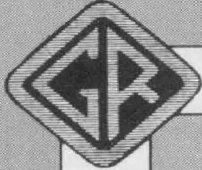


# General Radio EXPERIMENTER

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ELECTRICAL MEASUREMENTS AND THEIR INDUSTRIAL APPLICATIONS

<i>Also</i>	
IN THIS ISSUE	
	<i>Page</i>
DOUBLE DUTY . . . .	7
NEW PUBLICATIONS . .	8

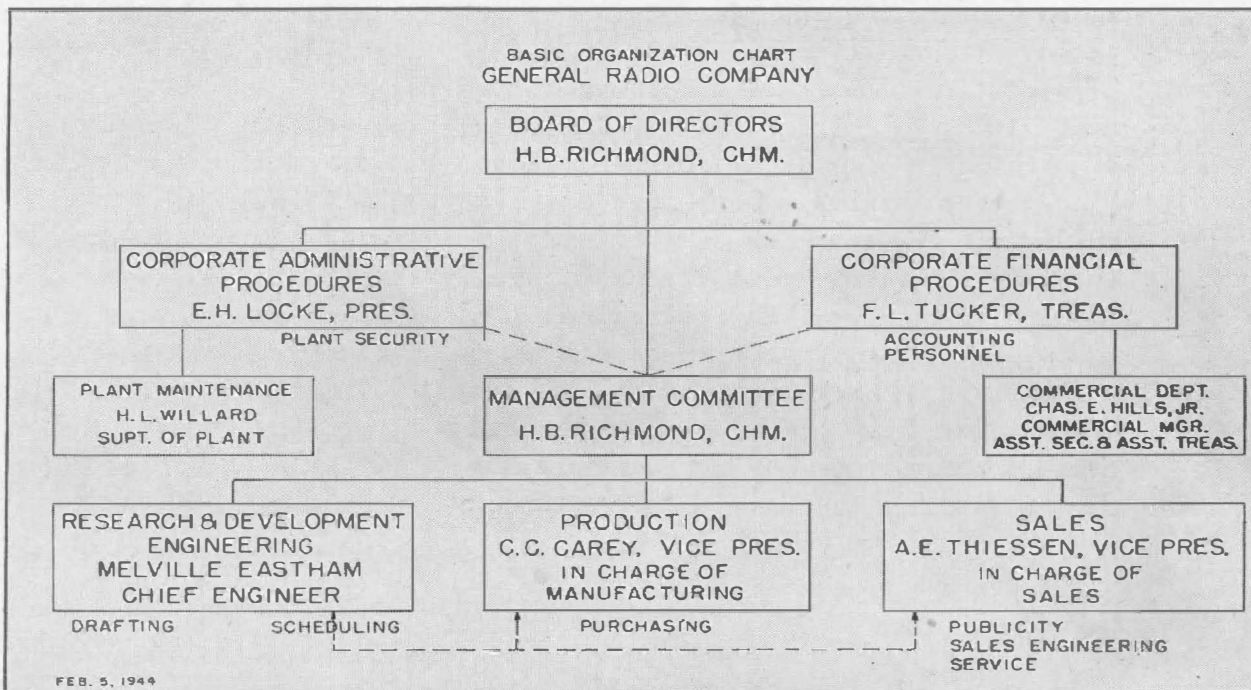
## NEW CHAIRS — SAME PEOPLE

● ON JUNE 14, 1915, when Melville Eastham received from the Secretary of the Commonwealth of Massachusetts a charter to operate the General Radio Company he had not quite reached his thirtieth birthday. During the days of World War I, Mr. Eastham was joined

in the General Radio venture, first, by Henry S. Shaw, and later by Errol H. Locke. Shortly after returning from France in 1919 Harold B. Richmond also joined this group

Deflated from its violent war expansion, this new company in the fall of 1919 found itself in that twilight zone where either life or death could easily follow. Its eldest officer, Mr. Shaw, was not yet thirty-five, and the youngest of the group, Mr. Richmond, was still under thirty. Perhaps it is the recollection of the struggles of those early days when youth did not know defeat that have made this group of four so unani-

Functional organization chart of the management of the General Radio Company.





