadena, California

10:30 a. m.—Tower chimes by Saml. L. Allen and announcements

11 a. m.—Church service, Sermon by Rev. J. Hudson Ballard, Ph.D., of Pomona

Organ prelude, Mattie B. Peck

Quartet, Melba French Barr, soprano; Mary Booth, contralto; Harold Proctor, tenor; Alexander J. Kisselburgh, baritone—
 Whoso Dwelleth Under the Defence.....Shackley

Come to Me.....Scott

Tenor solo, Harold Proctor—
 The Builder.....Foley-Cadman

Organ postlude, Mrs. Peck—
 Fanfare in D.....Lemmens

226 Meters **KFQZ** **250 Watts**
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood

8 to 9 p. m.—Classical program featuring the Hollywoodland String Quartet and Emma Golden

9 to 10 p. m.—Studio program featuring Charlie Dimond, Dora Leonard, Happy Paddy Flynn and Ladye Horton

10 to 11 p. m.—Southlanders Orchestra and Jack Cook, soloist

11 to 12 p. m.—Old Timers in old time melodies with Cliff Eddy, Bob McDonald and others

319 Meters **KOIN** **1000 Watts**
940 Kilocycles

H. B. Read, Portland, Oregon

7:50 to 9 p. m.—Services from First Church of Christ, Scientist

9:15 to 10:15 p. m.—Sacred musical program

(Programs continued on next page)

Sunday Programs—Continued

256 Meters **KRE** 100 Watts
1170 Kilocycles

The Berkeley Gazette, Berkeley, California

10 to 11 a. m.—Church service under direction Rev. Henry B. McFadden of San Pablo Park Presbyterian Church; music under direction of the church

6:30 to 7:30 p. m.—Dinner concert by Oakley Trio, Richard Bailey, piano; Josef Walter, violin; Niles Cutler, cello

8:15 to 9 p. m.—Social concert by Oakley Trio

207 Meters **KFWM** 250 Watts
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.

9:30 to 10 a. m.—Children's radio services. Song, "All to Thee"; anthem, "Let Us strive to Be Like the Master"; Bible story, "The Way to Paradise"

10 to 11 a. m.—Regular radio services. Voluntary, Mrs. Fall; song, "Worthy of the Lamb"; duet, Mrs. Fall and Miss Oma King; Bible lecture; anthem, "Come Let Us Reason Together"; Choral singers

1 to 2:30 p. m.—Studio program

Male quartet, W. Myles, H. Lawrence, M. F. Deutch, W. O. Furtwangler—

My ShepherdKoschat

Bass solos, W. O. Furtwangler—

JerusalemParker

The Good Shepherd.....Barry

Mixed quartet—

Twilight

Duets, H. Lawrence, Mrs. H. Lawrence—

Heavenly Truth

Only Thee.....Doane

Bible talk, "The Typical Organization," delivered by C. R. Little

Mixed quartet—

My Redeemer.....Granahan

Baritone solo, H. Lawrence—

Shall We Meet?

Duet, Mrs. Kent and Mrs. Lawrence—

Not My Own.....McGranahan

Male quartet—

Softly Now the Light of Day...Von Weber

491 Meters **KGW** 1000 Watts
610 Kilocycles

The Morning Oregonian, Portland, Oregon

10:25 to 12 noon—Morning services from the First Presbyterian Church

7:30 to 9 p. m.—Evening services from First Congregational Church

9 to 10 p. m.—Concert by Chevrolet Symphony Orchestra. Weather report; baseball scores

268 Meters **KFRC** 50 Watts
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco

6:30 p. m.—The stage and screen
10 to 12 p. m.—Dance music from Balconades Ballroom, by Walter Krausgrill's Orchestra. Intermissions by Bill Hawley and Puss Donahoe, comedy duo

250 Meters **KLS** 50 Watts
1200 Kilocycles

Warner Bros., Oakland, California

10 to 11 a. m.—Radio Church of America, services under direction Evangelist W. R. Fairfield; music in charge of Grace L. Fairfield

207 Meters **KGTT** 50 Watts
1450 Kilocycles

Glad Tidings Temple, San Francisco, Calif.

2:30 to 3 p. m.—Sunday school lesson

3 to 5 p. m.—Church services, R. J. Craig, pastor; music directed by G. P. Andrews

8 to 10 p. m.—Church services, R. J. Craig, pastor; music directed by G. P. Andrews

394.5 Meters **KHQ** 1000 Watts
760 Kilocycles

Louis Wasmer, Inc., Spokane, Washington

11 to 12:30 p. m.—Services of Central M. E. Church

6 to 7:30 p. m.—Mann Bros. Davenport Hotel Orchestra

7:30 to 9 p. m.—Services of Church of the Truth

300 Meters **KSL** 1000 Watts
1000 Kilocycles

Cope and Johnson, Salt Lake City, Utah

3 p. m.—Special "cheerio" broadcast

8 p. m.—Sacred services under auspices of the Church of Jesus Christ of Latter-day Saints (Mormon Church)

9 p. m.—Program by Utah Radio Products Co.

256 Meters **KFUS** 50 Watts
1170 Kilocycles

The Gospel Radio, Oakland, California

9 a. m.—Exposition of International Sunday School lesson

4:30 p. m.—Hour of sacred songs by KFUS Gospel Radio Chorus. Tongue-Tied Religion, poem; This is Like Heaven to Me, chorus; Rolled Away, chorus; A Soul Winner for Jesus, chorus; Busy Every Day, chorus; Still Sweeter Every Day, chorus; He's Everything to Me, chorus; Do You Know Him? chorus; I Will Praise Him, duet and chorus; I'm Glad I'm One of Them, chorus; There's No Disappointment in Heaven, cornet solo; What Will the Judgment Be? vocal solo; message, Judgement, G. F. Hoff

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Radio Optimism Is Justified

By ALFRED N. GOLDSMITH
Chief Broadcast Engineer, Radio Corporation of America

THAT amiable philosopher, Josh Billings, once made a statement something like this: "Most of the troubles people worry about never really happen." One can almost believe that he was thinking of the opinions of certain radio "experts" regarding the present spell of difficult long-distance reception. These prophets of evil are terribly worried. Nobody can hear distant stations. Nearby stations cause nothing but interference. High-power stations have ruined the climate of the earth and brought about fog and rain. The wave lengths or frequencies assigned to broadcasting stations, particularly those of high power, are such that no receiver can be built to separate the stations. And, what is perhaps worse, these high-power stations ruin each others transmission to such an extent that the future of the radio enthusiast is nothing but an appalling vista of gloom and woe. In a word, radio broadcasting is practically ruined and the future is going to be still worse than the past.

Josh Billings was right. Morbid enjoyment of imaginary troubles seems to be a fairly widespread human trait. And radio opinion represents no exception to this rule. Of course the opinions expressed by the "experts" along the lines of hopelessness and sorrowing-resignation are, in plain language, nonsense. Radio broadcasting was never in finer shape than it is right now, with one slight and unimportant exception. That exception is the relative infrequency of long-distance "freak reception" from low-power stations. It is a fact that all over the world, from Australia through North America to England, long-distance radio reception conditions have been poor this winter. Australian engineering experts have told me that in their great continent, noted for its tremendous distances, the cool weather of last July and August, 1925, did not bring with it good long-distance receiving conditions. From Southern California and Newfoundland come the same comment. And in England, where once in awhile the sleepless "radio fishermen" heard American stations.

there comes the similar report that the long-distance radio "fish" are not biting this season.

There are many theories to account for this. Some think that the outburst of sun spots has reduced the amount of light and heat received by the earth from the sun. As a result, the upper layers of the earth's atmosphere, which are usually turned into a conducting surface by ultra-violet light from the sun, have recently remained relatively non-conducting.

However, it is now well known that there are two ways of receiving a radio program. One of these is by the ground waves which travel right along the earth from the transmitting station to the receiving station. The other is through the so-called "sky waves" which travel obliquely upward from the transmitting station until they strike the reflecting layer of conducting air, far ahead, and are shot back obliquely to the surface of the earth, where they are received by the waiting listener. If the sun fails to provide the light which produces the overhead reflecting layer of air, the sky waves will not be reflected or received.

Something like this seems to have happened recently. The ground waves are being received in their usual reliable way over reasonable distances and with resultingly clear signals. The sky waves are relatively rarely received or, at best, feebly.

Fortunately, really high-grade reception is almost completely dependent on the ground waves. The sky waves are erratic, comparatively weak at any considerable distance, and fade in irregular fashion. They are of interest to the man who cares little about program quality or reliability. But the ground waves are the real foundation of high quality service in broadcasting. So that, while the relatively undesirable sky waves are weak and will stay so until atmospheric conditions improve—as no doubt they soon will—the reliable ground waves

(Continued on page 43)

(PATENT PENDING)

SCHEDULES FOR MONDAY

JULY 19, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.	STATION DIRECTORY			
				Call	Meters	Owner and Location	Power
9:00-9:30	KTAB KJBS			CFAC	435	Calgary Herald, Canada	2000
9:30-10:00	KJBS KQW		KTCL	CFCN	435	W. W. Grant, Calgary	3000
10:00-10:30	KFRC KJBS KFUS		KFOA KGW KFWV	CJCA	517	Journal, Edmonton, Canada	5000
10:30-11:00	KFRC KPO KFUS	KNX	KGW KFOA KFWV	CKCD	411	Daily Province, Vancouver	1000
11:00-11:30	KRE		KGW	CKCK	312	Leader Pub. Co., Regina, Can.	1000
11:30-12:00	KGO	KFON	CJCA KJR	KFBK	248	The Bee, Sacramento, Cal.	100
12:00-12:30	KGO KPO KGTT	KFON KNX KFQZ		KFEFC	248	Meier & Frank Co., Portland	50
12:30-1:00	KGO KPO	KHJ KNX KFQZ KFSD	KGW KFOA KFWV	KFI	467	Earl C. Anthony, Inc., L. A.	4000
1:00-1:30	KPO	KNRC KMTR KFSD	KGW KFOA CFCN KFWV	KFOA	454	Rhodes Co., Seattle, Wash.	1000
1:30-2:00	KPO	KFON KNX KFQZ	CFCN	KFON	232	Echophone Radio, Long Beach	500
2:00-2:30	KJBS	KNRC KTBI		KFQZ	226	Taft Radio, Hollywood, Cal.	50
2:30-3:00	KPO	KNRC KTBI		KFRC	268	City of Paris D. G. Co., S. F.	50
3:00-3:30	KGO KPO	KNX		KFSD	246	Air Fan Corp., San Diego, Cal.	500
3:30-4:00	KGO KPO		KFWV	KFUS	256	Gospel Radio, Oakland, Cal.	50
4:00-4:30	KPO	KFON KNX	KFEFC KFOA	KFWB	252	Warner Bros., Hollywood, Cal.	500
4:30-5:00	KPO KFRC	KNX KFON KFWB	KFWV	KFWM	207	Oakland Educational Society	250
5:00-5:30	KPO KFRC	KMTR KFON KFWB		KFWV	213	Sovereign Hotel, Portland, Ore.	50
5:30-6:00	KFRC KGO KRE KPO	KFI KMTR KFWB KNX KFON		KMO	250	Love Elec. Co., Tacoma, Wn.	100
6:00-6:30	KFRC KGO KZM KFBK KPO	KFI KMTR KFON KFSD KFQZ KFWB KNX	KMO KGW KHQ KFWV KOIN	KMTR	238	K. M. Turner, Hollywood, Cal.	500
6:30-7:00	KGO KPO KZM KFRC KQW KFBK	KFI KNX KFWB KMTR KFSD KFQZ KFON	KMO CJCA KGW CKCK KFOA KHQ KFWV KOIN	KNRC	208	Kierulff & Ravenscroft, L. A.	250
7:00-7:30	KGO KPO KFBK KQW KLX KFRC KTAB	KNX KFI KMTR KTBI KFON KFSD	KFOA KOWW KFWV	KNX	337	L. A. Express, Hollywood	500
7:30-8:00	KFBK KQW	KFI KFWB KMTR KNX KTBI KMJ KFON KFSD	CJCA KGW KOAC KFOA KFWV	KOAC	280	Ore. Agr. College, Corvallis	500
8:00-8:30	KTAB KPO KFRC KLX KGO KFBK KRE KFWM	KFI KFON KTBI KNX KFWB KMTR KFQZ KFSD KMJ KNRC	KFOA KGW CJCA KOWW CFAC KOIN KHQ KOAC KFWV KWSC	KOIN	319	H. B. Read, Portland, Ore.	1000
8:30-9:00	KFRC KLX KTAB KGO KPO KFRC KRE KFWM	KFI KFWB KTBI KNX KFON KMTR KNRC KMJ KFQZ KFSD	KFOA CKCD KOWW KJR KGW CFAC KHQ KOIN KFWV KOAC KWSC	KFRC	306	Am. Radio Tel. Co., Seattle	1000
9:00-9:30	KFBK KRE KGO KPO KLX KTAB KFRC KFWM	KFI KFON KFON KNX KMTR KNRC KMJ KFQZ KFSD	KFOA KMO KJR CKCD KOWW KOIN KFWV KWSC KGW	KWSC	349	State College, Pullman, Wash.	500
9:30-10:00	KPO KFBK KLX KGO KRE KTAB KFWM	KFI KFWB KFON KNX KMTR KNRC KMJ KFQZ KFSD	KJR KGW KOWW KFOA KMO KOIN KFWV	KZM	240	West. Radio Inst., Oakland	50
10:00-10:30	KPO	KFON KFSD KFQZ KFI KNX KFWB	KOWW KGW				
10:30-11:00	KPO	KFON KFSD KFQZ KFI KNX KFWB	KOWW KGW				
11:00-11:30		KNX KFON	KOWW KGW				
11:30-12:00		KNX KFON	KOWW KGW				
12:00-1:00							

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(PATENT PENDING)

SCHEDULES FOR MONDAY

JULY 19, 1926

Pacific Time

Inland Stations

Corrected Weekly

a.m.	Inland
7:00-7:30	KSL
7:30-8:00	KYW
8:00-8:30	KYW
8:30-9:00	KYW
9:00-9:30	KYW
9:30-10:00	KYW
10:00-10:30	KYW
10:30-11:00	WFAA KTHS KFKX
11:00-11:30	KFKX
11:30-12:00	KFKX
12:00-12:30	WHB
12:30-1:00	WHB WFAA
1:00-1:30	
1:30-2:00	WDAF WFAA KDYL
2:00-2:30	KDYL WDAF WLS
2:30-3:00	KDYL WLS WFAA
3:00-3:30	WSB WDAF WWJ WTAM KDYL
3:30-4:00	WSB WDAF WWJ WTAM KDYL
4:00-4:30	WDAF WWJ KDKA KDYL
4:30-5:00	WDAF KYW WFAA KFKX
5:00-5:30	KDKA WHB WOAW WWJ WFAA WTAM
5:30-6:00	KDKA WOR WBAP KDYL WHE WTAM WWJ KOA WLW KSL KUOA
6:00-6:30	WTAM WCCO WOS WEAF WUAZ KSL WWJ WSB KOA WLW WJZ WKRC WHAD KDKA WBAP KDYL WSM WOR
6:30-7:00	WDAF WTAM WCCO WOS WEAF KOA KOB WHAZ WWJ WLW WJAD WGR KSL KUOA KDKA KDYL WFAA WSB WOR WJZ WKRC WBZ WCAP WCAU WHAD WEEI WSM PWX
7:00-7:30	WDAF WOAW KSD KOA WFAA WOR KTHS WTAM WOS WEAF WHAZ WEEI KFKX WCAU WWJ WKRC KOB KFCB WCCO WAHG KOIL WOO WJR PWX KSL WCAP WHAD WLW WJAD WJZ WGR KDYL CZE KPRC KMOX
7:30-8:00	WEAF WHAZ WTAM KSL WOS WHAD WOR KFKX WOAW WBAP KOA KDYL WJAD KTHS WWJ WKRC WLW KFCB WJZ WCCO WCAU WAHG KOIL WCAP WGR WJR KFAB PWX KSD WOO KPRC KMOX
8:00-8:30	KSD WOAW WHAZ KOA KTHS KSL WJZ WEAF WBAP WGR WJR KMOX KFKX WKRC WTAM WSM KFAB WAHG KOIL KFWA WLW KPRC
8:30-9:00	WKRC WTAM WJR KFKX KFWA WLW KSD WOAW WHAZ KOA KTHS WSM KSL WJZ WGR WAHG KOIL KMOX
9:00-9:30	WSB WKRC WTAM KOIL WJR WAHG KLZ KSL KFWA KMOX
9:30-10:00	WSB WKRC WTAM KLZ KOIL KFWA KMOX
10:00-10:30	WDAF KGU WKRC KLZ
10:30-11:00	WDAF KGU WKRC KLZ
11:00-11:30	KGU
11:30-12:00	
12:00-1:00	

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CZE	250	Dept. of Educ., Mexico City	1000
KDKA	309	Westinghouse E., Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFCB	238	Nielson Radio, Phoenix, Ariz.	100
KFKX	288	Westinghouse, Hastings, Neb.	5000
KFWA	261	Browning Bros., Ogden, Utah	500
KGU	270	The Advertiser, Honolulu, Ha.	500
KLZ	266	Reynolds Radio Co., Denver	250
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
KOB	349	State College, New Mexico	1000
KOIL	278	Mona Motor Oil, Coun. Bl., Iowa	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KTHS	375	Arlington Hotel, H. Spgs., Ark.	750
KUOA	300	U. of Ark., Fayetteville, Ark.	750
PWX	400	Int. T. & T. Co., Havana, Cuba	500
WAHG	316	A. H. Grebe, Rich Hill., N. Y.	1000
WBAP	476	Star-Telegram, Ft. Worth	1500
WBZ	333	West. Elec., Springfield, Mass.	2000
WCAP	469	C. & P. Tel. Co., Washington	500
WCAU	278	Hotel Pennsylvania, Phila.	500
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y. City	5000
WEEI	349	Edison Elec. Co., Boston	500
WFAA	476	Dallas News, Dallas, Texas	500
WGR	319	Federal Radio Corp., Buffalo	750
WHAD	275	Marquette Journal, Milwaukee	500
WHAZ	380	Rensselaer Inst., Troy, N. Y.	1000
WHB	366	Sweeney Auto Sch. K. C., Mo.	500
WJAD	353	Barton Mfg. Co., Waco, Tex.	500
WJR	517	Jewett Radio, Pontiac, Mich.	5000
WJZ	455	R. C. A. N. Y. City	40,000
WKRC	326	Kodel Radio, Cincinnati	1000
WLS	345	Sears, Roebuck, Chicago	5000
WLW	422	Crosley Co., Cincinnati	500-5000
WOAW	526	W. O. W., Omaha, Neb.	1000
WOR	405	Wanamaker's, Philadelphia	500
WOO	508	St. Mar. B., Jefferson City, Mo.	500
WOS	441	L. Bamberger, Newark, N.J.	500
WSB	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500
WTAM	389	Willard Battery, Cleveland, O.	3500

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PROGRAMS FOR MONDAY

JULY 19, 1926



Ray Fox
KTAB—8 p.m.



Dan O'Brien, Jr.
KPO—2:30 p.m.



Jerome Damonte
KGO—11:30 a.m.



Jack Coale
KGO—11:30 a.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles

General Electric Company, Oakland, Calif.

11:30 a. m. to 1 p. m.—Luncheon concert

12 noon—Time signal

12:30 p. m.—Weather bureau reports

1:30 p. m.—Stock and weather reports

3 to 4 p. m.—Edward H. Wiley, pianist; Muriel Barnes Schad, soprano; Audrey Sage, clarinet soloist and piano numbers by pupils of Aurora Thompson

5:30 to 6 p. m.—Aunt Betty stories; KGO Kiddies' Klub

6 to 6:55 p. m.—Bem's Little Symphony Orchestra

6:55 p. m.—News items; weather report; S.F. produce, grain, cotton and metals; stocks

8 p. m.—Educational program

Amphion Trio—

Waltz, "Serenade Suite".....Tschaikowsky

8:05 p. m.—Talk, "Commercial Egg Inspections" by H. G. Hamann, Federal, state inspector

Amphion Trio—

AdagioBeethoven

8:25 p. m.—"Better English." Wilda Wilson

Church

Amphion Trio—

MinuetGrieg

8:50 p. m.—Talk, "United States Government—

The Cabinet," Leroy R. Goodrich

Amphion Trio—

The Cave.....Schneider

9:15 p. m.—Talk, "Symposium on the New Education," by speaker from Williams Institute

Amphion Trio—

Selection, "Cavalleria Rusticana".....Mascagni

9:30 p. m.—Talk, "The Importance of Making

Wills," by Donovan O. Peters

Amphion Trio—

FantasiaFuchs

280 Meters **KOAC** 500 Watts

1070 Kilocycles

Oregon Agricultural College, Corvallis, Ore.

7:30 p. m.—Radiograms

8 p. m.—Boys' and Girls' Club news, H. C.

Seymour

7:45 p. m.—Talk, "Better Fall Wheat for Western Oregon," G. R. Hyslop

8:15 p. m.—Talk, "Digestive Disturbances in the Dairy Cow," Dr. B. T. Simms

8:30 p. m.—Talk, "The Prune Outlook." C. J.

Hurd

467 Meters **KFI** 4000 Watts
640 Kilocycles

Copyright 1926, E. C. Anthony, Inc., L. A.

5:30 p. m.—Varsity Ramblers, Wallace Dishman, director

6 p. m.—KFI nightly doings

6:15 p. m.—Radio travel guide

6:30 p. m.—George Wilder Cartwright

7 p. m.—Owen Fallon and his Californians;

Jackie Lucas, blues singer

8 p. m.—Semi-classical program

9 p. m.—Walter M. Murphy Motors Co. program

Featuring Marie Caselotti-Chico De Verde

Russian Quartet; Ray Harmon; Nicholas

Ochi-Albi, cellist. Broadcast simultaneously

by KFI, Los Angeles, and KPO, San Francisco

10 p. m.—Program by Meiklejohn Bros.

232 Meters **KFON** 500 Watts

1200 Kilocycles

Nichols & Warinner, Inc., Long Beach, Calif.

