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OFFICERS AND BOARD OF DIRECTION, 1914

(Term expires January 8, 1915)

PRESIDENT
Louis W. Austin

VICE-PRESIDENT
John Stone Stone

TREASURER
John Hays Hammond, Jr.

SECRETARY
Emil J. Simon

EDITOR OF PUBLICATIONS
Alfred N. Goldsmith

MANAGERS
Robert H. Marriott
Roy A. Weagant

ASSISTANT TREASURER
Thos. T. Trapnell

ASSISTANT SECRETARY
Ralph H. Langley

GENERAL COUNSEL
Harold R. Zeamans

PAST-PRESIDENTS

SOCIETY OF WIRELESS TELEGRAPH ENGINEERS
John Stone Stone, 1907-8
Lee de Forest, 1909-10
Fritz Lowenstein, 1911-12

THE WIRELESS INSTITUTE
Robert H. Marriott, 1909-10-11-12

INSTITUTE OF RADIO ENGINEERS
Robert H. Marriott, 1912
Greenleaf W. Pickard, 1913
STANDING COMMITTEES

1914

COMMITTEE ON PAPERS

Alfred N. Goldsmith, Chairman,
College of the City of New York, New York
John Stone Stone..................New York
Louis W. Austin, Ex-officio..........Washington, D. C.

COMMITTEE ON STANDARDIZATION

John Stone Stone, Chairman, National Arts Club...New York
Ernest R. Cram.......................Washington, D. C.
Guy Hill..............................New York
Greenleaf W. Pickard................Boston, Mass.
Frederick A. Kolster................Washington, D. C.
Alfred E. Seelig.....................New York
Louis W. Austin, Ex-officio..........Washington, D. C.

COMMITTEE ON PUBLICITY

Robert H. Marriott, Chairman, Custom House...New York
John L. Hogan, Jr..................New York
Roy A. Weagant........................New York
Louis W. Austin, Ex-officio..........Washington, D. C.

SPECIAL COMMITTEE

COMMITTEE ON INCREASE OF MEMBERSHIP

John Hays Hammond, Jr., Chairman...Gloucester, Mass.
Thomas E. Clark.....................Detroit, Mich.
George S. Davis......................New Orleans, La.
Charles P. Edwards................Ottawa, Canada
Cyril F. Elwell.....................London, England
V. Ford Greaves......................Washington, D. C.
Oscar C. Roos........................Manila, P. I.
Stanford C. Hooper, Lieut. U. S. N........Flagship "Wyoming"
Louis W. Austin, Ex-officio..........Washington, D. C.

GENERAL INFORMATION

History and Scope of the Institute.

The Institute of Radio Engineers is to-day the only society of the radio engineering profession. Previous to its formation the two most influential organizations in this field of endeavor were The Society of Wireless Telegraph Engineers and The Wireless Institute. To the end that the influence exerted by those societies might gain greater effectiveness through concentration, efforts were made to secure their consolidation. These attempts were successful, and on May 13, 1912, the Institute of Radio Engineers was formerly established.

The remarkable progress in the art of communicating through space during the present decade has made desirable a parallel development of an organization of this character. The future advance of the radio profession will owe much to the men who founded these parent societies, and those who succeeded in accomplishing their consolidation. These men foresaw the possibilities which might grow from an organization that would foster and encourage the development of this useful art, and that would afford opportunity for its members to meet and discuss radio problems and developments. The Institute will be no small factor in bringing about the progress which will take place not only in applications of the art but also in the advancement of its individual members and of the radio profession as a whole.

Eligibility to Membership.

The Institute membership consists of Associates, Members and Honorary Members.

An Associate, according to the Constitution of the Institute, may be any person who is interested in the advancement of radio transmission.
A Member must be a person of good professional standing who has engaged in arts pertaining to the development of radio transmission for at least five years.

A Member must first be elected as an Associate and then, if eligible, may make application for transfer.

Honorary Members are chosen from among those who have rendered acknowledged eminent service to the art or science of radio transmission.

Applications for Membership.

All applications must be made on forms which are provided for that purpose and which can be obtained from the Secretary. These forms provide space for the required reference to five Members or Associates, and for a brief record of the professional or commercial experience of the candidate. If the applicant is not personally acquainted with five Members or Associates of the Institute, he may refer to non-members, preferably members of other engineering organizations, in which case the members of the Board of Direction will personally endorse his application, provided their investigation through his references is satisfactory.

Entrance Fee. Annual Dues.

There is at the present time no entrance fee for admission to the Institute.

The annual dues are five (5) dollars for Members and three (3) dollars for Associates, payable in advance on January 1st of each year.

A person transferred from the grade of Associate to the grade of Member is required to pay the dues of the higher grade.

A person elected after July 1st of any year is required to pay one-half the dues for that year.

An honorary member is exempt from all payments.

Membership.

The membership of the Institute is made up of scientists and engineers engaged in the development of the theory and practice of the radio science and art, and many others who through their business or mental trend are seriously concerned with this new field of endeavor.

