



About to take to the air over the Post Broadcasting System at the Army Air Forces Training Command Radio Station, Sioux Falls, S. D.

**I**T'S a long stone's throw from 50th Street and Sixth Avenue, but the Army Air Forces Training Command Radio School at Sioux Falls, S. D., has a Radio City all its own.

There is nothing about the appearance of the Post Broadcasting System Building to suggest page-boys, Krispie-Krunchie salesmen or soap operas, but the unpretentious structure houses a technical setup that is strictly "big time."

Visitors to the studio are invariably impressed with the layout's professional appearance. Veteran radio people agree it rivals any well-operated commercial studio of equal size.

The Radio School itself trains radio operator-mechanics for jobs in aerial combat crews. The course is a rugged one, calling for intense concentration in the studying of code and radio theory.

Because of the gruelling nature of the work, mental relaxation is of the utmost importance. By bringing programs of news, comedy and drama to students at all hours of the day, the Post Broadcasting System fulfills an unusually worthy function.

The "PBS," as it is known to soldiers, is primarily a huge public address system which has been adapted for distributing programs to KSOO and KELO in Sioux Falls through telephone lines.

To take a look at the technical setup

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**By Cpl. PHILIP MINOFF**

***Unique public address system constructed by the AAFTTC, at Sioux Falls. Programs are also sent via telephone lines for broadcasting over local radio stations.***

of the system—the control room contains the main console which measures 50 by 90 by 40 inches. In this console are two Stromberg-Carlson pre-amplifiers, two RCA 16-inch transcription turntables with an RCA recording unit which facilitates recording and play-back at 78 revolutions per minute or 33 $\frac{1}{3}$ , and a monitor amplifier. There is a recording amplifier with meters to indicate volume level of both recordings and programs going over the air.

Patch cords make it possible to pick programs from either of the two pre-amplifiers, office of the Commanding Officer, Colonel O. L. Rogers, both post theaters, the Service Club, Chapel and sports arena. Then, of course, any program KSOO or KELO, Sioux Falls

stations broadcast, including NBC and Blue network shows, may be "piped in" to the studio.

Four steel cabinets house twenty 25-watt Stromberg-Carlson dual channel amplifiers. These feed programs to 36 giant loudspeakers distributed in centralized street locations of each squadron and the radio school area. In addition, each mess hall is equipped with four 12-inch Stromberg-Carlson speakers, so the soldiers may have music while they dine.

Switch panels facilitate feeding any group of amplifiers to either of three input channels and also feeding any speaker or group of speakers any one of three available programs simultaneously. Each set of speakers may be controlled independently.

The three-program distribution works something like this—just suppose it's late in the evening and time for members of one squadron to leave their class rooms. These students march snappily out of the buildings and back to their squadron with the aid of appropriate military music. At the opposite side of the Post, soldiers with leisure time lounge about their barracks and enjoy Fred Waring's music, while still other GI's spring into action in preparation for chow as the bugle sounds "Mess Call."

The studio consists of the main studio, control room, chief's office and general office. All rooms are thoroughly sound-proofed to eliminate outside noises. The main 20 by 40-foot studio boasts a piano with a solo-vox attachment, music stands for an orchestra, a host of microphones, announcer's table and monitoring speaker.

One of the most appealing aspects of the PBS is its "GI" personality. The system, from start to finish, is a result of the ingenuity and work of soldiers. But the men responsible for the whole thing are hardly tyros in the radio business. Nearly every man connected with the system was engaged in some aspect of the radio industry before entering the Army.

Capt. Myron J. Bennett, youthful, energetic officer-in-charge, has been in the broadcasting field since 1927 and was manager of the Southwest Broadcasting System. At one time he was connected with NBC's Special



Associated Press teletype furnishes world-wide news for the Post Broadcasting system.

# BROADCASTING SYSTEM

Events Division. He also taught radio administration at the University of North Dakota. Three years prior to entering the Armed Forces, Capt. Bennett originated and produced the "M. J. B." show, which received the No. 1 Hooper Rating for the most popular locally-produced radio program in St. Louis.

Working with Capt. Bennett has been capable Sgt. Edward M. Scribner, of Schoharies, N. Y., who created quite a name for himself 13 years ago by designing the equipment for the nation's first outdoor-talkie theater in Schoharies.

Aided by only two assistants and continually handicapped by long delays in obtaining vital materials, Sgt. Scribner, who designed and installed the system, worked long hours and gave up much of his free time in order that the PBS could be completed as quickly as possible.

Cpl. Roger O. Wolf, non-commissioned officer-in-charge of broadcasting and announcers, was connected

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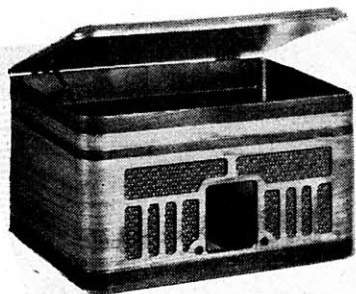


Radio students erecting wire network for PBS.