MELVILLE EASTHAM  
*Retiring President*

mous in their decision that the active operation of the Company should be in the hands of young men.

It has further been the aim of the four principals of the Company to have it known as a group working together rather than the image of any individual. For this reason titles have not always been fully descriptive, while the active management of the Company stemmed from a group known as the Management Committee, made up of the officers and the chiefs of the operating divisions. The officers also felt that it was desirable to avoid making any sudden change in the over-all management. The age grouping of these officers is such that the transfer of responsibility to the younger men can best be accomplished if these officers simultaneously relinquish their functional positions.

Thus, at the annual meeting of the corporation held on February fifth, and at a Directors' meeting held on the same day, a number of changes in personnel,

and the revision of duties pertinent to the several positions, were made to bring about the above-mentioned desired results.

Messrs. Eastham, Locke, Richmond, and Shaw will continue as Directors and have been joined by Frank L. Tucker, formerly Comptroller, who was also elected Treasurer and Secretary of the Company. Mr. Eastham, formerly President, and Mr. Shaw, formerly Chairman of the Board, will hold no officership, although Mr. Eastham will temporarily continue in charge of research and development with title of Chief Engineer. Mr. Richmond was appointed Chairman of the Board of Directors and Chairman of the Management Committee. Mr. Locke, formerly Vice-President, was elected President.

New appointments, in addition to Mr. Tucker as Secretary and Treasurer, are Arthur E. Thiessen, formerly Commercial Engineering Manager, as Vice-President in Charge of Sales, and Charles C. Carey, formerly Superintendent, as Vice-President in Charge of Manufacturing.

A simplified sketch showing the new organization is given on page one. The Board of Directors now consists of Mr. Richmond as Chairman, Messrs. Eastham, Locke, Shaw, and Tucker. These same men with the addition of Messrs. Carey, Thiessen, and Charles T. Burke, Engineering Manager, comprise the Management Committee. Mr. Burke is also Chairman of the Scheduling Committee which is responsible for coordinating the activities of the three departments that report to the Management Committee.

Mr. C. E. Hills, Jr., who has been associated with the Company since 1922, and has been Commercial Manager since 1929, will continue in that



position, but in addition has been appointed Assistant Secretary and Assistant Treasurer of the Company.

Henry S. Shaw, the retiring Chairman of the Board, joined the Company in 1917 and was elected Treasurer the following year. He served in this capacity until 1926 when he became Chairman of the Board of Directors, which office he held continuously until February 5, 1944.

Mr. Shaw is a graduate of Harvard University in the Class of 1906 and before joining the General Radio Company was employed in the office of the treasurer of several New England textile mills. He has served as a director of a Boston trust company and as a trustee of a Boston savings bank, and is currently director of other business corporations. He has been interested in amateur radio since 1910, and it was this interest which was instrumental in bringing him to the General Radio Company during the first World War. His scientific memberships include:

- Fellow, Institute of Radio Engineers
- Fellow, American Academy of Arts and Sciences
- Fellow, American Association for the Advancement of Science
- Fellow, Acoustical Society of America
- Member, American Institute of Electrical Engineers
- Member, American Meteorological Society
- Member, American Geophysical Union.

Melville Eastham was one of the founders of the Clapp-Eastham Company in 1906. This company, whose name is familiar to all old-timers in the radio industry, first manufactured X-Ray apparatus, but started the manufacture of "wireless" equipment in 1908.

Mr. Eastham left the Clapp-Eastham Company in 1915 to become president of the General Radio Company, and he held this office until 1944. He has re-

cently spent nearly two years on leave of absence to the Radiation Laboratory at Massachusetts Institute of Technology, working on the design of military equipment.

His principal interest has always been in the design of instruments and components, and he is responsible for many of General Radio's small parts as well as some complex instruments.

One of his important interests outside the General Radio Company has been the Institute of Radio Engineers, in which organization he served many years as a director, and from 1927 to 1940 as treasurer. He was awarded the Institute Medal of Honor in 1937.