All branches of the profession and of allied professions are represented. The membership includes inventors, authors, consulting engineers; professors and instructors of physics and engineering; chief engineers, managers and other officers connected with commercial companies; officers and officials of the several branches of the United States Government and foreign governments concerned with radio communication; professional and amateur investigators, professional and amateur operators; and other persons interested in the advancement of the art.

Membership Jan. 1, 1907, Society of Wireless Telegraph Engineers . 11
Membership Jan. 1, 1908, Society of Wireless Telegraph Engineers . 17
Membership Jan. 1, 1909, Society of Wireless Telegraph Engineers . 27
Membership Jan. 1, 1910, Society of Wireless Telegraph Engineers . 35
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Membership Jan. 1, 1911, Society of Wireless Telegraph Engineers . 36
Membership Jan. 1, 1912, Society of Wireless Telegraph Engineers . 43
Membership Jan. 1, 1912, The Wireless Institute . 27
Membership Jan. 1, 1913, Institute of Radio Engineers . 109
Membership Jan. 1, 1914, Institute of Radio Engineers . 231
Membership Mar. 1, 1914, Institute of Radio Engineers . 274

This large increase in membership has come from all parts of the United States and from foreign countries. The large number of members distant from New York is especially worthy of note, as it indicates the value placed upon Institute membership by engineers who reside at too great a distance to attend the regular meetings.

Meetings.

Institute meetings are held in New York monthly excepting in July and August of each year, for the presentation and discussion of engineering papers. These papers are presented by members who have specialized in some division of the subject and who desire to lay their results before the profession.

The annual meeting of the Institute is held in the first week of January, and although it has been customary in the past to hold this meeting in New York City, it is the intention of the Institute to have it held in different sections of the country from year to year, according to the distribution of the membership,
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and with special regard to conventions or congresses of the radio
or allied professions which may from time to time convene.

Section Meetings.

Section meetings of the Institute are held each month in the
City of Washington for the benefit of the large number of mem-
bers residing in the vicinity of the Capital.

As the membership in various cities increases it is expected
that other sections will be formed. Section meetings will in all
probability be held in the City of Boston before the end of the
present year.

Publications.

The Proceedings of the Institute are published quarterly and
contain the papers and their discussion as presented at the meet-
ings in New York and other cities. Hereafter they will also in-
clude other matters of general interest such as lists of new mem-
bers elected, personal notes, reports of meetings and committees
and other information pertaining to the Institute.

Payment of the annual dues by a member entitles him to one
copy of each number of the Proceedings issued during the period
of his membership. Members may purchase, when available,
copies of the Proceedings issued prior to their election at 75
cents each.

Subscriptions to the Proceedings are received from non-mem-
bers at the rate of $1.00 per copy or $4.00 per year. To foreign
countries the rates are $1.25 per copy or $5.00 per year, 25 per
cent. discount being allowed to libraries and booksellers.

Members presenting papers before the Institute are entitled to
ten copies of the paper and of the discussion.

Government.

The Institute is governed by a Board of Direction consisting
of the President, the Vice-President, the Treasurer, the Secretary,
the Editor of Publications and four Managers. The four officers
and the four managers are elected annually by the members. The
Editor of Publications is appointed by the Board of Direction.
The term of office in each case is one year beginning and end-
ing with the annual meeting in January. All Members and As-

are not eligible to the offices of President and Vice-President.
All Members and Associates have equal privileges in voting for
officers.

Committees.

A considerable portion of the important work of the Insti-
tute is accomplished by committees. The standing committees,
as required by the Constitution, are appointed annually by the
President. These are the Committee on Papers, the Committee
on Standardization, and the Committee on Publicity. The Com-
mittee on Papers aims to secure for presentation to the members
only those papers which merit serious consideration and which
deal with topics in which the greater portion of the member-
ship is expected to be interested. It is the function of the
Committee on Standardization to prepare standard terms, sym-

ebols, units and methods of testing and rating radio apparatus.
The duty of the Committee on Publicity is to keep the public
and the technical press informed as to the work done by the In-
stitute and its recommendations, thus insuring that the public
and the art shall benefit by the labors of the Institute. Other
Committees are appointed from time to time, as occasion requires.

There exists at present a Committee on Increase of Mem-

Emblem.

The Emblem of the Institute which all Members
and Associates are privileged to wear is shown in the
margin. The badge is of solid 14K. gold and finely
finished. The enameled background is blue for Mem-
ers and maroon for Associates with letters and bor-
ders in gold. This emblem is made in the form of a pin and

can be purchased through the Secretary's office for $2.50 each.
Member's initials are engraved on the back of each pin.

Insignia.

All Members are entitled to place after their names the fol-

ing letters to indicate their relation to the Institute:

Member—Mem. I.R.E.
Associate—Assoc. I.R.E.
Honorary Member—Hon. Mem. I.R.E.
Resolution

(Unanimously adopted by the Board of Direction and members of the Institute of Radio Engineers, assembled for regular meeting at Columbia University, New York, February 4, 1914, and at the Bureau of Standards, Washington, D.C., February 5, 1914.)