11:30 a. m. to 12:30 p. m.—Musical program

4 to 4:30 p. m.—Press-Telegram late news

5 to 6 p. m.—KFON Concert Orchestra

6 to 6:20 p. m.—Organ recital, State Theater

6:20 to 7 p. m.—KFON Concert Orchestra

7 to 8 p. m.—"Holsum" entertainment

8 p. m. to 12 a. m.—L. B. Advertising Club

program

252 Meters **KFWB** 500 Watts

1190 Kilocycles

Warner Brothers, Hollywood, California

4:45 to 5 p. m.—Agnes May Allen on home

economics

5 to 6 p. m.—Children's hour by Big Brother

6 to 7 p. m.—Pontiac Six dinner hour

7:30 to 8 p. m.—Program featuring Bill Blake,

June Parker and The Friendly Dentists

Orchestra

8 to 8:10 p. m.—News items

8:10 to 9:10 p. m.—Program featuring Raquel

Nieto, soprano; Peggy Mathews, blues singer;

Bob Robinson, 'cello, and The Sealy Tuftless

Mattress Orchestra

9:10 to 10:10 p. m.—Program featuring Julius

H. Phillips, tenor; Esther White, popular

songs; Ashley Sisters, Irma and Thelma, har-

mony numbers, and The American Dye Works

Orchestra

10:10 to 11 p. m.—News items followed by

Warner Bros Frolic

Monday Programs—Continued

428 Meters **KPO** **1000 Watts**
700 Kilocycles

Hale Bros. & The Chronicle, San Francisco

7, 7:30, 8 a. m.—Daily dozen, Y. M. C. A.
 10:30 a. m.—Ye Towne Cryer giving the U. S. weather forecast, amusement and general information

12 noon—Time signals and Scripture reading; weather forecast and market reports

12:10 to 1 p. m.—Cliff Hotel Concert Orchestra, Solite Heilbronner, director

1 to 2 p. m.—Rudy Seiger's Fairmont Hotel Orchestra

2:30 to 3:30 p. m.—Matinee program

Organ solos, Dan L. O'Brien—
 Medley of popular songs
 Readings, Nancy Buckley—
 The Little Pilgrims..... Buckley
 My Dream Garden..... Buckley

Banjo solos, Howard McNeil—
 I Would Rather Be Alone in the South
 Good Morning in Kentucky

Soprano solos, Malvina H. Cohn—
 Londonderry Air..... Bibb
 A Brown Bird Singing..... Wood

Organ solos, Dan L. O'Brien—
 Medley of popular selections

Readings, Nancy Buckley—
 Homesick..... Buckley
 The Net..... Buckley

Soprano solos, Malvina H. Cohn—
 To a Hill-Top..... Cox
 I Passed By Your Window..... Brake

Banjo solos, Howard McNeil—
 Lonah
 Hush-a-bye

Reading, Nancy Buckley—
 Alien..... Buckley

Soprano solos, Malvina H. Cohn—
 Were My Songs With Wings Provided
 Hahn

Gray Days..... Johnson

3:30 to 3:40 p. m.—"Breath of the Avenue"
 Fashion Notes

3:40 to 5:30 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobde, director

5:30 to 6:15—Children's hour, by Big Brother

6:15 to 6:30 p. m.—Ye Towne Cryer giving stock quotations, baseball scores and amusement and general information

6:30 to 7 p. m.—States Restaurant Orchestra, Waldemar Lind, director

7 to 7:30 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra

8 to 9 p. m.—Mandarin Cafe Orchestra, Clyde Sunderland, director

9 to 10 p. m.—KFI, Los Angeles, and KPO, San Francisco, broadcasting simultaneously a program originating in the KFI studio for the Walter M. Murphy Motors Company, Los Angeles and Stanley W. Smith, Inc., San Francisco

10 to 11 p. m.—Mandarin Cafe Orchestra, Clyde Sunderland, director

238 Meters **KMTR** **500 Watts**
1260 Kilocycles

K. M. Turner Corp., Hollywood, California

1 p. m.—Chester Baake, "Gardening"
 5 p. m.—Music hour featuring Gilletson Twin Sisters, Jack Searles, Dick Morton and Eldred Gaup

6 p. m.—Hawaiian Silver String Quintet
 7 p. m.—Intensive Farming, Charles Weeks

7:30 p. m.—Los Angeles Y. M. C. A. program

8 p. m.—KMTR Concert Orchestra

240 Meters **KTAB** **1000 Watts**
1260 Kilocycles

The Associated Broadcasters, Oakland, Cal.

9 to 9:30 a. m.—Prayer service, led by Rev. E. L. Spaulding

7 to 7:30 p. m.—Shopping hour
 8 to 10 p. m.—Studio program

Piano solos, Lillian Brandt Wright—
 Arabesque..... Arnold
 Two Larks..... Leschetzky

Baritone solos, James Isherwood—
 Song of the Sea..... Moussorgsky
 Song of Volga Boatman..... Chaliapin

Violin solos, Ray Fox—
 Adagietto..... Bizet
 The Hunt..... Garter-Kreissler

Address, F. H. Beckmann: Topic, "Personality"

Soprano solos, Madeline Darby—
 Thora..... Adams
 Roses of Love..... Squires

Piano solos, Lillian Brandt Wright—
 The Flatterer..... Chaminade
 Liebstraum No. 3..... Liszt

Baritone solos, James Isherwood—
 Tommy Lad..... Margetson
 Myra..... Clutsan

Violin solos, Ray Fox—
 The Dew Is Sparkling..... Rubinstein-Elman
 Spanish Dance, No. 8..... Sarasate

Soprano solos, Madeline Darby—
 Come Back to Sorrento..... de Curtis
 The Rosary..... Nevin

Violin solos, Ray Fox—
 The Lonely Wanderer..... Greig-Piastro
 Gypsy Airs..... Sarasate

Baritone solos, James Isherwood—
 Operatic Aria Di Provincia from Traviata,
 I Passed by Your Window..... Brahe

337 Meters **KNX** **500 Watts**
890 Kilocycles

L. A. Evening Express, Los Angeles, Calif.

7:30 a. m.—KNX morning gym
 8 a. m.—Inspirational talk

8:55 a. m.—Time signals and birthday notices
 9 a. m.—Radio shopping news

10 a. m.—Town Crier
 10:30 a. m.—Kate Brew Vaughan, director of Household Economics Dept.

12 noon—Leighton's Cafeteria Orchestra
 1:30 p. m.—The book worm

3 p. m.—Little Jean and the Town Crier
 4 p. m.—Helen's household hints

4:30 p. m.—Blue Monday frolic, Howard Clark
 4:55 p. m.—Market reports

5:30 p. m.—Leighton's Cafeteria Orchestra
 6 p. m.—The Town Tattler

6:15 p. m.—W. F. Alder travelogue
 6:30 p. m.—Atwater Kent Orchestra

7 to 11 p. m.—Studio program
 11 p. m.—Hotel Ambassador; Ray West's Co-coanut Grove Orchestra

508 Meters **KLX** **500 Watts**
590 Kilocycles

The Oakland Tribune, Oakland, California

7 to 7:30 p. m.—News broadcast
 8 to 9 p. m.—Fourteenth Community Night program by citizens and musicians of Salinas

9 to 10 p. m.—Weekly meeting of Protective Order of Lake Merritt Ducks

211 Meters **KFWO** **250 Watts**
1120 Kilocycles

Major Lawrence Mott, Avalon, California

12:30 to 1:30 p. m.—The Hotel St. Catherine Orchestra

6:30 to 7:45 p. m.—The Hotel St. Catherine Orchestra

(Programs continued on next page)

Monday Programs—Continued

208 Meters **KNRC** 250 Watts
1440 Kilocycles

Kierulff & Ravenscroft, Los Angeles, Calif.
1 to 3 p. m.—KNRC original blue Monday musical
7:50 to 8 p. m.—Live wire business announcements
8 p. m.—K. & R. courtesy program
9 to 10 p. m.—Jack Smith Orchestra and Entertainers

491 Meters **KGW** 1000 Watts
610 Kilocycles

The Morning Oregonian, Portland, Oregon
10 to 11:30 a. m.—Town Crier; music, weather report; household helps by Jeannette Putman Cramer; news items and shopping guide
12:30 to 1:30 p. m.—Concert
6 to 7 p. m.—Dinner concert; baseball scores
7:30 to 7:45 p. m.—Weather, markets, police reports; news items and sporting results
7:45 to 8 p. m.—Address, "A Service the Westerner Can Render His West," Col. Charles A. Simmons of Californians, Inc.
8 to 9 p. m.—Organ recital
9 to 10 p. m.—Vaudeville entertainment
10 to 12 p. m.—Dance music by Herb Wiedoeft's Cinderella Roof Orchestra

226 Meters **KFQZ** 250 Watts
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood
12 to 1 p. m.—Dave Ward's Merchant's Hour
6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String Trio and Frank Barry, the silver-toned tenor
8 to 8:30 p. m.—Studio program featuring Jack Wilson, Martha Mills and Art Goodstein
8:30 to 9 p. m.—Program courtesy Endo Laboratories
9 to 10 p. m.—Drake's Orchestra with Bob Swan, soloist
10 to 11 p. m.—Program featuring Evans Sibert, Edna Brisbane, Fred Lloyd and others

294 Meters **KTBI** 750 Watts
1020 Kilocycles

The Bible Institute, Los Angeles, California
8:30 to 9 a. m.—Devotional service
2 to 3 p. m.—Monday Club, Winifred Rouzee, speaker; Maurice Johnson, song leader; Mrs. Robt. Harkness, contralto; Keith L. Brooks, pianist
7:15 to 8 p. m.—Aunt Martha's Children's hour
8 to 9 p. m.—Musical program under direction of Mrs. Beyne, soprano

322 Meters **KOA** 5000-Watts
930 Kilocycles

General Electric Company, Denver Colorado
5:30 p. m.—Dinner concert, Brown Palace String Orchestra
6:30 p. m.—Sandman's hour
7 p. m.—Scheuerman's Colorado Orchestra
7:15 p. m.—Studio program, presenting the KOA Players in a historical play, "Border Lines," in four acts. Nineteen performers will be heard during this production under direction of Iris Ruth Gilmore; music between acts will be played by the KOA Orchestra, Lewis H. Chernoff, director

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SUPERTRON

A SERIAL NUMBER GUARANTEE
The Foremost Independent Tube in America

Monday Programs—Continued

268 Meters **KFRC** **50 Watts**
1120 Kilocycles
City of Paris Dry Goods Co., San Francisco
 10 to 11 a. m.—Household hints by Mary Lewis Haines, S. F. Cal!
 4:30 to 5:30 p. m.—Dance music by Ken Roth's Palm Garden Four
 5:30 to 6:30 p. m.—A. F. Merrell and his Stamp Club
 6:30 p. m.—The stage and screen
 6:30 to 7 p. m.—Jo Mendell and his Pep Band from the Lido Cafe
 7 to 7:30 p. m.—Goodfellows ad period
 8 to 9 p. m.—Around the camp-fire with Mac and weekly detective story by A. J. Kane of Kane Detective Agency
 9 to 9:30 p. m.—KFRC Hawaiians

207 Meters **KFWM** **250 Watts**
1450 Kilocycles
Oakland Educational Society, Oakland, Cal.
 8 to 10 p. m.—Studio program
 Orchestra selection, the Brown Family Duet, Margaret and Edna Lancaster—Smilin' Through
 Xylophone solo, Hubert Brown—The Bugle Boy
 Soprano solos, Mrs. Leola. V. Anderson—A May Morning
 I Love You
 News of the world, O. Allison
 Saxophone solo, Harold Jones—Lonesome
 Negro dialect reading, Mrs. Bessie A. Black
 Soprano solo, Miss Mary Richards—Just to Be With You
 Violin solo, Arthur James Young
 Bass solos, Jas. Roberts—Old Black Joe
 Mother
 Saxophone solo, Freeman Black
 Piano solos, Billy Jones
 Harp solo, T. E. Shaw
 'Cello solo, J. O. Jackson
 Violin solo, Clifford Brown
 St. Augustine Parish Club Quartet
 Tenor solo, Cary Brown—Daddy You've Been a Mother to Me

319 Meters **KOIN** **1000 Watts**
940 Kilocycles
H. B. Read, Portland, Oregon
 12 to 1 p. m.—Noon-day concert by Saxophone Shop Orchestra
 2 to 4 p. m.—News items, ad-o-grams, musical numbers
 6 to 7 p. m.—Dinner hour concert
 8 to 9 p. m.—KOIN Light Opera Ensemble
 9 to 10 p. m.—Portland Police Quartet

256 Meters **KRE** **100 Watts**
1170 Kilocycles
The Berkeley Gazette, Berkeley, California
 11:15 a. m.—Physical exercise for women conducted by Dorothy Barron
 5:30 p. m.—Current news
 8 to 10 p. m.—Play night—KRE Players under direction Ruth Taft will present "Interurban" by W. T. Marris

454 Meters **KFOA** **1000 Watts**
660 Kilocycles
Rhodes Department Store, Seattle, Wash.
 10 to 10:30 a. m.—The home-maker, by Mary Gordon
 10:30 to 10:45 p. m.—Health exercises for the housewife by Van
 10:45 to 11:10 a. m.—Cheerio to the shut-ins
 11:10 to 11:15 a. m.—Market quotations
 12:30 to 1:30 p. m.—Club luncheon program from C. of C. Bldg.
 4:15 to 5 p. m.—The Times afternoon at home
 6:25 to 6:45 p. m.—Sports and amusements
 6:45 to 8:15 p. m.—Studio program
 8:15 to 8:30 p. m.—Industrial news; weather report
 8:30 to 10 p. m.—The Times presents Goodrich Silvertown Cord Orchestra

256 Meters **KFUS** **50 Watts**
1170 Kilocycles
The Gospel Radio, Oakland, California
 10 a. m.—Hour of ministry

207 Meters **KGTT** **50 Watts**
1450 Kilocycles
Glad Tidings Temple, San Francisco, Calif.
 12:15 p. m.—Scripture reading, Rev. R. J. Craig

394.5 Meters **KHQ** **1000 Watts**
760 Kilocycles
Louis Wasmer, Inc., Spokane, Washington
 6 to 7 p. m.—Mann Bros. Davenport Hotel Orchestra
 8 to 9 p. m.—Tull & Gibbs program

300 Meters **KSL** **1000 Watts**
1000 Kilocycles
Cope and Johnson, Salt Lake City, Utah
 6:30 a. m.—Setting up exercises
 6:45 a. m.—Inspirational period
 7 a. m.—Setting up exercises
 7:15 a. m.—Cheerio period
 5:30 p. m.—Stories for the children by Uncle Ben
 6:15 p. m.—Weather, livestock, butter, egg and vegetable reports; farm flashes
 6:30 p. m.—Address
 7 p. m.—Program

384 Meters **KJR** **1000 Watts**
780 Kilocycles
N. W. Radio Service Co., Seattle, Wash.
 11:30 to 12 noon—Talk, "What to Prepare for Tonight's Dinner," Prudence Penny; Daily produce reports
 12 noon—Time signals
 5:40 p. m.—Stock quotations
 6 p. m.—Time signal; weather reports and the box office
 8:30 to 10 p. m.—Post-Intelligencer program
 10 p. m.—Time signal

333 Meters **KQW** **500 Watts**
900 Kilocycles
First Baptist Church, San Jose, California
 9:30 to 10:30 a. m.—Shopping guide
 6:30 to 6:50 p. m.—Farm flashes
 6:50 to 7 p. m.—Sperry Flour home service talk
 7 to 8 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks

(PATENT PENDING)

SCHEDULES FOR TUESDAY

Pacific Time

Pacific Coast Stations

JULY 20, 1926

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KJBS KTAB		
9:30-10:00	KJBS KQW	KMTR	KTCL
10:00-10:30	KJBS	KMTR	KFOA KGW KFWV
10:30-11:00	KPO	KFSG KNX	KFOA KGW KFWV
11:00-11:30	KRE KGO	KFSG KMTR	KFOA KGW
11:30-12:00	KGO	KFSG KFON	KJR CJCA
12:00-12:30	KGO KPO KGTT	KFSG KNX KFQZ KFON	
12:30-1:00	KGO KPO	KIJ KFOW KNX KFSD KFQZ	KFOA KGW KFWV
1:00-1:30	KPO	KIJ KFOW KFSD	KFOA KGW KFWV
1:30-2:00	KPO	KNX	
2:00-2:30	KJBS KFWW KGOKNX	KTBI	KGW KHQ
2:30-3:00	KPO KGO KFWW	KTBI KFSG KNX KFON	KGW KIJQ
3:00-3:30	KPO KLX KGO	KFON KFSG KMTR	KGW KJR KOIN
3:30-4:00	KPO KGO KLX	KFON KFSG	KJR KFWV
4:00-4:30	KPO	KFON KFSG KFQZ	KFEC KFOA
4:30-5:00	KPO	KFQZ	KFEC KFOA KFWV
5:00-5:30	KPO	KFWB KFON KMTR	KFWV
5:30-6:00	KFRC KPO KRE	KMTR KNX KFI KFWB KFON	
6:00-6:30	KZM KGO KFRC KPO	KFI KFSD KFQZ KMTR KFON KFOW KFWB KNX	KGW KFWV KHQ KOIN
6:30-7:00	KZM KPO KFRC KGO KQW KFUS	KNX KFI KFQZ KHJ KFSG KFON KMTR KFOW KFSD KFWB	KGW CJCA KFOA KIJQ KFWV KOIN
7:00-7:30	KGO KPO KFRC KLX KQW KTAB KFUS	KIJ KFI KNX KFSG KFOW KTBI KFON KMTR KSMR KFSD	KOWW CNRR KFOA KFWV KHQ KGW
7:30-8:00	KQW	KFWO KFI KFSG KNX KHJ KTBI KFON KFSD KSMR KMTR	KGW CNRR KPO KFWV KFOA
8:00-8:30	KPO KGO KFUS KFQB KGTT KFRC KTAB	KTBI KFI KNX KNRC KFON KFSG KIJ KFWB KMTR KFOW KPSN KSMR KFQZ KFSD	CNRR KFWV KOWW KGW KFOA KHQ KOIN
8:30-9:00	KFRC KFQB KPO KGO KFUS KTAB KGTT	KFON KFOW KFSD KNRC KNX KFSG KMTR KPSN KSMR KFI KHJ KTBI KFQZ KFWV KOWW	KJR CNRR KHQ KGW CFCN KFOA KOIN
9:00-9:30	KPO KFRC KRE KFOB KGTT KGOKRFB KTAB	KFI KIJ KNX KFON KNRC KSMR KFQZ	KGW KFOA KJR KOWW KHQ CFCN KFWV CNRY KOIN
9:30-10:00	KGO KPO KTAB	KFWB KMTR KNX KFRC KFQB KREKFI KGTT	KGW KFOA KJR CNRY CFCN KHQ KOWW KFWV
10:00-10:30	KFRC KPO KFOB	KNX KFQZ KFSD KFI KFWB KFON	CNRY KJR KGW CFCN KOWW
10:30-11:00	KPO KFQB KFRC	KFI KNX KFSD KFQZ KFWB KFON	KGW CNRY KJR KOWW
11:00-12:00	KFOB	KFON KNX	KGW CNRY KOWW KHQ

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CFCN	435	W. W. Grant, Calgary	3000
CNRR	312	Nat. Rys., Regina, Canada	2000
CNRV	291	Nat. Rys., Vancouver, Canada	500
KFEC	248	Meier & Frank Co., Portland	50
KFI	467	Earl C. Anthony, Inc., L. A.	4000
KFOA	454	Rhodes Co., Seattle, Wash.	1000
KFOB	226	KFOB, Inc., Burlingame, Cal.	50
KFON	232	Echophone Radio, Long Beach	500
KFQZ	226	Taft Radio, Hollywood, Cal.	50
KFRC	268	City of Paris D. G. Co., S. F.	50
KFSD	246	Air Fan Corp., San Diego, Cal.	500
KFSG	275	Angelus Temple, Los Angeles	500
KFUS	256	Gospel Radio, Oakland, Cal.	50
KFWB	252	Warner Bros., Hollywood, Cal.	500
KFWM	207	Oakland Educational Society	250
KFWO	211	Lawrence Mott, Avion, Cal.	250
KFWV	213	Sovereign Hotel, Portland, Ore.	50
KGO	361	Gen. Elec. Co., Oakland, Cal.	4000
KGTT	207	Glad Tidings Temple, S. F.	50
KGW	491	The Oregonian, Portland, Ore.	500
KHJ	405	The Times, Los Angeles, Cal.	500
KHQ	394	L. Wasmer, Inc., Spokane, Wn.	1000
KJES	220	Julius Brunton & Sons, S. F.	5
KJR	384	N. W. Radio Service, Seattle	1000
KLX	508	The Tribune, Oakland, Cal.	500
KMTR	238	K. M. Turner, Hollywood, Cal.	500
KNRC	208	Kierulff & Ravenscroft, L. A.	250
KNX	237	L. A. Express, Hollywood, Cal.	500
KOIN	319	H. B. Read, Portland, Ore.	1000
KOWW	256	F. A. Moore, Walla Walla, Wn.	500
KPO	428	Hale Bros. & Chronicle, S. F.	1000
KPSN	316	The Star-News, Pasadena	1000
KQW	333	1st Baptist Church, San Jose	500
KRE	256	The Gazette, Berkeley	100
KSMR	210	S. M. Ry. Co., Santa Maria	100
KTAB	240	Associated Broadcasters, Oak.	1000
KTBI	294	Bible Institute, Los Angeles	750
KTCL	306	Am. Radio Tel. Co., Seattle	1000
KZM	240	West. Radio Inst., Oakland	50

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(PATENT PENDING)

SCHEDULES FOR TUESDAY

JULY 20, 1926

Pacific Time

Inland Stations

Corrected Weekly

a.m.	Inland
8:00-8:30	KYW
8:30-9:00	KYW
9:00-9:30	KYW
9:30-10:00	KYW
10:00-10:30	KYW
10:30-11:00	WFAA KFKX
11:00-11:30	KOA KFKX
11:30-12:30	KOA KFKX
12:00-12:30	WHB
12:30-1:00	WHB WFAA
1:00-1:30	WOC
1:30-2:00	WDAF WFAA KDYL
2:00-2:30	KDYL WDAF
2:30-3:00	KDYL KOA WFAA
3:00-3:30	WSB WDAF WWJ KOA WFAA KFAB KDYL
3:30-4:00	WSB WWJ KFKX KDKA WFAA KFAB KDYL KOA
4:00-4:30	WOR WOAW WOC KFKX KDYL
4:30-5:00	WDAF WOAW WOC WFAA KFKX
5:00-5:30	WWJ WFAA WREO WLW KYW KOIL KDKA WOAW KOA WGBS
5:30-6:00	WWJ WOC KOA WREO WLW KYW KOIL WBAF KDYL KDKA WGY
6:00-6:30	KSD WMAQ WGY WDAF WLW WREO KOIL WSB WBAF WHB KDYL KDKA KYW WGBS WWJ WCCO WOC KSL KOA WEAR WCBF KLDS WENR
6:30-7:00	KDKA KYW WOAI WREO KOA WFAA WOC KFAB WGY KSD KDYL WSB WJZ KOIL KFAU KSL WLW WHB WMAQ WGN WRC WENR
7:00-7:30	WFAA KYW KSD WOAW WOAI WCAU WHB KTHS WIP WDAF WGBS KDYL WGN WGY WOC PWX WJR WRC KMOX KFAU KFAB WMAQ WEAR WENR WWJ WJZ WJY CZE WCX KSL WBZ WLW WCCO WEBH WCBF KLDS KLZ WJAZ
7:30-8:00	WJZ WCCO WCBF WRC WENR KYW WCAU KTHS WIP WDAF WGBS WHB WEAR WLW WGY KFAB WBZ WHT KSL WOC WMAQ WEBH WBAF KSD WOAW WOAI WJY KFAU WCX KDYL KMOX KLZ PWX WGN WJAZ
8:00-8:30	KDYL KFAB WGBS WIP WMAQ KMOX WRC WOAI WKRC WDAF PWX WLIB WBCN KYW KFAU WTAM WHT WEAR WJZ KSL WBAF WOAW KSD WQJ WSM WOK WCX KTHS WJAZ WJY
8:30-9:00	WOAW WQJ WIP KSL KYW WLIB WJY KDKA KSD WKRC KDYL WMAQ KFAU WGBS WDAF WJZ WBCN WJAZ WEAR WSM WOK WCX WTAM WHT
9:00-9:30	WOK WQJ WSB WFAA KFUR KYW KOIL KDKA WKRC WBCN WCX WOAW WEBH WSM WLIB WJAZ WIT KMOX
9:30-10:00	WSB WFAA KFUR WOAW WEBH KYW WSM WOK WCX WJAZ WHT KMOX KOIL WQJ WKRC WBCN WLIB
10:00-10:30	WDAF WOAW KFUR KGU WEBH WCX WQJ WBCN WOK
10:30-11:00	WDAF WOAW KFUR KGU WEBH WCX WQJ WBCN
11:00-11:30	KGU WBCN KYW
11:30-12:00	KGU WBCN KYW

STATION DIRECTORY

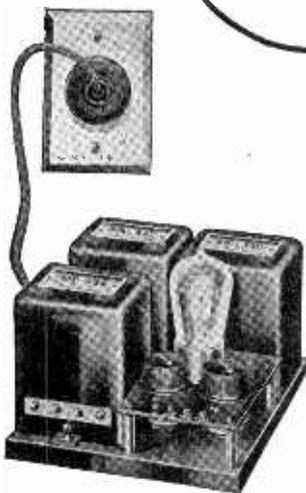
Call	Meters	Owner and Location	Power
CZE	350	Dept. of Edu., Mexico City	1000
KDKA	309	Westinghouse, E., Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFAU	250	Public Schools, Boise, Idaho	750
KFKX	288	Westinghouse, Hastings, Neb.	5000
KFUR	224	Orden, Utah, Peery's Bldg.	50
KGU	270	The Advertiser, Honolulu, Ha.	500
KLDS	441	Ch. of Christ, Independ'ce, Mo.	100
KLZ	266	Reynolds Radio Co., Denver	500
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
KOIL	278	Mona Motor Oil, Coun. Bl., Iowa	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KTHS	375	Arlington Hotel, H. Sprgs., Ark.	750
KYW	536	Westinghouse Elec., Chicago	3500
PYW	400	Int. T. & T. Co., Havana	500
WBAP	476	Star-Telegram, Ft. Worth	1500
WBCN	266	Southtown Econ. Sta., Chicago	500
WCAU	278	Hotel Pennsylvania, Phila.	500
WCBF	345	W. G. Voliva, Zion, Ill.	5000
WCCO	416	Wash.-Crosby, Minneapolis	5000
WCX	517	Free Press, Pontiac, Mich.	2500
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y.	5000
WEAR	389	Goodyear Tire & Rubber Co.	1000
WEHR	370	Edgewater Hotel, Chicago	1500
WEET	349	Edison Elec. Co., Boston	500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGBS	316	Gimbel Bros., New York	500
WGN	303	Chicago Tribune, Chicago	1000
WGR	319	Federal Radio Corp., Buffalo	750
WGY	380	Gen. Elec. Co., Schenectady	5000
WHB	366	Sweeney Auto Sch., K. C., Mo.	500
WHT	400	Radiophone Corp., Chicago	3500
WIP	508	Gimbel Bros., Philadelphia	500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJY	405	R. C. A., N. Y. City	1000
WJZ	455	R. C. A., N. Y. City	40,000
WKRC	326	Kodol Radio, Cincinnati	1000
WLIB	303	Liberty Weekly, Elgin, Ill.	4000
WLS	345	Sears, Roebuck, Chicago	5000
WLW	422	Crosley Co., Cincinnati	500-5000
WMAQ	448	Chicago Daily News	1000
WOAI	394	S. Equip. Co., San Ant., Tex.	2000
WOAW	526	W. O. W., Omaha, Neb.	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Neutrowound, Homewood, Ill.	5000
WOR	405	L. Bamberger, Newark, N. J.	500
WQJ	448	Cal. Bak. Powder Co., Chicago	500
WRC	469	R. C. A., Washington, D. C.	1000
WREO	286	Reo Motor Co., Lansing, Mich.	500
WSE	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500
WTAM	389	Willard Battery, Cleveland, O.	3500
WWJ	353	Detroit Evening News	1000

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The S-M “Plug-In B” will operate any type of set, no matter what it is. It will handle the largest power tubes (especially the new UX171 soon due), and it will supply “A” and “C” power for audio amplifier tubes, too.