He holds, among others, the following memberships:

- Fellow, Institute of Radio Engineers
- Fellow, American Association for the Advancement of Science
- Member, American Institute of Electrical Engineers, Acoustical Society of America, American Physical Society, American Meteorological Society.



**HENRY S. SHAW**  
*Retiring Chairman*





**ERROL H. LOCKE**  
*President*

Harold B. Richmond, the incoming Chairman of the Board of Directors and Chairman of the Management Committee, joined the General Radio organization in 1919, becoming Secretary in 1921, Assistant Treasurer in 1924, and Treasurer since 1926.

He is a graduate of the Class of 1914, Massachusetts Institute of Technology, and for the past eleven years has been a member of the Corporation of that Institution. Since last year he has also been a member of the Corporation of Northeastern University. Mr. Richmond has served as Director and President of the Radio Manufacturers' Association, and as Vice-Chairman of the Board of the Scientific Apparatus Makers of America. He has been a director of a Cambridge trust company and is now a Corporator of the Home Savings Bank of Boston and also a director of the United Mutual Fire Insurance Company.

Before joining the General Radio

Company, Mr. Richmond had served with the Stone & Webster Management Association, the General Vehicle Company, and as a member of the electrical engineering staff of the Massachusetts Institute of Technology, which position was interrupted when he was called to active duty as a reserve officer in the Coast Artillery Corps in 1917. He is a Fellow of the American Institute of Electrical Engineers and of the Institute of Radio Engineers.

Errol H. Locke, our new President, joined the Company in 1918, becoming Vice-President in 1920, and holding that office until his election to the presidency on February fifth. Mr. Locke has been particularly interested in production and has devoted himself very largely to that phase of the Company's activities.

Mr. Locke is a graduate of Harvard College in the Class of 1913. Before joining the General Radio Company he was in the investment banking business.



**HAROLD B. RICHMOND**  
*Chairman of Board*



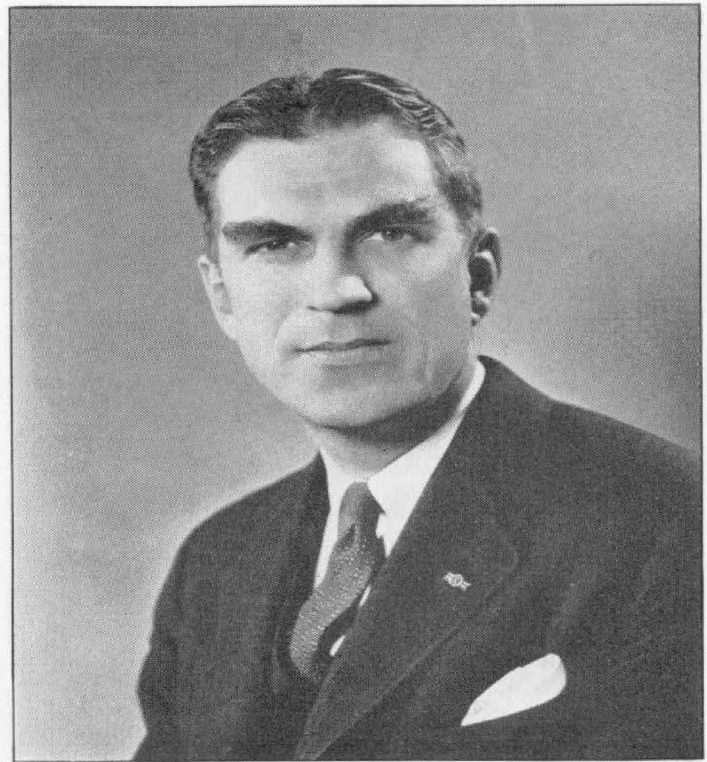
His outside activities have largely centered around his native town of Lexington, Massachusetts, where he has served on various town committees and since 1939 has been one of its selectmen. He is a Director of the Lexington Trust Company, a Trustee of the Lexington Savings Bank, the President of the Lexington Home for Aged People, and Treasurer of the Lexington Historical Society.