WHEREAS, we have lost by death our charter member, Clark H. Sphar; and

WHEREAS, he was a member of the Board of Direction of The Wireless Institute, a parent organization of the Institute of Radio Engineers, and

WHEREAS, he was an active worker in the building of our Institute, and

WHEREAS, he was noted among us for his honorable, dependable, sincere and gentle qualities as a man, as an engineer, and as a member of the Institute; it is hereby

Resolved, That the Institute of Radio Engineers considers his death on January 23, 1914, depletes the Radio Fraternity of a loved and valued Member; and it is further

Resolved, That the Institute of Radio Engineers hereby express to the wife and family of Clark H. Sphar and to the world its sincere sorrow; and it is further

Resolved, That these resolutions be spread upon the minutes, and a copy of them be sent to his wife and family, and that they be printed in the Proceedings.

CONSTITUTION

Adopted at the First Meeting of the Institute of Radio Engineers, May 13, 1912.

ARTICLE I

NAME AND OBJECT

Sec. 1. The name of this organization shall be The Institute of Radio Engineers.

Sec. 2. Its object shall be to advance the art and science of radio-transmission.

ARTICLE II

MEMBERSHIP

Sec. 1. The membership shall consist of:

a. Members, who shall be entitled to all the privileges of the Institute.

b. Associates, who shall be entitled to all the privileges of the Institute, except the right to hold office as President or Vice-President.

c. Honorary Members, who shall be entitled to all the privileges of the Institute.

Sec. 2. A Member shall be a person of good professional standing who has engaged in arts pertaining to the development of radio-transmission for at least five years.

Sec. 3. An Associate shall be a person who is interested in the advancement of radio-transmission.

Sec. 4. An Honorary Member shall be a person who has rendered acknowledged eminent service to the art or science of radio-transmission.

ARTICLE III

ADMISSIONS AND EXPULSIONS

Sec. 1. Honorary Members shall be recommended by at least ten members to the Board of Direction, and upon unanimous vote
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of that Board shall be proposed to the membership for election. A person elected an Honorary Member shall be promptly notified thereof by letter. The election shall be cancelled if an acceptance is not received within six months after the mailing of notice.

SEC. 2. An application for admission to the Institute, or for transfer from one grade to another, shall embody a concise statement with dates, of the candidate's training and experience, and shall be in such form and in such detail as may be prescribed by the Board of Direction. It shall be signed by the applicant, and shall contain a promise to conform to the requirement of membership, if elected.

The applicant shall furnish the names of at least five members to whom he is personally known. Each of these shall be requested by the Secretary to address a letter to the Board of Direction, stating the extent of the writer's personal knowledge of the applicant and his training and experience. If at least three of the corporate members named as references do not furnish the requisite endorsement, the Secretary shall call upon the applicant for additional names, and not until written communications have been received from at least three members shall the application be considered by the Board of Direction.

Applicants who may be so situated as not to be personally known to three members may be recommended for ballot by three members after they have secured, in their opinions, sufficient evidence to show that the candidate is worthy of admission.

SEC. 3. Subject to the discretion of the Board of Direction, and at stated periods to be determined by that Board, there shall be issued to each member whose address is known, a list of all new applications received for admission or for transfer, which list shall be dated and shall contain a concise statement of the record of each applicant and the names of his references, with a request that members transmit to the Board of Direction any information in their possession which may affect the disposition of the applications. Not less than twenty days after the issue of such list the Board of Direction shall consider these applications, together with any information with regard to the applicants which may have been received; may make further inquiries if deemed expedient; on application being approved by the Board the applicant may be ballotted upon by the membership. More than one-fifth of the votes of those present (but not less than three votes) adversely cast shall suffice for the rejection of the candidate.

SEC. 4. A rejected applicant may renew his application for membership at any time after the expiration of one year from the date of the ballot rejecting his previous application.

SEC. 5. All elected candidates shall be duly notified and shall subscribe to the Constitution and Rules of the Institute. Forms for these purposes shall be prescribed by the Board of Direction. If these provisions are not complied with within six months from the notification of election, such election shall be considered void, unless for special reason the time shall be extended by the Board of Direction. Membership of any person shall date from the date of his election.

SEC. 6. Members or Associates, if found delinquent in their duties may be tried by the Board of Direction, and upon decision of the Board their names shall be submitted to the Institute to determine their suspension or expulsion. A three-quarters vote of the Institute shall be necessary to ratify such action of the Board.

SEC. 7. A member may resign his membership by a written communication to the Secretary, who shall present the same to the Board of Direction; when, if all his dues have been paid, his resignation shall be accepted.

ARTICLE IV

DUES

SEC. 1. The annual dues payable by members, whether resident or non-resident, shall be as follows: by Members, five dollars ($5); by Associates, three dollars ($3).

SEC. 2. A person transferred from the Associate grade to the Member grade shall pay the dues of the higher grade.

SEC. 3. The annual dues shall be payable on the first day of January, in advance for the ensuing year. It shall be the duty of the Secretary to notify each member of the amount due at the time of giving notice of the annual meeting.
CONSTITUTION

SEC. 4. Persons elected after July 1st of any year shall pay only one-half of the dues for that year.

