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Folder 4471-A tells all about them

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
Newark Works, Newark, N. J.

*Member of Radio Section
Associated Manufacturers of Electrical Supplies.
Station KDKA Opens New Radio Studio

Radio listeners who chanced to be using their sets Monday evening December 18, were treated to an extra program from 10.30 P. M. until midnight, given in connection with the opening of the new studio of station KDKA, at East Pittsburgh, Pa.

The new studio is located at the main entrance to the Works of the Westinghouse Electric and Manufacturing Company, about one mile from the actual broadcasting station. It will take the place of the studio adjacent to the broadcasting station, which was the first studio specially built for radio broadcasting.

One of the features of the new studio will be the remote control, by which the studio operator will be able to get perfect synchronism between the station and the performer and thus eliminate some of the tiresome delays which have been unavoidable in the past.

The new studio is draped with monk cloth which is gathered in the middle of the ceiling and held by a large rosette of orange silk. Under ordinary conditions the walls will be plain, so as not to distract the attention of the performers, although the photograph on our front cover shows it in Christmas dress in honor of the opening night.

The official opening was attended by representatives of the Pittsburgh newspapers, theaters and churches, who joined with artists prominent in the broadcasting field, and officials of the Westinghouse Company in making the occasion an auspicious one. A special impromptu program was given by the artists present assisted by the KDKA Little Symphony Orchestra.

This new studio is the direct result of the far-seeing vision and deep interest of H. P. Davis, vice-president of the Westinghouse Electric & Mfg. Co., better known to radio enthusiasts as the "Father of Radio Broadcasting". Every refinement has been worked out to the greatest degree, embodying the results of thousands of experiments made in the old KDKA studio.

Nothing has been omitted that would assist the artists in giving their very best to the radio audiences for whom they perform.

Just outside the studio proper is a beautiful reception room designed to give a soft restful atmosphere which will be helpful to the artists.

This studio is but another evidence of the fact that those in charge of KDKA are determined to maintain the high place this station holds in the broadcasting world.

From tests recently made we are promised some new "radio thrills" from KDKA this winter. We are sure the readers of Radio Broadcasting News will be glad to learn of the efforts which have been made by this station to improve radio broadcasting, and will join us in wishing for KDKA a Happy and Prosperous New Year, which is also our wish for every reader of Radio Broadcasting News.
Sunday
Programs

Sunday, December 31, 1922

10:45 A.M. Services of the Emory Methodist Episcopal Church, North Highland Avenue at Rippey Street, Pittsburgh, Pa., Rev. W. Wofford T. Duncan, Minister.
2:45 P.M. Children's Bible Story by Rev. W. A. Logan, Pastor of the Alpha Lutheran Church, Turtle Creek, Pa.
3:00 P.M. Organ recital by Fred Lotz, organist and choir director of the Emory Methodist Episcopal Church, Pittsburgh, Pa.
4:45 P.M. Vesper Services of the Shadyside Presbyterian Church, Amberson Ave., near Fifth Avenue, Pittsburgh, Pa., Rev. Hugh Thompson Kerr, Pastor.
7:45 P.M. Services of the First Presbyterian Church, Sixth Ave., Pittsburgh, Pa., Rev. Maitland Alexander, D.D. Pastor.
12:00 P.M. Midnight. Special concert, the details of which will be announced by radio telephone.

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.
10:30 A.M. Musical program.
11:00 A.M. Morning services at Saint Thomas' Church, Fifth Avenue, New York City. Sermon by Rev. Ernest M. Stires, D.D., Rector, officiating. T. Tertius Noble, M. A. Organist will direct the M:ns and Boys choir of 60 voices.
3:00 P.M. City Symphony Concert at the Century Theatre, will be conveyed to WJZ by a Special Western Union wire. The City Symphony Orchestra, composed of 83 players selected for their musical talent and symphonic experience, under the baton of Dirk Foch, is maintained by the Musical Society of the City of New York. Young soloists of real talent will be heard at each performance of a series of concerts. The arrangements for broadcasting these concerts were made with the assistance of Popular Radio.
4:45 P.M. "Something for Everybody", copyrighted stories by the Youth's Companion:
6:30 P.M. "Readings and Records from the Bubble Books that Sing", by Ralph Mayhew, Harper & Bros.

7:00 P.M. "Musical Stories" by Mary Plowden Kernan, lecturer for the New York City Board of Education.
9:05 P.M. "The masterworks of famous painters" by Arthur Maude, who has appeared all over the Continent and co-starred in America with Constance Crawley, the English actress, in plays by Ibsen, Shakespeare, Pinero, Oscar Wilde and Maeterlink. Critics agree that Mr. Maude is striking an absolutely new note in film production and is at the same time familiarizing the public with the masterpieces of painting.
9:15 P.M. Recital by Marion Armstrong, a Scotch-Canadian soprano who had the distinction of being the first soloist to be heard at the Eastman Theatre of the University of Rochester.
The program includes "The World is Waiting for the Sunrise," which made a decided impression in Rochester. The radio audience also requests Miss Armstrong to sing "Her Love Song," Mary Turner Saller; which she sang so delightfully in her recital in the Aeolian Hall. Radio recital arranged by the Betty Tilson Concert Bureau.
9:30 P.M. Concert by Oscar Ziegler, pianist of New York.
9:50 P.M. Concert by Devora Nadwornay, contralto, 1921 winner of the Gold medal of the National Federation of Musical Clubs. Miss Nadwornay has appeared in concerts all over the United States; she sings in Russian.
Program: Aria from the Opera "Rusalka," Dargorssky; Short story of the opera by Mrs. James D. Boyd, of Jersey City; "Would You," Mabel Anna Corby; "A Kiss," Mabel Anna Corby; "Dreams," Corby; and "Spring is Here," Corby; "Dreams," Wagner; "Sinning Song," German; "Within Thine Eyes," Isler. Mabel Anna Corby will accompany Miss Nadwornay at the piano.
9:55-10:00 P.M. Arlington Time Signals, weather forecast.
10:01 P.M. Continuation of program by Miss Nadwornay.