The “Plug-In B” never runs down, never is noisy—and will give constant, ample power long after you’ve spent three or four times its cost for dry cells.

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The 220 and 221 Audio Transformers

A Silver-Marshall audio transformer with a guarantee!—nothing less than a promise that it’s better than anything you’ve ever heard—bar nothing.

The 220 audio, and 221 output transformers, are designed for the new power tubes as well as present day tubes.

Big, husky, solid—they usher in a new principle in audio equipment—the falling high frequency characteristic that means no hiss or noise—and quality such as you’ve simply never heard.

A pair of 220’s and a 221 put into your present set will convince you of what radio reception can be. And remember, these transformers are unconditionally guaranteed to give better quality than any audio amplifier you’ve ever heard—resistance, impedance, any type at all. \$6.00 each.

Long Wave Transformers

The Silver-Marshall laboratories have perfected a new and radical method of transformer measuring that insures an unbelievable degree of selectivity and sensitivity to weak signals. The 210 and 211 long wave transformers are tested with equipment approximating actual receiving conditions and actual amplification to the fraction of one percent is predicted in the tests that these transformers have to pass. Type 210 is an untuned iron core transformer and 211 a sharply tuned air core filter. Supplied measured in any quantity for 199 or 201A type tubes, \$6.00 each.

Silver-Marshall, Inc.

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Pacific Coast Representative

ERNEST WALKER SAWYER

New Chronicle Bldg., San Francisco 824 E. 7th St., Los Angeles

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A New 'A' - 'B' - 'C' Battery Eliminator

Gerald M. Best has developed a new "A," "B" and "C" battery eliminator for operating the Browning Drake Receiver. The many users of Browning Drake Sets can now enjoy batteryless operation by installing this new device. It can be assembled in a few hours. The cost is surprisingly low. Full instructions for building it will be found in "RADIO" for August—out on July 25th. We advise you to order your copy now. The August issue will sell out in a hurry. Send the coupon and \$1.00 for a special six month trial subscription.

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PROGRAMS FOR TUESDAY

JULY 20, 1926



E. Harold Dana
KTAB—Announcer



Harrison Coles
KGO—8 p.m.



Cyrus Trobbe
KPO—9 p.m.



George Von Hagel
KPO—9 p.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles

General Electric Company, Oakland, Calif.

10:45 to 11:30 a. m.—Literary hour, Wilda Wilson Church

11:30 a. m. to 1 p. m.—Luncheon concert

12 noon—Time signal

12:30 p. m.—Weather bureau reports

1:30 p. m.—Stock and weather reports

2 to 4 p. m.—Alexander and Lavenson Electrical Supply Co. program

6 to 6:55 p. m.—Bem's Little Symphony Orchestra

6:55 p. m.—News items; weather report; baseball scores; S.F. produce, grain, cotton and metals; stock reports

8 to 9 p. m.—Eveready program

Valencia Orchestra—

Selections, "The Vagabond King".....Friml

Rendezvous Valse.....Rosey

Tenor solos, Harrison L. Coles—

Come to My Dreams, Beloved.....Campbell

You Came at Dawning.....Ebbille

Valencia Orchestra—

March, "Merry Widow".....Lehar

Vision of Salome.....Joyce

Baritone solos, G. Franklyn Roberts—

At the End of the Sunset Trail.....Hanson

At Sundown.....Denniker

Valencia Orchestra—

Two Old Dance Tunes:

Dancing in the Barn.....Turner

Popularity—March and Two Step.....Cohan

Tenor solos, Harrison L. Coles—

The Barefoot Trail.....Wiggers

The Garden of Your Heart.....Dore

Valencia Orchestra—

On the Bosphorus.....Lincke

The Perfect Melody.....O'Hara

9 to 10 p. m.—The Pilgrim's hour

316 Meters **KPSN** 1000 Watts
950 Kilocycles

The Star-News, Pasadena, California

6 to 6:15 p. m.—Dinner time news reports

7:50 to 8 p. m.—Current sport events discussed

by Charles W. Paddock, champion sprinter

8 to 9 p. m.—Star-News concert hour with Star-News Ensemble, Henri J. van Praag, director; George Frenger, tenor soloist

467 Meters **KFI** 4000 Watts
640 Kilocycles

Copyright 1926, E. C. Anthony, Inc., L. A.

5:30 p. m.—Rendezvous Ballroom Orchestra

6 p. m.—KFI nightly doings

6:15 p. m.—KFI radio travel guide

6:30 p. m.—Edna Cook and Billie Henderson

6:45 p. m.—KFI radiatorial period

7 p. m.—Virginia Ballroom Orchestra

8 p. m.—Screen Artists' Quartet

9 p. m.—Ernest R. Ball, composer and Company, with Edna Kellogg, soprano; Mildred Carroll, pianist; Gretchen Brendell, mezzo-soprano; Anne Sherman, cellist; Mary Bennett

10 p. m.—Packard Radio Club

294 Meters **KTBI** 750 Watts
1020 Kilocycles

The Bible Institute, Los Angeles, California

8:30 to 9 a. m.—Devotional service

2 to 3 p. m.—Inspirational hour

7:15 to 8 p. m.—Aunt Martha's Children's hour

8 to 9 p. m.—Studio program, Rev. L. W. Guilford, pastor Church of God, director

226 Meters **KFQZ** 250 Watts
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood

12 to 1 p. m.—Dave Ward's Merchant's Hour

4 to 5 p. m.—Dorothy's Personal Service Hour

6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String

Trio and Frank Barry, the silver-toned tenor

8 to 9 p. m.—Ballad hour featuring Lee Bolin and Lillie Bellamy

9 to 10 p. m.—Joe Martin's Famous Studio Six

Dance Orchestra with Eunice Wynn, soloist

10 to 11 p. m.—Program featuring Phil Neeley, Joe Carr, Clarise Russell and others

476 Meters **CNRR** 2000 Watts
630 Kilocycles

Canadian National Railways, Regina, Sask.

7 p. m.—Kiddies' bedtime story by Aunt Jenny

Studio program of vocal and instrumental numbers

Tuesday Programs—Continued

428 Meters 1000 Watts
700 Kilocycles KPO

Hale Bros. & The Chronicle, San Francisco

- 7, 7:30, 8 a. m.—Daily dozen given by Y.M.C.A.
- 10:30 a. m.—Ye Towne Cryer giving the U. S. weather forecast, amusement and general information and market reports
- 12 noon—Time signals, scripture reading, weather forecast and market reports
- 12:10 to 1 p. m.—Clift Hotel Concert Orchestra, Sollie Heilbronner, director
- 1 to 2 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
- 2:45 p. m.—Play by play of baseball game
- 4:30 to 5:30 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobbe, director
- 5:30 to 6:15 p. m.—Children's hour by Big Brother
- 6:15 to 6:30 p. m.—Ye Towne Cryer giving stock quotations, baseball scores, amusement and general information
- 6:30 to 7 p. m.—States Restaurant Orchestra, Waldemar Lind, director
- 7 to 7:30 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
- 8 to 9 p. m.—Program for the H. O. Harrison Company
- 9 to 10 p. m.—Program for the Mona Motor Oil Company
- Mona Motor Oil Trio, Cyrus Trobbe, violin; George von Hagel, 'cello; Jean Campbell, piano—
- Prelude.....Kistler
- Harmony Team, Gypsy and Marta—
- If I Knew I'd Find You
- Old Timers
- Baritone solo, James Isherwood—
- Tempest of the Heart from "Il Trovatore".....Verdi
- Mona Motor Oil Trio—
- Told at Twilight.....Hueter
- Harmony Team, Gypsy and Marta—
- Drifting Apart
- Just a Cottage Small
- Violin solo, Cyrus Trobbe
- Baritone solo, James Isherwood—
- Pleading.....Elgar
- Mona Motor Oil Trio—
- Serenade.....Ciappi
- Harmony Team, Gypsy and Marta—
- A Novelty
- The Swallow
- Baritone solo, James Isherwood—
- Homing.....del Riego
- Mona Motor Oil Trio—
- Valse Gentile.....Nevin
- Baritone solo, James Isherwood—
- I Heard You Go By.....Wood
- 10 to 11 p. m.—Clift Hotel Dance Orchestra, Herb Meyerinck, director

211 Meters 250 Watts
1420 Kilocycles KFWO

- Major Lawrence Mott, Avalon, California**
- 12:30 to 1:30 p. m.—St. Catherine Orchestra
- 6 to 6:30 p. m.—Chimes
- 6:30 to 7:30 p. m.—St. Catherine Orchestra
- 7:30 to 9 p. m.—Band concert

508 Meters 500 Watts
590 Kilocycles KLX

- The Oakland Tribune, Oakland, California**
- 3 p. m.—Baseball
- 7 to 7:30 p. m.—News broadcast

240 Meters 1000 Watts
1250 Kilocycles KTAB

The Associated Broadcasters, Oakland, Cal.

- 9 to 9:30 a. m.—Prayer service, led by Rev. Geo. W. Phillips
- 7 to 7:30 p. m.—Shopping hour
- 8 to 9 p. m.—Studio program, part I
- Pasmore Trio—
- "Gems" from Tschaikowsky
- Kamanoi Ostrow.....Rubinstein
- Soprano solos, Ruth May Friend—
- Listen to the Mocking Bird.....Hawthorne
- Last Night (with flute).....Kjerulf
- Dear Evelina
- Pasmore Trio—
- Suite of Dances.....German
- Soprano solos, Ruth May Friend—
- I Dreamt I Dwelt in Marble Halls.....Balfe
- One Fine Day (Madame Butterfly).....Puccini
- Pasmore Trio—
- Berceuse.....Brahms
- Soprano solos, Ruth May Friend—
- Whenever a Little Child Is Born
- Benediction
- The Vagrant Wing
- Pasmore Trio—
- Scherzo.....Mendelssohn
- 9 to 10 p. m.—Part II, featuring members of KTAB Quartet, Ida Fording, organist and accompanist, and Marie Wallman, soprano—
- A Heart That's Free.....Robyn
- My Desire.....Cadman
- Robin Adair.....Keppel
- Carry Me Back to Old Virginny.....Bland
- Home Sweet Home.....Bishop
- Aria, Retative and Cavatina.....Verdi
- Serenade.....Poselli
- 10 to 11 p. m.—Part III, featuring Harry Tallman, violinist, and his instrumental quartet; Harold Dana, baritone; Gwynfi Jones, tenor

238 Meters 500 Watts
1260 Kilocycles KMTR

K. M. Turner Corp., Hollywood, California

- 9:30 a. m.—Sylvia, "The Blind Cook"
- 10 a. m.—Dr. T. J. Coulter will talk on "Cats and Dogs"
- 11 a. m.—Mme. Alene's Shopping Tours
- 3 p. m.—Rev. S. J. Skevington, pastor of Hollywood Baptist Church
- 5 p. m.—Home Hour conducted by Mammy Simmons. "Citizenship Hour," with Western Rangers and Campfire Girls
- 6 to 7 p. m.—Popular entertainment
- 7 p. m.—E. P. Barclay, African explorer and diamond expert
- 8 p. m.—Dance Orchestra
- 9 p. m.—Henry Halstead Dance Orchestra and Entertainers

208 Meters 250 Watts
1440 Kilocycles KNRC

Kierulff & Ravenscroft, Los Angeles, Calif.

- 7:50 to 8 p. m.—Live wire business announcements
- 8 p. m.—Novelty program
- 9 to 10 p. m.—Johnny Turk's Melody Boys and Entertainers

291 Meters 500 Watts
1030 Kilocycles CNRV

Canadian National Railways, Vancouver, B.C.

- 9 p. m.—Studio program featuring The Two Jacks, Churchill and Ternstrand in popular songs, assisted by Len Holland, accordionist, and Jack McGinnis, banjo and violin
- 10:30 p. m.—Cabaret Belmont Orchestra, playing from Rose Room of Hotel Belmont

(Programs continued on next page)

Tuesday Programs—Continued

337 Meters **KNX** **500 Watts**
890 Kilocycles
L. A. Evening Express, Los Angeles, Calif.
 7:30 a. m.—KNX morning gym
 8 a. m.—Inspirational talk
 8:55 a. m.—Time signals and birthday notices
 9 a. m.—Radio shopping news
 10 a. m.—Town Crier
 10:30 a. m.—Kate Brew Vaughan, director of Household Economics Dept.
 12 noon—Leighton's Cafeteria Orchestra
 1:30 p. m.—The Book Worm
 2 p. m.—Mothers' Hour, an hour of music and educational talks in the interests of children; Town Crier of the day
 4:55 p. m.—Market reports
 5:30 p. m.—Leighton's Cafeteria Orchestra
 6 p. m.—The Town Tattler
 6:15 p. m.—W. F. Alder travelogue
 6:30 p. m.—Atwater Kent Orchestra
 7 to 11 p. m.—Studio program
 11 p. m.—Hotel Ambassador; Ray West's Coconut Grove Orchestra

252 Meters **KFWB** **500 Watts**
1190 Kilocycles
Warner Brothers, Hollywood, California
 4:45 to 5 p. m.—Agnes May Allen on home economics
 5 to 6 p. m.—Children's hour by Big Brother
 6 to 7 p. m.—Pontiac Six dinner hour
 8 to 8:10 p. m.—News items
 8:10 to 8:40 p. m.—Program featuring Esther White, popular songs; Bill Blake, tenor, and The Morola Orchestra
 8:40 to 9:10 p. m.—Program featuring Ann Grey, blues singer; Julius H. Phillips, tenor; Bill Hatch's Orchestra
 9:10 to 10:10 p. m.—Program featuring Art Pabst, Esther White, popular songs; Julius H. Phillips, tenor; Bill Hatch's Orchestra
 10:10 to 11 p. m.—News items followed by Warner Bros. frolic

232 Meters **KFON** **500 Watts**
1200 Kilocycles
Nichols & Warinner, Inc., Long Beach, Calif.
 11:30 to 12:30 p. m.—Music; late news reports
 2:20 to 4 p. m.—Municipal band concert
 4 to 4:30 p. m.—Press-Telegram late news
 5 to 6 p. m.—KFON Concert Orchestra
 6 to 6:20 p. m.—Organ recital, State Theater
 6:20 to 7 p. m.—KFON Concert Orchestra
 7 to 7:15 p. m.—Nick Harris Detectives
 7:15 to 7:30 p. m.—Band box program
 7:30 to 8 p. m.—Hewitt's chat for book lovers
 8 to 9 p. m.—Press-Telegram program
 9 to 10:30 p. m.—Aero Club program
 10:30 to 12 p. m.—State Theater frolic, featuring Pantages vaudeville acts

300 Meters **KSL** **1000 Watts**
1000 Kilocycles
Cope and Johnson, Salt Lake City, Utah
 6:30 a. m.—Setting up exercises
 6:45 a. m.—Inspirational period
 7 a. m.—Setting up exercises
 7:15 a. m.—Cheerio; daily strength
 6:15 p. m.—Weather, livestock, butter, egg and vegetable reports; mining quotations; farm flashes
 6:30 p. m.—Program

491 Meters **KGW** **1000 Watts**
610 Kilocycles

The Morning Oregonian, Portland, Oregon
 10 to 11:30 a. m.—Town Crier; music, weather report, household helps by Jeanette Putman Cramer, news items and shopping guide
 12:30 to 1:30 p. m.—Concert
 2 to 3:30 p. m.—Women's matinee, talks, lectures and music
 6 to 7 p. m.—Dinner concert
 7 to 7:30 p. m.—Children's program by the Atwater Kent boys, "Doug" and Fred Richardson
 7:30 to 7:45 p. m.—Weather, market and police reports, news items and sporting results
 8 to 10 p. m.—Educational program, talk, "Crater Lake National Park," R. W. Price; talk, "Intelligent Use of the Camera"; thrift talk, George P. Simons; music by Alicia McElroy String Quartet
 10 to 12 p. m.—Dance music from Multnomah Hotel featuring Herman Kenin's Dance Orchestra and intermission piano solos by Curt Kramer

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ELECTRAD
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Tuesday Programs—Continued

268 Meters KFRC 50 Watts
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco
 5:30 to 6:30 p. m.—Mac and his gang
 6:30 p. m.—Stage and screen
 6:30 to 7 p. m.—Fred McKinley of Bigin's Cafe in popular songs
 7 to 7:30 p. m.—Goodfellow's ad period
 8 to 9:30 p. m.—Studio program featuring Edythe Jessica West, soprano; Geo. Black, bass; Thiel Vyshala, mezzo-soprano
 9:30 to 11 p. m.—Dance music by Balconades Ballroom, Walter Krausgrill's Orchestra and Wm. Backstedt's Old-Time Band
 10 p. m.—Time signals
 11 to 12 p. m.—Organ concert

226 Meters KFOB 50 Watts
1330 Kilocycles

KFOB, Incorporated, Burlingame, California
 8 to 9 p. m.—Concert program featuring Mrs. C. N. Kirkbride, contralto; Mrs. Gerald Anthony, soprano; Adolph Hansen, violinist and Ray G. Tinney, tenor and marimbaist
 Short talks by business men on "Civic Responsibility"
 9 to 10 p. m.—Open House Entertainers, led by Miss Patsy, Rod Smith and Carl Winge
 10 to 12 p. m.—Dance orchestra

207 Meters KFWM 250 Watts
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.
 2 to 2:45 p. m.—Studio program
 Organ solo, Mrs. T. E. Shaw
 Soprano solos, Mable Taft—
 Mother o' Mine.....Tours
 The Birth of Morn.....Leoni
 Violin solos, Elizabeth Peacock—
 Serenade.....Schubert
 Flower Song.....Lange
 Educational talk, "Earth's New Kingdom,"
 V. R. Molin
 Violin solo, Elizabeth Peacock—
 Ava Maria.....Gounod
 Soprano solo, Mabel Taft—
 Homing.....del Riego
 Organ solo, Mrs. T. E. Shaw

256 Meters KRE 100 Watts
1170 Kilocycles

The Berkeley Gazette, Berkeley, California
 11:15 a. m.—Physical exercise for women conducted by Dorothy Barron
 5:30 p. m.—Current news
 9 p. m.—Studio program
 Travelogue, "The Experiences of a Motorist in Europe," Prof. Wm. S. Morgan
 Review, "The Revolt of Modern Youth" by Mrs. Elizabeth Anderson, Berkeley Police Department
 Book review, Mrs. Bessie Chapman
 Talk, Leah Hall Wisler

220 Meters KJBS 5 Watts
1360 Kilocycles

Julius Brunton & Sons Co., San Francisco
 9 to 10:40 a. m.—Vocal, instrumental selections
 2 to 2:30 p. m.—Vocal, instrumental selections

256 Meters KFUS 50 Watts
1170 Kilocycles

The Gospel Radio, Oakland, California
 6:30 p. m.—Children's Bible story hour
 6:45 p. m.—Bible reading, modern translation
 7 p. m.—KFUS Gospel radio vesper service, Mrs. A. A. Story, leading. Day Is Dying In the West, chorus; God Moves in a Mysterious Way, quartet; Scripture and prayer; Beloved, Now Are We King's Business, duet and chorus; Sweet Will of God, chorus
 8 p. m.—Musical concert by KFUS Orchestra

207 Meters KGTT 50 Watts
1450 Kilocycles

Glad Tidings Temple, San Francisco, Calif.
 12:15 p. m.—Scripture reading, Rev. R. J. Craig
 8 to 10 p. m.—Studio program of sacred music

394.5 Meters KHQ 1000 Watts
760 Kilocycles

Louis Wasmer, Inc., Spokane, Washington
 2 to 3 p. m.—Radio Trades Ass'n program
 6 to 7 p. m.—Mann Bros. Davenport Hotel Orchestra
 7 to 8 p. m.—Chase Engineering Co. program
 8 to 9 p. m.—Variety program
 9 to 10 p. m.—Spokane Battery & Ignition Co. program

454 Meters KFOA 1000 Watts
660 Kilocycles

Rhodes Department Store, Seattle, Wash.
 10 to 10:30 a. m.—The homemaker, by Mary Gordon
 10:45 to 11:10 a. m.—Cheerio to the shut-ins
 11:10 to 11:15 a. m.—Market quotations
 12:30 to 1:30 p. m.—Luncheon program
 4:15 to 5 p. m.—The Times "afternoon at home"
 5:55 to 6:25 p. m.—The Atwater Kent boys, Doug and Fred; children's program
 6:25 to 6:45 p. m.—Sports and amusements revue
 6:45 to 7 p. m.—American Institute of Banking
 7 to 8 p. m.—Olympic Calpet Refining Co.
 8 to 8:15 p. m.—Sports talk
 8:15 to 10 p. m.—Studio program

384 Meters KJR 1000 Watts
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.
 11:30 to 12 noon—Talk, "What to Prepare for Tonight's Dinner," Prudence Penny. Daily produce reports
 12 noon—Time signal
 3 to 4 p. m.—Program
 5:40 p. m.—Stock quotations
 6 p. m.—Time signal, weather reports and "The Box Office"
 8:30 to 10 p. m.—Puget Sound Savings & Loan Assn. Orchestra directed by Henri Damski
 10 p. m.—Time signal
 10 to 11 p. m.—Nute Motor Company program

333 Meters KQW 500 Watts
900 Kilocycles

First Baptist Church, San Jose, California
 9:30 to 10:30 a. m.—Shopping guide
 6:30 to 6:50 p. m.—Farm flashes
 6:50 to 7 p. m.—Sperry Flour home service talk
 7 to 8 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks

(PATENT PENDING)

