

— Radio —  
**BROADCASTING  
STATE FAIR IS  
INTRICATE TASK**

**Mammoth Job Is Achieved  
by Engineers at Indiana  
Exposition.**

Some idea of the magnitude of the task of broadcasting the Indiana State fair by WLS, the Sears-Roebuck station of Chicago, in cooperation with WENR, station of the Great Lakes Broadcasting Company and the Interstate Public Service Company during this week came from the State fairground can be gained from the following facts:

Microphones for various pickups giving the highlights of the fair are located in the coliseum for judging cattle, and leads go into the cattle barn, race track and other vantage points over the grounds.

These wires all terminate in a radio control room, which is a temporary structure located in the southeast corner foyer of the women's building.

Microphone wires from these points run into what is known as a mixer panel, where the various programs are blended. This means that the pickups are made instantly from these several microphones.

**See Artists in Action**

The WLS portable studio is located also in the southeast end of the foyer. This is where fair visitors are enabled to see the WLS artists from Chicago in action.

Two special wires carrying the "big doings" go from this panel to the American Telegraph and Telephone Company toll or repeating station in downtown Indianapolis.

From this central office in Indianapolis six repeating stations located between here and Chicago carry the amplification. Each station amplifier insures a proper level for a perfect broadcast from the 5,000-watt WLS station in Chicago.

The receiving end at Chicago gets the pickup and then it is carried by land wires to the WLS transmitting station at Crete, Ill.

Two operators are located at the fairground control board, and a man continually is following the program and checking its quality as it is amplified at each of the six amplifying points.

**Three Engineers Check**

At the Crete transmitting station three engineers give the program their final check and send it out on huge antenna, where it is available to listeners.

In addition to the wires that handle the program is another special wire which runs directly from the temporary control room of WLS, Chicago, this wire being for the sole purpose of permitting communication between chief operators at each end of the line.

The average listener, when hearing a program, thinks only of the announcers and various artists taking part in the broadcast, but from the foregoing it can be seen that their efforts would be of no avail without the steady and careful efforts of the experienced engineering staff.

**Play Big Part**

The two men who have arranged this intricate system of wires and microphone set-ups, and who are on the job throughout the week, to see that the programs are carried to listeners are T. L. Rowe, chief operator of the WLS engineering staff, and his assistant, Charles Townsend.

WLS hours on the air at the State fairground, excepting for Saturday, when lines from the big race track will be in operation from 2:30 until the final heats late in the afternoon, are 10:20 a.m. to 11:30; 1:30 to 2:30; 3:30 to 5:30 to 6.

Announcing is in charge of Harold Safford of the WLS staff, Chicago.

**RADIO DEALERS WILL  
BE BANQUET GUESTS**

Federal Commission Member Will Be Main Speaker.

Annual banquet of the Indiana radio show will be held this evening in the Claypool Hotel with more than 400 radio dealers invited. Musical numbers will be given under direction of George Irish, announcer.

I. H. Caldwell, member of the Federal radio commission, a former Indianapolis resident, will be the principal speaker. Part of his address will be broadcast over WFBM.

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Open Till 8:00 p.m.

**Fishing The Air**

All references are Central Daylight Saving Time

**WAR** veterans of Indianapolis will live over the days of 1917-1918 when they turn in Thursday night at 6 o'clock on the WJZ network. A special program celebrating Lafayette-Marne day will be given, with the principal address by Charles B. Robbins, assistant secretary of war. Robbins' talk will deal with the activities of the American forces during the world conflict. The United States Navy band also will broadcast selections.

Indianapolis listeners will welcome the return of the Revelers male quartet tonight over the WEAF system at 8:30. "Blue Shadows" will be their first offering, with "Some Day, Somewhere," also on the program. Tenor and vocal solos will be included.

Lovers of Gilbert & Sullivan operas will be given opportunity to night at 9:30 to hear an old favorite, when WEAF and associated stations will broadcast "The Sorcerer."