WGY—410 Meters, General Electric Company
Schenectady, N. Y.
10:30 A.M Morning service of Bellevue Reformed Church, sermon by Rev. J. A. Thurston.
3:00-4:00 P.M. Welsh Male Choir.
9:00 P.M. Watchnight service of First Methodist Episcopal church, of Schenectady, N. Y., Rev. Philip A. Frick, with talks by business men, chorus of 100, and orchestra. Service will last until 12:05 midnight.
Monday, January 1, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.

3:00 P. M. Concert by C. Howard Van Zandt, tenor, D. Diebell, Accompanist; Kamiki Hawaiian Troupe of New Kensington, Pa. William J. Murray, steel guitar, director; Alfred Tress, regular guitar; George Tress, ukulele; Norman Tress, tenor mandola.
6:30 P. M. Play by play report of football game, Penn State College vs. University of S. California, at Pasadena, California.
8:30 P. M. Concert by the Chaminade Concert Company.

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.

9:00 A. M. Early morning reports and prices and farm products.
12:00 to 1:00 P. M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.
4:00 P. M. Closing prices on stocks and bonds, grain, coffee and sugar.
4:05 P. M. "Fashions" from Women's Wear Daily Newspaper.
5:30 P. M. Closing prices on stocks, bonds, grains, coffee and sugar.
5:45 P. M. Resumé of Sporting events, etc.
6:00 P. M. Business and Industrial Conditions in the United States as observed by the National Industrial Conference Board.
7:00 P. M. Stories from St. Nicholas Magazine.
8:30 P. M. Dance Music by the Club Orchestra, members, Frank H. Cureau, piano; Arthur G. Ferris, violin; Edward J. Duggan, banjo; William T. Graff, Jr., cornet; and Herbert M. Foxwell, drums.

Pittsburgh, Pa.

No program will be broadcast from this Station on this date, on account of National Holiday. Remainder of programs for the week will be broadcast as usual and according to Schedule.

OTHER CLASS B STATIONS YOU MAY HEAR MONDAY.

KGW—The Oregonian, Portland, Oregon.
KJH—The Times-Mirror Company, Los Angeles, Calif.
KSD—The St. Louis Post Dispatch, St. Louis, Mo.
WBAP—Fort Worth Star Telegram, Fort Worth, Texas.
WDAF—Kansas City Star, Kansas City, Mo.
WFAA—Dallas News & Dallas Journal, Dallas, Texas.
WGM—Atlanta Constitution, Atlanta, Ga.
WHAZ—Rensselaer Polytechnic Inst., Troy, N. Y.
WHB—Sweeney Auto & Tractor School, Kansas City, Mo.
WOC—Palmer School of Chiropractic, Davenport, Iowa.
WOR—L. Bamberger & Co., Newark, N. J.
WSB—Atlanta Journal, Atlanta, Ga.

7:45 P. M. Concert Program and New Year's greetings (using Hoxie Pallophotophone) by General John J. Pershing and others.

KFW—360 Meters, Westinghouse Electric

New Year's Day Programs

Mention Radio Broadcasting News when writing to Advertisers
Tuesday
Programs

Tuesday, January 2, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.
7:00 P.M. News. Weekly Survey of Business Conditions. Letter from FARM AND HOME.
7:30 P.M. Bedtime story for the children.
8:00 P.M. Monthly Review of Business Conditions by Clark Hammond, Vice President of the Columbia National Bank, Pittsburgh, Pa.
8:30 P.M. Concert by Mrs. Howard Noble, violin; Phyllis Gray, accompanist; Harold Bagnell, concert baritone; P. M. Huweber, accompanist; Mrs. Howard Gardner, soprano; Caroline Gray, accompanist.

11:55 A.M. U.S. Naval Observatory time signals.
12:00 A.M. Noon stock market quotations.
2:00 P.M. Music and subjects of interest to women.
6:00 P.M. Produce and stock market quotations; news bulletins.
7:45 P.M. Program of Scotch selections.
March, "Millothian Pipe Band," Taylor, Clan MacRae Bagpipe Band; Robert Dickson, Piper, Campbell MacRae, Piper, Robert Taylor, Side Drummer; Soprano solo, "Loch Lomond," MacKenzie, Mrs. Harry Bertran; Mr. Harry Bertran, accompanist; Scotch Comedy song, "The Same as His Father Did Before Him," Lauder, Master Thomas Cammidge; Bagpipe solo, March, "Scottish Horse," Scott, Robert Dickson; Tenor solo, Scotch Ballad, "Mary of Argyle," Jefferys, James Hampson; Scotch Readings by Mungo MacRae; Bagpipe Band selection. "Earl of Mansfield's March, MacPhedron, Clan MacRae Pipe Band; Scotch Songs and Impressions, (a) "Stop Your Ticklin', Jock," Lauder, (b) "Down on the Beech a-strollin'," Keefe-Ferron, Andrew Keefe, Professor Ferron, pianist, accompanist; Soprano solo, "Ye Banks and Braes O' Bonnie Doon," Burns, Mrs. Harry Bertran; Tenor solo, "Afton Water," Burns, James Hampson; Scotch Comic Song, "She's My Rose," Lauder, Master Thomas Cammidge; Bagpipe solo, "My Native Highland Home," a March Composer Unknown, Campbell MacRae; Tenor solo, "My Love is Like the Red, Red Rose," Burns, James Hampson; Reading, Scotch Humor, Andrew Keefe; Bagpipe Band selection, "Lord Lovat's Lament," Douglas, Clan MacRae Pipe Band.