SCHEDULES FOR WEDNESDAY

JULY 21, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KJBS KTAB KGO		
9:30-10:00	KJBS KQW KGO		KTCL
10:00-10:30	KJBS KFRC KFUS KGO	KMTR	KFOA KGW KFWV
10:30-11:00	KFRC KPO	KFSG KNX	KFOA KGW KFWV
11:00-11:30	KRE KGO	KFSG	KGW
11:30-12:00	KGO	KFSG KFON	KJR CJCA
12:00-12:30	KGO KPO KGTT	KFSG KFON KNX KFQZ	KOWW
12:30-1:00	KGO KPO	KHJ KFOW KNX KFSD KFQZ	KFOA KGW KFWV KOWW
1:00-1:30	KPO	KFWO KHJ KFSD	KFOA KGW KFWV
1:30-2:00	KPO	KNX	CFEN
2:00-2:30	KJBS KFWW KGOKTBI		
2:30-3:00	KPO KGTT KGO KFWW	KHJ KFSG KFON KTBI	
3:00-3:30	KGO KPO KGTT KLX	KFSG KFON KNX	
3:30-4:00	KGO KPO KLX	KFSG KFON	KFWV
4:00-4:30	KPO KFRC	KFSG KFON KNX	KFEC KFOA
4:30-5:00	KPO KFRC	KFSG	KFEC KFOA KFWV
5:00-5:30	KPO KFRC	KFSG KMTR KFON KFWB	KFWV
5:30-6:00	KRE KGO KPO KFRC	KFI KFOW KNX KMTR KFON	CNRW
6:00-6:30	KGO KZM KPO KFRC	KFI KMTR KFSD KFQZ KFON KFWB KNX	KMO KFWV KGW KTCL
6:30-7:00	KGO KPO KZM KFRC KQW	KHJ KFOW KNX KFQZ KFOW KFSG KFI KFSD KFON KMTR	KMO CNRW KFWV CKCK KFOA CJCA KGW KTCL
7:00-7:30	KPO KGO KFIC KLX KQW KTAB	KHJ KFSG KNX KFI KFWO KTBI KFON KFSD KMTR KNRC	KFOA CNRW KOWW KFWV
7:30-8:00	KQW	KFI KPCC KFOW KTBI KFON KMJ KNX KHJ KNRC KFSD KFWB KMTR	CNRW KFOA KOAC KJR KFWV KGW
8:00-8:30	KPO KLX KFRC KGTT KQW KFUS KGO	KNX KPCC KFOW KMTR KFWB KTBI KFI KFON KNRC KHJ KMJ KFQZ KFSDKWSC KOWW	CFCT KGW CNRW KFOA CJCA KJR KFWV
8:30-9:00	KPO KLX KFRC KQW KGTT KFUS KGO	KMTR KNX KTBI KNRC KFI KFON KHJ KMJ KFWB KFQZ KFSD KFOW	CFCT KWSC CNRW CJCA CKCD KGW CFEN KFWV KFOA KOWW
9:00-9:30	KGTT KFRC KLX KPO KQW KGO	KFI KHJ KFWB KNX KMTR KFON KMJ KFSD KFQZ KNRC	CKCD CFCT KGW KOWW KTCL CJCA KWSC KMO CFEN CNRW KFWV KFOA
9:30-10:00	KFRC KGTT KLX KPO KGO	KFI KHJ KFWB KNX KMTR KFON KMJ KFSD KFQZ KNRC	CKCD KOWW CNRW CJCA KMO KFWV KFOA
10:00-10:30	KFRC KPO KGO	KFI KNX KFQZ KFON KFWB KFSD	KOWW KJR KFWV
10:30-11:00	KFRC KPO KGO	KFI KNX KFQZ KFON KFWB KFSD	KOWW KJR KFWV
11:00-12:00	KFRC KGO	KNX	KOWW KFWV

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CFEN	435	W. W. Grant, Calgary	3000
CFCT	330	Geo. W. Deaville, Victoria	2000
CJCA	517	Journal, Edmonton, Canada	5000
CKCD	411	Daily Province, Vancouver	1000
CKCK	312	Leader Pub. Co., Regina	1000
KFEC	248	Meler & Frank Co., Portland	50
KFI	467	Earl C. Anthony, Inc., L. A.	4000
KFOA	454	Rhodes Co., Seattle, Wash.	1000
KFON	232	Echophone Radio, Long Beach	500
KFQZ	226	Taft Radio, Hollywood, Cal.	50
KFRC	268	City of Paris D. G. Co. S. F.	50
KFSD	246	Air Pan Corp., San Diego, Cal.	50
KFSG	275	Angelus Temple, Los Angeles	50
KFUS	256	Gospel Radio, Oakland, Cal.	5
KFWB	252	Warner Bros., Hollywood, Cal.	50
KFWO	211	Lawrence Mott, Avalon, Cal.	25
KFWW	207	Oakland Educational Society	25
KFWV	213	Sovereign Hotel, Portland, Ore.	5
KGO	361	Gen. Elec. Co., Oakland, Cal.	4000
KGTT	207	Glad Tidings Temple, S. F.	50
KGW	491	The Oregonian, Portland, Ore.	50
KHJ	405	The Times, Los Angeles, Cal.	50
KJBS	220	Julius Brunton & Sons, S. F.	100
KJR	384	N. W. Radio Service, Seattle	100
KLX	508	Tribune, Oakland, Cal.	50
KMJ	234	The Fresno Bee, Fresno, Cal.	50
KMO	250	Love Elec. Co., Tacoma, Wn.	10
KMTR	238	K. M. Turner, Hollywood, Cal.	50
KNRC	208	Kierulff & Ravenscroft, L. A.	25
KNX	337	L. A. Express, Hollywood	50
KOAC	280	Oregon Agr. College, Corvallis	50
KOWW	256	F. A. Moore, Walla Walla, Wn.	50
KPO	428	Hale Bros. & Chronicle, S. F.	100
KPPC	229	Pasadena Pres. Church	5
KQW	333	1st Baptist Church, San Jose	5
KRE	256	The Gazette, Berkeley	10
KTAB	240	Associated Broadcasters, Oak.	1000
KTBI	294	Bible Institute, Los Angeles	750
KTCL	306	Am. Radio Tel. Co., Seattle	1000
KWSC	349	State College, Pullman, Wash.	500
KZM	240	West. Radio Inst., Oakland	50

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(PATENT PENDING)

SCHEDULES FOR WEDNESDAY

JULY 21, 1926

Pacific Time

Inland Stations

Corrected Weekly

s.m.	Inland
7:00-7:30	KSL
7:30-8:00	KYW
8:00-8:30	KYW
8:30-9:00	KYW
9:00-9:30	KYW
9:30-10:00	KYW
10:00-10:30	KYW
10:30-11:00	WFAA KTHS
11:00-11:30	KFKX KOA
11:30-12:00	KFKX KOA
12:00-12:30	
12:30-1:00	WFAA
1:00-1:30	WOC
1:30-2:00	WDAF WFAA KDYL
2:00-2:30	WLW KDYL WDAF WOC
2:30-3:00	KDYL WFAA
3:00-3:30	WSB WTAM KDYL KFAB KFAU
3:30-4:00	KFAB KDKA KFAU KFKX KDYL KOA
4:00-4:30	WDAF WWJ KFKX KDKA KDYL
4:30-5:00	WOC KDKA KYW KFKX
5:00-5:30	WOR WCCO WLS WWJ KOA KYW WTAM WQJ KDKA
5:30-6:00	KSL KDYL PWX WWJ KOA WQJ WTAM CNRM CNRO KDKA
6:00-6:30	WLW KOA WMAQ WJZ WEAF WEZ WCAP KSD KDYL WLIB
6:30-7:00	WWJ KDYL WTAM WDAF WLIB WMAQ KOA WSM WJAD CNRM KSL CNRO WENR WBZ WCAP KSD
7:00-7:30	WGR WKRC WCCO WJAZ WJR KMOX WJAD CNRM CNRO WENR WCAU KTHS WCAP WOS WTAM WEAF WOC WWJ WOR WEBH KOA KSD KDYL WIIT CZE WLS KFKX KYW KFCB
7:30-8:00	KOA KTHS WMAQ WWJ KYW WJZ WGR WKRC WCCO KMOX WJR CNRM CNRO WENR WJAD WCAU WCAP WBAP WEBH KLZ WJAZ CZE KFKX WLS WOS WTAM WEAF WOC KFAB WGN KFCB KSD KDYL WHT
8:00-8:30	WBAP KFWA KFKX WJZ KFAB WJAZ WQJ KOA WLS WTAM WCCO CZE WHT WEAF WOK KTHS WKRC WBCN WMAQ WJR WSM WOC KLZ WLIB KMOX WOS KYW WLW
8:30-9:00	KYW WQJ WCCO WLW WTAM KFWA WJR WBCN WSM KLZ WHT WOS KFKX WEAF WMAQ KTHS WKRC KOA WJZ WOK WJAZ WLS WLIB KMOX
9:00-9:30	WTAM WEBH KFWA WJAZ KMOX KYW WSB WQJ WCCO KLZ WLW WHT WJR WBCN WHAD WOK
9:30-10:00	WSB WQJ WCCO WTAM WJAZ WJR WEBH KYW WBCN KFWA KLZ KMOX WHAD WOK WLW WHT
10:00-10:30	WQJ WENR WEBH WDAF KYW KFWA WHAD WOK KLZ
10:30-11:00	WQJ WENR WEBH WDAF KFWA KLZ
11:00-11:30	WENR KYW
11:30-12:00	WENR KYW

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CNRM	411	Nat. Rys., Montreal, Canada	2000
CNRO	435	Nat. Rys., Ottawa, Canada	2000
CNRW	384	Nat. Rys., Winnipeg, Canada	2000
CZE	350	Dept. of Educ., Mexico City	1000
KDKA	309	Westinghouse, E. Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFCB	238	Nielson Radio, Phoenix, Ariz.	100
KFKX	288	Westinghouse, Hastings, Neb.	5000
KFWA	261	Browning Bros., Ogden, Utah	500
KLZ	266	Reynolds Radio Co., Denver	250
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KTHS	375	Arlington Hotel, H. Spgs., Ark.	750
PWX	536	Westinghouse Elec., Chicago	3500
PWX	400	Int. T. & T. Co., Havana	500
WBAP	476	Star-Telegram, Ft. Worth	1500
WBCN	266	Southtown Econ. Sta., Chicago	500
WBZ	333	West. Elec., Springfield, Mass.	2000
WCAP	469	C. & P. Tel. Co., Washington	500
WCAU	278	Hotel Pennsylvania, Phila.	500
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y.	5000
WEBH	370	Edgewater Hotel, Chicago	1500
WEEL	349	Edison Elec. Co., Boston	500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGN	303	Chicago Tribune, Chicago	1000
WGR	319	Federal Radio Corp., Buffalo	750
WHAD	275	Marquette Journal, Milwaukee	500
WHT	475	Radiophone Corp., Chicago	3500
WJAD	353	Barton Mfg. Co., Waco, Tex.	500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJR	517	Jewett Radio, Pontiac, Mich.	5000
WJZ	455	R. C. A., N. Y. City	40,000
WKRC	326	Kodol Radio, Cincinnati	1000
WLIB	303	Liberty Weekly, Elgin, Ill.	4000
WLS	345	Sears, Roebuck, Chicago	5000
WLW	422	Crosley Co., Cincinnati	500-5000
WMAQ	448	Chicago Daily News	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Neutrowound, Homewood, Ill.	5000
WOO	508	Wanamaker's, Philadelphia	500
WOS	441	St. Mar. B., Jefferson City, Mo.	500
WOR	405	L. Bamberger, Newark, N. J.	500
WQJ	448	Cal. Bak. Powder Co., Chicago	500
WSB	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500
WTAM	389	Willard Battery, Cleveland, O.	3500
WWJ	353	Detroit Evening News	1000

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PROGRAMS FOR WEDNESDAY

JULY 21, 1926



Waldemar Lind and the States Restaurant Orchestra—KPO—6:30 p.m. and 10 p.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles
General Electric Company, Oakland, Calif.

- 9 to 10:45 a. m.—Opening session, International Convention of Lions Clubs, Civic Auditorium, San Francisco. Address of welcome, Mayor James Rolph, Jr. Opening address, Benjamin F. Jones, International President of Lions Clubs. History of California, George Barron
10:45 to 11:30 a. m.—Literary hour, Wilda Wilson Church
11:30 a. m. to 1 p. m.—Luncheon concert
12 noon—Time signal
12:30 p. m.—U. S. weather bureau reports
1:30 p. m.—Stock and weather reports
2 to 3 p. m.—W. E. and W. H. Jackson program
3 to 4 p. m.—Billy Martin, ten-year-old saxophone soloist; Ruth Wambold Parks, soprano; pupils of Eva Garcia, pianist; Edith Parks Cunningham, soprano; Williams Institute speaker
5:30 p. m.—"For Instance," General Jackson columnist
6 to 6:55 p. m.—Bem's Little Symphony Orchestra
6:55 p. m.—News items; weather reports; baseball scores; S.F. produce, grain, cotton and metals; stock reports
8 to 12 p. m.—International Convention of Lions Clubs, Civic Auditorium, San Francisco. "Illinois and Indiana Night"

294 Meters **KTBI** 750 Watts
1020 Kilocycles
The Bible Institute, Los Angeles, California

- 8:30 to 9 a. m.—Devotional service
2 to 3 p. m.—Inspirational hour
7:15 to 8 p. m.—Aunt Martha's Children's hour
8 to 9 p. m.—Musical program under direction of Mildred Boone

322 Meters **KOA** 5000-Watts
930 Kilocycles
General Electric Company, Denver Colorado

- 5:30 p. m.—Brown Palace String Orchestra
6:30 p. m.—Book of Knowledge program
7 p. m.—Scheuerman's Colorado Orchestra
7:15 p. m.—Studio program of miscellaneous musical offerings, presented by the Rocky Mountain News and Denver Times

467 Meters **KFI** 4000 Watts
640 Kilocycles
Copyright 1926, E. C. Anthony, Inc., L. A.

- 5:30 p. m.—Don Warner's Orchestra
6 p. m.—KFI nightly doings
6:15 p. m.—KFI radio travel guide
6:30 p. m.—Don Warner's Orchestra
6:45 p. m.—E. C. D. Price, "Gossip"
7 p. m.—Popular program
7:30 p. m.—Nick Harris, detective stories
8 p. m.—Program by California Petroleum Corp. Cal. Pet. Quartet
9 p. m.—Varied program
10 p. m.—Program arranged by Charles Beauchamp

232 Meters **KFON** 500 Watts
1200 Kilocycles
Nichols & Warinner, Inc., Long Beach, Calif.

- 11:30 a. m. to 12:30 p. m.—Musical program
2:30 to 4 p. m.—Municipal band concert
4 to 4:30 p. m.—Press-Telegram late news
5 to 6 p. m.—KFON Concert Orchestra
6 to 6:20 p. m.—Organ recital, State Theater
6:20 to 7 p. m.—KFON Concert Orchestra
7 to 8 p. m.—L. B. trade program
8 to 9 p. m.—Press-Telegram program
9 to 11 p. m.—KFON Concert Orchestra and radio stars

240 Meters **KTAB** 1000 Watts
1250 Kilocycles
The Associated Broadcasters, Oakland, Cal.

- 9 to 9:30 a. m.—Prayer service, led by Rev. Geo. W. Phillips
7 to 7:30 p. m.—Shopping hour

333 Meters **KQW** 500 Watts
900 Kilocycles
First Baptist Church, San Jose, California

- 9:30 to 10:30 a. m.—Shopping guide
6:30 to 6:50 p. m.—Farm flashes
7 to 8 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks
8 to 9:30 p. m.—Mid-week prayer service of the First Baptist Church

Wednesday Programs—Continued

428 Meters 1000 Watts
700 Kilocycles KPO

Hale Bros. & The Chronicle, San Francisco

- 7, 7:30, 8 a. m.—Daily dozen given by Y.M.C.A.
- 10:30 a. m.—Ye Towne Cryer giving the U. S. weather forecast, amusement and general information and market reports
- 12 noon—Time signals, scripture reading, weather forecast and market report
- 12:10 to 1 p. m.—Cliff Hotel Concert Orchestra, Sollie Heilbronner, director
- 1 to 2 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
- 2:45 p. m.—Play by play of baseball game
- 4:30 to 5:30 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobhe, director
- 5:30 to 6:15 p. m.—Children's hour by Big Brother
- 6:15 to 6:30 p. m.—Ye Towne Cryer giving stock quotations, amusement and general information and baseball scores
- 6:30 to 7 p. m.—States Restaurant Orchestra, Waldemar Lind, director
- 7 to 7:30 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
- 8 to 9 p. m.—Program by the Atwater Kent Artists, under the auspices of Ernest Ingold, Inc.
Orchestra—
Hungarian March, "Kinizi".....Fucik
Selection from "Madame Sherry".....Hoschna
Violin solo—
AdorationBorowski
Orchestra—
Concert Waltz "Pomone".....Waldteufel
Contralto solos—
Ben Bolt.....Kneass
Love's Old, Sweet Song.....Molloy
Orchestra—
Ballet Music from "Faust".....Gounod
First Love.....Benoist
March from "Aida".....Verdi
- 9 to 10 p. m.—Studio program
- 10 to 11 p. m.—The States Restaurant Orchestra, Waldemar Lind, director

211 Meters 250 Watts
1420 Kilocycles KFWO

Major Lawrence Mott, Avalon, California

- 12:30 to 1:30 p. m.—St. Catherine Orchestra
- 5 to 6 p. m.—Miss Hewitt's golden hour
- 6 to 6:30 p. m.—Chimes
- 6:30 to 7:45 p. m.—St. Catherine Orchestra
- 7:30 to 9 p. m.—Band concert

208 Meters 250 Watts
1440 Kilocycles KNRC

Klerulff & Ravenscroft, Los Angeles, Calif.

- 7 p. m.—L. A. County Sheriff's hour
- 7:50 to 8 p. m.—Live wire business announcements
- 8 p. m.—Popular program
- 9 to 10 p. m.—K. & R. courtesy dance hour with entertainers

229 Meters 50 Watts
1310 Kilocycles KPCC

Presbyterian Church, Pasadena, California

- 7:30 p. m.—Tower chimes and announcements
- 7:45 p. m.—Prayer meeting service led by Rev. James Leishman, assistant pastor

508 Meters 500 Watts
590 Kilocycles KLX

The Oakland Tribune, Oakland, California

- 3 p. m.—Baseball
- 6:30 to 7 p. m.—Athens Athletic Club Orchestra
- 7 to 7:30 p. m.—News broadcast
- 8 to 9 p. m.—Educational program
- 9 to 10 p. m.—Special program through courtesy of Hotel Oakland

337 Meters 500 Watts
890 Kilocycles KNX

L. A. Evening Express, Los Angeles, Calif.

- 7:30 a. m.—KNX morning gym
- 8 a. m.—Inspirational talk
- 8:55 a. m.—Time signals and birthday notices
- 9 a. m.—Radio shopping news
- 10 a. m.—Town Crier
- 10:30 a. m.—Kate Brew Vaughan, director of Household Economics Dept.
- 12 noon—Leighton's Cafeteria Orchestra
- 1:30 p. m.—The Book Worm
- 3 p. m.—Musical reading, Claire and Pierre Mellonino
- 4 p. m.—Talk on care of children by Dr. Wayne E. Burr
- 4:55 p. m.—Market reports
- 5:30 p. m.—Leighton's Cafeteria Orchestra
- 5:55 p. m.—The Town Tattler
- 6:15 p. m.—W. F. Alder Travelogue
- 6:30 p. m.—Atwater Kent Orchestra
- 7 to 11 p. m.—Courtesy program; Town Crier of the night
- 11 p. m.—Hotel Ambassador, Ray West's Coconut Grove Orchestra

238 Meters 500 Watts
1260 Kilocycles KMTR

K. M. Turner Corp., Hollywood, California

- 10 a. m.—Rev. S. J. Mathison, of Hollywood Christian Church
- 5 p. m.—Home Hour conducted by Mammy Simmons, "Just-for-Fun Day," riddles, jokes, songs, stories by Irene Bennett, Louise Tropper, Blanch Hubler; Nature talks by Dorothy Walker, pupil from Winifred Pollard Studio of Drama, Marjorie May, Frankie Hill
- 6 p. m.—The Hawaiian Silver String Quintet
- 7 p. m.—L. A. Street Railway Orchestra
- 8 to 10 p. m.—KMTR Concert Orchestra

252 Meters 500 Watts
1190 Kilocycles KFWB

Warner Brothers, Hollywood, California

- 4:45 to 5 p. m.—Agnes May Allen on home economics
- 5 to 6 p. m.—Children's hour by Big Brother
- 6 to 7 p. m.—Pontiac Six dinner hour
- 7:30 to 8 p. m.—Program featuring Bill Blake, tenor; June Parker, blues singer; The Corduroy Cord Tire Orchestra
- 8 to 8:10 p. m.—News items
- 8:10 to 9:10 p. m.—Program featuring Esther White, popular songs; The Ashley Sisters, Irma and Thelma, in harmony numbers; Julius H. Phillips, tenor; Universal DeLux Shoe Dressing Orchestra
- 9:10 to 10:10 p. m.—Program featuring Ann Grey, blues singer; Ashley Sisters, Irma and Thelma; Julius H. Phillips, tenor; Bill Hatch's Orchestra
- 10:10 to 11 p. m.—News items followed by Warner Bros. frolic

(Programs continued on next page)

Wednesday Programs—Continued

226 Meters **KFQZ** **250 Watts**
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood

12 to 1 p. m.—Dave Ward's Merchant's Hour
6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String Trio and Frank Barry, the silver-toned tenor
8 to 8:30 p. m.—Program featuring Charlie Dimond, Henry Felix and Happy Dodge
8:30 to 9 p. m.—Program courtesy Los Angeles Japanese Daily News
9 to 10 p. m.—Program featuring International Trio and Dorothy Dodd, the radio personality girl
10 to 11 p. m.—Program featuring Ken Burzell and his Orchestra with Marion Boogar, soloist

268 Meters **KFRC** **50 Watts**
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco

10 to 11 a. m.—Household hints by Mary Lewis Haines, S. F. Call
5 to 6 p. m.—Dance music by Billy Hamilton's Cafe Apollo Orchestra
6 to 6:30 p. m.—Goodfellow's ad period
6:30 p. m.—"The Stage and Screen"
6:35 to 7:30 p. m.—Mac and his gang
8 to 8:10 p. m.—Talk, "Health and Safety," Mrs. D. F. F. Easton, chairman Women's Division Calif. Development Association
8:10 to 9 p. m.—Concert by KFRC Little Symphony Orchestra
Suite "La Ferie".....Lacome
Serenade.....Toselli
Selection "Student Prince".....Romberg
Waltz "Vienna Life".....Strauss
Marcella Knieri, soloist
9 to 10 p. m.—Studio program by San Francisco Community Chest
10 to 12 p. m.—Dance music by Walter Krausgrill's Orchestra. Intermissions by Del Perry and Lou Emmel

207 Meters **KFWM** **250 Watts**
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.

2 to 2:45 p. m.—Musical program
Piano solo, Mrs. Fannie Johnson—
Sabbath Chimes.....Klickman
Violin solo, Annette Sutt—
Czardas.....Monti
Baritone solo, Alvin Saari—
Elegie.....Massenet
Violin solo, Annette Sutt—
Serenade.....Toselli
Health talk, Mrs. Alston Yuille
Violin solo, Annette Sutt—
Schon Rosmerin.....Kreisler
Baritone solos, Alvin Saari—
Song of Songs.....Moya
Kasakanlalu

300 Meters **KSL** **1000 Watts**
1000 Kilocycles

Cope and Johnson, Salt Lake City, Utah

6:30 a. m.—Setting up exercises
6:45 p. m.—Inspirational period
7 a. m.—Setting up exercises
7:15 a. m.—Cheerio; Daily Strength
5:30 p. m.—Stories for the children by Uncle Ben
5:30 p. m.—Stock, weather and produce reports

491 Meters **KGW** **1000 Watts**
610 Kilocycles

The Morning Oregonian, Portland, Oregon

10 to 11:30 a. m.—The Town Crier; music, weather report, household helps by Jeannette Putman Cramer; news items and shopping guide
12:30 to 1:30 p. m.—Concert
6 to 7 p. m.—Dinner concert; baseball scores
7:30 to 7:45 p. m.—Weather, market and police reports, news items and sporting results
8 to 9:20 p. m.—Vocal, instrumental numbers

384 Meters **KJR** **1000 Watts**
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.

11:30 to 12 noon—"What to Prepare for Tonight's Dinner," Prudence Penny; Daily produce reports
12 noon—Time signal
3 p. m.—Musical program
5:40 p. m.—Stock quotations
6 p. m.—Time signal; weather reports, and "The Box Office," musical program
7:30 to 8:30 p. m.—Arcweld Mfg. Co. program
10 p. m.—Time signal
10 to 11 p. m.—Olympic Calpeteers program

454 Meters **KFOA** **1000 Watts**
660 Kilocycles

Rhodes Department Store, Seattle, Wash.

