



the **GR**and Experiment





*“When you can measure what you are speaking about and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind. It may be the beginning of knowledge, but you have scarcely progressed in your thoughts to the stage of science, whatever the matter may be.”*

Sir William Thomson,  
**LORD KELVIN**



## *Future*

General Radio realizes that to keep up with the demands of industry, planned expansion is essential. Recent construction and occupancy of our new buildings on the 80-acre Company site in historic Concord have increased total working area to approximately 250,000 square feet; 100,000 and 150,000 square feet for Cambridge and Concord, respectively. These accommodations and immediate plans for yet another addition (approximately 130,000 square feet sketched) will permit us to expand with the growing electronic industry and its markets. This new construction will effectively double our present space in Concord and permit consolidation of our activities at one location.

Furthermore, this growth will not be made at the expense of our employees or customers. Behind the familiar General Radio instrument panel will be the same Quality that customers have come to expect as a matter of course. Our new facilities and continued efforts in development engineering will allow us to uphold our promise to provide the best to those who have come to look to General Radio for the finest in modern instrumentation.

Here at General Radio, what started out as a Grand Experiment in Company organization has materialized into a well integrated effort by management and employees that provides industry with the measuring tools which move the frontiers of research further along. The General Radio trademark has indeed become synonymous with progressive design and represents throughout the world a Hallmark of Quality.





**GENERAL RADIO Company**

Cambridge • Concord  
Massachusetts



“ General Radio was founded for two broad reasons: to satisfy the need for high-quality precision electrical measuring equipment, and to create a model place at which to work. The men of vision who guided General Radio's early footsteps tried the Grand Experiment — and found that the best investment any company can make is in the well-being of its employees. Today, almost a half century after its founding, General Radio remains true to the original ideals and aims that have given it success. ”

**BOARD of DIRECTORS**  
**General Radio Company**



### *The history of General Radio*

cannot be expressed simply as a series of chronological facts, for it is a story of people — their ideas, hopes and accomplishments.

In 1915, Melville Eastham, then in his late twenties, obtained a charter from the Commonwealth of Massachusetts authorizing him to establish the General Radio Company in Cambridge. His purpose was to supply industry with suitable electrical measuring equipment, and early catalogs describe such items as Spark Indicators, Audibility Meters, Flame-Proof Keys and R-L-C Standards.

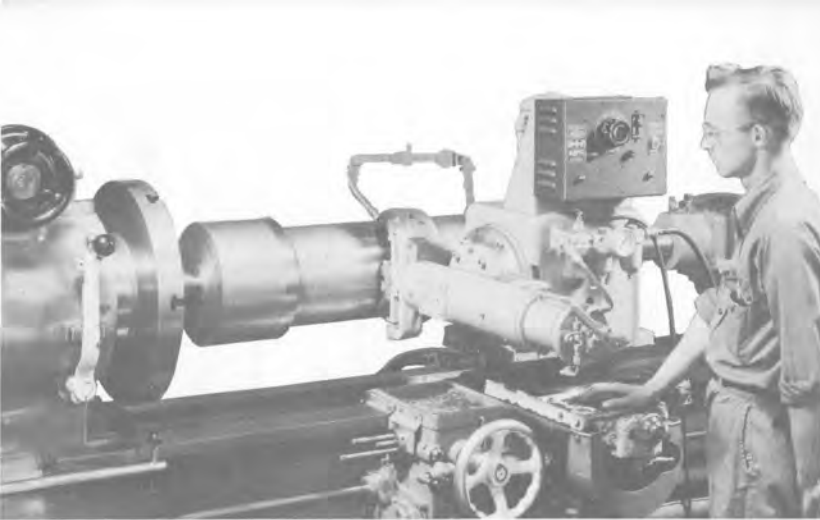
However, Mr. Eastham's original goal had to be put aside during the first World War, in order to fulfill the needs of the armed forces for communications equipment. The Company's efforts were rewarded at the close of the War with a military citation.



Following World War I, General Radio continued to satisfy the demand for radio receiver parts — but now for the general public, whose imaginations were captured by wireless communication. Then, in the middle twenties, General Radio decided to leave the receiver manufacturing business. With zeal, the Company returned to Mr. Eastham's original concept of supplying the industry with the best possible measuring apparatus. That the Company was successful in its chosen field is evidenced by the fact that only General Radio has survived of the companies manufacturing instruments for the radio industry in 1915. This is a tribute to the Quality of the General Radio product — Quality in design, manufacture, and performance, which set the standards for the years of growth.