SEC. 5. Any person whose dues are more than three months in arrears shall be notified by the Secretary. Should his dues not be paid when they become six months in arrears, he shall lose the right to vote or to receive the publications of the Institute. Should his dues become nine months in arrears, he shall be again notified in form prescribed by the Board of Direction, and if such dues become one year in arrears he shall forfeit his connection with the Institute. The Board of Direction may, however, for cause deemed by it sufficient, extend the time for payment and for the application of these penalties.

SEC. 6. The Board of Direction may, for sufficient cause, temporarily excuse from payment of annual dues any member; and the Board may remit the whole or part of dues in arrears, or accept in lieu thereof desirable additions to the library or collections.

SEC. 7. Every person admitted to the Institute shall be considered as belonging thereto and liable for the payment of all dues until he shall have resigned, been expelled, or have been relieved therefrom by the Board of Direction.

ARTICLE V
OFFICERS

SEC. 1. The governing body of the Institute shall be a President, a Vice-President, a Secretary, and a Treasurer, an Editor of Publications, and four Managers, who shall together constitute the Board of Direction.

SEC. 2. The terms of all officers named in the preceding section shall be one year, shall begin at the close of the annual meeting at which election is made, and shall continue until successors are duly elected.

ARTICLE VI
MANAGEMENT

SEC. 1. The President shall have general supervision of the affairs of the Institute. He shall preside at meetings of the Institute and of the Board of Direction at which he may be present, and shall be an ex-officio member of all committees. He shall deliver an address at the annual meeting.

SEC. 2. The Board of Direction shall manage the affairs of the Institute in conformity to the laws under which the Institute is organized and the provisions of the Constitution. It shall direct the investment and care of the funds of the Institute; make appropriations for specific purposes; act upon applications for membership as heretofore provided; take measures to advance the interests of the Institute; appoint all its employees, and generally direct its business. The Board of Direction shall make an annual report at the annual meeting, transmitting the report of the Treasurer and of other officers and of committees. A majority of the Board of Direction shall constitute a quorum.

SEC. 3. The Treasurer shall receive all moneys and deposit the same in the name of the Institute. He shall invest all funds not needed for current disbursements, as shall be ordered by the Board of Direction. He shall pay all bills, when certified and audited, as provided by this Constitution and by rules to be prescribed by the Board of Direction. He shall make an annual report and all other reports as may be prescribed by the Board of Direction.

The Board of Direction shall secure a satisfactory surety for the faithful performance of his duties by the Treasurer, and shall renew the same during the month of January of each year.

SEC. 4. The Secretary will be expected to attend all meetings of the Institute and of the Board of Direction; prepare the business therefor, and duly record the proceedings thereof. He shall see that all moneys due the Institute are carefully collected, and without loss transferred to the custody of the Treasurer. He shall carefully scrutinize all expenditures and use his best endeavor to secure economy in the administration of the Institute. He shall personally certify the accuracy of all bills or vouchers on which money is to be paid, and shall countersign the checks drawn by the Treasurer against the funds of the Institute, when such drafts are known to him to be proper and duly authorized by the Finance Committee. He shall have charge of the books of account of the Institute, and shall furnish when required by the Board of Direction a statement of receipts and expenses under
their several headings, and also a statement of monthly balances. He shall present annually, to the Board of Direction, a balance sheet of his books as of the 31st of December, and shall furnish from time to time such other statements as may be required of him. He shall conduct the correspondence of the Institute and keep full records of the same. He shall perform all other duties which may from time to time be assigned to him by the Board of Direction.

Sec. 5. The Board of Direction may also, if they deem it necessary, appoint an Assistant Secretary, who shall aid the Secretary and be under his immediate direction in all matters.

Sec. 6. The President, within twenty days after the annual meeting, shall appoint from the membership the following standing committees:

Committee on Papers.
Committee on Standardization.
Committee on Publicity.

These committees shall report to the President and perform their duties under his supervision.

ARTICLE VII
NOMINATION AND ELECTION OF OFFICERS

Sec. 1. One month before the annual meeting, nominations for the offices of President, Vice-President, Secretary, Treasurer, and four Managers, shall be called for from the entire membership. Ten weeks before the annual meeting the Board of Direction shall submit to the membership a list of nominees, which list shall consist of the pairs of names receiving the largest number of nominations for each office. In the event of ties in nomination, the Board of Direction shall select the name of the man in its opinion best fitted for that office. The membership shall then submit a written ballot voting for officers from the list of nominees above described. A majority vote up to the time of the closing of the polls (24 hours before the opening of the annual meeting) shall elect. Before nominees' names are submitted to the membership for final vote each nominee shall be consulted, and, if he so requests, his name shall be withdrawn and the next ranking name substituted.

Sec. 2. The Editor of Publications shall be elected by a majority vote of the Board of Direction at their meeting next after the annual meeting of the Institute.

ARTICLE VIII
MEETINGS

Sec. 1. There shall be an Annual Meeting, at which the annual reports for the year ending December 31st previous shall be presented, and the ballot for officers canvassed. At this meeting fifteen members shall constitute a quorum.

Sec. 2. Business meetings shall be held as prescribed by the by-laws.