10 to 10:30 a. m.—The home-maker, by Mary Gordon
10:30 to 10:45 a. m.—Health exercises for the housewife, by Van
10:45 to 11:10 p. m.—Cheerio to the shut-ins
11:10 to 11:15 a. m.—Market quotations
12:30 to 1:30 p. m.—Luncheon program
4:15 to 5 p. m.—The Times "afternoon at home"
6:25 to 6:45 p. m.—Sports and amusement revue
6:45 to 8:15 p. m.—Program
8:15 to 8:30 p. m.—Auto Club news; weather report
8:30 to 10 p. m.—Studio program

256 Meters **KRE** **100 Watts**
1170 Kilocycles

The Berkeley Gazette, Berkeley, California

11:15 a. m.—Physical exercise for women conducted by Dorothy Barron
5:30 p. m.—Current news

220 Meters **KJBS** **5 Watts**
1360 Kilocycles

Julius Brunton & Sons Co., San Francisco

9 to 10:40 a. m.—Vocal, instrumental selections
2 to 2:30 p. m.—Vocal, instrumental selections

256 Meters **KFUS** **50 Watts**
1170 Kilocycles

The Gospel Radio, Oakland, California

10 a. m.—Hour of Christian ministry
8 p. m.—Sacred songs by Chorus of Christian and Missionary Alliance Church

207 Meters **KGTT** **50 Watts**
1450 Kilocycles

Glad Tidings Temple, San Francisco, Calif.

12:15 p. m.—Scripture reading, Rev. R. J. Craig
3 to 4 p. m.—Divine healing service
8 to 10 p. m.—Program of sacred music

RADIO OPTIMISM IS JUSTIFIED

(Continued from page 23)

are furnishing steady service just as they always have and over reasonable distances.

Why is radio optimism justified? There are so many reasons, that the space is not available to state them all in this commentary on radio opinions. Broadcasting stations are running on higher powers than ever and giving reliable service through static over greater distances. By reliable service is meant just that: Service on which the listener can depend, and not freaky occasional and mangled signals. The quality of transmission is better than ever, and tones from the highest to the lowest are well transmitted. Receiving sets have been greatly improved, so that powerful audio-frequency output tubes enable clear reproduction, practically without distortion, and with satisfactory volume. Loud speakers are far beyond anything in the past in their capabilities of furnishing an accurate replica of the studio's program. And, last but by no means least, programs are far better than anything which we have known. The greatest artists in the world, and the finest orchestras, are at the service of the radio listeners.

Broadcasting stations are assigned frequencies 10 kilocycles apart. It is perfectly possible to separate these on a selective receiver even if one station is producing a rather strong signal, and the adjacent one a fairly weak signal. The quality which can be obtained from existing stations is excellent—unless one of them happens to wander off its assigned frequency—but then we need traffic policemen to keep automobiles from colliding in the streets, and it is not too much to expect that the radio divisions of the government will similarly keep the stations on their assigned frequency. Many stations are putting in master oscillator systems, often crystal controlled, whereby they will be kept rigidly and precisely on their assigned frequencies.

In summary, broadcasting is in fine shape and getting steadily better. Next winter promises to be a fine radio season. If there is now less unreliable long-distance reception, there is greatly improved local reception of superior programs. So that the best thing for the radio listener to do is to leave all worry about radio troubles to the "experts" while he, on the other hand, continues to enjoy the reliable and excellent program service of the best stations within a moderate distance of his home.

NATIONAL RADIO MAP FOR SESQUI

The Department of Commerce is making a large radio map of the United States for display at the Sesqui-Centennial Exposition at Philadelphia. Every broadcasting station in the country will be designated by a colored marker which will indicate the approximate power of the transmitter. A red is used to mark the location of all broadcasters of 5,000 watts or over; a red marker will designate all stations between 500 and 5,000 watts, and a blue marker those below 500 watts in power.

Citizens from different states will be able to find their local broadcasters and observe how well their city or town is represented on the radio map.

California is represented by 24 different cities, as is Illinois. New York follows, with 20, and Pennsylvania is next with 18. Texas shows 17 cities where radio broadcasts are sent out; Ohio, Iowa and Michigan each boast 16 each, Indiana has 12 and Wisconsin 11. Washington, Missouri, New Jersey and Massachusetts show ten each, and then the list diminishes down to one each for Delaware, Kentucky, South Carolina, West Virginia and Wyoming. Nebraska is the only state unrepresented by a city on this radio map.

As to numbers of stations by cities, Chicago still leads, followed by New York, San Francisco and Los Angeles.

A radio expert in Great Britain has designed a fool-proof automatic receiver; all that the fan does is to turn it on and off. It is calculated to please many unskilled listeners who desire only the local station. When it is installed and wired up, the dials are set and clamped in place. The operator simply plugs in the loud speaker when he wishes entertainment, and when he is through he pulls the plug out.

As a "tube rejuvenator," a common "B" battery, if tapped, may be used in an emergency. Flash the 199 type tubes on about 7 volts (5 cells) and then let them burn for 10 to 20 minutes with the plate current OFF, on about 5 volts (4 cells). For the 201 type tubes the same process should be followed, except that voltages of about 14 and 10 should be used.

(PATENT PENDING)

SCHEDULES FOR THURSDAY

JULY 22, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KJBS KTAB		
9:30-10:00	KJBS KQW	KMTR	KTCL
10:00-10:30	KJBS		KFOA KGW
10:30-11:00	KPO	KFSG KNX KMTR	KFOA KGW
11:00-11:30	KRE KGO	KNX	KGW
11:30-12:00	KGO	KFSG KFON	KJR CJCA
12:00-12:30	KGO KPO KGTT	KFSG KFON KNX KFQZ	KOWW
12:30-1:00	KGO KPO	KHJ KNX KFQZ KFSD	KFOA KGW KOWW
1:00-1:30	KPO	KHJ KFSD	KFOA KGWKFWV
1:30-2:00	KPO	KNX	
2:00-2:30	KJBS KGO	KNX KTBI KNRC	KHQ
2:30-3:00	KGO KPO KLX	KFSG KNRC KFON KTBI	KHQ
3:00-3:30	KPO KLX KGO	KFON KFSG	
3:30-4:00	KGO KPO KLX	KFON KFSG	
4:00-4:30	KPO	KFSG KFON	KFEC KFOA
4:30-5:00	KPO		KFEC KFOA KFWV
5:00-5:30	KPO KGO	KMTR KFON	KFOA CJCA KFWV
5:30-6:00	KGO KRE KPO KTAB KFWM	KMTR KFI KNX KFON	CJCA
6:00-6:30	KGO KZM KPO KFRC KTAB	KMTR KFI KNX KFQZ KFON KFWB KFWO	CNRC KGW KFAC CJCA KHQ KFWV
6:30-7:00	KPO KZM KQW KFRC KGO KFUS	KFI KNX KFWO KHJ KMTR KFON KFSD KFQZ KFWB	KGW CJCA KHQ KFWV
7:00-7:30	KPO KLX KFRC KQW KGO KTAB KFUS	KFI KHJ KNX KFSD KTBI KFWO KMTR KFON KSMR	KOWW KFWV
7:30-8:00	KFBK KQW	KFI KNX KHJ KFSG KFON KTBI KFWO KSMR KFSD KMTR	KFWV KGW CFAC
8:00-8:30	KFBK KRE KGO KTAB KFWM KPO KFOB KFRC	KFI KFSG KNX KHJ KNRC KFON KMTR KTBI KFWB KFQZ KPSN KSMR KFSD KFWO	CFAC CNRC KOWW KOIN KTCL KGW
8:30-9:00	KFRC KRE KPO KTAB KGO KFBK KFOB KFWM	KNX KFWB KNRC KFON KMTR KFQZ KTBI KPSN KSMR KFSG KHJ KFI KFSD KFWO	CFAC CNRC CKCD KJR KGY KGW KOWW KOIN KFWV KTCL
9:00-9:30	KRE KGO KPO KFRC KTAB KFBK KFWM KFOB	KFI KFSG KHJ KNX KFWB KFSD KMTR KSMR KFQZ KFON KNRC	CKCD CFAC KJR KOWW KHQ KGY KGW KOIN KFWV CNRC
9:30-10:00	KGO KPO KFRC KTAB KFWM KFRC KFOB KRE KFBK	KFI KFSG KHJ KNX KFWB KMTR KMJ KFON KFSD KFQZ KNRC	CKCD CFAC KJR KOWW KHQ KGW KOIN CNRC KFWV
10:00-10:30	KPO KGO KFOB KFUU	KFI KFSG KHJ KNX KFON KFSD KFQZ KFWB	KJR KGW KOIN KOWW
10:30-11:00	KPO KGO KFOB	KFI KFSG KFWB KNX KFON KFSD KFQZ KHJ	KJR KGW KOIN KOWW
11:00-11:30	KGO KFOB	KNX	KJR KOWW KGW KOIN
11:30-12:00	KGO KFOB	KNX	KJR KGW KOIN

STATION DIRECTORY			
Call	Meters	Owner and Location	Power
CFAC	435	Calgary Herald, Canada	2000
CJCA	517	Journal, Edmonton, Canada	5000
CKCD	411	Daily Province, Vancouver	1000
CNRC	436	Nat. Rys., Calgary, Canada	1000
KFBK	248	Meier & Frank Co., Portland	50
KFEC	248	Meier & Frank Co., Portland	50
KFI	467	Earl C. Anthony, Inc., L. A.	4000
KFOA	454	Rhodes Co., Seattle, Wash.	1000
KFOB	226	KFOB, Inc., Burlingame, Cal.	50
KFON	232	Echophone Radio, Long Beach	500
KFQZ	226	Taft Radio, Hollywood, Cal.	50
KFRC	268	City of Paris D. G. Co., S. F.	50
KFSD	246	Air Fan Corp., San Diego, Cal.	500
KFSG	275	Angelus Temple, Los Angeles	500
KFWB	252	Warner Bros., Hollywood, Cal.	500
KFWO	211	Lawrence Mott, Avalon, Cal.	250
KFWV	213	Sovereign Hotel, Portland, Ore.	50
KFWW	207	Oakland Educational Society	250
KGO	361	Gen. Elec. Co., Oakland, Cal.	4000
KGTT	207	Glad Tidings Temple, S. F.	50
KGW	491	The Oregonian, Portland, Ore.	500
KGY	246	St. Martin's Col., Lacey, Wn.	50
KHJ	406	The Times, Los Angeles, Cal.	500
KHQ	394	L. Wasmer, Spokane, Wash.	1000
KJBS	220	Julius Brunton & Sons, S. F.	5
KJR	384	N. W. Radio Service, Seattle	1000
KLX	508	The Tribune, Oakland, Cal.	500
KMJ	234	The Fresno Bee, Fresno, Cal.	50
KMTR	238	K. M. Turner, Hollywood, Cal.	500
KNRC	208	Kierulff & Ravenscroft, L. A.	250
KNX	337	L. A. Express, Hollywood	500
KOIN	319	H. B. Read, Portland, Ore.	1000
KOWW	256	F. A. Moore, Walla Walla, Wn.	500
KPO	428	Hale Bros. & Chronicle, S. F.	1000
KPSN	316	The Star-News, Pasadena	1000
KQW	333	1st Baptist Church, San Jose	500
KRE	256	The Gazette, Berkeley, Cal.	100
KSMR	210	S. M. Ry. Co., Santa Maria	100
KTAB	240	Associated Broadcasters, Oak.	1000
KTBI	294	Bible Institute, Los Angeles	750
KTCL	506	Am. Radio Tel. Co., Seattle	1000
KZM	240	West. Radio Inst., Oakland	50

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PACIFIC RADIO PUB., CO.
Pacific Building, San Francisco

(PATENT PENDING)

SCHEDULES FOR THURSDAY

JULY 22, 1926

Pacific Time

Inland Stations

Corrected Weekly

a.m.	Inland
7:00-7:30	KSL
7:30-8:00	KYW
8:00-8:30	KYW
8:30-9:00	KYW
9:00-9:30	KYW
9:30-10:00	KYW
10:00-10:30	KYW
10:30-11:00	WFAA
11:00-11:30	KOA
11:30-12:00	KOA
12:00-12:30	WHB
12:30-1:00	WHB WFAA
1:00-1:30	WOC
1:30-2:00	WDAF WFAA KDYL
2:00-2:30	WLW KDYL WDAF
2:30-3:00	KDYL KOA WFAA
3:00-3:30	WSB WWJ KDYL KOA
3:30-4:00	WSB WDAF WWJ KFKX WFAA KDYL KOA
4:00-4:30	WDAF WWJ WOC KFKX KDYL
4:30-5:00	WOAW WOC KFKX KDKA
5:00-5:30	WOC WOAW KYW WGY KOA WWJ WHB
5:30-6:00	KDYL WBAP WGY WGBS WREO KOA KDKA KYW WOC KOIL WHB
6:00-6:30	WBAP WSB WWJ KYW KSD KDKA WHB KDYL WMAQ WCCO WGY KSL WGBS KOA WREO WOC WDAF WBCB WJZ KLDS WENR KOIL WJR WBZ
6:30-7:00	WSB WWJ WHB KYW KSD KDKA WGN KDYL WMAQ WCCO WFAA WREO WGY KSL WIP WGBS WOC WEAR WJZ WBZ WCAU WCBW KLDS WRC WENR WJR
7:00-7:30	WOAW WFAA KTHS WIP WDAF KDYL KYW WCO WHB WGBS WGY KSL KSD WOC WMAQ WGN WJZ WRC WJR WJAZ WEBH WEAR WBCD KLDS WENR CZE WCAU WWJ KFAU
7:30-8:00	WBAP WOAW WHB WIP WEBH KDYL WCAU WGY WOAI WDAF KTHS WMAQ WEAR KSL WCCO WCBW KYW WJAZ WJZ WGBS WRC WENR WJR WGN KSD WWJ KFAU CZE
8:00-8:30	WBAP WOAW KYW WOAI WHT WOK WWJ WQJ KSL WLW KDKA KTHS WIP WMAQ WGBS WJAZ WJZ WDAF KSD WKRC KFAU WCCO WRC WJR WBCN WLIB WTAM
8:30-9:00	WOAW KYW WQJ WLW WLIB WTAM WKRC KDKA WMAQ WGBS WRC WHT WJAZ WJZ WDAF WBCN WOK KSD
9:00-9:30	WQJ WOC KFUR WSB WBCN WKRC WLW KYW WHT WEBH KOIL KDKA WLIB WOK
9:30-10:00	WQJ WOC WHT KFUR WSB KYW WLW WEBH KOIL WBCN WKRC WOK WLW
10:00-10:30	WDAF WQJ KFUR KGU WEBH WBCN WOK
10:30-11:00	WDAF WQJ KFUR KGU WEBH WBCN
11:00-11:30	KGU KYW
11:30-12:00	KGU KYW

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CZE	350	Dept. of Educ., Mexico City	1000
KDKA	309	Westinghouse E., Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAU	280	Public Schools, Boise, Idaho	750
KFKX	288	Westinghouse, Hastings, Neb.	5000
KFUR	224	Ogden, Utah, Peery's Bldg.	50
KGU	270	The Advertiser, Honolulu, Ha.	500
KLDS	441	Ch. of Christ, Independ'ce, Mo.	1000
KOA	322	General Elec. Co., Denver	5000
KOIL	278	Mona Motor Oil, Coun. Bl., Iowa	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KTHS	375	Arlington Hotel, H. Spgs., Ark.	750
KYW	536	Westinghouse Elec., Chicago	3500
WBAP	476	Star-Telegram, Ft. Worth	1500
WBCN	266	Southtown Econ. Sta., Chicago	500
WBZ	333	West. Elec., Springfield, Mass.	2000
WCAU	278	Hotel Pennsylvania, Phila.	500
WCBW	345	W. G. Voliva, Zion, Ill.	5000
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y.	5000
WEAR	389	Goodyear Tire & Rubber Co.	1000
WEBH	370	Edgewater Hotel, Chicago	1500
WEEI	349	Edison Elec. Co., Boston	500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGBS	316	Gimbel Bros., New York	500
WGN	303	Chicago Tribune, Chicago	1000
WGR	319	Federal Radio Corp., Buffalo	750
WGY	380	Gen. Elec. Co., Schenectady	5000
WHB	366	Sweeney Auto Sch. K. C., Mo.	500
WHT	400	Radiophone Corp., Chicago	3500
WIP	508	Gimbel Bros., Philadelphia	500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJR	517	Jewett Radio, Pontiac, Mich.	5000
WJY	405	R. C. A., N. Y. City	1000
WKRC	326	Kodel Radio, Cincinnati	1000
WLIB	303	Liberty Weekly, Elgin, Ill.	4000
WLW	422	Crosley Co., Cincinnati	500-5000
WMAQ	428	Chicago Daily News	1000
WOAI	394	S. Equip. Co., San Ant., Tex.	2000
WOAW	526	W. O. W., Omaha, Neb.	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Neutrowound, Homewood, Ill.	5000
WQJ	448	Cal. Bak. Powder Co., Chicago	500
WRC	469	R. C. A., Washington, D. C.	1000
WREO	286	Reo Motor Co., Lansing, Mich.	500
WSB	428	The Journal, Atlanta, Ga.	1000
WTAM	389	Willard Battery, Cleveland, O.	3500
WWJ	353	Detroit Evening News	1000

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Franklin 3687

After 6 p.m.
Park 3244

PROGRAMS FOR THURSDAY

JULY 22, 1926



L. Waterman
KPO—4:30 p.m.



George Ludlow
KGO—5 p.m.



Helen E. Merchant
KGO—11:30 a.m.



Ira D. Morgan
KPO—9 p.m.

361 Meters **KGO** **4000 Watts**
830 Kilocycles
 General Electric Company, Oakland, Calif.
 10:45 to 11:30 a. m.—Literary hour, Wilda Wilson Church
 11:30 a. m. to 1 p. m.—Luncheon concert
 12 noon—Time signal
 12:30 p. m.—Weather bureau reports
 1:30 p. m.—Stock and weather reports
 2 to 4 p. m.—J. C. Hobrecht Co., Sacramento, program
 5 to 6 p. m.—George W. Ludlow, "Friend to Boys"
 6 to 6:55 p. m.—Bem's Little Symphony Orchestra
 6:55 p. m.—News items; weather reports; baseball scores; S. F. produce, grain, cotton and metals; stock reports
 8 to 9 p. m.—Vacation program, Oakland studio
 Touring information, California State Automobile Association
 Radioart presents Duke Kamoku's Royal Hawaiians
 Fishin' Jim Pike
 The WOW Male Trio in "Campfire Songs"
 Nature talk
 9 to 12 p. m.—Dance music

316 Meters **KPSN** **1000 Watts**
950 Kilocycles
 The Star-News, Pasadena, California
 6 to 6:15 p. m.—Dinner time news reports
 8 to 9 p. m.—Musical program arranged by the Pasadena Chamber of Commerce

208 Meters **KNRC** **250 Watts**
1440 Kilocycles
 Kierulff & Ravenscroft, Los Angeles, Calif.
 2 p. m.—Cliff Eddie's vest pocket edition
 7:50 to 8 p. m.—Live wire business announcements
 8 p. m.—Moseby's Dixieland Blue Blowers from Solomon
 9 to 10 p. m.—K. & R. feature program

508 Meters **KLX** **500 Watts**
590 Kilocycles
 The Oakland Tribune Oakland, California
 3 p. m.—Baseball
 7 to 7:30 p. m.—News broadcast

467 Meters **KFI** **4000 Watts**
640 Kilocycles
 Copyright 1926, E. C. Anthony, Inc., L. A.
 5:30 p. m.—Theron Bennett's Hollywood Foot-lifters
 6 p. m.—KFI nightly doings
 6:15 p. m.—KFI radio travel guide
 6:30 p. m.—Theron Bennett's Hollywood Foot-lifters
 6:45 p. m.—KFI radiatorial period
 7 p. m.—Duncan Sisters and Co., from "Topsy and Eva"
 8 p. m.—Program arranged by Robert Hurd
 9 p. m.—An hour of semi-classic music
 10 p. m.—Patrick-Marsh Orchestra; Betty Patrick, soloist

232 Meters **KFON** **500 Watts**
1200 Kilocycles
 Nichols & Warinner, Inc., Long Beach, Calif.
 11:30 a. m. to 12:30 p. m.—Musical program
 2:30 to 4 p. m.—Municipal band concert
 4 to 4:30 p. m.—Press-Telegram late news
 5 to 6 p. m.—KFON Concert Orchestra
 6 to 6:20 p. m.—Organ recital, State Theater
 6:20 to 7 p. m.—KFON Concert Orchestra
 7 to 7:30 p. m.—California College of Commerce English lesson, F. Darwin Smith
 7:30 to 8 p. m.—Municipal band concert
 8 to 8:15 p. m.—Health and diet talk by original Battle Creek treatments
 8:15 to 9 p. m.—Municipal band concert
 9 to 10 p. m.—Musical program
 10 to 11 p. m.—KFON Concert Orchestra and radio stars

252 Meters **KFWB** **500 Watts**
1190 Kilocycles
 Warner Brothers, Hollywood, California
 6 to 7 p. m.—Pontiac Six dinner hour
 8 to 8:10 p. m.—News items
 8:10 to 9:10 p. m.—Program featuring Peggy Mathews, blues singer; Kenneth Gillum; Julius H. Phillips, tenor; Ray Kellogg and Bill Hatch, violin and piano; McGavin Bros. Doughboys
 9:10 to 10:10 p. m.—Program featuring Esther White; Raquel Nieto, soprano; Chapman's Trio; Chapman's Famous Ice Cream Orchestra
 10:10 to 11 p. m.—News items followed by Warner Brothers Frolic

Thursday Programs—Continued

428 Meters KPO 1000 Watts
700 Kilocycles

Hale Bros. & The Chronicle, San Francisco
 7, 7:30, 8 a. m.—Daily dozen exercises, given by the Y. M. C. A.
 10:30 a. m.—“Ye Towne Cryer,” giving U. S. weather forecast, amusement, general information and market reports
 12 noon—Time signals, scripture reading, weather forecast and market report
 12:10 to 1 p. m.—Cliff Hotel Concert Orchestra, Sollie Heilbronner, director
 1 to 2 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
 2:45 p. m.—Play by play broadcast from Recreation Park of the baseball game
 4:30 to 5:30 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobber, director
 5:30 to 6:15 p. m.—Children's hour by Big Brother of KPO with stories taken from the Book of Knowledge
 6:15 to 6:30 p. m.—“Ye Towne Cryer” giving stock market quotations, amusement, general information and baseball scores
 6:30 to 7 p. m.—States Restaurant Orchestra, Waldemar Lind, director
 7 to 7:30 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
 8 to 9 p. m.—Studio program
 9 to 10 p. m.—Studio program
 Piano solo, John Lopez—
 Granada.....Albanez
 Soprano solos, Mrs. Anthony J. Silva—
 Beautiful Roses (in French).....Cesek
 Thine Eyes (in French).....Rabey
 Saxophone solo, Bessie Empey—
 Come, Sing to Me.....Thompson
 Baritone solos, Ira D. Morgan—
 Song of the Vagabond.....Friml
 Honey Moon Waltz.....Arden
 Piano solos, John Lopez—
 Waltz.....Chopin
 Study No. 14.....Chopin
 Soprano solos, Mrs. Anthony J. Silva—
 As We Part.....Igenfritz
 Minor and Major.....Spross
 Saxophone solo, Bessie Empey—
 Sunrise and You.....Seitz
 Baritone solos, Ira D. Morgan—
 Journeying.....Helen G. Miles
 Morning.....Speaks
 Piano solo, John Lopez—
 Dream of Love.....Liszt
 Soprano solos, Mrs. Anthony J. Silva—
 The Nightingale Has a Lyre of Gold.....Whelpley
 Vainka's Song.....Whishaw
 Saxophone solos, Bessie Empey—
 Through the Night.....Logan
 Spanish Moon.....Robison
 10 to 11 p. m.—Mandarin Cafe Dance Orchestra, Clyde Sunderland, director