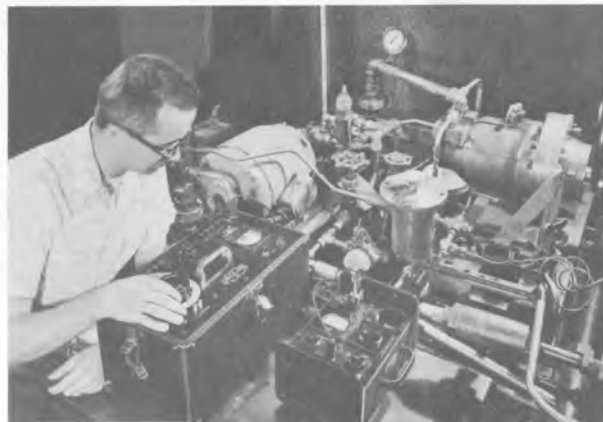




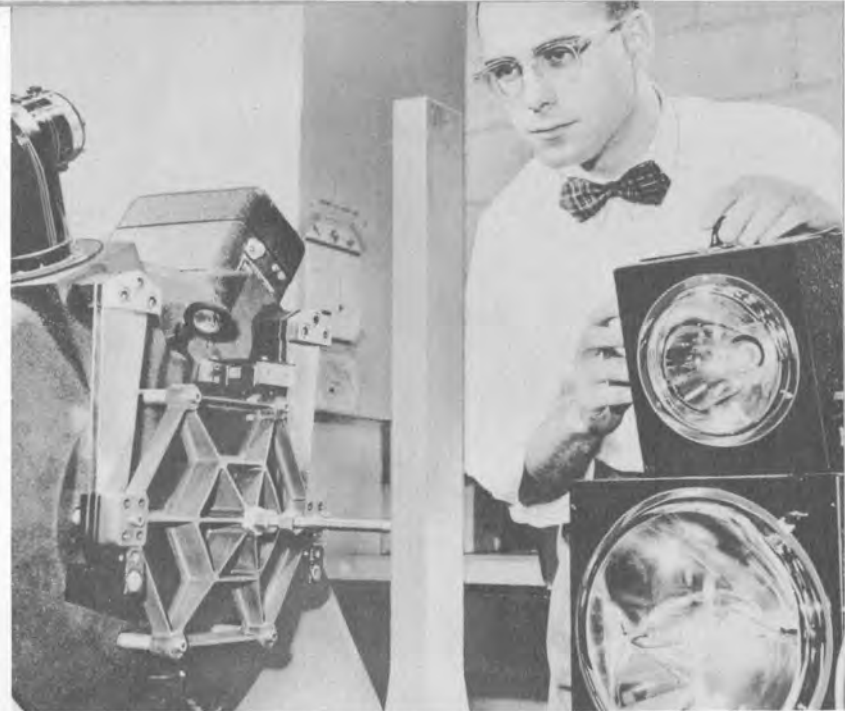


G-R is a *manufacturer's* manufacturer. Industry looks to us for equipment that enables them to calibrate their products accurately. When a radio or television set is tuned to a particular station or channel, chances are that G-R equipment was used in developing and testing to insure that WBZ comes in and not WZZZ. At the same time, other G-R equipment keeps WBZ's transmitting frequency accurately in place at 1030 kilocycles. From toy electric trains to elaborate electronic computers, G-R equipment is used to check performance.

General Radio sound measuring equipment tests hundreds of products such as air conditioners, machine tools, and outboard motors to insure quiet operation before products such as these leave the factory. Noise, vibration, shock — G-R instruments measure and assign accurate numbers to these factors over fantastically wide ranges.







G-R equipment helps explore the depths of the earth for oil, it flies in aircraft, helps the miracle of radar reach through fog and night. The chemist, the metallurgist, the machinist, the weaver — all industry depends upon G-R instruments to tell the truth in accurate numbers about the goods and processes they must control if quality and economy are to be realized.

In schools and colleges, G-R instruments help in the training of future engineers. Our unit instruments in particular are adaptable to a variety of experimental setups by which the budding engineer can become familiar with the practice of precise technical measurements.

A highly specialized portion of our business deals with frequency standardization. G-R frequency standards produce periodic electrical signals to an accuracy of one part in one hundred million. A clock of this accuracy would gain or lose less than two seconds a year. The monitoring equipment used to keep WBZ "on frequency," to which we have previously referred, is of this type. Such precision equipment also finds a steady market in government and industrial laboratories and observatories.