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.
9:00 A.M. Early morning reports and prices and farm products.
12:00 to 1:00 P.M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.

100% Service to the Dealer

A jobber can give his dealers 100% service only when 100% of his product goes to dealers.

The dealers of such a jobber can rest assured that when a certain item becomes scarce that jobber will sell his dealers all of that item he can get—he will not hold back from his dealers to sell at retail and get both the jobber's and dealer's profits.

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A four tube set with one stage of Tuned Radio Frequency Amplification.

CROSLEY

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CROSLEY RECEIVER MODEL X. This four tube set is the most popular on the market to-day. It consists of one stage of Tuner Radio Frequency Amplification, Audion Detector and two stages of Audio Frequency Amplification. The Crosley Model X is built on scientific principles. Especially is the Tuned Radio Frequency Amplification feature popular. It not only serves to magnify the incoming waves before they reach the detector tube, but eliminates static and interference to a wonderful degree. With this set, listeners in Florida have heard broadcasting from Winnipeg, Seattle and Honolulu. Without phones, batteries or tubes, only $5.00.

Write for Catalog

Crosley Manufacturing Company
Dept. RS16 - - - CINCINNATI, OHIO
Convenient and Economical Battery Charging

Didn't it ever occur to you that you could have a charging station for your radio battery right in your own home? All you need is a source of alternating current supply and a

Tungar Battery Charger

At an insignificant cost for current you can do your own charging, saving money, time and trouble.

The Tungar Battery Charger has been used for years for charging automobile storage batteries. You are, therefore, taking no chances in buying this charger. There are two sizes of Tungar: the larger size charges 3 cells at 5 amperes; the smaller, 3 cells at 2 amperes. Your battery can be completely charged for a few cents.

An overnight charge once or twice a week will keep a radio battery in perfect condition for average service. Ask your nearest dealer in radio supplies for a Tungar or write us for further information. Address Merchandise Dept., General Electric Company, Bridgeport, Conn.

General Electric Company

Mention Radio Broadcasting News when writing to Advertisers
Wednesday, January 3, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.
6:15 P. M. Dinner music by KDKA Little Symphony Orchestra, under the direction of Victor Saudark. Program will be announced in the daily newspapers.
7:15 P. M. News. Letter from FARM AND HOME Summary from the Iron and Steel Industries, prepared by THE IRON AGE.
7:30 P. M. Bedtime story for the children.
8:00 P. M. "Broadcasting Conditions", a talk by C. W. Horn, Superintendent of Radio Operations, Westinghouse Electric & Manufacturing Company.
8:30 P. M. Concert by Mrs. Helen House, soprano; Donald McGill, concert baritone; and the KDKA Little Symphony Orchestra, under the direction of Victor Saudark.

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.
9:00 A. M. Early morning reports and prices and farm products.
12:00 to 1:00 P. M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.
4:00 P. M. Closing prices on stocks and bonds, grain, coffee and sugar.
4:05 P. M. "Fashions" from Women's Wear Daily Newspaper.
5:30 P. M. Closing prices on stocks, bonds, grains, coffee and sugar.
5:45 P. M. Resumé of Sporting events, etc.
5:55 P. M. "Iron and Steel Review" by the Iron Age.
6:00 P. M. Musical program.
7:00 P. M. "Animal Stories" by Florence Smith Vincent, author of the "Peter's Adventures" Book, and Editor of the Woman's Page of the New York Evening Telegram.
9:00 P. M. Program to be announced by radio.

KYW—400 Meters, Westinghouse, Chicago, Illinois
Central Standard Time
8:30 P. M. Musical Program by Louise Joyner, soprano; Sallie Menkes, accompanist; Louis Puppilo, violinist; Margaret Miller, accompanist.
Program: (a) "Violets," Roma, (b) "I'll Forget You," Ball, Louise Joyner; (a) "Romance," Wieniawski, (b) Gavotte, Gossec, Louis Puppilo; "The Songs My Mother Used To Sing," Smith, Louise Joyner; (a) Hymn To The Sun, Rimsky-Korsakov, (b) Spanish Dance No. 3, Sarasate, Louis Puppilo. Other numbers on program to be announced by Radiophone.

WGY—400 Meters, General Electric Co.
Schenectady, N. Y.
12:30 P. M. Noon stock market quotations.
12:45 P. M. Weather report on 485 meters wavelength.
6:00 P. M. Produce and stock market quotations; news bulletins.

Pittsburgh, Pa.
10:00 P. M. Regular Popular Program, with dance numbers, as a post-holiday offering from this Station for the lovers of Radio dancing. To the latest dance numbers will be added a number of "feature solos" on the Ocarena, played by Frank Steen, formerly member of the Americania Military Band, of New York City, von Prag, conductor.
Clifford Maurice, a young and very interesting pianist will be the accompanist for Mr. Steen.
On this rather primitive instrument, which, by the way is one of the best transmitting instruments heard on Radio, Mr. Steen succeeds in interpreting some of the best known concert numbers for both solo and orchestra. His tone is clear, exceedingly musical and has color, a really remarkable exhibition of musical talent of the most inherent sort. Ocarena solos: (a) "Violets Waltz" (b) "Sky-Blue Polka," (a) "Love's Dream Waltz," (b) "Morning Stroll Polka," (a) "Forest Revels Polka," (b) "A Longchamp March."

OTHER CLASS B STATIONS YOU MAY HEAR WEDNESDAY.

