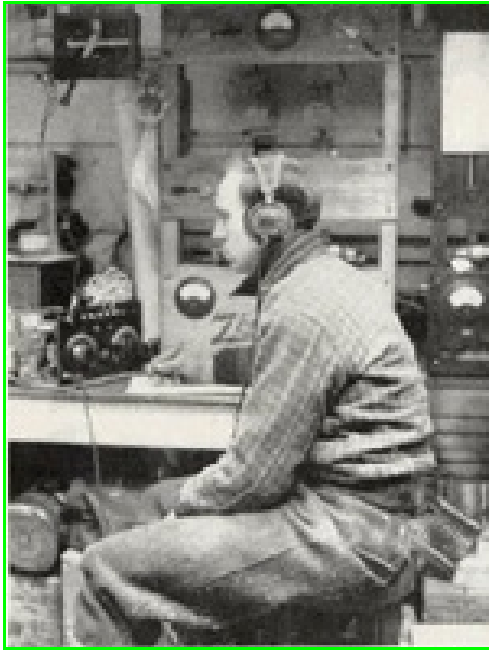


**JOHN L. REINARTZ - K6BJ - \*1894 - 1964\*** Also 1QP-1XAM -W3RB - Born 6 March 1894 in Rhine Province, Germany, the oldest of 7 children. In 1904 the family settled in South



Manchester, CT, where Reinartz' father was a farmer. John is being included in our manuscript because of his quest of electronic genius and the fact he graced Cambridge, Ohio in 1937 at the 2<sup>nd</sup> Annual Southeastern Ohio Hamfest Program, with a wonderful talk on radio, being a Goodwill Ambassador and employee of Radio Corporation of America.

The gathering was held at the National Hotel, Sponsored by the Cambridge Radio Club. I have a copy of the program at that unusual gathering so long ago Sunday June 27<sup>th</sup> 1937, courtesy of Dick Burgess W8KWN/W5OUN. His accomplishments were: By 1921 he developed the Reinartz tuner receiving world wide publicity. Participation in the first U.S.A.-European two-way contact in 1923 and first daytime trans-United States contact in 1925. He established the first daily radio communications for a arctic expedition in 1925. During WW2 he was a Navy Captain which included a term as

head of the radio and radar division of the Naval Research Labs. He holds 28 patents many of which were significant advancements in radio techniques and are still in use today.

Mr. Reinartz first became interested in radio in 1908, while browsing through the magazine racks at a small candy store near school. He read of wireless and its fundamental equipment and practices in The Electrical Experimenter. Saving the 10 cents a day he earned working for a blacksmith, he bought the secondary of a one-inch spark coil which he saw advertised.

He used iron wire for the core and bell wire for the primary. The electrolytic interrupter for the spark coil was homemade, he made a coherer from a quarter-inch glass tube, filled with nickel filings "from Uncle Sam's nickels" and iron filings from a nail. Using his own initials he went on the air as "JL" via the spark transmitter and a 600 foot antenna tacked to the tops of trees.

In 1916 he trained at Camp Upton, L.I., and then taught code to military operators. When the ARRL was formed in 1915 by Hiram Percy Maxim, Reinartz was one of the first members. At the time he was employed by the local power company, where he became superintendent. By 1921, Reinartz developed the Reinartz tuner. It was given wide publicity, thousands were built and it was the predecessor of most current receiving set tuners. In 1921, Reinartz was also publishing a magazine, distributed free, on How to Build Receivers and Transmitters at Low Cost. His writings on the tuner and its improvements were published in QST June 1921 – March 1922 and October 1922. He published a new circuit for a transmitter in June, 1923 and was the ARRL's assistant division manager for Connecticut in 1923.

A major achievement of Reinartz' early radio work was the first successful two-way trans-Atlantic communication, November 27<sup>th</sup> 1923. Three men took part in the attempt – Reinartz, F.H.Schnell, Hartford CT and M. Leon Deloy at 8AB, Nice France. All used a Reinartz circuit developed on the base of a Westinghouse 50 watt tube. Reinartz had developed a single tuner able to sweep from 200 meters down to 28 or 29 meters. Continued page two

Reinartz had given Deloy the special circuit when Deloy was in Chicago for a convention of the ARRL. The men then made arrangements for the trans-Atlantic contact, which broke the record for short wave radio. Five messages were received by Schnell and Reinartz, Schnell in Hartford and Reinartz in South Manchester. Two messages were received by Deloy in France. The two way messages were handled for a period of two hours. They worked on a wave length of 100 meters, from 9-30 to 10-30 on two successive nights.

Through '23 – '24 Reinartz worked on the problem of “skip” in short wave communications. The development of the short waves is another of the outstanding examples of amateur endeavor. By the summer of 1924 most of the amateurs of the country were operating not only on 100 meters, but still lower on 80 and 40 and even 20 meters. Reinartzs’ experiments, published in the April 1925 Issue of QST credited the Heaviside with bouncing back radio signals. This reflection theory of short waves explained the phenomenon whereby a low power transmitter could send shorter waves to its immediate area and then, after passing a “dead space,” could be received again at longer distances.

Using this theory in his experiments, he was able to communicate across the nation for a daylight record. In 1925 he reached Santa Monica with a 20 meter transmission sent at high noon from New England, rather than during night hours.

His work attracted attention of then LCDR Richard E. Byrd, who asked him to handle communications for the first attempt to fly over the North Pole. Reinartz achieved the first daily communications with civilization from the arctic expedition. Some of his transmissions were received by Arthur Collins of Collins Radio, then a high school boy who cut classes to get back to his rig for the communications. For Reinartz’ work he was commissioned a Lieutenant in the Naval Reserve in 1927. After the Arctic tour of duty, he experimented for the Navy and also worked at what is now the University of Conn.

After a distinguished career, John’s trail-blazing work in radio was recognized in 1958 when he was named a Fellow of the Institute of Radio Engineers. He is also a member of the Explorers Club of New York, the American Polar Society, the ARRL and associate member of the Naval Institute. As of January 30<sup>th</sup> 1960 John retired from his post at Eimac. His wife, Gertrude Reinartz, daughter of a South Coventry farmer, only recently gave up letting her husband be the only radio amateur in the family – after 43 years of marriage, Gertrude became K6MJH.

I return to the 1937 gathering at The National Hotel in Cambridge the site of Ham Radio Conference and Seminar, it was Sunday June 27<sup>th</sup> 1937, our subject Reinartz was to speak at (3-15PM) Attendance was expected to be around 300 but only half of that number attended due to inclement weather and impassable road conditions in other sections of the state. However, it was reported to be one of the most successful staged by the organization. My guess is that you could hear a pin drop when Reinartz took the podium and spoke.

Our Cambridge Boys W8CXC George Smith – W8KWN Dick Burgess – In the late 1930's would work the 2<sup>nd</sup> Dr. Donald B. MacMillan Arctic Expedition. Holding many schedules, with the Arctic team. Also earlier in a comment by Cambridge Boy Wallace Brill - 8SN - stated his most memorable contact was in 1931 from his home on Stewart Avenue, he had made contact with the Admiral Byrd expedition to the south pole on 40 meters c.w. Partially scripted ARRL. K6BJ.org - collins.com