226 Meters KFQZ 250 Watts
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood
 12 to 1 p. m.—Dave Ward's Merchant's Hour
 6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String Trio and Frank Barry, the silver-toned tenor
 8 to 9 p. m.—Program through courtesy Canyon Garage and Parts Company
 9 to 10 p. m.—Program arranged by Billie Henderson, with Billie's Banjo Boys, Harold Allen and Edna Cook
 10 to 11 p. m.—Los Angeles Railway Hawaiian Quintet and Norma Foss

240 Meters KTAB 1000 Watts
250 Kilocycles

The Associated Broadcasters, Oakland, Cal.
 9 to 9:30 a. m.—Prayer service, led by Rev. Geo. W. Phillips
 5:45 to 6:15 p. m.—Lecture hour, “Keeping Well”
 7 to 7:30 p. m.—Shopping hour
 8 to 10 p. m.—Alameda Kiwanis Male Quartet, R. C. Brown, first tenor; G. W. Booth, second tenor; Earl C. Borton, baritone; Floyd J. Collar, bass—
 I Love a Little Cottage.....O'Hara
 Dreaming of My Old Home Sweet Home.....O'Hara
 Instrumental Trio selections
 Soprano solos, Miriam Sellander—
 With You.....Nutting
 The Cuckoo.....Lehmann
 Violin solo, Harriet French
 Contralto solos, Clara Burnett—
 Misanny.....Foster
 My Thoughts Are You.....Cadman
 Alameda Kiwanis Male Quartet—
 The Rosary.....Nevin
 Winter's Song.....Bullard
 Instrumental Trio selections
 Soprano solos, Miriam Sellander—
 In a Meadow (Russian Folk Song)
 When I Was Seventeen (Swedish Folk Song)
 Contralto solos, Clara L. Burnett—
 Ahoming.....del Riego
 Je Bousaime.....Beiner
 Alameda Kiwanis Club Quartet—
 Little Boy Blue.....Parks
 De Backsliden Brudder.....Parks
 Instrumental Trio selections
 Soprano solos, Miriam Sellander—
 Little Star.....La Forge
 The Banjo Player.....Barnett
 Alameda Kiwanis Club Quartet—
 A Basket of Chestnuts.....Parks
 A Little Close Harmony.....Parks
 Kentucky Babe.....Parks

238 Meters KMTR 500 Watts
1260 Kilocycles

K. M. Turner Corp., Hollywood, California
 9:30 a. m.—Sylvia, “The Blind Cook”
 10:30 a. m.—Willis Martin, D.D., minister of First Methodist Church, Hollywood
 5 p. m.—Home Hour, conducted by Mammy Simmons. Continuity program presented by pupils of Carter Weaver
 6 to 7 p. m.—Popular program
 7 p. m.—Mme. Alene's “Fashion Talk”
 8 p. m.—KMTR Concert Orchestra
 9 p. m.—Henry Halstead Dance Orchestra and Entertainers

211 Meters KFWO 250 Watts
1420 Kilocycles

Major Lawrence Mott, Avalon, California
 6 to 6:30 p. m.—Chimes
 6:30 to 7:30 p. m.—St. Catherine Orchestra
 7:30 to 9 p. m.—Band concert

294 Meters KTBI 750 Watts
1020 Kilocycles

The Bible Institute, Los Angeles, California
 8:30 to 9 a. m.—Devotional service
 2 to 3 p. m.—Inspirational hour
 7:15 to 8 p. m.—Aunt Martha's Children's hour
 8 to 9 p. m.—Character impersonation by Prof. W. H. Head, Venice High School

(Programs continued on next page)

Thursday Programs—Continued

337 Meters **KNX** 500 Watts
890 Kilocycles

L. A. Evening Express, Los Angeles, Calif.

7:30 a. m.—KNX morning gym
8 a. m.—Inspirational talk
8:55 a. m.—Time signal and birthday notices
9 a. m.—Radio shopping news
10 a. m.—Town Crier
10:30 a. m.—Kate Brew Vaughan, director of Household Economics Dept.
11 a. m.—Nature talk by Theodore Payne
12 noon—Leighton's Cafeteria Orchestra
1:30 p. m.—The Book Worm
2 p. m.—Paul D. Hugon, handwriting expert
4:55 p. m.—Market reports
5:30 p. m.—Leighton's Cafeteria Orchestra
6 p. m.—The Town Tattler
6:15 p. m.—W. F. Alder travelogue
6:30 p. m.—Atwater Kent Orchestra
7 to 11 p. m.—Feature program
11 p. m.—Hotel Ambassador; Ray West's Coconut Grove Orchestra

333 Meters **KQW** 500 Watts
900 Kilocycles

First Baptist Church, San Jose, California

9:30 to 10:30 a. m.—Shopping guide
6:30 to 6:50 p. m.—Farm flashes
6:50 to 7 p. m.—Sperry Flour home service talk
7 to 8 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks

491 Meters **KGW** 1000 Watts
610 Kilocycles

The Morning Oregonian, Portland, Oregon

10 to 11:30 a. m.—Town Crier; music, weather report, household helps by Jeanette Putman Cramer, news items and shopping guide
12:30 to 1:30 p. m.—Concert
6 to 7 p. m.—Dinner concert; baseball scores
7:30 to 7:45 p. m.—Weather, police and market reports, news items and sporting results
7:45 to 8 p. m.—Lecture, given by Catholic Truth Society
8:20 to 10 p. m.—Vaudeville program
10 to 12 p. m.—Dance music by Herb Wiedoeft's Cinderella Roof Orchestra

454 Meters **KFOA** 1000 Watts
660 Kilocycles

Rhodes Department Store, Seattle, Wash.

11:10 to 11:15 a. m.—Market quotations
12:30 to 1:30 p. m.—Luncheon program
4:15 to 5 p. m.—The Times "afternoon at home"
5 to 5:15 p. m.—Mary Gordon reads the children a story
6:25 to 6:45 p. m.—Sports and amusement revue

394.5 Meters **KHQ** 1000 Watts
760 Kilocycles

Louis Wasmer, Inc., Spokane, Washington

2 to 3 p. m.—Radio Trades Ass'n program
6 to 7 p. m.—Mann Bros. Davenport Hotel Orchestra
9 to 10 p. m.—Stewart-Warner program
10 p. m.—Time signals

207 Meters **KFWM** 250 Watts
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.

8 to 10 p. m.—Studio program
Oriole Orchestra—
Stars and Stripes Forever.....Sousa
Violin solo, Carmen Eccelle—
ValseBluett
Instrumental Trio, Alice Bredeson, saxophone;
Verne McKenna, piano; Carmen Eccelle,
violin—
GavotteMartin
Review of International Sunday School Lesson for July 25, by Robert Craig
Oriole Orchestra—
The Three Twins.....Hoschna
Vocal solo, Carmen Eccelle—
Suicidio from LaGiacconda.....Poncinelli
Oriole Orchestra—
Neapolitan Nights
Clarinet solo, Mel Smith
Educational talk, "The Land of Darkness,"
C. R. Little
Oriole Orchestra—
Selection "The Red Mill".....Herbert
Vocal solos, Carmen Eccelle—
Aria from Traviata.....Verdi
A Voice With a Smile.....Breau
Saxophone solo, Hugo Smith
Oriole Orchestra—
Blue Danube.....Strauss
March of the Toys.....Herbert
Selection "The Mikado".....Gilbert & Sullivan

384 Meters **KJR** 1000 Watts
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.

11:30 to 12 noon—"What to Prepare for Tonight's Dinner," Prudence Penny; Daily produce reports
12 noon—Time signal
5:40 p. m.—Stock quotations
6 p. m.—Time signal; weather reports, and "The Box Office"
8:30 to 10 p. m.—Studio program
10 p. m.—Time Signal
10 to 10:30 p. m.—Musical program
10:30 to 12 p. m.—Post-Intelligencer presenting weekly meeting of "Keep Joy Radiating Order of Bats"

436 Meters **CNRC** 1000 Watts
690 Kilocycles

Canadian National Railways, Calgary, Alta.

6 p. m.—Bedtime story by Aunt Mary
8 p. m.—Studio program by Canadian National Railways' Little Symphony Orchestra, Gladys Webb Foster, director

300 Meters **KSL** 1000 Watts
1000 Kilocycles

Cope and Johnson, Salt Lake City, Utah

6:30 a. m.—Setting up exercises
6:45 a. m.—Inspirational period
7 a. m.—Setting up exercises
7:15 a. m.—Cheerlo; Daily Strength
6:15 p. m.—Weather, livestock, butter, egg and vegetable reports; mining quotations; farm flashes
6:30 p. m.—Program by S. L. Chamber of Commerce
7 p. m.—Studio program

Thursday Programs—Continued

268 Meters **KFRC** 50 Watts
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco

- 5:30 to 6:30 p. m.—Mac and his gang
- 6:30 p. m.—The stage and screen
- 6:30 to 7 p. m.—Harry Rose in "30 Minutes Before the Mike"
- 7 to 7:30 p. m.—Goodfellows ad period
- 8 to 8:30 p. m.—Studio program courtesy of Brockway-Tahoe-Vista Corporation
- 8:30 to 10 p. m.—Dance music from Balconades Ballroom, by Walter Krausgrill's Orchestra. Intermissions by Carl Winge, pianist, and Rod Smith, tenor

226 Meters **KFOB** 50 Watts
1330 Kilocycles

KFOB, Incorporated, Burlingame, California

- 8 to 8:20 p. m.—Children's book hour, by Mary MacMurtrie
- 8:20 to 9 p. m.—Short talks by business men on "The Peninsula Highway"
- Concert program featuring Johann Colet, piano; James Blaney, tenor, and Ethel Allen, pianist
- 9 to 10 p. m.—Request program by Gladys Cronk and Paul Nelson
- 10 to 12 p. m.—Dance orchestra

256 Meters **KRE** 100 Watts
1170 Kilocycles

The Berkeley Gazette, Berkeley, California

- 11:15 a. m.—Physical exercise for women conducted by Dorothy Barron
- 5:30 p. m.—Current news
- 8 to 10 p. m.—Studio program under direction of Earl Wheeler and William Ajello, vocal selections, Henry Hobson; musical selections arranged by Carolyn Flowers

220 Meters **KJBS** 5 Watts
1360 Kilocycles

Julius Brunton & Sons Co., San Francisco

- 9 to 10:40 a. m.—Vocal, instrumental selections
- 2 to 2:30 p. m.—Vocal, instrumental selections

256 Meters **KFUS** 50 Watts
1170 Kilocycles

The Gospel Radio, Oakland, California

- 6:30 p. m.—Children's Bible story hour
- 6:45 p. m.—Bible reading modern translation
- 7 p. m.—KFUS Gospel radio vesper service, Mrs. W. L. Garrard, leading. Quartets, duets, etc.

207 Meters **KGTT** 50 Watts
1450 Kilocycles

Glad Tidings Temple, San Francisco, Calif.

- 12:15 p. m.—Scripture reading, Rev. R. J. Craig

When brass nuts are screwed down fast on terminals, which are required to remain solid, a center punch mark on the side of the screw, between the nut and screw often will lock the affair securely enough to prevent loosening.

ELEMENTS

of

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By Lieut. E. W. Stone

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(PATENT PENDING)

SCHEDULES FOR FRIDAY

JULY 23, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KJBS KTAB		
9:30-10:00	KJBS KQW		KTCL
10:00-10:30	KJBS KFUS		KFOA KGW
10:30-11:00	KFUS KPO	KFSG KNX	KFOA KGW KFWV
11:00-11:30	KRE KGO	KFSG	KGW
11:30-12:00	KGO	KFSG KFON	CJCA KJR
12:00-12:30	KGO KPO KGTT	KFSG KNX KFON KFQZ	
12:30-1:00	KPO KGO	KFWO KHJ KNX KFQZ KFSD	KFOA KGW KFWV
1:00-1:30	KPO	KFWO KHJ KFSD	KFOA KGW KFWV
1:30-2:00	KPO	KNX	
2:00-2:30	KFWM KGO	KNX KTBI	KGW
2:30-3:00	KPO KGO KFWM	KNX KFON KTBI KFSG	KGW
3:00-3:30	KLX KGO KPO KGTT	KFON KFSG	KJR
3:30-4:00	KGO KPO KGTT	KFON KFSG	KJR KFWV
4:00-4:30	KPO	KFON KNX KFSG	KFEC KFOA
4:30-5:00	KPO		KFOA KFWV
5:00-5:30	KPO	KMTR KFON	KFWV
5:30-6:00	KGO KPO KRE	KMTR KFI KNX KFON	
6:00-6:30	KGO KZM KPO KFRC	KFI KMTR KNX KFON KFSD KFQZ KFWO KFWB	KFOA KHJ KFWW KGW
6:30-7:00	KPO KGO KFRC KQW KZM	KHJ KNX KFI KFQZ KFWO KFON KFSD KTBI KMTR KFWB	KMO CNRE KGW KFOA KHJ KFWV
7:00-7:30	KFRC KPO KQW KTAB KLX KGO	KFWO KFSD KFWB KHJ KNX KTBI KMTR KFI KFON	KFOA KOWW KFWV KHJ
7:30-8:00	KQW	KFI KFSG KFWO KNX KMTR KFWB KTBI KFON KMJ KPSD KHJ	KFOA KGW CFCT CNRE CNRV KFWV KHJ
8:00-8:30	KLX KFRC KPO KGTT KFUS KTAB KGO	KFWB KNRC KTBI KFWO KFSG KFON KFI KHJ KNX KFQZ KMTR KMJ KFSD	KFOA KWSC KOWW CFCT CNRE CNRV KGW KFWV KOIN
8:30-9:00	KLX KPO KFRC KGTT KFUS KTAB KGO	KMTR KTBI KFWO KFON KNX KMJ KFWB KNRC KFSD KFI KFSG KHJ KFQZ	KFOA CKCD KWSC KGW KJR KOIN KOWW CFCT CFCT CFCT
9:00-9:30	KLX KPO KFRC KGTT KRE KTAB KGO	KFI KHJ KMJ KFSD KNX KFWB KMTR KNRC KFON KFQZ	KMO CFCT KWSC CNRV KFOA KJR CFCT KOIN KHJ CNRE KFWV KOWW KTCL
9:30-10:00	KGTT KTAB KPO KGO	KFI KHJ KMJ KFSD KNX KFWB KMTR KNRC KFON KFQZ	KFOA KMO CFCT KJR CNRV KTCL KOWW KOIN KFWV KHJ
10:00-10:30	KPO KLX KRE KFRC KGO	KFI KNX KFWB KFSG KFQZ KFSD KFON	CNRV KOWW CFCT KJR CNRE
10:30-11:00	KPO KRE KFRC KGO	KFI KNX KFWB KFQZ KFSD KFON KFSG	KFOA KGW KHJ KOWW CNRV KJR CNRE
11:00-11:30	KRE KGO	KNX KFON	KGW CNRV KHJ KOWW KFOA
11:30-12:00	KRE KGO	KNX KFON	KGW KOWW KFOA KHJ CNRV

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CFCT	435	W. W. Grant, Calgary	3000
CJCA	330	Geo. W. Deaville, Victoria	2000
CNRE	517	Journal, Edmonton, Canada	5000
CNRV	517	Nat. Rys., Edmonton, Canada	5000
KFEC	291	Nat. Rys., Vancouver, Canada	500
KFI	248	Meier & Frank Co., Portland	50
KFOA	467	Earl C. Anthony, Inc., L. A.	4000
KFON	454	Rhodes Co., Seattle, Wash.	1000
KFQU	232	Echophone Radio, Long Beach	500
KFQZ	217	Holy City, California	100
KFRC	268	Taft Radio, Hollywood, Cal.	50
KFSD	268	City of Paris D. G. Co., S. F.	50
KFSG	246	Air Fan Corp., San Diego, Cal.	500
KFWV	275	Angelus Temple, Los Angeles	500
KFUU	256	Gospel Radio, Oakland, Cal.	50
KFWB	220	Mathewson Motor Co., Oakland	500
KFWO	252	Warner Bros., Hollywood, Cal.	500
KFWM	211	Lawrence Mott, Avalon, Cal.	250
KFWV	207	Oakland Educational Society	250
KGO	213	Sovereign Hotel, Portland, Ore.	50
KGTT	361	Gen. Elec. Co., Oakland, Cal.	4000
KGW	207	Glad Tidings Temple, S. F.	50
KHJ	491	The Oregonian, Portland, Ore.	500
KHQ	405	The Times, Los Angeles, Cal.	500
KJBS	394	L. Wasmer, Spokane	1000
KJR	220	Julius Brunton & Sons, S. F.	5
KLX	384	N. W. Radio Service, Seattle	1000
KMJ	508	Tribune, Oakland, Cal.	500
KMO	234	The Fresno Bee, Fresno, Cal.	50
KMTR	250	Love Elec. Co., Tacoma, Wn.	100
KNX	238	K. M. Turner, Hollywood, Cal.	500
KOIN	208	Kierulff & Ravenscroft, L. A.	250
KOWW	337	L. A. Express, Hollywood	500
KQW	319	H. E. Read, Portland, Ore.	1000
KQW	256	F. A. Moore, Walla Walla, Wn.	500
KRE	428	Hale Bros. & Chronicle, S. F.	1000
KTAB	333	1st Baptist Church, San Jose	500
KTBI	256	The Gazette, Berkeley, Cal.	100
KTCL	240	Associated Broadcasters, Oak.	1000
KWSC	294	Bible Institute, Los Angeles	750
KZM	306	Am. Radio Tel. Co., Seattle	1000
	349	State College, Pullman, Wash.	500
	240	West. Radio Inst., Oakland	50

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Price \$64.00

G. M. BEST

1460 Grand Ave.

Piedmont, Cal.

(PATENT PENDING)

SCHEDULES FOR FRIDAY

JULY 23, 1926

Pacific Time

Inland Stations

Corrected Weekly

a.m.	Inland
7:00-7:30	KSL
7:30-8:00	KYW
8:00-8:30	KYW
8:30-9:00	WFAA
9:00-9:30	KSL
9:30-10:00	KSL
10:00-10:30	KSL
10:30-11:00	WFAA KTHS
11:00-11:30	KOA
11:30-12:00	KOA
12:00-12:30	WHB
12:30-1:00	WHB WFAA
1:00-1:30	WOC
1:30-2:00	WDAF WFAA KDYL
2:00-2:30	KDYL WOC
2:30-3:00	WFAA KDYL WOC KOA
3:00-3:30	WSB KDYL KOA
3:30-4:00	KFKX KFAB KDYL KOA
4:00-4:30	WOC KFAB KFKX KDYL
4:30-5:00	WDAF WOAW WOC KFKX
5:00-5:30	WGY KDKA
5:30-6:00	WHB KDYL KYW WLS WQJ KOA KSL
6:00-6:30	WDAF KDYL WSB WOC KYW WLS WEZ WSM WMAQ WCCO KDKA WEAR WENR WGY KOA KSL WJZ CNRT WWJ
6:30-7:00	WMAQ WGN WGY KSL WCCO KDKA WOS WDAF WSB WOC WLS KYW PWX WEAR KOA WJZ CNRT WENR WHAD WFAA KDYL KFAB
7:00-7:30	WENR WJY WOO WCAP WEZ WJZ WGN CNRT WFAA WEEI KTHS WEAR KMOX CYL KOA WMAQ WHAD WJAZ KSD CZE WWJ WEBH WDAF WCO WGR KYW WCAU WJR WLS WOS WEAF KSL WOC KFKX WJAD WAHG KFAB WCX PWX
7:30-8:00	KTHS KFKX WMAQ KYW WGR WEAR WJAD WLS WOS WEEI WJZ WJR WHT WCCO WOC CYL KOA WJZ WJAZ KMOX WHAG WJY WOO WCAP WEEI WEZ WEAF KSL CNRT WENR WCAU WHAD KFAB WGN KSD PWX WOAW
8:00-8:30	WBAP KOA WJAZ WHT WOK WTAM KSL WQJ WCCO WLS WEAF WJZ WLIB KTHS KFKX WMAQ KYW WGR KSD WSM CNRT WJY WCAP WBCN WOS WAIIG WOK KFAB WOC KFWA KMOX
8:30-9:00	WOAW WCAP KOA WEAF WCCO WJAZ KFKX WMAQ WLIB CNRT WBCN WGR KYW WAHG WSM KFWA KMOX WTAM WJZ WOK WOS WHT KSL WQJ WLS KSD
9:00-9:30	KYW WSB WEEI WQJ KOIL WHT WOAW KFUR WBCN WLIB WOK KMOX WJAZ KSD KFWA
9:30-10:00	KYW WQJ KFUR WEBH WOK WOAW WBCN KOIL WSB WLIB WHT KMOX WJAZ KSD KFWA
10:00-10:30	WDAF KFUR WEBH WENR WQJ KYW WOK
10:30-11:00	WENR WQJ WDAF KFUR WEBH
11:00-11:30	KYW WENR
11:30-12:00	KYW WENR

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CNRT	357	Nat. Rys., Toronto, Canada	2000
CYL	480	El Universal, Mexico City	500
CZE	350	Dept. of Educ., Mexico City	1000
KDKA	309	Westinghouse E., Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFKX	288	Westinghouse, Hastings, Neb.	5000
KFUR	224	Ogden, Utah, Peery's Bldg.	50
KFWA	261	Browning Bros., Ogden, Utah	500
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
KOIL	278	Mona Motor Oil, Coun. Bl., Iowa	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KYW	536	Westinghouse Elec., Chicago	3500
PWX	400	Int. T. & T. Co., Havana	500
WAHG	316	A. H. Grebe, Rich. Hill., N. Y.	1000
WBCN	266	Southtown Econ. Sta., Chicago	500
WEZ	333	West Elec., Springfield, Mass.	2000
WCAP	469	C. & P. Tel. Co., Washington	500
WCAU	278	Hotel Pennsylvania, Phila.	500
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y.	5000
WEAR	389	Goodyear Tire & Rubber Co.	1000
WEEI	349	Edison Elec. Co., Boston	500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGN	303	Chicago Tribune, Chicago	1000
WGR	319	Federal Radio Corp., Buffalo	750
WGY	380	Gen. Elec. Co., Schenectady	5000
WHAD	275	Marquette Journal, Milwaukee	500
WHB	366	Sweeney Auto Sch., K. C., Mo.	500
WHT	400	Radiohone Corp., Chicago	3500
WJAD	353	Barton Mfg. Co., Waco, Tex.	500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJR	517	Jewett Radio, Pontiac, Mich.	5000
WJY	405	R. C. A., N. Y. City	1000
WJZ	455	R. C. A., N. Y. City	40,000
WLIB	303	Liberty Weekly, Elgin, Ill.	4000
WLS	345	Sears, Roebuck, Chicago	5000
WMAQ	448	Chicago Daily News	1000
WOAW	526	W. O. W., Omaha, Neb.	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Newtownound, Homewood, Ill.	5000
WOO	508	Wanamaker's, Philadelphia	500
WOS	441	St. Mar. B., Jefferson City, Mo.	500
WQJ	448	Cal. Bak. Powder Co., Chicago	500
WSB	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500

Radio Trouble?

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Shop work, \$1.50 per hour

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Pick up and delivery 50 cents

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Also house-wiring, electric fixture and
appliance repairing

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660 Twelfth Street

Oakland, Calif.

PROGRAMS FOR FRIDAY

JULY 23, 1926



Clair E. Morrison
KPO—Announcer



Dr. A. R. Nash
KGO—3 p.m.



Stanislaus Bem
KGO—6 p.m.



Wilda W. Church
KGO—10:45 a.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles

General Electric Company, Oakland, Calif.