Time given is Eastern Standard (Arlington)
6:00 P. M. — WOR, WSB; 6:30 P. M. — WOR;
6:45 P. M. — WOC; 7:00 P. M. — WIP; 7:30 P. M. — WBAP, WBZ, WFI, WOC, WWJ; 7:45 P. M. — WFAA; 8:00 P. M. — WBZ, WEAF, WIB, WOC, WSB; 9:00 P. M. — KSD, WDAF, WFAA, WOC, WWJ; 10:00 P. M. — KJH; 10:30 P. M. — WBAP; 11:00 P. M. — WGY, WOC; 11:45 P. M. — WSB.
Key to Call Letters appears on page 5.
December 30, 1922

Thursday, January 4, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.

7:30 P. M. Bedtime story for the children.
8:00 P. M. Practical Hints for Modern Home-furnishing, prepared by the Joseph Horne Company, Pittsburgh, Pa. Articles of interest to the farmer, prepared by THE NATIONAL STOCKMAN AND FARMER, Pittsburgh, Pa.
8:30 P. M. Concert by Mrs. Joseph Diamond, concert soprano; Gizella Pallos, piano; Charles K. Ray, harmonica.


WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.

9:00 A. M. Early morning reports and prices and farm products.
12:00 to 1:00 P. M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.
4:00 P. M. Closing prices on stocks and bonds, grain, coffee and sugar.
4:05 P. M. "Fashions" from Women's Wear Daily Newspaper.
5:30 P. M. Closing prices on stocks, bonds, grains, coffee and sugar.
5:45 P. M. Resumé of sporting events, etc.
6:00 P. M. Musical program.
7:00 P. M. "Jack Rabbit Stories," by David Cory, New York Evening Mail.
8:30 P. M. Concert by Sophia Sanina, pianiste, of whom it is said "The fascination of mysterious Russia clings to her."

Sophia Sanina, the young pianist, is shortly to commence an American concert tour. Up to now Miss Sanina has played only on the continent, where she appeared in Vienna, Berlin, Patrogad and other important cities.
9:00 P. M. "Food for Health and Pleasure," by Anne Lewis Pierce, director of the New York Tribune Institute.
9:30 P. M. Ampico Series of Distinguished Artists,—Hans Barth, pianist; Roderick White, violinist; John Tasker Howard, will give a 15 minute talk—"A Plea for Musical Chestnut" illustrated with music. Courtesy Wm. Knabe & Co.

Hans Barth began his career as a prodigy, the Brooklyn Press writing at the time; "He is no doubt as great a genius as Josef Hofmann." At the age of six he was offered a scholarship at the famous Leipzig Conservatory.

Mr. White, violinist, is an American born musician of unusual attainments. He was a pupil of the famous Leopold Auer in Russia and studied with this master at the same time that Elman, Heifetz, Max Rosen and others were studying with him. Mr. White possesses one of the finest Stradivarius violins in this country.

Mr. Howard is well known as a contributor to various musical magazines and was for a number of years Managing Editor of "The Musician."

10:01 P. M. Continuation of program by the Ampico Artists.

KYW—400 Meters, Westinghouse, Chicago, Illinois
Central Standard Time

8:30 P. M. The Opera "Robin Hood" given by the pupils of the Lake View High School.

Cast—Robin Hood, Louis Haake; Maid Marian, Maurine Marseilles; Sheriff of Nottingham, James Griffin; Guy of Gisborne (His Ward), Philip Thorek; Little John (An Outlaw), Robert Shirley; Alan A. Dale (An Outlaw), Gwynfa Thomas; Friar Tuck (An Outlaw), C. Hardy Humes; Will Scarlet (An Outlaw), Lorine Collins; Dame Durden (A Widow), Vinze Lindhe; Annabel (Her Daughter), Miriam Levey.

ACT I. "Opening Chorus:" "Milk Maids Song;" "Entrance of Robin Hood;" "Duet," Lady Marian and Robin Hood; "Sheriff Song;" "Trio," Sheriff, Marian & Guy; "Come to The Bowmen;" "Finalle.


WGY—400 Meters, General Electric Co.
Schenectady, N. Y.

11:55 A. M. U. S. Naval Observatory time signals.
12:30 P. M. Noon stock market quotations.
12:45 P. M. Weather report on 485 meters wavelength.
2:00 P. M. Music and subjects of interest to women.
6:00 P. M. Produce and stock market quotations; news bulletins.
7:45 P. M. Concert program and radio drama, "Within the Law" by B. Zellier.

The Cast
Mary Turner, a saleswoman in the Emporium
Viola Karwowska
Aggie Lynch, a confidence woman... Ruth Schilling
Joe Garson, a forger... Edward H. Smith
Eddie Griffes, a crook known as English Eddie
Frank Oliver
Richard Gilder, Edward Gilder's son
Edward Gilder, proprietor of the Emporium
James S. B. Mullarkey

Instrumental selection, "Kunihild," Kister, WGY Instrumental Quartet.

Melodrama, "Within the Law," Act I. In Edward Gilder's office at the Emporium Department Store, Mary
Thursday Programs

Turner is accused of shoplifting and sent to the penitentiary.
Time—Early spring about noon.
Instrumental selection, "In the Arbor," Greenwald, WGY Instrumental Quartet.
Melodrama, "Within the Law," Act II. Mary’s apartment—four years later, in the spring.
Melodrama, "Within the Law," Act III. Scene 1—The next night at half past ten in Edward Gilder’s house. English Eddie breaks away from the gang and plans to rob the house of Edward Gilder.
Scene II—Same night at 12 o’clock. The attempted robbery and the murder of English Eddie.
Instrumental selection, "Danse Macabre," Chopin, WGY Instrumental Quartet.
Instrumental selection, "Victory March," Jarnefelt, WGY Instrumental Quartet.