Frank L. Tucker, Treasurer, received his B.S. degree in Electrical Engineering from the University of Texas in 1927, and his M.B.A. degree from the Harvard Graduate School of Business Administration in 1930. He was employed by the Scout and Lease Department of the Gulf Oil Company in 1928-29, and by Arthur D. Little, Inc., from 1930 to 1934.

He came to the General Radio Company as statistician in 1934 and was appointed Comptroller in 1937, where his activities have included many phases



FRANK L. TUCKER  
*Treasurer*



ARTHUR E. THIESSEN  
*Vice-President for Sales*

of Company financial procedure, including accounting, statistics, costs, and government regulations.

Mr. Tucker is a member of the National Association of Cost Accountants. He has been active in the Harvard Business School Alumni Association and the Greater Boston Community Fund.

Arthur E. Thiessen, Vice-President in Charge of Sales, graduated from Johns Hopkins University in 1926 with the degree of Bachelor of Engineering. After graduation he became a Member of the Technical Staff of the Bell Telephone Laboratories, leaving there in 1928 to join the engineering staff of the General Radio Company. For the next several years he was engaged in both development engineering and sales activities, becoming Commercial Engineering Manager in 1937.

Articles by Mr. Thiessen have appeared frequently in the *Experimenter* and in other technical publications. He



**CHARLES C. CAREY**  
*Vice-President for Manufacturing*

is a Senior Member of the Institute of Radio Engineers, a Member of the American Institute of Electrical Engineers, and of the American Association for the Advancement of Science.

He is a Director of the Family Welfare Society of Cambridge and also a director of two local manufacturing concerns.

Charles C. Carey, Vice-President in Charge of Manufacturing, joined the General Radio organization as a winder in 1927 and became foreman of the winding department in 1928. He became assistant to Mr. Locke, who was then vice-president in charge of production, in 1931, in which capacity he supervised the production of special items and government contracts. While in this position he also reorganized the Company's production control system. In 1935 he was appointed production superintendent, holding that post until recently elected Vice-President.

Prior to his association with the General Radio Company, Mr. Carey was employed by the New England Telephone and Telegraph Company from 1922 to 1925, and by the Acme Apparatus Company from 1925 to 1927.

Charles E. Hills, Jr., Assistant Secretary and Assistant Treasurer, was graduated from Northeastern University in 1921 with the degree of Bachelor of Electrical Engineering. He came to General Radio in 1922, after a short period in the employ of the Boston Edison Company. After spending one year in the production department and five years in the sales department, he became Commercial Manager in 1929, which position he still holds.

Mr. Hills is a member of the National Office Managers' Association, the Export Managers' Club of New York, and the New England Export Club. He is an associate of the Institute of Radio Engineers.



**CHARLES E. HILLS, JR.**  
*Assistant Secretary and Assistant Treasurer*





**CHARLES T. BURKE**  
*Management Committee*

Charles T. Burke, Engineering Man-

ager, received his S.B. and S.M. degrees from the Massachusetts Institute of Technology in 1924. After graduation, he joined the engineering staff of the General Radio Company. Since that time his activities have included engineering, publicity, sales, and export. He was editor of the *Experimenter* from 1927 to 1929, and was appointed Engineering Manager in 1933. He has been a member of the Management Committee since 1939, and was appointed Chairman of the Scheduling Committee in 1943.

Mr. Burke is a Fellow of the Institute of Radio Engineers and a Member of the American Institute of Electrical Engineers. He has been active in municipal affairs in his home town of Watertown, Massachusetts, having served as a Town Meeting Member, and is at present Chairman of the Trustees of the Free Public Library of that town.