10:45 to 11:10 a. m.—Literary hour, Wilda Wilson Church
11:10 a. m.—Prudence Penny, Homemaking talk
11:30 a. m. to 1 p. m.—Luncheon concert
12 noon—Time signal
12:30 p. m.—Weather bureau reports
1:30 p. m.—Stock and weather reports
2 to 3 p. m.—Listenwalter & Gough and The Magnavox Co. program
3 to 4 p. m.—Edwin Heinsohn, baritone; Margaret Lloyd, soprano; Effie Edmonson, acc.; Ted Cooke, tenor; Dr. Albertine Richards Nash, consulting psychologist
5:30 to 6 p. m.—Esther Wood Schneider, KGO Radio Girls
6 to 6:55 p. m.—Bem's Little Symphony Orchestra
6:55 p. m.—News items; weather reports; baseball scores; S. F. produce, grain, cotton and metals; stock reports
8 to 12 p. m.—International Convention of Lions Clubs, Civic Auditorium, San Francisco, "Stunt Night"

208 Meters **KNRC** 250 Watts
1440 Kilocycles

Kierulff & Ravenscroft, Los Angeles, Calif.

7:50 to 8 p. m.—Live wire business announcements
8 p. m.—Program of "songs of long ago"
9 to 10 p. m.—K. & R. courtesy dance hour

291 Meters **CNRV** 5000 Watts
1030 Kilocycles

Canadian National Railways, Vancouver, B.C.

7:30 p. m.—Bedtime story, Aunt Ruby
8 p. m.—Talk prepared by Canadian Manufacturers' Association
9 p. m.—Studio program featuring Miss D. Woodley, soprano; D. C. Hetherington, baritone; A. E. Knight, bass and Messrs. J. M. and Winston Churchill Ferrier, and J. T. Parle, cornetist
10:30 p. m.—Cabaret Belmont Orchestra playing from Rose Room of Hotel Belmont

467 Meters **KFI** 4000 Watts
640 Kilocycles

Copyright 1926, E. C. Anthony, Inc., L. A.

5:30 p. m.—Program arranged by Eugene Biscauluz
6 p. m.—KFI nightly doings
6:15 p. m.—KFI radio travel guide
6:30 p. m.—Paula Meeks
6:45 p. m.—Burr McIntosh, "Cheerful Philosopher"
7 p. m.—Leslie Adams, whistler
7:30 p. m.—Felipe Delgado, Media Hora Española
8 p. m.—Aeolian organ recital, Dan L. MacFarland at the console
9 p. m.—Program of Hawaiian music by Harry Decker
10 p. m.—Packard ballad hour, Emma Kimmel, Tom McLaughlin, Paul Roberts and Leslie Adams

294 Meters **KTBI** 750 Watts
1020 Kilocycles

The Bible Institute, Los Angeles, California

8:30 to 9 a. m.—Devotional service
2 to 3 p. m.—Inspirational hour
6:15 to 7 p. m.—Aunt Martha's Children's hour
7 to 8 p. m.—Exposition of the International Sunday School Lesson
8 to 9 p. m.—Musical program under direction Almo R. Taylor

508 Meters **KLX** 500 Watts
590 Kilocycles

The Oakland Tribune, Oakland, California

3 p. m.—Baseball
7 to 7:30 p. m.—News broadcast
8 to 9:45 p. m.—Studio program through courtesy of Western Auto Supply Company
9:45 to 10:30 p. m.—Athens Athletic Club Orchestra

211 Meters **KFWO** 250 Watts
1420 Kilocycles

Major Lawrence Mott, Avalon, California

12:30 to 1:30 p. m.—St. Catherine Orchestra
6 to 6:30 p. m.—Chimes
6:30 to 7:30 p. m.—St. Catherine Orchestra
7:30 to 9 p. m.—Band concert

Friday Programs—Continued

428 Meters 700 Kilocycles KPO 1000 Watts

Hale Bros. & The Chronicle, San Francisco

- 7, 7:30, 8 a. m.—Daily dozen given by Y.M.C.A.
- 10:30 a. m.—Ye Towne Cryer giving the U. S. weather forecast; amusement and general information; market reports
- 12 noon—Time signals, scripture reading, weather forecast and market report
- 12:10 to 12:45 p. m.—Clift Hotel Concert Orchestra, Solie Heilbronner, director
- 12:45 p. m.—Talk from Commonwealth Club luncheon at Palace Hotel
- 1:30 to 2 p. m.—Rudy Selger's Fairmont Hotel Orchestra
- 2:45 p. m.—Play by play of baseball game
- 4:30 to 5:30 p. m.—Palace Hotel Concert Orchestra, Cyrus Trobbe, director
- 5:30 to 6:15 p. m.—Big Brother's stories for children taken from Book of Knowledge
- 6:15 to 6:30 p. m.—Ye Towne Cryer giving stock quotations, baseball scores and amusement and general information
- 6:30 to 7 p. m.—States Restaurant Orchestra, Waldemar Lind, director
- 7 to 7:10 p. m.—"Sports-on-the-Air" by Harry B. Smith, Sporting Editor of the Chronicle
- 7:10 to 7:20 p. m.—Business and investment talk
- 7:20 to 7:25 p. m.—Chamber of Commerce talk on "Industrial San Francisco," by Capen A. Fleming, director Industrial Department
- 8 to 9 p. m.—Studio program
- 9 to 10 p. m.—Clift Hotel Dance Orchestra, Herb Meyerinck, director. Book reviews by Harry A. Small of the Chronicle
- 10 to 11 p. m.—States Restaurant Orchestra, Walder Lind, director

337 Mete. 890 Kilocyc KNX 500 Watts

L. A. Even Express, Los Angeles, Calif.

- 7:30 a. m.—KNX morning gym
- 8 a. m.—Inspirational talk
- 8:55 a. m.—Time signal and birthday notices
- 9 a. m.—Radio shopping news
- 10 a. m.—Town Crier
- 10:30 a. m.—Talk on "Proper Foods and How to Prepare Them," a Virginia Tappan talk
- 12 noon—Leighton's Cafeteria Orchestra
- 1 p. m.—The Village Gossip
- 1:30 p. m.—The Book Worm
- 2 p. m.—L. A. District Federation of Women's Clubs musical program
- 4 p. m.—Boy Scouts musical program
- 4:55 p. m.—Market reports
- 5:30 p. m.—Leighton's Cafeteria Orchestra
- 6 p. m.—The Town Tattler
- 6:15 p. m.—W. F. Alder travologue
- 6:30 p. m.—Atwater Kent Orchestra
- 7 to 10 p. m.—Courtesy program
- 10 p. m.—Broadcasting the main event from Hollywood Legion Stadium
- 11 p. m.—Hotel Ambassador; Ray West's Coconut Grove Orchestra

322 Meters 930 Kilocycles KOA 5000-Watts

General Electric Company, Denver Colorado

- 5:30 p. m.—Brown Palace String Orchestra
- 6:30 p. m.—Preview of Sunday School lesson
- 7 p. m.—Open-air concert, Denver Municipal Band, Henry Sachs, director

240 Meters 1250 Kilocycles KTAB 1000 Watts

The Associated Broadcasters, Oakland, Cal.

- 9 to 9:30 a. m.—Prayer service, led by Rev. E. L. Spaulding
- 7 to 7:30 p. m.—Shopping hour
- 8 to 10 p. m.—Barber Shop Ballad Quartet, G. Gibson, first tenor; Kenneth M. Morse, second tenor; Merlwyn Morse, baritone; Bert Shrader, bass—
 - My Old Kentucky Home.....Foster
 - I've Been Workin' on de Railroad.....Anon
 - Piano solos, Carmen de Obarrio—
 - Barcarolle.....Moore
 - Revon.....Moore
 - Contralto solos, Agnes Reis Armistead—
 - Mornin' on the Bayou.....Strickland
 - Nalin Bateau.....Strickland
 - Address, Chas. H. Scoggins, publicity supervisor, Oakland postoffice
 - 'Cello solos, Paul Langer—
 - Palm Branches.....Faure
 - Romance Sans Paroles.....Davidoff
 - Barber Shop Ballad Quartet—
 - How Can I Leave Thee.....German Ballad
 - Medley, Dear Old Girl and I Had a Dream.....Anon
 - Old Folks at Home.....Neidlinger
 - Nellie Was a Lady.....Foster
 - Piano solos, Carmen de Obarrio—
 - Etude.....Chopin
 - Etude en Forme de Valse.....Saint-Saens
 - Contralto solo, Agnes Reis Armistead
 - 'Cello solos, Paul Langer—
 - Berceuse from "Jocelyn".....Goddard
 - Ave Maria.....Schubert
 - Piano solo, Carmen de Obarrio
 - Contralto solos, Agnes Reis Armistead—
 - Waters of Minnetonka.....Lieurance
 - Indian Dawn.....Zanecnik
 - The Barber Shop Ballad Quartet—
 - Soldiers' Farewell.....Kinkle
 - My Wild Irish Rose.....Olcott-Ball
 - Old Black Joe.....Foster
 - Mandy Lee.....Bland

232 Meters 1200 Kilocycles KFON 500 Watts

Nichols & Warinner, Inc., Long Beach, Calif.

- 11:30 a. m. to 12:30 p. m.—Musical program
- 2:30 to 4 p. m.—Municipal band concert
- 4 to 4:30 p. m.—Press-Telegram late news
- 5 to 6 p. m.—KFON Concert Orchestra
- 6 to 6:20 p. m.—Organ recital, State Theater
- 6:20 to 7 p. m.—KFON Concert Orchestra
- 7 to 8 p. m.—Program featuring orchestral music
- 8 to 9 p. m.—Press-Telegram program
- 9 to 9:15 p. m.—Seaboard Bond and Mortgage Company
- 9:15 to 9:30 p. m.—"The Lure of the Sky," Doctor Lewis Thomas
- 9:30 to 10 p. m.—Organ recital
- 10 to 12 p. m.—Elks Frolic, Lodge 88k

238 Meters 1260 Kilocycles KMTR 500 Watts

K. M. Turner Corp., Hollywood, California

- 6 p. m.—Home Hour, conducted by Mammy Simons, "Peter Pan" hour. Harold Raim, "Pal"
- 9 p. m.—The Hawaiian Silver String Quintet
- 7 p. m.—Gaylord Wilshire lectures
- 7:30 p. m.—Prof. Alfred Cookman, president of the Los Angeles Nature Club
- 8 p. m.—KMTR Concert Orchestra

(Programs continued on next page)

Friday Programs—Continued

252 Meters **KFWB** 500 Watts
1190 Kilocycles

Warner Brothers, Hollywood, California

6 to 7 p. m.—Pontiac Six dinner hour
7 to 8 p. m.—Program featuring June Parker, blues singer; Dan Gridley, tenor; Charlie Wellman; The Bert Farrar String Trio and also their Dance Orchestra
8 to 8:10 p. m.—News items
8:10 to 9:10 p. m.—Program featuring Raquel Nieto, soprano; The International Trio; Esther White; Charlie Wellman; The John Wright Orchestra
9:10 to 10:10 p. m.—Program featuring Esther White, popular songs; the International Trio; Julius H. Phillips, tenor; Bill Hatch's Orchestra
10:10 to 11 p. m.—News items followed by Warner Bros. Frolic

226 Meters **KFOZ** 250 Watts
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood

12 to 1 p. m.—Dave Ward's Merchant's Hour
6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String Trio and Frank Barry, the silver-toned tenor
8 to 9 p. m.—Semi-classical hour with Gerald McCreary, Helen Boyd, Ned Francis and Virginia Turner Platt
9 to 10 p. m.—Program featuring Don Smith, Mildred Masser and the California Melody Girls
10 to 11 p. m.—Program featuring Eddy Miller's Dixie Boys and Ruth Michaelson, soloist

384 Meters **KJR** 1000 Watts
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.

■:30 to 12 noon—Talk "What to Prepare for Tonight's Dinner," by Prudence Penny; daily produce reports
12 noon—Time signal
5:40 to 6 p. m.—Stock quotations
6 to 6:10 p. m.—Time signals; baseball scores; weather reports and "The Box Office"
8:30 to 10 p. m.—Post Intelligencer program
10 to 11 p. m.—Nute Motor Co. program

454 Meters **KFOA** 1000 Watts
660 Kilocycles

Rhodes Department Store, Seattle, Wash.

10 to 10:30 a. m.—The home-maker, by Mary Gordon
10:30 to 10:45 a. m.—Health exercises for the housewife, by Van
10:45 to 11:10 a. m.—Cheerio to the shut-ins
11:10 to 11:15 a. m.—Market quotations
12:30 to 1:30 p. m.—Luncheon program
4:15 to 5 p. m.—The Times "afternoon at home"
5:15 to 6:25 p. m.—The Atwater Kent boys, Doug and Fred; children's program
6:25 to 6:45 p. m.—Sports and amusement revue program
6:45 to 8:15 p. m.—Sherman Clay and Company
8:15 to 8:30 p. m.—"Book Chat"; weather report
8:30 to 10 p. m.—The Times studio program
10:30 to 12 p. m.—Simultaneous broadcast Hoot Owls, KGW and KFOA

491 Meters **KGW** 1000 Watts
610 Kilocycles

The Morning Oregonian, Portland, Oregon

10 to 11:30 a. m.—The Town Crier; women's daily dozen; music, weather report; household helps by Jeannette Putman Cramer; shopping guide and news items
12:30 to 1:30 p. m.—Concert
2 to 3 p. m.—Women's matinee, talks, lectures and music
6 to 7 p. m.—Dinner concert; baseball scores
7:30 to 7:45 p. m.—Weather, police and market reports, news items and sporting results
8 to 9 p. m.—Concert of vocal and instrumental music
10:30 to 12 p. m.—Weekly frolic of Keep Growing Wiser Order of Hoot Owls, Pantages stars and other features

517 Meters **CNRE** 5000 Watts
580 Kilocycles

Canadian National Railways, Edmonton, Alta.

6:30 to 7 p. m.—Children's half hour with the Farmer
7:30 to 9 p. m.—Studio concert by Percy Humphrey and his Orchestra, assisted by vocal artists
10:30 p. m.—Rialto hour, Tom Gardiner and his Orchestra in favorite operatic selections

394.5 Meters **KHQ** 1000 Watts
760 Kilocycles

Louis Wasmer, Inc., Spokane, Washington

6 to 7 p. m.—Mann Bros. Davenport Hotel Orchestra
7 to 8 p. m.—Universal Auto Co., program
9 to 10 p. m.—Tull & Gibbs program
10 p. m.—Time signals
10:30 to 12 p. m.—Simultaneous broadcast of the Hoot Owls through KGW and KFOA

207 Meters **KFWM** 250 Watts
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.

2 to 2:45 p. m.—Studio program
Soprano solos, Mrs. Adele Krug—
I Know a Lovely Garden.....D'Hardelot
It Was a Bowl of Roses.....Foster
Piano solo, Mrs. Hermine C. Winks—
Love.....Grieg
Educational talk, Mrs. George Hein—
China and Her People
Vocal solos, Mrs. Neil B. Pierson—
Good Bye.....Tosti
Where Love Awaits.....Metcalfe

300 Meters **KSL** 1000 Watts
1000 Kilocycles

Cope and Johnson, Salt Lake City, Utah

6:30 a. m.—Setting up exercises
6:45 a. m.—Inspirational period
7 a. m.—Setting up exercises
7:15 a. m.—Cheerio; Daily Strength
9 a. m.—Instrumental trio and address on cooking problems
10 a. m.—Housekeeper's half hour
5:30 p. m.—Stories for the children by Uncle Ben
6:15 p. m.—Weather, livestock, butter, egg and vegetable reports; mining quotations; farm flashes
6:45 p. m.—Book review, T. Albert Hooper
7 p. m.—Program

Friday Programs—Continued

268 Meters **KFRC** 50 Watts
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco

- 6 to 6:30 p. m.—Goodfellows' Ad Period
- 6:30 p. m.—"The Stage and Screen" and police reports
- 6:30 to 7:30 p. m.—Mac and his gang
- 8 to 9 p. m.—The KFRC Little Symphony Orchestra, Frank Moss, director
- Overture "La Dame Blanche".....Boildien
- Selection "Apple Blossoms".....Kreisler
- CanzonettaGodard
- Danza EsoticaMascagni
- Alvina Barth, soloist
- 9 to 10 p. m.—"L'Enfant Prodigue," a short opera for three voices by Debussy, to be done by Flora Howell Bruner, soprano; Gwynfi Jones, tenor; Albert Gillette, bass; direction of Frank Moss
- 10 to 11 p. m.—Dance music by Walter Krausgrill's Orchestra and Bill Backstedt's Old-Time Band

333 Meters **KQW** 500 Watts
900 Kilocycles

First Baptist Church, San Jose, California

- 9:30 to 10:30 a. m.—Shopping guide
- 6:30 to 6:50 p. m.—Farm flashes
- 6:50 to 7 p. m.—Sperry Flour home service talk
- 7 to 8 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks

256 Meters **KRE** 100 Watts
1170 Kilocycles

The Berkeley Gazette, Berkeley, California

- 11:15 a. m.—Physical exercises for women, conducted by Dorothy Barron
- 5:30 p. m.—Current news
- 9 to 12 p. m.—Dance program by Bob Beal and his Hotel Claremont Orchestra
- 10 p. m.—Studio program. Intermission solos by members of the orchestra continuously during the evening

256 Meters **KFUS** 50 Watts
1170 Kilocycles
The Gospel Radio, Oakland, California

- 10 a. m.—Hour of Christian ministry
- 8 p. m.—Studio program; health questions received by phone or mail answered by Louis L. Sherman, M.D.

207 Meters **KGTT** 50 Watts
1450 Kilocycles
Glad Tidings Temple, San Francisco, Calif.

- 12:15 p. m.—Scripture reading, Rev. R. J. Craig
- 3 to 4 p. m.—Sunshine hour under direction of F. V. Katte
- 8 to 10 p. m.—Studio program of sacred music

220 Meters **KJBS** 5 Watts
1360 Kilocycles
Julius Brunton & Sons Co., San Francisco

- 9 to 10:40 a. m.—Vocal, instrumental selections
- 2 to 2:30 p. m.—Vocal, instrumental selections

Square bus wire that is twisted by placing one end in a vise, and then fastening the other end in a hand or breast speed drill and given a few turns, affords a novelty in wiring. The twist serves to give a better gripping surface to the solder, and inferior grades of wire, that have been bent until they are not satisfactory for wiring, may be made as straight as a ruler through this treatment. Soft wire, tempered in this manner, may be bent more neatly than otherwise. Where one wants a particularly neat appearing wiring job, the use of twisted bus wire is worth considering.

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(PATENT PENDING)

SCHEDULES FOR SATURDAY

JULY 24, 1926

Pacific Time

Pacific Coast Stations

Corrected Weekly

a.m.	Central Cal.	Southern Cal.	Pacific N. W.
9:00-9:30	KJBS KTAB		
9:30-10:00	KJBS KQW	KMTR	
10:00-10:30	KJBS KFUS		KGW KFWV
10:30-11:00	KFUS KPO	KFSG	KGW KFWV
11:00-11:30	KRE KGO	KFSG	KFEC KGW KFOA
11:30-12:00	KGO	KFSG KFON	CJCA KFEC KJR
12:00-12:30	KGO KPO KGTT	KFSG KFON KNX KFQZ	CJCA
12:30-1:00	KGO KPO	KHJ KFWO KNX KFQZ KFSD	KGW KFWV
1:00-1:30	KPO	KMTR KFWO KHJ	KGW KFWV
1:30-2:00	KPO	KNX	
2:00-2:30	KJBS KGO		KHQ
2:30-3:00	KGO KPO	KFON	KHQ
3:00-3:30	KPO KLX KGO	KNX KFON	
3:30-4:00	KGO KPO KLX	KFON KFSG	KFWV
4:00-4:30	KPO KFRC KGO	KFSG KFON	KFEC KFOA
4:30-5:00	KPO KFRC KGO		KFEC KFOA KFWV
5:00-5:30	KPO KFRC KGO	KFON	KFWV
5:30-6:00	KFRC KFOB KREKFI	KNX KFON	
6:00-6:30	KFRC KZM KPO	KFI KMTR KNX KFQZ KFON KFWB KFQW	KHQ KFWV KGW
6:30-7:00	KFRC KZM KPO KFUS KQW	KHJ KFI KNX KFON KFWO KMTR KFSD KFQZ KFWB	CJCA KGW KFOA KHQ KFWV
7:00-7:30	KLX KFRC KPO KQW KFUS KTAB	KFI KHJ KNX KFWO KFON KFSD	KOWW KFOA KFWV
7:30-8:00	KFBK	KFI KFON KFWO KNX KFSD KSMR KHJ	KFOA KFWV
8:00-8:30	KPO KRE KFOB KGO KFRC KFBK KFWM	KHJ KNX KFSD KFI KFWB KFON KMTR KNRC KPSN KSMR KFQZ KFWO	KFOA KOWW
8:30-9:00	KFRC KFOB KFBK KPO KGO KRE KFWM	KFI KHJ KFSD KNX KFON KFWB KMTR KNRC KSMR KFWO KFQZ KPSN	CKCD KJR KFOA KOWW
9:00-9:30	KFWM KFBK KFOB KGO KPO KRE KFRC	KFI KHJ KNX KFON KFWB KMTR KNRC KSMR KFQZ KFSD	KFCN CKCD KJR KFOA KOWW CJCA
9:30-10:00	KFOB KFWM KGO KPO KRE KFBK KFRC	KFI KHJ KNX KFON KFWB KMTR KNRC KMJ KFSD KSMR KFQZ	KJR KOWW KFOA KTCL
10:00-10:30	KFRC KFOB KRE KPO KGO	KFI KNX KFON KFWB KNRC KFSD KFQZ	KFOA CFCN CFCT KOWW KGW CJCA KTCL
10:30-11:00	KGO KPO KFRC KRE KFOB	KFON KFWB KNRC KFI KNX KFSD KFQZ	KFOA CFCN CFCT KOWW KGW CJCA KTCL
11:00-11:30	KPO KGO KFRC KFOB KREKFSD	KFI KNX KFWO	KGW KOWW CFCT CJCA
11:30-12:00	KPO KGO KFRC KFOB KREKFSD	KFI KNX KFWO	KGW KOWW CFCT
12:00-12:30	KFRC KGO KRE	KFI KFSD	
12:30-1:00	KFRC KRE KGO	KFI KFSD	
1:00-2:00		KFI KFSD	

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CFCN	435	W. W. Grant, Calgary	3000
CFCT	330	Geo. W. Deaville, Victoria	2000
CJCA	517	Journal, Edmonton, Canada	5000
CKCD	411	Daily Province, Vancouver	1000
KFBK	248	The Bee, Sacramento, Cal.	100
KFEC	248	Meier & Frank Co., Portland	50
KFI	467	Earl C. Anthony, Inc., L. A.	4000
KFOA	454	Rhodes Co., Seattle, Wash.	1000
KFOB	226	KFOB, Inc., Burlingame, Cal.	50
KFON	232	Echophone Radio, Long Beach	500
KFQZ	226	Taft Radio, Hollywood, Cal.	50
KFRC	268	City of Paris D. G. Co., S. F.	50
KFSD	246	Air Fan Corp., San Diego, Cal.	500
KFSG	276	Angelus Temple, Los Angeles	500
KFUS	256	Gospel Radio, Oakland, Cal.	500
KFWB	252	Warner Bros., Hollywood, Cal.	500
KFWO	207	Oakland Educational Society	250
KFWM	213	Sovereign Hotel, Portland, Ore.	50
KGO	361	Gen. Elec. Co., Oakland, Cal.	4000
KGW	491	The Oregonian, Portland, Ore.	500
KHJ	405	The Times, Los Angeles, Cal.	500
KHQ	394	L. Wasmer, Spokane	1000
KJBS	220	Julius Brunton & Sons, S. F.	5
KJR	384	N. W. Radio Service, Seattle	1000
KLX	508	Tribune, Oakland, Cal.	500
KMJ	234	The Fresno Bee, Fresno, Cal.	50
KMTR	238	K. M. Turner, Hollywood, Cal.	500
KNRC	208	Kierulff & Ravenscroft, L. A.	250
KNX	337	L. A. Express, Hollywood	500
KOWW	256	F. A. Moore, Walla Walla, Wn.	500
KPO	428	Hale Bros. & Chronicle, S. F.	1000
KPPC	229	Pasadena Pres. Church	50
KPSN	316	The Star-News, Pasadena	1000
KQW	333	1st Baptist Church, San Jose	500
KRE	256	The Gazette, Berkeley	100
KSMR	210	S. M. Ry. Co., Santa Maria	100
KTAB	240	Associated Broadcasters, Oak.	1000
KTCL	306	Am. Radio Tel. Co., Seattle	1000
KZM	240	West. Radio Inst., Oakland	50