OTHER CLASS B STATIONS YOU MAY HEAR THURSDAY.

Time given is Eastern Standard (Arlington)
6:00 P. M.—WOR, WSB; 6:30 P. M.—WOR; 6:45 P. M.—WOC; 7:00 P. M.—WIP; 7:30 P. M.—WBAP, WBZ, WOC, WWJ; 7:45 P. M.—WFAA; 8:00 P. M.—WBZ, WEAF, WHB, WOC, WSB; 9:00 P. M.—KSD, WFAA, WHB, WOC, WWJ; 10:00 P. M.—KHJ; 10:30 P. M.—WBAP; 11:45 P. M.—WSB; 12:00 Midnight—WFAA.
Key to Call Letters appears on page 5.

Friday, January 5, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.
6:15 P. M. Dinner concert by the KDKA Little Symphony Orchestra, under the direction of Victor Saudek.
7:15 P. M. News, Letter from FARM AND HOME.
7:30 P. M. Bedtime story for the children.
8:00 P. M. "The Maker of Dreams" a one-act play by Oliphant Down, prefaced by a sketch of the life of Mr. Down; read by Harriet Smith. Talk on Etiquette by Mrs. Chester B. Story.
8:30 P. M. Concert by Lee Gardner, tenor; Mrs. Lee Gardner, soprano; Mary Hallock, piano, and talk on "Color Organ."

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.
9:00 A. M. Early morning reports and prices and farm products.

Radio is Calling
WESTINGHOUSE RADIO POWER SET

THE Westinghouse Power Set consists of a Westinghouse Radio “A” Battery, two or more Westinghouse Radio “B” Batteries, a glass tray and a suitable charging apparatus which may be obtained at a low cost from any Westinghouse Service Station.

With this power set you can always be assured of electric current for your Radio outfit, and clear, sweet strong reproduction.

WESTINGHOUSE UNION BATTERY CO.
SWISSVALE, PA.
December 30, 1922

12:00 to 1:00 P. M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.
4:00 P. M. Closing prices on stocks and bonds, grain, coffee and sugar.
4:05 P. M. “Fashions” from Women’s Wear Daily Newspaper.
5:30 P. M. Closing prices on stocks, bonds, grains, coffee and sugar.
5:45 P. M. Conditions of leading industries by R. D. Wychoff, Editor of the Magazine of Wall Street.
5:45 P. M. Resumé of sporting events, etc.
6:00 P. M. Musical program.
7:00 P. M. “Bedtime Stories”, by Thornton Burgess.
7:15 P. M. “Poméranians” by Frank F. Dole, noted authority.
7:30 P. M. Impersonation of Sir Harry Lauder”, by MacWilliams of West Orange, N. J., A. D. Smith at the piano.
8:15 P. M. “Current Reviews” by an editor of Review of Reviews.
8:30 P. M. Joint recital by Ethel Colgate, pianiste and Mme. Margaret Nikoloric, pianiste; Betty Tillotson Concert Bureau.
8:45 P. M. Literary Evening conducted by the Editorial staffs of the Outlook, Scientific American and Harper & Bros.
9:15 P. M. Program to be announced by radio.

KYW—100 Meters, Westinghouse, Chicago, Illinois

Central Standard Time

8:30 P. M. Program Courtesy of Lyon & Healy Concert and Artists Department.
Program will be announced by Radiophone.

WGY—100 Meters, General Electric Co., Schenectady, N. Y.

11:55 A. M. U. S. Naval Observatory time signals.
12:30 P. M. Noon stock market quotations.
12:45 P. M. Weather report on 485 meters wavelength.
2:00 P. M. Music and talks of interest to women.
6:00 P. M. Closing produce and stock market quotations; news bulletins.
6:30 P. M. For the children, a reading by Kolin D. Hager.
7:40 P. M. Health Talk.
7:45 P. M. Oriental program.

Friday Programs


10:30 P. M. Piano and Cello Recital with explanations by Vladimir Karapetoff, Professor of Electrical Engineering, Cornell University, Ithaca, N. Y.

Address, “Why and How the Five-String Cello was developed,” Selections on the five string cello, with piano accompaniment; (a) “Andante from the Second Concerto,” Romberg; (b) “Song of India,” Rimsky-Korsakoff; (c) “Neapolitan Song,” Casella; (d) “Meditation” from “Thais,” Massenet; (e) “Tarantella,” Popper; Introductory remarks on Russian music. Piano selections, with explanations: (a) “Kamenoi Ostrov,” Roush; (b) “A Sleigh Ride,” Tchaikowsky; (c) “Preludes in C Sharp Minor,” Rachmaninoff; (d) “Prisoners’ March,” Rubkoff.


10:00 P. M. Program will be given by Miss Kathleen French who was prevented by illness from singing from this Station on December 18. Miss French is from the Studio of Marjorie Keil Bentley. Assisting Miss French will be Miss Eleanor Brendel, also of Pittsburgh, and a piano student in both Pittsburgh and Mount de Chantal, W. Va. Contralto solos, “Till I Wake,” and “Temple Bells,” by Amy Woodford Finden; “By the Waters of Minnesota,” by Lieurance; and “I Know,” by Strauss. Piano solos: D flat Prelude, Op. 28, No. 15, and C sharp minor Valse, Op. 64, No. 2, by Chopin; and “Valcik,” by John Mokrijs.

To these will be added numbers featuring ensemble for organ and piano which is receiving most favorable commend from Station KQV listeners on each occasion when it is part of the artists’ programs from this Station.

