

Activities of the Amateur Radio Station W9UIH During the 1937 Ohio River Flood

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By way of introduction, a brief resumé of the factors leading to the establishment of the two radio organizations at Southern Illinois State Normal University might be of interest.

In 1934 there were several students on this campus who were interested in amateur radio. After numerous informal discussions of topics of common interest pertaining to the field of radio, they decided that they would like to have a regular meeting place where they could discuss and benefit by the experiences of the others. The physics department was eager to cooperate, and a radio club was soon organized to familiarize students with radio equipment and to give instruction in radio communication. Dr. O. B. Young was chosen sponsor and has served in that capacity since that time.

At first the members of the physics department did not feel justified in requisitioning any equipment for the club. Since this is a nontechnical school, they felt that the interest manifested in this type of work would not warrant the purchasing of radio equipment. However, several of the members possessed amateur operators licenses and had considerable equipment of their own. With various contributions sufficient equipment was accumulated to build a receiver and a small transmitter. A license was then obtained for a station here on the campus with the call letters W9UIH.

Several other students became interested as soon as they came to appreciate the type of work which was being done. The membership of the club increased rapidly, and as a result of that first year of work, eight persons were enabled to pass the examination for an amateur operators license which is given by the Federal Communications Commission.

A year later, in 1935, a bid was received to establish on this campus a chapter of Synton, which is a national radio fraternity. This bid was accepted and Epsilon chapter was established here. Synton had chapters in several of the Big Ten schools, but this was the first Teachers College to be admitted into it. Only those persons who possessed amateur operators licenses were eligible for membership in the fraternity. The members of Synton meet each week to discuss technical problems of common interest in the field of radio.

In view of the interest manifested in this type of work the physics department included in its curriculum a four quarter hour course in radio and requisitioned equipment for the groups. The organization now possesses in addition to testing meters, a National HRO receiver, a 150 watt transmitter on the 160 meter phone band, and there is being constructed a 1,000 watt code transmitter which has modulation equipment capable of 500 watts on phone. The radio frequency final stage consists of two type 852 tubes in push-pull and will be plate modulated, class B by a pair of 203 A's in push-pull.

The advantages of such a set up, particularly in a non-technical school are many. The student, to a considerable extent, masters the field of radio which is a practical application of physics. He learns and better appreciates the fundamentals of the theory courses. He develops manipulative technique and resourcefulness, which lead toward more skillful laboratory and research work. He is made to assume the responsibility of valuable equipment and to operate it in strict compliance with the rules of the Federal Communications Commission.

This type of work here in the past four years has also in many cases led to a vocation and thus has added a skilled worker to the large industrial field of radio. A few of the fellows have gone into radio work as a life's occupation while many others have obtained employment during summer vacations in various radio fields.

Nevertheless, the great opportunity of the radio organizations on the campus to show their importance in a most practical way came during the 1937 Ohio river valley flood. The following messages are typical of those handled by the members of Synton during the 10 days following the break of the flood. "Hello cq cq cq flood traffic cq cq cq Have messages for Shawneetown Stop Water expected to rise 3 feet in the next 24 hours stop Are shipping pump parts requested by air Stop sent 500 cc of anti-toxin serum by plane 4:52 this p.m., etc."

At the time of the crisis we had a 70 watt code station in operation of 80 meters, which was soon found to be inadequate to handle the large number of messages received. Two of our men were also operating a transmitter on 160 meter phone elsewhere here in town, but in view of our advantageous location it was decided, on Tuesday at 6:30 p.m. to move their equipment to the radio shack and make it the center of operations. By 10:30 that night all changes had been made and our station was in the midst of flood work. During the following eight days our station was in continuous operation.

Our radio shack was selected as the ideal location for a central station for various reasons. In the first place there were some 700 refugees living in the gymnasiums on the campus. By telephone we were also in direct contact with the Health, Red Cross, and Highway Department offices in Carbondale. Also, the fact that there were several experienced operators on the campus was one of no little importance. At first we had 10 operators, but 3 of them soon left to go down into the flood area to operate portable transmitters. Each operator here had definite hours during the day or night to work, arranged so as not to interfere with his regular program of school work.

Regular schedules at intervals of one or two hours were kept with Shawneetown, Villa Ridge, Paducah, Herrin, Anna, Cairo, and others which were most influential in flood work. One of the three receivers which we had in constant operation was used to monitor WQPD, the police station at DuQuoin. They also had a receiver tuned to our frequency so that we were in direct contact with each other at all times.

During the first two days personal messages poured in from all over the United States. One station alone which we contacted in New Jersey had 25 personal messages to be delivered in southern Illinois and Kentucky. However, the Federal Communications Commission soon banned all personal messages from the air. From then on the majority of messages handled by the station were those from the Health office, Red Cross, Highway Department, and those personal messages involving a situation of life or death.

During the 10 days that the transmitter was in continuous operation, there were approximately 800 messages handled, and this was accomplished through approximately 900 different contacts.

In recognition of the work done by our station we received an invitation to join the Army Amateur Radio System the purpose of which is to establish and have available a system of communication for use in emergencies such as floods, earthquakes, fires, or any other disaster in which commercial communications are out of commission, and where valuable services can be performed by organized amateur radio stations.

We also received a certificate of merit from the American Radio Relay League and a letter of appreciation from the Adjutant General of the State of Indiana.