ANSWER—CX-301-A tubes should not have more than 67.5 watts on the plate unless the proper "C" battery is utilized, else the tubes will be overloaded and the useful life shortened. Secure a power-tube adapter, place it in the output socket of the set and put the power tube in this adapter. The adapter has four extra contacts; one for the additional "B" voltage (135 to 180 volts, depending upon the power tube used), and the other for the "C" battery. Apply about 45 volts to the detector and 67.5 to the radio frequency and first audio tubes.

A sports resume, with "inside dope" on what is taking place in the sports world, will be presented to WJZ listeners in a new series of programs, "Long's Sporting Page," to be broadcast on Mondays from 5:45 to 6 p.m. Burris Jenkins Jr. has been engaged to present these talks.

A new all-electric radio receiver designed to operate from direct current lighting mains has been announced by F. A. D. Andrea Inc., New York. The new model is the Fada 10, and is similar in size and appearance to the alternating current model 10. The circuit was designed to meet the demand of the trade in districts where Edison three-wire D. C. service is still in whole or partial use. Voltage between 105 and 125 volts will operate the set satisfactorily.

The receiver incorporates a wave trap to give maximum selectivity. Pin jacks on the terminal board permit operation with electric phonograph pickups. It is designed to operate with 200-A type of detector and the 171-A type power tube. The other tubes are standard 201-A.

Starting this week, WMCA will present a new weekly feature known as "The Love Nest Program." It will be heard each Wednesday at 7 p.m.

A new program, "Melodies and Memories," will be presented over WABC Thursday at 9 p.m. The weekly series will be based on classical music.

Zenith radio distributors and dealers throughout the United States will stage, "National Zenith Automatic Week," Sept. 9 to 15, inclusive, for the first public introduction and demonstration of automatic tuning.

Gershwin's "Rhapsody in Blue" will be played by a saxophone ensemble over WRNY tonight at 6:05 o'clock.

Grantland Rice, nationally known sports authority, will summarize each day's play in the national amateur golf tournament at Boston, Oct. 12, 13, 14 and 15.

A special microphone installation is being made in the Brae Burn Country Club, on whose course the tournament is to be held. Rice will speak on Wednesday, Thursday and Friday evenings from 6:15 to 6:30 o'clock, and on Saturday evening from 6:45 to 7 o'clock.

Radio's most unusual instrument is the vitaphone. One of the very few heard on the air is played at Westinghouse station KYW by Avis McDonald, an exponent and teacher of the art. Besides playing vibraphone solos over KYW and furnishing the background to various ensembles, he plays the xylophone expertly, is adept with drums and spares and as an added trick, has a few more musical stunts up his sleeve that are expounded now and then over KYW. He is heard most regularly on Wednesday nights after 9 o'clock.

**THANKS TO V. F. W.**

**TRAFFIC SYSTEM HIT**

Engineer Advocates Abolition of  
Downtown Turns.

The Washington St. three-signal traffic control system was criticised in the report of Emmett G. Fowler, chairman, who will report to the Indianapolis Engineering Society Thursday at the Board of Trade.

Fowler suggests elimination of right and left-hand turns and moving of pedestrians in the same direction as motor traffic.

**Asks \$500 for Dog's Death**  
By Times Special  
RUSHVILLE, Ind., Sept. 5.—Walter G. Witt has filed suit for \$500 damages against Ben H. Wilson, owner of the Wilsons Kennels for neglect in allowing Witt's dog to become fatally poisoned last August.

The letter was written from the summer White House in Superior, Wis. "I deeply appreciate the congratulations expressed in this resolution and shall be glad to forward it to Secretary Kellogg," the President said in part.

Frank T. Strayer, past national commander of the Veterans of Foreign Wars, received a letter Tuesday from President Coolidge thanking the V. F. W. for indorsing the Kellogg peace treaty at the national convention held in Indianapolis last week.

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Two operators are located at the fairground control board, and a man continually is following the program and checking its quality as it is amplified at each of the six amplifying points.

Three engineers check the wires that handle the program is another special wire which runs directly from the temporary control room of WLS, Chicago, this wire being for the sole purpose of permitting communication between chief operators at each end of the line.

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