Sec. 3. In addition to the Annual Meeting, meetings for the reading and discussion of papers shall be held as ordered by the Board of Direction.

Sec. 4. Special meetings may be called by the Board of Direction, and shall be so called upon the request of ten members, which request shall state the purpose of such meeting. The call for such meeting shall be issued ten days in advance, and shall state the purpose thereof, and no other business shall be taken up at such meeting. At these meetings ten members shall constitute a quorum.

Sec. 5. The Institute may adopt, from time to time, rules for the order of business at its meetings.

Sec. 6. Meetings of the Board of Direction shall be held at the time of the Annual Meeting and such other times as the Board may determine.

ARTICLE IX
AMENDMENTS

Sec. 1. Proposed amendments to this Constitution must be reduced to writing and signed by not less than ten members, and be submitted to the membership who shall vote by letter ballot. The amendment shall be adopted if 75 per cent. of the votes received are in favor of such action.
TREASURER'S REPORT

STATEMENT OF RECEIPTS AND DISBURSEMENTS FROM FEBRUARY 1, 1913, TO DECEMBER 31, 1913.

RECEIPTS
Amount turned over by former Treasurer of Institute of Radio Engineers, February 6, 1913 $150.97
Amount received from J. L. Hogan, Jr., account balance of Wireless Telegraph Engineers $50.00
Dues Dr. A. N. Goldsmith $50.00
Anonymous Gift through Dr. A. N. Goldsmith $100.00
Sale of Proceedings $23.21

$850.97

DISBURSEMENTS
Printing Proceedings of Institute $647.25
Swastika Office Equipment Co., for duplicating letters, addressing, etc. $68.60
Postage, typewriting, stationery, etc. $67.50
Fayerweather Hall—Janitorial service $16.00
Coal & Iron National Bank, check book and charges for handling account $7.00
Fees for incorporating Institute, exchange and miscellaneous charges $20.00