The Program to be broadcast from this Station by the Geneva College Glee Club, of Beaver Falls, Pa., on January 8, will be looked forward to by lovers of programs by male voices, to which will be added the charm of “college songs” sung by a college club.

OTHER CLASS B STATIONS YOU MAY HEAR FRIDAY

Time given is Eastern Standard (Arlington)
6:00 P. M.—WOR, WSB; 6:30 P. M.—WOR, WFI; 6:45 P. M.—WOC; 7:00 P. M.—WIP; 7:30 P. M.—WBAP, WBZ, WFI, WOC, WWJ; 7:45 P. M.—WFAA; 8:00 P. M.—WBZ, WHB, WOC, WSB; 8:30 P. M.—WFI; 9:00 P. M.—KSD, WDAF, WFAA, WIP, WOC, WWJ; 10:00 P. M.—KHJ; 10:30 P. M.—WBAP; 11:45 P. M.—WSD.

Key to Call Letters appears on page 9.
**Saturday, January 6, 1923**

**KDKA—300 Meters, Westinghouse Electric**
East Pittsburgh, Pa.

3:00 P. M. Popular Concert.
7:00 P. M. News. “Under the Evening Lamp” copyrighted stories furnished by the Youth’s Companion.
Program: “Two-Mile Cut,”—How Jerry Anderson, though imprisoned in the railway cut, escaped an oncoming train; Story by Henry W. Patterson; “Out of Action,”—when the hornets fought for Sheridan; “A Diplomatist,”—James Holland’s plan for getting his wife to work; “Under Another Name,”—what happened when the Englishman ordered two watermelons.

7:30 P. M. Bedtime Story for the children.
8:00 P. M. “Hints on Adjustment of Receiver Sets” a Radio Talk by L. W. Chubb, Manager of Radio Engineering Department, Westinghouse Electric & Manufacturing Company.
8:30 P. M. Concert by Mrs. R. Shiveley.

**WJZ—360 Meters, Radio Corporation-Westinghouse**
Newark, N. J.

9:00 A. M. Early morning reports and prices and farm products.
12:00 to 1:00 P. M. Opening prices on active bonds and stocks, grain, coffee and sugar; midday reports and prices on farm products; musical program.
4:00 P. M. Closing prices on stocks and bonds, grain, coffee and sugar.
4:05 P. M. “Fashions” from Women’s Wear Daily Newspaper.
5:30 P. M. Closing prices on stocks, bonds, grain, coffee and sugar.
5:45 P. M. Resumé of sporting events, etc.
6:00 P. M. Musical program.
7:00 P. M. “Uncle Wiggly Stories”, by Howard R. Garis, author.
8:30 P. M. “Fashions” by an editor of Harper’s Bazar.
8:45 P. M. Concert by Gladys E. Gilman.
9:30 P. M. Dance music by the Dixie Serenaders; “William Bachman, C melody and B flat Tenor saxophones; Joel Silver, piano; Emanuel Pfeiffer, violin; Abe Klapholz, banjo; Dave Silver, drums.
9:55-10:00 P. M. Arlington Time Signals, weather forecast.

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**December 30, 1922**

10:01 P. M. “Current Topics”, by the Institute for Public Service.
10:10 P. M. Continuation of program by Dixie Serenaders.

**KYW—400 Meters, Westinghouse, Chicago, Illinois**
Central Standard Time

8:30 P. M. Musical Program by Irma Murphy, contralto; Mario Carboni, baritone; Sallie Menkes, accompanist.
Program: (a) “O Don Fatale,” Verdi, (b) “Annie Laurie,” Irma Murphy; Baritone solos by Mario Carboni; (a) “To The Sun,” Curran, (b) “Hayfields and Butterflies,” Del Riego, Irma Murphy; Baritone solos by Mario Carboni; (a) “Pirate Dreams,” Krueter, (b) “Jasmine Door,” Scott, Irma Murphy. Other numbers on program to be announced by Radiophone.

**OTHER CLASS B STATIONS YOU MAY HEAR SATURDAY.**

Time given is Eastern Standard (Arlington)

6:00 P. M.—WOR, WSB; 6:30 P. M.—WOR; 6:45 P. M.—WOC; 7:00 P. M.—WII; 7:30 P. M.—WBAP, WBZ; 7:45 P. M. WFAA; 8:00 P. M.—WBZ, WEAH, WHB, WOC, WSB; 8:30 P. M.—WFI; 9:00 P. M.—KSD, WFAA, WIP, WOC, WWJ; 10:00 P. M.—KHJ; 10:30 P. M.—WBAP; 11:45 P. M. WSB; 12:00 Midnight—WFAA.

Key to Call Letters appears on page 5.

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**for clear and accurate Reception of RADIO broadcasting use FROST TONES A QUALITY ACHIEVEMENT — Your local dealer has them**

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<th>Type</th>
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<td>Ohm Set No. 162</td>
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**Frost Radio**

[Advertisement for Frost Radio set]
Benjamin G. Lamme

VISITORS at the Chicago World's Fair, in 1893, saw the first extensive use of alternating current ever undertaken, when Westinghouse lighted the entire grounds with this type of current. This achievement marked the beginning of the commercial development of alternating current for power purposes, and brought the induction motor into prominence which it has never since relinquished. Great and rapid have been the developments since that day, but the most impressive aspect of this progress is not to be found in the spectacular evidences that are visible to everyone, but rather, in the vision and fundamental soundness and determination that have been quietly at work blazing and clearing the trails which the electrical art has followed.

There is, for instance, the synchronous converter. This machine is the most efficient and economical means for changing alternating to direct current, which the operation of most street railway systems and many other processes require. Without it, the development of alternating current to its present universal usefulness would have been tremendously retarded.