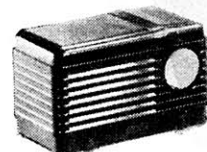
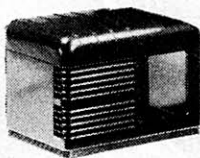
Designer at control console in main studio.

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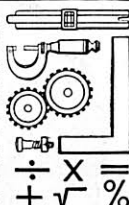
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example, diathermy effects may be noted when a hand is placed in front of the antenna if frequency is sufficiently high and very high power is employed. Those who were foolish enough to believe that exposure to microwave radiation would produce sterilization are parents of fine children. Other mistaken notions have arisen such as a claim that it might produce soft X-ray burns. The writer once was troubled with a skin rash resembling poison ivy. Doctors tried to associate it with microwave work. All treatments failed until a doctor diagnosed it as a mild case of scabies and treated it for same. The rash trouble disappeared promptly. Under all practical conditions, diathermy or X-ray effects are absent. Such effects will be deliberately developed in the fields of medicine and industrial heating. Radio's greatest benefit to mankind is yet to come in the field of medicine but it will be on frequencies and with powers much higher than what will ever be required for microwave communication. Microwaves are still tremendously remote in frequency from the X-ray spectrum even though it is approaching frequencies where its thermal effect can be felt. But that is true only if developments are directed deliberately in that direction.

The time is approaching when we in the radio fraternity shall migrate from both long and short waves towards the microwave band. There lies unlimited space and opportunity for all of us to perform miracles without number of great value to all mankind. The writer sincerely hopes that thousands of men comprising some of the backbone of radio will join in post-war microwave development.

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## Sioux Falls PBS

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with the Production Department of WABC's Network Operations Division in New York.

Another Gothamite on the staff is Cpl. Edgar H. Kobak, former member of the Traffic and Script-writing Departments of NBC's International Division in New York. Cpl. Kobak is the son of Edgar Kobak, executive vice-president of the Blue Network.

Others who keep the PBS going 16 hours a day are Staff Sgt. Burt M. Cloud, non-commissioned officer in charge of administration; Staff Sgt. Jesse V. Faulkner, engineer; Cpl. Robert S. McCarl, announcer and engineer; and Cpl. Victor M. Turner and Pfc's Max E. Pierce and James P. Pund, broadcast technicians.

The management of Stations KSOO and KELO, NBC outlets in Sioux Falls, which have cooperated wholeheartedly with the PBS since its inception, is enthusiastic about the local Army setup.

"The Post Broadcasting System," says Morton Henkin, vice president and manager of both stations, "is a

complete broadcast service except that it transmits programs by wire instead of by wireless.

"No objection, of course, is raised by NBC artists and program producers, because the broadcast service is conducted exclusively for Army personnel.

"I understand it has been proved that students who are given periods to listen to radio programs during actual classroom instruction learn code much faster than do students who do not have access to such facilities."

With the radio school on two shifts, the soldiers who operate this PBS get up early and retire late.

It's tough on GI's who heartily desire to murder the bugler at this station. The "Man with the Horn" is a recording in the control room which gets the day off to a perfect (?) beginning with reveille and winds up military proceedings with taps.

The primary original reason for PBS was a means of affording a period of rest from the tiring job of listening to code for several hours.

Each shift of classes in code receives a special program of music and news each day, "piped" directly through headsets in class rooms. These programs cover 10 minutes and include musical transcriptions, news bulletins and special announcements. Needless to say, these newscasts help keep the soldiers informed on what's going on in the world.

On Sundays, these 10-minute periods are utilized by chaplains of every faith for religious talks.

Often interesting personalities, both civilian and military, visit the Post and transcriptions are made of interviews with the visitors. If of sufficient interest to students, these interviews are rebroadcast to classes at appropriate times.

The 55-piece Post band is featured in a concert once each week and the 20-piece Post orchestra also has 30 minutes on the air every week. Practically every squadron has its own orchestra and these also stage half-hour musical and variety shows.

Thrice each week, at noon, a program of luncheon music originates from the studio featuring talented soldier singers and instrumentalists—aired especially for men in the mess halls. On alternating days, the noon hour is turned over to novelty shows, which spotlight short humorous skits and popular music.

Each Sunday a religious program is put on from one of the three Post Chapels. These consist of organ music, vocal solos, choral works and short sermons by chaplains.

Outstanding network shows such as Bob Hope, The Telephone Hour, and Glenn Miller's Army Air Forces Training Command band are "piped in" each week. For the men who miss these shows, the programs are transcribed and rebroadcast. In addition, all important national and world events such as Cordell Hull's address