$826.85

Cash on hand and in bank $24.43

$850.93

CATALOGUE OF MEMBERS
Listed Alphabetically

<table>
<thead>
<tr>
<th>Name</th>
<th>Designation</th>
<th>Address</th>
<th>Date of Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEXANDERSON, E. F. W.</td>
<td>Consulting Engineer, Gen'l Electric Co.</td>
<td>Scheneate, N.Y.</td>
<td>Mar. 12, 1913</td>
</tr>
<tr>
<td>BEHR, CAPT. P. L.</td>
<td>War Dept. Representative, Haman Radio Research Laboratory, Gloucester, Mass.</td>
<td></td>
<td>Dec. 3, 1913</td>
</tr>
<tr>
<td>BUTCHER, E. E.</td>
<td>Instructing Engineer, Marconi Wireless Telegraph Co., 29 Cliff St., N.Y.</td>
<td></td>
<td>Sep. 3, 1913</td>
</tr>
<tr>
<td>CURTIS, AUSTIN M.</td>
<td>Engineer, Western Electric Co., N.Y., 1238 St. Johns Ave, Brooklyn, N.Y.</td>
<td></td>
<td>Nov. 4, 1912</td>
</tr>
<tr>
<td>EASTHAM, MELVILLE</td>
<td>Partner, Chapp-Eastham Co., Boston, Mass., 139 Main St., Cambridge, Mass.</td>
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<td>Feb. 14, 1913</td>
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<tr>
<td>EDWARDS, CHARLES P.</td>
<td>Director, Radio Telegraph Branch, Dept. of Naval Service, Ottawa, Ont., Canada</td>
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<td>Jun. 12, 1913</td>
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<td>ESPENSCHEID, LLOYD</td>
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<td>May 28, 1913</td>
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<td>FORBES, E. D.</td>
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<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Company</th>
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<tbody>
<tr>
<td>Applegate, D. V.</td>
<td>Inspector, Marconi Wireless Telegraph Co., 29 Cliff St., N. Y.</td>
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<td>Ashton, John O.</td>
<td>Salesman, Radio Telephone and Telegraph Co., New York; res., 7 Haley Place, Brooklyn, N. Y.</td>
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<td>Ballet, H. Y.</td>
<td>54th Jefferson St., Portland, Ore.</td>
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<tr>
<td>Barth, Julian</td>
<td>Engineer, Marconi Wireless Telegraph Co., New York; res., 53 W. 12th St., New York</td>
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<tr>
<td>Beaumont, Victor S.</td>
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<tr>
<td>Best, Paul T.</td>
<td>Chief Radio Electrician, U. S. S. Constellation, Newport, R. I.</td>
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<tr>
<td>Bissell, William F.</td>
<td>Attorney at Law, 2 Horton St., New York</td>
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<tr>
<td>Bowen, Chas. F.</td>
<td>Manager, N. H.</td>
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<tr>
<td>Bowen, Paul</td>
<td>Radio Operator, Tropical Radio Telegraph Co., 81 South Street, N. Y.</td>
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<tr>
<td>Boynton, Harold W.</td>
<td>Radio Operator, Navy Dept., Washington, D. C.</td>
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<tr>
<td>Brown, D. S., Jr.</td>
<td>Radio Experimental; res., 236 West 65th St., New York</td>
<td></td>
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<tr>
<td>Cadmus, Richard O.</td>
<td>Radio Inspector, Dept. of Commerce, Custom House, Baltimore, Md.</td>
<td></td>
<td></td>
<td>Nov. 1, 1913</td>
</tr>
<tr>
<td>Calvert, F. E.</td>
<td>res., 1201 Elmwood Ave., Charlestown, W. Va.</td>
<td></td>
<td></td>
<td>July 24, 1913</td>
</tr>
<tr>
<td>Camp, W. F.</td>
<td>Automobile Salesman, 1706 Broadway, N. Y.</td>
<td></td>
<td></td>
<td>Jan. 21, 1911</td>
</tr>
<tr>
<td>Campbell, H. E.</td>
<td>Inspector, Marconi Wireless Telegraph Co.; res., 1517 Westminster Road, Brooklyn, N. Y.</td>
<td></td>
<td></td>
<td>Nov. 14, 1912</td>
</tr>
<tr>
<td>Campbell, J. H.</td>
<td>Electrical Sub-inspector, Machinery Division, Navy Yard, New York</td>
<td></td>
<td></td>
<td>June 3, 1912</td>
</tr>
<tr>
<td>Chadbourne, W. E.</td>
<td>Engineer, Marconi Wireless Telegraph Co., 233 Broadway, N. Y.</td>
<td></td>
<td></td>
<td>Jan. 15, 1913</td>
</tr>
<tr>
<td>Cole, A. B.</td>
<td>Manager, Wireless Department, Manhattan Electrical Supply Co., 17 Park Place, New York; res., Coldwell, N. Y.</td>
<td></td>
<td></td>
<td>Aug. 7, 1913</td>
</tr>
<tr>
<td>Cole, Geo. E.</td>
<td>Inspector, National Electric Signaling Co., 855 35th St., Brooklyn, N. Y.</td>
<td></td>
<td></td>
<td>Nov. 1, 1912</td>
</tr>
<tr>
<td>Collins, Charles H., Jr.</td>
<td>Radio Experimenter, Bay View Hotel, S. more Point, N. J.</td>
<td></td>
<td></td>
<td>Aug. 13, 1913</td>
</tr>
<tr>
<td>Collins, P. A.</td>
<td>New York Edison Co.; res., 172 Maple St., Brooklyn, N. Y.</td>
<td></td>
<td></td>
<td>Jan. 15, 1913</td>
</tr>
<tr>
<td>Conway, Urey W.</td>
<td>Field Engineer, U. S. Atlantic Torpedo Flotilla; res., U. S. S. Birmingham, c/o: Postmaster, New York</td>
<td></td>
<td></td>
<td>June 1, 1912</td>
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<tr>
<td>Cowan, Capt. A. S.</td>
<td>Radio Officer, Signal Corps, U. S. A., Fort Leavenworth, Kansas</td>
<td></td>
<td></td>
<td>Oct. 15, 1913</td>
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<tr>
<td>Cross, Roy Corwin</td>
<td>Radio Experimenter; res., 211 West 11th St., New York</td>
<td></td>
<td></td>
<td>Jan. 15, 1913</td>
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<tr>
<td>Dages, James J.</td>
<td>Electrical Engineer, Western Union Telegraph Co., 195 Broadway, New York; res., 355 Mowbray Ave., Convent, Staten Island, New York</td>
<td></td>
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<td>June 8, 1912</td>
</tr>
<tr>
<td>Davis, F. C.</td>
<td>Inspector, Dept. of Water Supply, Gas, and Electricity, City of New York; res., 120 W. 10th St., New York</td>
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<td>June 8, 1912</td>
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<tr>
<td>DeForest, Lee, Ph. D.</td>
<td>Asst. President, S. W. T. E.; Radio Inventor; res., 1914 3rd Ave., New York</td>
<td></td>
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<td>July 1, 1912</td>
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<tr>
<td>Donley, Harold P.</td>
<td>Radio Engineer; res., 9 Phillips St., Providence, R. I.</td>
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<td>Aug. 1, 1912</td>
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<tr>
<td>Doollittle, Franklin M.</td>
<td>Student, Yale University, New Haven, Conn.; res., 171 Bradley St., New Haven, Conn.</td>
<td></td>
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<td>July 1, 1912</td>
</tr>
<tr>
<td>Duncan, R. D.</td>
<td>Special Student, Washington University; res., 6114 Washington St., St. Louis, Mo.</td>
<td></td>
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<td>Jan. 21, 1913</td>
</tr>
<tr>
<td>Dunn, J. A.</td>
<td>Auditor, Tropical Radio Telegraph Co., 59 South St., N. Y.</td>
<td></td>
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<td>Jan. 7, 1914</td>
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<tr>
<td>Edwards, Jos. B.</td>
<td>Student in Electrical Engineering, Columbia University, N. Y.; res., 236 Linden Avenue, Flatbush, Brooklyn, N. Y.</td>
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<td>Oct. 1, 1912</td>
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<tr>
<td>Eilenschneider, J. B.</td>
<td>Engineer, Marconi Wireless Telegraph Co., Brooklyn, N. Y.; res., 805 Sixth Ave., Newark, N. J.</td>
<td></td>
<td></td>
<td>Sep. 3, 1913</td>
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<tr>
<td>Engler, John</td>
<td>Engineer, Atlantic Communication Co., 47 West 31st St., N. Y.</td>
<td></td>
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<td>Apr. 2, 1912</td>
</tr>
<tr>
<td>Engesht, Norbert K.</td>
<td>Treasurer's Assistant, Hoover &amp; Robinson Co., Newark, res., 128 Montmorenci St., Newark, N. J.</td>
<td></td>
<td></td>
<td>Feb. 8, 1912</td>
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<tr>
<td>Evans, James</td>
<td>Chief Radio Electrician, Radio Laboratory, Hq., 14 Navy Yard, N. Y.</td>
<td></td>
<td></td>
<td>April 1, 1913</td>
</tr>
<tr>
<td>Everett, L. C.</td>
<td>Engineer, Marconi Wireless Telegraph Co., 254 Broadway, N. Y.</td>
<td></td>
<td></td>
<td>Sep. 3, 1913</td>
</tr>
<tr>
<td>Facet, John W.</td>
<td>Electrician, with Mr. Richard Plum, 51 Stone St., N. Y.</td>
<td></td>
<td></td>
<td>Sep. 3, 1913</td>
</tr>
</tbody>
</table>
ASSOCIATES