The synchronous converter, in its present perfection, is but one of the great contributions to electrical progress that have been made by Benjamin G. Lamme, Chief Engineer of the Westinghouse Electric & Manufacturing Company. Mr. Lamme, in 1891 when he was Chief Designer, conceived and developed the converter, which, first used commercially in connection with the great Niagara power plan, has since come to be indispensable to large producers of power.

When a man has played so vital a part in electrical progress that his knowledge and vision have contributed to practically every forward engineering step, it is perhaps misleading to attempt to identify him particularly with any one development. His work on the induction motor, the turbo generator, the single-phase railway motor, and the synchronous converter is but typical of the constructive ability which Mr. Lamme has brought to bear on practically every phase of electrical development.

A man of foresight, visioning the alternatives in a problem as well as its hoped-for results. A man whose mind combines great power of analysis with the gift of imagination. A prolific technical writer, whose style is unequalled in clearness and simplicity of expression. Few engineers so thoroughly predetermine the results they actually achieve. Few men capitalize their experiences so completely. And few indeed have at once his thorough technical equipment, his commercial understanding, and his broad human interests.

An institution which has built its success largely on engineering achievement pays Benjamin G. Lamme affectionate loyalty and respect. The young engineer on his first job, as well as the most seasoned co-worker, finds in him understanding, sympathy, wise counsel, and a conscience; to all of which his associates, in preparing this article, are proud to bear witness.
Sunday, January 7, 1923

KDKA—360 Meters, Westinghouse Electric
East Pittsburgh, Pa.
10:45 A. M. Services of the Point Breeze Presbyterian Church, Penn & Fifth Aves., Rev. P. H. Barker, Minister.
2:45 P. M. Bible Story by Rev. W. A. Logan, Pastor of the Alpha Lutheran Church, Turtle Creek, Pa.
3:00 P. M. Musical Concert.
4:45 P. M. Vesper Services of the Shadyside Presbyterian Church, Pittsburgh, Pa., Rev. Hugh Thompson Kerr, Pastor.
7:30 P. M. Services of the Calvary Episcopal Church, Shady Ave., Pittsburgh, Pa., Rev. E. J. Van Etten, Rector.

WJZ—360 Meters, Radio Corporation-Westinghouse
Newark, N. J.
10:30 A. M. Musical program.
11:00 A. M. Morning services at St. Thomas' Church, Fifth Avenue, New York City, Sermon by the Reverend Ernest M. Stires, D.D., Rector. T. Tertius Noble, M.A. Organist will direct the choir of 60 voices.
3:00 P. M. "Experiences in Egypt", by Rev. B. F. Dickinson, Newark, N. J.
4:00 P. M. Concert by Harold Stern and His Hotel Belleclaire Orchestra.
4:40 P. M. "A Story from the Youth's Companion", copyrighted; "The Grim Raider". Archibald Rutledge tells the story of Ben Loftus' fight with a bull alligator.
5:30 P. M. "Readings and Records from the Bubble Books that Sing" by Ralph Mayhew, Harper & Bros.
7:00 P. M. "Musical Stories" by Mary Plowden Kerman, lecturer for the New York City Board of Education.
7:30 P. M. Estey Organ Recital from the Estey Auditorium New York City.
8:30 P. M. Concert by Max Kaplick, the youngest baritone on the concert stage.
He is the possessor of a rather unusual voice and was selected by Mme. Ganna Walska to appear on the program with her on her tour in this country, and besides songs and arias, he will be heard in classical and operatic duets.
8:40 P. M. Concert by Mme. Mouart Dzeron Koslikarion, soprano, Newark, N. J.
8:50 P. M. Program continued by Max Kaplick, baritone.

KYW—400 Meters, Westinghouse, Chicago, Illinois
Central Standard Time
3:30 P. M. Radio Chapel Services will be conducted by Thomas Marshall Baxter, St. Anne's Episcopal Church, 3405 McLean St., Chicago.

SUNDAY BROADCASTING SCHEDULE
Time given is Eastern Standard (Arlington) Time
10:00 A. M. Chimes, WOC, (400 meters) Palmer School of Chiropractic, Davenport, Iowa.
WGY (400 meters) General Electric Co., Schenectady, N. Y., Music—WJZ, Radio Corporation, Westinghouse, Newark, N. J.
11:00 A. M. Church—WGAM, Orangeburg Radio Equip. Co., S. C.
WDM, Church of the Covenant, Washington, D. C.
WHAB, Clark W. Thompson Co., Galveston, Texas.
WJZ, Radio Corporation, Westinghouse, Newark, N. J.
WHAJ, Daily Telegraph, Bluefield, W. Va.
WLAO, Anthracite Radio Shop, Scranton, Pa.
WLW, Crosley Mfg. Co., Cincinnati, Ohio.
WNAC, Shepard Stores, Boston, Mass.
WSB (400 meters)—Atlanta Journal, Atlanta, Ga.
WGAY, North Western Radio Co., Madison, Wis.
WHAA, State University of Iowa, Iowa City.
12:00 M. Church—WEAD, North Western Radio Supply Co., Atwood, Kansas.