### DOUBLE DUTY



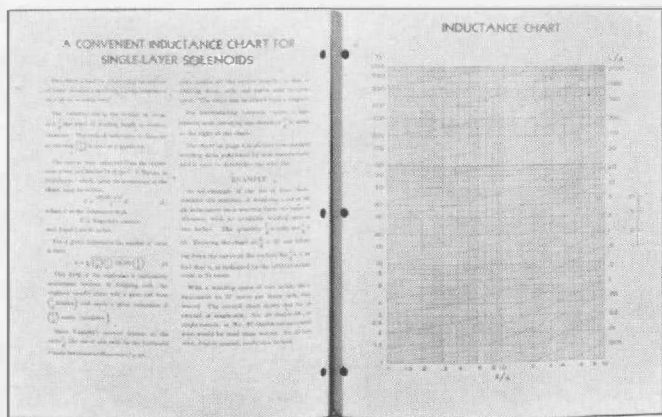
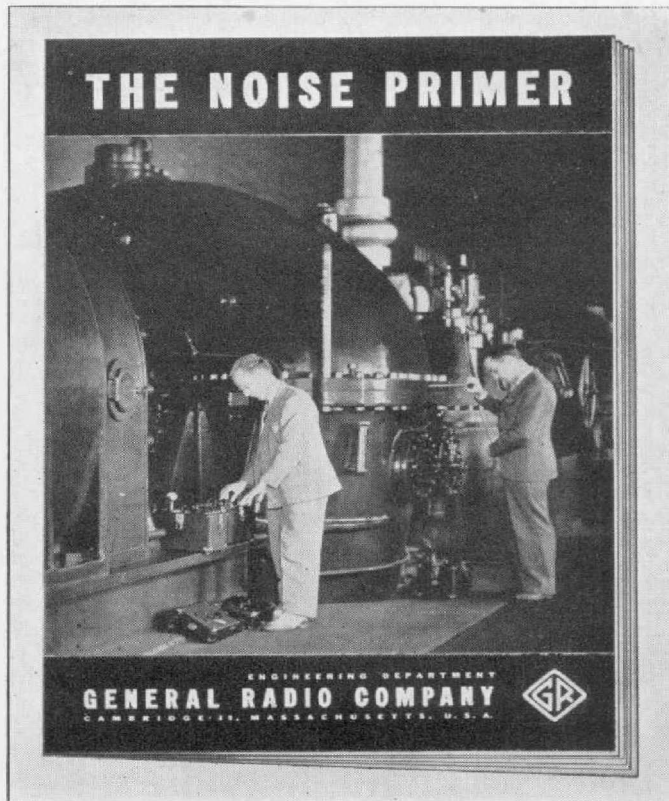
Supplementing the efforts of our 66 employees in the armed forces, 31 other General Radio employees contribute much of their time after working hours directly to military activities. Of this group, 23 are members of the U. S. Coast Guard Auxiliary, six others have joined the Massachusetts State Guard, and two women employees are members of the Women's Defense Corps.

## NEW PUBLICATIONS

● **THE SERIES OF ARTICLES** by H. H. Scott, entitled "The Noise Primer," which ran serially in the *Experimenter* last year, is now available in booklet form.

The Noise Primer is the ABC of noise and vibration measurement. Standards, methods, and instruments are discussed in detail.

If you make noise and vibration measurements, or if you would like to learn more about the accepted methods of measurement, you will find this booklet valuable. A copy will be sent free on request.



● **THE INDUCTANCE CHART** originally published in the August, 1940, issue of the *Experimenter* and recently available in a 17 x 22-inch size for wall

mounting, has been reprinted in a 4-page, 8½ x 11-inch folder, punched for a standard 3-ring binder. This chart indicates the number of turns required for a given inductance in terms of the length and diameter of the winding form. An auxiliary chart determines the wire size to be used. If you can use this handy aid to the coil designer, write for a copy.

**THE General Radio EXPERIMENTER** is mailed without charge each month to engineers, scientists, technicians, and others interested in communication-frequency measurement and control problems. When sending requests for subscriptions and address-change notices, please supply the following information: name, company name, company address, type of business company is engaged in, and title or position of individual.

**GENERAL RADIO COMPANY**  
**30 STATE STREET - CAMBRIDGE 39, MASSACHUSETTS**

**BRANCH ENGINEERING OFFICES**  
**90 WEST STREET, NEW YORK CITY 6**  
**920 SOUTH MICHIGAN AVENUE, CHICAGO 5, ILLINOIS**  
**1000 NORTH SEWARD STREET, LOS ANGELES 38, CALIFORNIA**