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Jan. 7, 1914

Charter Member, W. I.

Feb. 18, 1914

Sep. 13, 1913

Jan. 7, 1914

Nov. 4, 1912

June 2, 1912

Apr. 2, 1913

Dec. 4, 1912

July 16, 1913

Mar. 12, 1913

July 16, 1913

Nov. 1, 1912

Jan. 7, 1914

Nov. 4, 1912

Oct. 15, 1913

Feb. 18, 1914

Jan. 21, 1914

Nov. 3, 1913

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Dec. 4, 1912

July 16, 1913

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Jan. 7, 1914

Feb. 3, 1914

Oct. 15, 1913

Jan. 21, 1914

Feb. 3, 1914

Oct. 15, 1913

Jan. 21, 1914

June 3, 1912

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ASSOCIATES

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MCNAIR, WALTER W., Engineer, Clark Wireless Telegraph Company, 1210 Madison Avenue, Kansas City, Mo.

MEISSNER, BENJ., Engineer, Hamburg, Ind.

MENENDEZ, H. T., Chief Engineer, United States Government, Washington, D. C.

MONTGOMERY, S. R., Assistant Engineer, United States Government, Washington, D. C.

MORRIS, M. C., Construction Engineer, Marconi Wireless Telegraph Company, 520 South 35th Street, Philadelphia, Pa.

MOORE, H. C., Sales Engineer for Radio Apparatus; res. 107 North 30th Street, Springfield, Ill.

MURRAY, EUGENE M., Construction Engineer, Marconi Wireless Telegraph Company, 601 Madison Avenue, Baltimore, Md.

NAUGLE, PHILIP D., Designing Engineer, Kilbourn & Clark Machine Company, 71 Columbus Street, Seattle, Wash.

NEWTON, EDWARD C., Division Superintendent, Marconi Wireless Telegraph Company, Cleveland, Ohio.

NOLAN, EDWARD J., Garage Keeper, 121 Willow Street, Brooklyn, N. Y.

OGDEN, HERBERT G., Patent Attorney, 2 Reuter Street, New York, N. Y.
ASSOCIATES


STEVENS, A. M., Assistant Engineer, U.S. Radio Station, 5th Congressional District, New York, N.Y.

STEWARD, R. D., Clerk, Handbridge Co., 52 East 34th St., New York, N.Y.

TABER, W. M., Assistant Engineer, Western Tel. Co., 80 W. 42nd St., New York, N.Y.

TADINO, CHAS. W., Electrical Assistant, Western Union Co., 140 West 34th St., New York, N.Y.

TAYLOR, D. W., Electric Inspector, Dept. of Commerce, Washington, D.C.

THOMAS, J. E., Chief Radio Engineer, U. S. Naval and Post Office, Washington, D.C.

TOWNSHEND, T. E., Assistant Engineer, Western Electric Co., 1200 Broadway, New York, N.Y.

TROPP, L. J., Assistant Engineer, Western Electric Co., 1200 Broadway, New York, N.Y.

TUKEY, W. H., Service Engineer, Western Electric Co., 1200 Broadway, New York, N.Y.

UPSON, HARRY E., Electrical Engineer, U.S. Navy Dept., 2190 L Street, Washington, D.C.

VANDERPOEL, FLOYD, Radio Engineer, U.S. Navy Dept., 2190 L Street, Washington, D.C.

VAN DYKE, A. F., Radio Engineer, Western Union Telegraph Co., 1233 Broadway, New York, N.Y.

WAGGONER, J. F., Radio Operator, New York City, N.Y.

WATTS, J. B., Radio Operator, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WELSH, L. E., Assistant Engineer, Western Electric Co., Smethport, N.Y.

WATERMAN, FRANK, Electrical Engineer, Western Electric Co., 1200 Broadway, New York, N.Y.