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<tr>
<th>Time</th>
<th>Program/Station</th>
<th>Location/Description</th>
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<tr>
<td>12:00</td>
<td>M. Church—WJAD, Jackson’s Radio Eng. Lab.</td>
<td>Waco, Texas.</td>
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<td>WGAQ, Glenwood Radio Corp., Shreveport, La.</td>
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<td>WLW, Crosley Mfg. Co., Cincinnati, Ohio.</td>
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<td>WRR, City of Dallas, Dallas, Texas.</td>
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<td>Pipe Organ Music—WJAP, Kelley-Duluth Co., Duluth, Minn.</td>
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<td>1:00</td>
<td>P. M. Church—KDZH, The Herald-Burford Co., Fresno, California.</td>
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<td>1:20</td>
<td>P. M. Church—WJAP, Kelley-Duluth Co., Duluth, Minn.</td>
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<td>2:00</td>
<td>P. M. Church—KFW, First Presbyterian Church, Seattle, Washington.</td>
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<td>2:30</td>
<td>P. M. Sacred Music, Sermon—KJS, Bible Inst. of Los Angeles, Los Angeles, California.</td>
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<td>WJAK, White Radio Lab., Stockdale, Ohio.</td>
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<td>WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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<td>Lecture—WDM, Church of the Covenant, Washington, D. C.</td>
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<td>3:15</td>
<td>P. M. WDM, Church of the Covenant, Washington, D. C.</td>
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<td>3:30</td>
<td>P. M. Church—WHAL, Jeffers &amp; Derby, Lansing, Mich.</td>
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<td>WIAA, Capital Radio Co., Lincoln, Nebr.</td>
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<td>Music—WMAH, General Supply Co., Lincoln, Nebr.</td>
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<td>3:40</td>
<td>P. M. WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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<td>4:00</td>
<td>P. M. Church—WFL, (400 meters), Strawbridge &amp; Clothier, Philadelphia, Pa.</td>
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<td>WGAT, American Legion, Lincoln, Nebr.</td>
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<td>WLAJ, Waco Elec. Supply Co., Waco, Texas.</td>
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<td>Sacred Music—WEAD, N. W. Kansas Radio Supply Co., Atwood, Kansas.</td>
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<td>Books, talk—WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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<td>4:30</td>
<td>P. M. Church—WGY, General Elec. Co., Shecncatady, N. Y.</td>
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<td>WESP, Services—WEAB, Standard Radio equipment Co., Fort Dodge, Iowa.</td>
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<td>5:00</td>
<td>P. M. Church—WKAA, H. F. Par, Cedar Rapids, Iowa.</td>
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<td>KDYX, Star-Bulletin, Honolulu, Hawaii.</td>
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<td>Concert—KWH, Portable Wireless Tel. Co., Stockton, California.</td>
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<td>Concert and Talk—KSL, The Emporium, San Francisco, California.</td>
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<td>Stories, WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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<td>5:30</td>
<td>P. M. Church—WLW, Cutting &amp; Wash. Radio Shop, Minneapolis, Minn.</td>
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<td>6:00</td>
<td>P. M. Church—WGF, Register and Tribune, Des Moines, Iowa. (Alternate Sundays).</td>
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<td>WSB, (400 Meters), Atlanta Journal, Atlanta, Ga.</td>
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<td>KDYD, Great Falls Tribune, Great Falls, Montana.</td>
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<td>KTW, First Presbyterian Church, Seattle, Washington.</td>
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<td>Concert—KLJ, J. J. Dunn Co., Pasadena, California.</td>
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<td>6:30</td>
<td>P. M. Church—WNAC, Shepard Stores, Boston, Mass.</td>
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<td>7:00</td>
<td>P. M. Adventure Stories—WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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<td>Pipe Organ—WOC, (400 meters) Palmer School of Chiropractic, Davenport, Iowa.</td>
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<td>WEAD, N. W. Kansas Radio Supply Co., Atwood, Kansas.</td>
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<td>Welfare Talks—WJZ, Radio Corporation, Westinghouse, Newark, N. J.</td>
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WDM, Church of the Covenant, Washington, D. C.
Music—KMG, San Joaquin Lt. & Pr. Corp.
WOQ, Western Radio Co., Kansas City, Mo.
Police News, Church—WRR, City of Dallas, Dallas, Texas.

8:30 P. M. Church—WDM, Church of the Covenant, Washington, D. C.
WGAQ, Glenwood Radio Corp., Shreveport, La.
WSB, (400 Meters), Atlanta Journal, Atlanta, Ga.

8:45 P. M. Church—WGF, Register and Tribune, Des Moines, Iowa. (Alternate Sundays).

9:00 P. M. Church—WSY, Alabama Power Co., Birmingham, Ala.
WBB, Sweeney Auto & Tractor School, Kansas City, Mo. (400 Meters).
Musical Program—WOC—Palmer School of Chiropractic, Davenport, Iowa. (400 meters).

9:05 P. M. Talk and Music—WJZ, Radio Corporation, Westinghouse, Newark, N. J.

9:10 P. M. Church—WEY, Wichita Beacon, Kans

9:30 P. M. Music, Concert—WCAL, St. Olaf College, Northfield, Minn.
WDAP—Midwest Radio Central Inc., Drake Hotel, Chicago, Ill.
Reading—WJZ, Radio Corporation, Westinghouse, Newark, N. J.

Music—WJZ, Radio Corporation, Westinghouse, Newark, N. J.

9:50 P. M. Time Signals—WJZ, Radio Corporation, Westinghouse, Newark, N. J.

10:00 P. M. Church—KGW, Ship Owners Radio Service Inc., (Daily Oregonian).
KTT, First Presbyterian Church, Seattle, Washington.
Music—WJZ, Radio Corporation, Westinghouse, Newark, N. J.

Concert—KLB, J. J. Dunn Co., Pasadena, California.

11:30 P. M. News, concert, bedtime story—KDY, St. Martin’s College, Lacey, Wash.

11:45 P. M. Church—KFAT, Pacific Radio Co., Eugene, Oregon.

NOTE—All stations listed above broadcast or 360 meters unless otherwise indicated.