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(PATENT PENDING)

SCHEDULES FOR SATURDAY

JULY 24, 1926

Pacific Time

Inland Stations

Corrected Weekly

s.m.	Inland
8:00-8:30	KYW
8:30-9:00	KYW
9:00-9:30	KYW
9:30-10:00	KYW
10:00-10:30	KYW
10:30-11:00	KTHS WFAA
11:00-11:30	KOA
11:30-12:00	KOA
12:00-12:30	
12:30-1:00	WFAA
1:00-1:30	
1:30-2:00	WFAA KDYL
2:00-2:30	KDYL WDAF
2:30-3:00	WFAA KDYL
3:00-3:30	WSB WTAM KDYL
3:30-4:00	WSB WDAF WTAM WFAA KDYL
4:00-4:30	WDAF WOAW WOC KDYL
4:30-5:00	WDAF KYW WOAW WFAA WOC
5:00-5:30	KYW WFAA WOAW WTAM WLS
5:30-6:00	KDYL WTAM WLS WOAW KYW
6:00-6:30	KDYL KOIL WSB WLS WGY WTAM WCCO KDKA KYW WIP WFAF
6:30-7:00	KSL WSB PWX KYW WGY WLS KDYL WBZ WSM CNRO WRC WENR WLW WTAM WIP WFAF WGBS WJZ
7:00-7:30	KSD WOC WTAM KTHS WFAF KFAU PWX KYW WOAW WLS WIP WGN KLZ WFAA WGBS WJZ WEBH WJR WBCN WGY WMAQ WREO WCCO WSM CZE CNRO WRC WENR WLW KFAB WJAZ
7:30-8:00	WOC WTAM PWX WMAQ WCCO WENR WSM KYW WOAW WOR WJR WLS WIP WBCN KTHS WFAF WGBS WREO WHT WEBH WJZ CNRO WRC WLW WGY KLZ WJAZ WGN KFAB KFAU KSD CZE
8:00-8:30	WQJ WMAQ WREO WKRC KPRC WLIB WEBH WSM CNRO KFWA WOAW WRC KTHS WMAQ WGBS WFAF KFAU CZE WJR KSD PWX WBCN WTAM WOK KYW KLZ WJAZ WCCO WLIB WHT
8:30-9:00	WQJ WREO WKRC KPRC WLIB WMAQ WIP WLS WGBS WJZ WEBH WHT KSD KFWA WOK WOAW WTAM WJAZ KFAU WFAF WBCN KYW WJR CNRO PWX WRC WSM KTHS KLZ WCCO KMOX
9:00-9:30	WFAA KFUR WOAW WEBH KLZ KMOX WOK WKRC WBCN WJR WQJ WLS PWX KFWA WMAQ WSB KOIL WGBS KYW WJAZ WSM WFAF WLIB KPRC WHT
9:30-10:00	WFAA WQJ WOAW WSB WEBH WLIB WKRC WBCN KFUR KFWA WJR WOK WLS KYW KOIL WSM WHT KMOX KPRC WJAZ WFAF KLZ PWX
10:00-10:30	WQJ KFUR WEBH WDAF KFWA WFAF KYW WENR KOIL WBCN WOK KFAB WJAZ KLZ KGU
10:30-11:00	WQJ KFUR WEBH WDAF KFWA KGU KYW WENR KOIL WBCN KLZ WJAZ KFAB
11:00-11:30	KYW WENR KOIL WQJ WBCN KFBC KLZ KFAB KGU
11:30-12:00	KYW WENR WBCN KFAB KGU KFBC
12:00-12:30	WBCN KGU KFBC
12:30-1:00	WBCN KGU KFBC

STATION DIRECTORY

Call	Meters	Owner and Location	Power
CNRO	435	Nat. Rys. Ottawa, Canada	2000
CZE	350	Dept. of Educ. Mexico City	1000
KDKA	309	Westinghouse, E. Pittsburgh	10,000
KDYL	246	Newhouse Hotel, Salt Lake	50
KFAB	341	Neb. Buick Auto Co., Lincoln	1000
KFAU	280	Public Schools, Boise, Idaho	750
KFCB	238	Nielson Radio, Phoenix, Ariz.	100
KFUR	224	Ogden, Utah, Peery's Bldg.	50
KFWA	261	Browning Bros., Ogden, Utah	500
KGU	270	The Advertiser, Honolulu, Ha.	500
KLZ	265	Reynolds Radio Co., Denver	250
KMOX	280	Voice of St. Louis, St. Louis	500
KOA	322	General Elec. Co., Denver	5000
KOIL	278	Mona Motor Oil, Coun. Bl., Ia.	500
KSD	545	The Post-Dispatch, St. Louis	500
KSL	300	Cope & Johnson, Salt Lake	1000
KTHS	375	Arlington Hotel, H. Sprgs., Ark.	750
KYW	536	Westinghouse Elec., Chicago	3500
PWX	400	Int. T. & T. Co., Havana, Cuba	500
WBCN	266	Southtown Econ. Sta., Chicago	500
WEZ	333	West. Elec., Springfield, Mass.	2000
WCCO	416	Wash.-Crosby, Minneapolis	5000
WDAF	366	The Kansas City Star	500
WEAF	492	Am. T. & T. Co., N. Y. City	5000
WEAR	389	Goodyear Tire & Rubber Co.	1000
WEBH	370	Edgewater Hotel, Chicago	1500
WENR	266	All Am. Radio Corp., Chicago	500
WFAA	476	Dallas News, Dallas, Texas	500
WGBS	316	Gimbel Bros., New York City	500
WGN	303	Chicago Tribune, Chicago	1000
WGY	380	Gen. Elec. Co., Schenectady	5000
WHT	400	Radiohone Corp., Chicago	3500
WIP	508	Gimbel Bros., Philadelphia	500
WJAZ	330	Zenith Radio Corp., Chicago	500
WJR	517	Jewett Radio, Pontiac, Mich.	5000
WJZ	455	R. C. A., N. Y. City	40,000
WKRC	326	Kodol Radio, Cincinnati	1000
WLIB	303	Liberty Weekly, Elgin, Ill.	4000
WLS	345	Sears, Roebuck, Chicago	5000
WLW	422	Crosley Co., Cincinnati	500-5000
WMAQ	448	Chicago Daily News	1000
WOAW	526	W. O. W., Omaha, Neb.	1000
WOC	484	Palmer Sch., Davenport, Ia.	5000
WOK	217	Neutrowound, Homewood, Ill.	5000
WOR	405	L. Bamberger, Newark, N. J.	500
WQJ	443	Cal. Bak. Powder Co., Chicago	500
WRC	469	R. C. A., Washington, D. C.	1000
WREO	286	Reo Motor Co., Lansing, Mich.	500
WSB	428	The Journal, Atlanta, Ga.	1000
WSM	283	Nat. Ins. Co., Nashville, Tenn.	500
WTAM	389	Willard Battery, Cleveland, O.	3500
WWJ	353	Detroit Evening News	1000

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PROGRAMS FOR SATURDAY

JULY 24, 1926



Wilt Gunzendorfer's Band—KGO—10 p.m.

361 Meters **KGO** 4000 Watts
830 Kilocycles

General Electric Company, Oakland, Calif.

10:45 to 11:30 a. m.—Literary hour, Wilda Wilson Church

11:30 a. m. to 1 p. m.—Luncheon concert

12 noon—Time signal

12:30 p. m.—Weather and stock reports

2 to 3 p. m.—T. White Eastman Co. program

3 to 4 p. m.—Radiocast Weekly program

4 to 5:30 p. m.—Bem's Little Symphony Orchestra

8 p. m.—Weather bureau report; Al Santoro, "Weekly Sport Review"

8:10 p. m.—International Convention of Lions Clubs, Civic Auditorium, San Francisco. Concert by Columbia Park Boys' Band. Organ recital by A. O. T. Astenius. "Making a Movie," Hollywood Lions Club, presenting prominent movie stars in person

10 p. m. to 1 a. m.—Dance music, Wilt Gunzendorfer's Hotel Whitcomb Band, San Francisco

226 Meters **KFQZ** 250 Watts
1330 Kilocycles

Taft Radio Broadcasting Co., Hollywood

12 to 1 p. m.—Dave Ward's Merchant's Hour

6 to 7 p. m.—Semi-classical dinner hour program with Chico de Verdi's Russian String Trio and Frank Barry, the silver-toned tenor

8 to 9 p. m.—Program arranged by Billy Hall with Polly Grant Hall, Dick Powers, Lou Parker and Stark Sisters

9 to 10 p. m.—Program featuring Harmony Girls, Charlie Cole, George O'Hara and Dick Shane

10 to 11 p. m.—Dance program by Los Angeles Railway Dance Orchestra

252 Meters **KFWB** 500 Watts
1190 Kilocycles

Warner Brothers, Hollywood, California

6 to 7 p. m.—Pontiac Six dinner hour

8 to 9 p. m.—Program featuring Peggy Mathews, blues singer; Bill Blake, tenor; Raquel Nieto, soprano; Bill Hatch's Orchestra

9 to 10 p. m.—Program featuring Ann Grey, Bill Blake and Bill Hatch's Orchestra

10 to 11 p. m.—Warner Bros. Frolic

467 Meters **KFI** 4000 Watts
640 Kilocycles

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5:30 p. m.—Shelley Players Orchestra, with Marta Ewatts, Millie Hart Teate and Jack Brady; Kenneth Price; Joe Haggerty

6 p. m.—KFI nightly doings

6:15 p. m.—KFI radio travel guide

6:30 p. m.—Vest pocket program

6:45 p. m.—KFI radiotorial period

7 p. m.—Knights of the Notes, Walter Sprague, director; Paul Roberts, soloist

8 p. m.—Angelus Trio

9 p. m.—Program by Robert Hurd

10 p. m.—Packard Radio Club, featuring Radioland's most prominent stars

11 p. m. to 2 a. m.—KFI midnight frolic. Carey Wilson, master of ceremonies

315 Meters **KPSN** 1000 Watts
950 Kilocycles

The Star-News, Pasadena, California

6 to 6:15 p. m.—Dinner time news reports

8 to 9 p. m.—Star-News concert hour with Star-News Ensemble, Henri J. van Praag, director, and assisting artists

240 Meters **KTAB** 1000 Watts
1250 Kilocycles

The Associated Broadcasters, Oakland, Cal.

9 to 9:30 a. m.—Prayer service, led by Rev. E. L. Spaulding

7 to 7:30 p. m.—Shopping hour

232 Meters **KFON** 500 Watts
1200 Kilocycles

Nichols & Warinner, Inc., Long Beach, Calif.

11:30 a. m. to 12:30 p. m.—Musical program

2:30 to 4 p. m.—Municipal band concert

4 to 4:30 p. m.—Press-Telegram late news

5 to 6 p. m.—KFON Concert Orchestra

6 to 6:20 p. m.—Organ recital, State Theater

6:20 to 7 p. m.—KFON Concert Orchestra

7 to 7:30 p. m.—Texas Cowboys, featuring Old Time Dance Music

7:30 to 9 p. m.—Municipal band concert

9 to 11 p. m.—KFON Concert Orchestra and other entertainers

Saturday Programs—Continued

428 Meters **KPO** **1000 Watts**
700 Kilocycles

Hale Bros. & The Chronicle, San Francisco

- 7, 7:30, 8 a. m.—Daily dozen given by Y.M.C.A.
- 10:30 a. m.—Ye Towne Cryer giving the U. S. weather forecast, amusement and general information and market reports
- 12 noon.—Time signals, scripture reading, weather forecast and market report
- 12:10 to 1 p. m.—Clift Hotel Concert Orchestra. Sollie Heilbronner, director
- 1 to 2 p. m.—Rudy Seiger's Fairmont Hotel Concert Orchestra
- 2:45 p. m.—Play by play of baseball game
- 4:30 to 5:30 p. m.—Palace Hotel Concert Orchestra. Cyrus Trobbe, director
- 6:15 to 6:30 p. m.—"Ye Towne Cryer" giving stock market quotations, baseball scores, market reports, amusement and general information
- 6:30 to 7:20 p. m.—States Restaurant Orchestra, Waldemar Lind, director
- 7:20 to 7:30 p. m.—Talk on Real Estate
- 8 to 10 p. m.—Cabiria Cafe Orchestra, Billy Long, director, with Maurice Gunsky, tenor, and Merton Borles, pianist, soloists during intermissions
- 10 to 12 p. m.—Clift Hotel Dance Orchestra, Herb Meyerlnck, director

337 Meters **KNX** **500 Watts**
890 Kilocycles

L. A. Evening Express, Los Angeles, Calif.

- 7:30 a. m.—KNX morning gym
- 8 a. m.—Inspirational talk
- 8:55 a. m.—Time signals and birthday notices
- 9 a. m.—Radio shopping news
- 10 a. m.—Town Crier
- 12 noon.—Leighton's Cafeteria Orchestra
- 1:30 p. m.—The Book Worm
- 3 p. m.—Town Crier of the day and his pals
- 4:45 p. m.—Joyce Coad talk
- 4:55 p. m.—Market reports
- 5:30 p. m.—Leighton's Cafeteria Orchestra
- 6 p. m.—The Town Tattler
- 6:15 p. m.—W. F. Alder travelogue
- 6:30 p. m.—Atwater Kent Orchestra
- 7 p. m.—Stories of insect life by Harry W. McSpadden
- 7:15 p. m.—Announcement of Sunday services of leading Los Angeles churches
- 7:30 to 10 p. m.—Studio program
- 10 p. m.—Hotel Ambassador Ray West's Coconut Grove Orchestra
- 11 p. m.—Frolic from Edgewater Club, Santa Monica

491 Meters **KGW** **1000 Watts**
610 Kilocycles

The Morning Oregonian, Portland, Oregon

- 10 to 11:30 a. m.—Town Crier; music, weather report, household helps by Jeannette Putman Cramer; shopping guide
- 12:30 to 1:30 p. m.—Concert
- 6 to 7 p. m.—Concert
- 10 to 12 p. m.—Dance music from Multnomah Hotel featuring Herman Kenia's Orchestra

208 Meters **KNRC** **250 Watts**
1440 Kilocycles

Kierulff & Ravenscroft, Los Angeles, Calif.

- 7:50 to 8 p. m.—Live wire business announcements
- 8 p. m.—Concert hour
- 9 p. m.—Weekly meeting of K. R.E.'s (A bunch of Radio Bugs)

238 Meters **KMTR** **500 Watts**
1260 Kilocycles

K. M. Turner Corp., Hollywood, California

- 9:30 a. m.—Junior Cooking class, conducted by Sylvia, "The Blind Cook"
- 1 p. m.—Gordon Whitnall, director-manager of the City Planning Commission
- 1:15 p. m.—"Safety First" talk by Traffic Officer Gerald Riley of the L. A. Police Dept.
- 6 to 7 p. m.—Popular program
- 8 p. m.—KMTR Concert Orchestra

333 Meters **KQW** **500 Watts**
900 Kilocycles

First Baptist Church, San Jose, California

- 9:30 to 10 a. m.—Shopping guide
- 6:30 to 7 p. m.—Humpty Dumpty
- 7 to 7:30 p. m.—California Farm Bureau evening radio news, weather, mail bag, farm topics and editorial talks

211 Meters **KFWO** **250 Watts**
1420 Kilocycles

Major Lawrence Mott, Avalon, California

- 12:30 to 1:30 p. m.—St. Catherine Orchestra
- 6 to 6:30 p. m.—Chimes
- 6:30 to 7:30 p. m.—St. Catherine Orchestra
- 7:30 to 9 p. m.—Special studio program

508 Meters **KLX** **500 Watts**
590 Kilocycles

The Oakland Tribune, Oakland, California

- 3 p. m.—Baseball
- 7 to 7:30 p. m.—News broadcast

454 Meters **KFOA** **1000 Watts**
660 Kilocycles

Rhodes Department Store, Seattle, Wash.

- 10:45 to 11:10 a. m.—Cheerio to the shut-ins
- 11:10 to 11:15 a. m.—Market quotations
- 4:15 to 5 p. m.—The Times "afternoon at home"
- 6:25 to 6:45 p. m.—Sports and amusement revue
- 7 to 8 p. m.—Musical program by "Shopping News"
- 8 to 8:15 p. m.—Travel talk; weather report
- 8:15 to 9:30 p. m.—All-artist studio program
- 9:30 to 11 p. m.—Jackie Souders and his Club Lido Serenaders

384 Meters **KJR** **1000 Watts**
780 Kilocycles

N. W. Radio Service Co., Seattle, Wash.

- 11:30 to 12 noon—"What to Prepare for Tonight's Dinner," Prudence Penny; Daily produce reports
- 12 noon.—Time signals
- 5:40 p. m.—Stock quotations
- 6 p. m.—Time signal; weather reports and "The Rox Office"
- 8:30 to 10 p. m.—J. C. Warner program
- 10 p. m.—Time signals

(Programs continued on next page)

Saturday Programs—Continued

268 Meters **KFRC** **50 Watts**
1120 Kilocycles

City of Paris Dry Goods Co., San Francisco

6 to 7 p. m.—Mac and his gang with Mac's Junior Orchestra

7 p. m.—"The Stage and Screen" and police reports

7 to 7:30 p. m.—Goodfellows' Ad Period

8 to 8:30 p. m.—KFRC Request Twins, "Jake 'n Alec"

8:30 p. m. to 1 a. m.—Dance music by direct wire from Balconades Ballroom by Walter Krausgrill's Orchestra. Intermissions by "Jake 'n Alec"

226 Meters **KFOB** **50 Watts**
1330 Kilocycles

KFOB, Incorporated, Burlingame, Calif.

8 to 12 p. m.—Concert program and dance music

220 Meters **KJBS** **5 Watts**
1360 Kilocycles

Julius Brunton & Sons Co., San Francisco

9 to 10:40 a. m.—Vocal, instrumental selections

2 to 2:30 p. m.—Vocal, instrumental selections

256 Meters **KFUS** **50 Watts**
1170 Kilocycles

The Gospel Radio, Oakland, California

10 a. m.—Children's church broadcasting

6:30 p. m.—Broadcast of Big Down Town Mission, Harry Morse, pastor

207 Meters **KGTT** **50 Watts**
1450 Kilocycles

Glad Tidings Temple, San Francisco, Calif.

12:15 p. m.—Scripture reading, Rev. R. J. Craig

394.5 Meters **KHQ** **1000 Watts**
760 Kilocycles

Louis Wasmer, Inc., Spokane, Washington

2 to 3 p. m.—Radio Trades Ass'n program

6 to 7 p. m.—Mann Bros. Davenport Hotel Orchestra

207 Meters **KFWM** **250 Watts**
1450 Kilocycles

Oakland Educational Society, Oakland, Cal.

8 to 10 p. m.—Studio program

Piano solos, Vartan Toutjian, Jr.

Violin solos, R. V. Toutjian

Trios, Vartan Toutjian, piano; R. N. Toutjian,

violin; S. H. Toutjian, flute

Accordion solo, A. Toutjian

Educational talk, S. N. Toutjian

Violin duet, S. H. and R. H. Toutjian

Bible questions and answers, R. V. Toutjian

256 Meters **KRE** **100 Watts**
1170 Kilocycles

The Berkeley Gazette, Berkeley, California

11:15 a. m.—Physical exercises for women, con-

ducted by Dorothy Barron

5:30 p. m.—Current news

8 p. m. to 1 a. m.—Dance program by Bob Beal and his Hotel Claremont Orchestra

9 p. m.—Studio program. Intermission solos by members of the orchestra

Common "liquid glue," used sparingly, and well dried in a warm oven will make a fairly satisfactory substance for holding wire on a form or tube. Care should be taken to keep it dry or it will soften and lose its strength and insulation if it is dampened.

CYC is the call of the new Mexican broadcasting station, on 337 meters, with 50 watts power at Vera Cruz. It was installed by an American company, according to advices from Vice-Consul Willys A. Myers.

The lead from colored pencils can be used to mark the ends of soft cotton sleeving, by heating the colored lead, (which is only wax colored) with a hot iron, and letting the color flow into the sleeving.

Common sheet tin, such as can be obtained from any plumber or hardware store is an effective shielding material.

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of any make or size, home or factory built, into our latest improved Super-Selective Long Distance

Calco Combination, 4-tube \$15.00

Calco Combination, 5-tube 25.00

Calco Combination, 6-tube 30.00

Price includes new Bakelite panels, special coils and extra parts. We have combined the remarkable features of Browning Drake, Silver-Marshall, Hamnerlund-Roberts and the Diamond of the Air into a new circuit having remarkable ability to separate every station, including the Low Wave. Exceptional volume and distance. Perfect operation in any location.

CALIFORNIA COIL COMPANY

Elmhurst 3486

8314 East 14th Street

Oakland, Calif.

AMPLIFICATION

(Continued from page 8)

termed "step-down" transformers. But it is easily seen that we may make use of the device in a reverse sense, thus obtaining an increase of the voltage by a "step-up" transformer.

The transformers used for radio frequency amplification usually have two air core coils, a primary of relatively few turns of wire, say ten to thirty, and a secondary of relatively many, say from forty to eighty. This is shown in diagram in Figure 2, where on the left we have the "untuned" type and on the right the "tuned," the latter being arranged to have a variable condenser shunted across the secondary, thus permitting a much sharper adjustment to a resonant condition at a stated frequency.

Two stages of radio frequency amplification, involving the use of two radio frequency amplifying transformers, are in common use in many modern radio receivers.

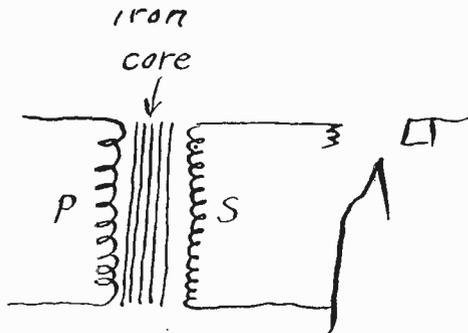


Fig. 3.

More than this number may prove difficult of adjustment because of interstage coupling effects which may affect the stability of the system.

It is to be noted emphatically that radio frequency amplification takes place before detection.

Audio frequency amplification is the actual amplification of audible signals which have been changed in character by the detector (either crystal or tube) into signals of useful (audible) character. Consequently such amplification takes place after detection and the signals may have been previously amplified at radio frequencies or not.

The present and common method of achieving such amplification is the use of transformers of iron core, as shown in Figure 3, though the use of more than two such stages involves difficulty in securing an output entirely free from objectionable noises. Figure 4 shows "resistance coupled" amplification wherein the amplification is accomplished by coupled resistances. Though this type does not give as high

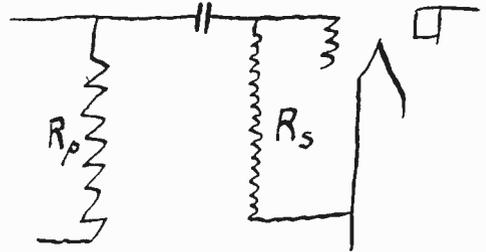


Fig. 4.

amplification, being limited by the constant of the tube used it has the advantage that more stages may be used without objectionable interstage coupling noises. Tubes of more than usual amplification possibilities have recently been placed on the market, so that this method will undoubtedly become more prominent.

The recognition and understanding of the principles of amplification will do much to make clear what goes on behind the panel.

Although not required by the Underwriter's Laboratories, it is a good plan if building a new house to have a special service led from the panel at the meter to the radio set, as this will eliminate much unsightly wiring, and will also permit the right fusing of the radio circuit exclusively, which is an added safety feature. This may also eliminate interference, in some cases, from household devices, etc.

In controlling the current supply from the house-lighting circuits for some of the modern sets a wall-switch, with a "bull's-eye" indicator, such as are used for some types of heating appliance outlets, will be handy in reminding you to turn off the set when you are through with it.

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