

John Reinartz Testimonial

Amateur Radio Banquet

February 1, 1960

Villa Hotel, San Mateo

Welcoming Remarks — by W. W. EITEL, W6UF

President, Eitel-McCullough, Inc.

Introductions by Master of Ceremonies —

HERBERT HOOVER, JR., W6ZH, W6EV .

Consulting Engineer

Speakers —

LT. GEN. FRANCIS H. GRISWOLD, KØDWC

Vice Commander in Chief, Strategic Air Command

HERBERT J. BREUER, W6JN

Communications Field Representative,
California Disaster Office

ORRIN H. BROWN, W6HB

Director of Marketing, Eitel-McCullough, Inc.

E. FINLEY CARTER, K6GT

President, Stanford Research Institute

ARTHUR A. COLLINS, WØCXX

President, Collins Radio Company, Cedar Rapids, Iowa

VICE ADM. MAURICE E. CURTS, USN

Commander, Western Sea Frontier

M. LEON DELOY, French8AB

(taped message)

HARRY M. ENGWICHT, W6HC

Professor of Electrical Engineering, San Jose State College

REAR ADM. FREDERICK R. FURTH, USN Retired

Vice President, Research and Engineering,
International Telephone and Telegraph

FRANK A. GUNTHER, W2ALS

Executive Vice President and General Manager,
Radio Engineering Laboratories

RALPH M. HEINTZ, K6RH

Consulting Engineer

FRANK C. JONES, W6AJF

Retired

FRANK MATEJKA, W2BB

Project Manager, St. Lawrence Power Project

RAYMOND E. MEYERS, W6MLZ

Manager of Radio Operations, Lockheed Aircraft

Presentation —

JACK A. McCULLOUGH, W6CHE

Chairman of the Board, Eitel-McCullough, Inc.

JOHN L. REINARTZ

K6BJ

1XAM

IQP

John L. Reinartz was born in Krefeld, Rhine Province, Germany, March 6, 1894, the oldest of seven children. In 1904, the family settled in South Manchester, Conn., where Reinartz' father was a farmer.

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 interruptor for the spark coil was home made. He made a coherer from a quarter-inch glass tube, filled with the nickel filings.

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.

Reinartz married Gertrude Hazen, the daughter of a neighboring farmer, in 1916. They are still married.

In 1916, he trained at Camp Upton, L.I., and then taught code to military operators.

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" in June, 1921, March, 1922 and October, 1922. He published on a new circuit for a transmitter in June, 1923. In 1923, he was the A.R.R.L.'s assistant manager for Connecticut.

A major achievement of Reinartz' early radio work was the first successful two-way trans-Atlantic communication, Nov. 27, 1923. Three men took part in the attempt—Reinartz, F. H. Schnell, Hartford, Conn., traffic manager for the A.R.R.L., 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.

Reinartz had given Deloy the circuit when Deloy was in Chicago for a convention of the A.R.R.L. 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 at 1MO in Hartford and Reinartz at 1XAM in South Manchester. Two messages were received by Deloy. 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 1923 and 1924 he worked on the problem of "skip" in short wave communications. His 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 Ed N. Willis, at 6TS Santa Monica, with a 20-meter transmission sent at high noon, rather than during night hours.

His work attracted the attention of then Lt. Cdr. 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 an 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 his work with Byrd, Reinartz 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 Connecticut. These latter experiments were on measurement of voltage generated by growing plants.

By 1933, Reinartz joined the Radio Corporation of America. As a Naval reservist, he ran weekly classes, via radio, for the men of the Third Naval District.

In 1938, Reinartz was called to active duty in the Navy as a personnel officer, assigned to assemble eligible, experienced, radio personnel for training and research. By Pearl Harbor, he had assembled a list of 720 reserve officers and 3,500 enlisted reserves who were quickly assigned to communications duties.

Reinartz moved on to other Navy jobs, including head of the Naval Research Laboratories Radio and Radar Division. Later, on the West Coast, he was in charge of modification of airborne radar equipment used in the Pacific.

Reinartz served in the Navy until 1946, achieving the rank of captain. In 1946, he rejoined R.C.A.

Reinartz and his wife came to California in 1949 and he joined Eimac as manager of the Amateur Service Department.

Reinartz holds a total of 28 patents. Several aided in the development of communications for World War II.

He developed the loop antenna used in microwave radar, a super-generator receiver which makes radio reception more readily possible in very high frequencies and a "duo inductor" for increasing efficiency of shortwave transmission tubes.

He also developed radio equipment for aerological and meteorological studies made by the University of Michigan in exploring life on and above the Greenland land mass.

Reinartz' 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 American Radio Relay League and is an associate member of the Naval Institute.

Reinartz retired January 30 from his post at Eimac. He and his wife, who now reside in Burlingame, plan to retire to Aptos, where they'll continue to be active on the air—and Reinartz can get in plenty of fishing.