

WIRELESS IN THE PHILIPPINES

by H. W. Dickow

5/2



The entry of the United States into World War I saw only three wireless stations in operation in the Philippine Islands. One of these was a 7-kw. Telefunken quenched spark station on Corregidor which was used for communication with the ships of the U.S. Army Transport Service plying between San Francisco and Manila; another was a Navy station at Cavite, and the third was a little amateur wireless station built by Fred Johnson Elser, now a retired U.S. Army colonel.

Elser's first interest in wireless telegraphy came at a time when he was a passenger on the Army Transport Thomas, WXM, in February, 1911. The 5-kw fixed-spark transmitter on the Thomas made a great deal of noise, which was so appealing to him that he decided to become a wireless operator. From his home in Manila, he could look across the bay to Cavite where the navy was building its first super-power station, NPO. Its transmitter was a 500-kw Federal Arc. The massive antenna was supported by three 600-ft towers. Operation was on 12,000 meters.

Fred Elser was given a crystal detector, a tuner, and a pair of British headphones by one of the operators at the Corregidor station, and with the aid of a circuit diagram in the Boy Scout Handbook he was able to build his own transmitter. Mr. William Howard, of the Marconi Wireless Telegraph Company, was sent to Manila as an advisor to the Bureau of Posts. He gave Elser official permission to operate his experimental wireless station, using his own initials as a call sign. There were no radio laws in effect in the Philippines at this time; the first Radio Act was not passed by the legislature until 1924.

Elser returned to the Pacific Coast to enter a military academy, from which he was graduated in 1925. Back to Manila, he found much interest in radio as a commercial venture, but the Islands were still without amateur stations. He put a 1/4-kw spark transmitter on the air and signed his Pacific Coast call letters 6ANM. On one occasion, after calling CQ, he was answered by a started ship operator who believed he had heard the call of a station on the mainland.

Soon after 1925, a number of amateur stations went into operation in Manila as well as a few commercial installations. Elser was called in as a consultant when a station installed on an oil-pumping barge of the Atlantic Gulf & Pacific Company developed difficulties. He successfully eliminated the trouble and created such a good impression that he was given a position as wireless instructor for a Manila engineering establishment. While teaching his group of Filipino students the rudiments of wireless telegraphy and telephony, one of the natives who had considerable trouble with the English language asked Elser: "Will the wireless also speak Filipino?" Assured that it would, the student jabbered away at the microphone, greatly relieved that he would be understood by the listeners.

Elser then built a powerful radio-telephone transmitter and began broadcasting concerts on a regular schedule, with the Government-issued callletters $\underline{\mathsf{KZUY}}$. A description of the station appeared in numerous technical magazines, one of which eventually came into the hands of the Japanese.

Heller 75%

Wireless in the Philippines

Intent upon learning more of the technical details, an enthusiastic Japanese experimenter wrote a letter to Elser, with these closing words: "We are awaiting your kindly reply with craned necks."

Elser then ventured into the mountains with his receiving apparatus intent upon hearing distant stations. He picked up the telegraph signals of Lawrence Mott, 6XAD-6ZW, on Catalina Island, the first trans-pacific shortwave signals ever received in the Philippines. A few months later, in the summer of 1925, Frank Bell, 4AA, in New Zealand intercepted Elser's 200-meter signals over a distance of 5,000 miles - another record.

Later in 1925, Elser designed and built a 1/2-kw broadcasting station for a newly-formed company, Far Eastern Radio, Inc. The stations was installed in the Manila Hotel with the call letters KZRM. Head of the company was Admiral Bullard, USN (retired), who insisted that the entire station be battery-operated. A huge bank of lead-acid storage batteries, delivering 2,000 volts, was installed on the roof of the Hotel, where General Mac-Arthur set up his headquarters shortly thereafter.

Elser then wrote a book, <u>Radio in the Philippines</u>, copies of which were placed in school libraries. This book proved of great value to the Philippine guerilla forces who assembled clandestine radio stations from the information supplied by Elser. Signals from these stations were picked up by Army intercept operators on the Pacific Coast.

While serving as a radio instructor in Manila, Elser bought a Model-I Ford and equipped it with a 40-meter wireless station. In March, 1927, he departed on the S.S. President Van Buren, taking the automobile with him. Later he sailed for Naples, where the "flivver" was debarked for a tour of the continent. In Florence, Italy, he was arrested on suspicion of being a spy, but the Captain of Detectives there had just returned from a two-year sojourn in Chicago, spoke perfect English, and liked Americans. Elser was released with a warning to refrain from further use of his mobile wireless equipment. In Rome, he met a Jesuist priest who had just come from Santa Barbara, and after being given a demonstration of the automobile wireless equipment by Elser, he arranged for an audience with Pope Pius XI in the Vatican. "This time radio really paid off," said Elser.

He subsequently attended college, where he secured his degree in electrical engineering, and after doing graduate work at Cal. Tech. he secured a patent on a radio tube that became the basis for the "magic eye"...and sold his invention to RCA.

He was hard hit during the Depression of the '30s and accepted employment with Westinghouse Electric & Mfg. Co. in their radio division at Chicopee Falls, Massachusetts at sixty-eight cents an hour, after being required to pay his own transportation from the Pacific Coast. With the coming of better times a few years later, he was able to secure an electrical engineering assignment with Douglas Aircraft in Santa Monica, where he became a Supervisor in the Plant Engineering Department, overseeing the work of 1,000 men.

His heart remained in the Philippines. He maintained a code schedule on 40 meters with KA1HR at Fort McKinley in Manila, the station he helped build in 1925. Each morning he arose before sunrise to keep his schedule, thus qualifying for the Brass Pounders' League. He will always remember a

strange message he handled from 1HR; it read as follows: "Mary married yesterday. Baby arrived today. All well."

* * * * *

Story from unpublished book "TALES OF THE WIRELESS PIONEERS" (BOOK 2 - Telegraphers & others I have known) by the late Henry W. Dickow, Honorary Member #1 and Member 3-SSGP. Mr. Dickow donated his publications to Bill Breniman before becoming a silent key on April 17, 1971. The 'Ancient Mariner' is publishing them for enjoyment of Society members.