WATSON, RALPH C., General Manager, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WINNERMANN, FRED, Assistant Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WINDSOR, MORTON E., Assistant Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WOLFE, ALBERT W., Radio Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WOLFE, S. B., Radio Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

WOLFE, A. S., Radio Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.


WOODBOROUGH, W. W., Chief Engineer, U.S. Naval radio station, Washington, D.C.


WOODWARD, HAROLD E., Assistant Engineer, Western Electric Co., 1200 Broadway, New York, N.Y.


ZIMMER, ARTHUR C., Assistant Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

ZIMMER, ARTHUR C., Assistant Engineer, Western Union Telegraph Co., 1200 Broadway, New York, N.Y.

SUMMARY OF MEMBERSHIP

MARCH 1, 1914

Members.................. 64

Associates................. 1207

Total..................... 281

It is requested that Changes of Address be forwarded promptly to:

The Secretary, Institute of Radio Engineers,

At New Street, New York.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Role</th>
<th>Company/Site</th>
<th>Address</th>
<th>City/State</th>
<th>Date</th>
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<tbody>
<tr>
<td>STEEVEN, A. M.</td>
<td>Assistant Engineer</td>
<td>Universal Radio Syndicate</td>
<td>444 Commercial Hotel, Mike End, Portsmouth, N.H., England</td>
<td>Nov. 4, 1912</td>
<td></td>
</tr>
<tr>
<td>STEWART, DONALD</td>
<td>Clerk</td>
<td>Hardware Co.</td>
<td>82 Elm St., Hudson Falls, N.Y.</td>
<td>Sep. 3, 1913</td>
<td></td>
</tr>
<tr>
<td>TABER, W. J.</td>
<td>President/Manager</td>
<td>Marconi Wireless Telegraph Co.</td>
<td>703 Bloomfield Ave., Mt. Claire, N.J.</td>
<td>Feb. 4, 1914</td>
<td></td>
</tr>
<tr>
<td>TAASSIG, CHAS. W.</td>
<td>Chemical Assistant</td>
<td>American Mechanics Co.</td>
<td>26 West 5th St., N.Y.</td>
<td>June 3, 1912</td>
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<tr>
<td>TERRILL, W. D.</td>
<td>Radio Inspector</td>
<td>Dept. of Commerce</td>
<td>Custom House, New York</td>
<td>Oct. 15, 1913</td>
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<tr>
<td>TRAPPEE, W. D.</td>
<td>Assistant Treasurer</td>
<td>Institute of Radio Engineers</td>
<td>71 Broadway, New York</td>
<td>June 12, 1913</td>
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<tr>
<td>TROPP, RAYMOND F.</td>
<td>Installing Engineer</td>
<td>Wireless Specialty Apparatus Co.</td>
<td>120 State St., Boston, Mass.</td>
<td>June 12, 1913</td>
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<tr>
<td>TRUEBILL, KARL L.</td>
<td>Signal Corps</td>
<td>U. S. Army Signal Corps</td>
<td>Whitehall St., N. Y.</td>
<td>July 10, 1913</td>
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<tr>
<td>UPTON, HARRY E.</td>
<td>Electrical Assistant</td>
<td>Signal Service, War Department</td>
<td>75 Oxford St., Portland, Maine</td>
<td>Nov. 4, 1912</td>
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<td>VANDERPOEL, FLOYD</td>
<td>Radio Engineer</td>
<td>Radio Engineers</td>
<td>Litchfield, Conn.</td>
<td>Oct. 16, 1913</td>
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<tr>
<td>WALLIS, A. F.</td>
<td>Radio Operator</td>
<td>National Electrical Signaling Co.</td>
<td>410 61st St., Brooklyn, N.Y.</td>
<td>May 14, 1913</td>
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<td>WATERMAN, FRANK</td>
<td>Consulting Engineer</td>
<td>100 Broadway, New York</td>
<td></td>
<td>Oct. 15, 1913</td>
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<td>WATROUS, RALPH C.</td>
<td>General Manager</td>
<td>R. H. Perkins Horse Shoe Co.</td>
<td>20 Bloomfield Place, Providence, R.I.</td>
<td>Feb. 14, 1913</td>
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<td>WESCOTT, MORRIS I.</td>
<td>Testing Department Manager/Theater Engineer</td>
<td>American Theater and Telephone Co.</td>
<td>144 Westervelt Ave., New Brighton, N.Y.</td>
<td>Feb. 4, 1914</td>
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<td>WOLF, ALBERT W.</td>
<td>Asst. Engineer</td>
<td>Clark Wireless Telegraph-Telephone Co.</td>
<td>206 E. 6th St., Detroit, Mich.</td>
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<td>WOOLF, A. R.</td>
<td>Chief Engineer</td>
<td>U. S. A. Signal Corps</td>
<td>20 Bloomfield Place, Providence, R.I.</td>
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<td>WOODWORTH, J. E.</td>
<td>Officer-in-Charge</td>
<td>U. S. Naval Radio Station</td>
<td>Radio Station, Wash. D.C.</td>
<td>June 3, 1912</td>
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<td>ZEAMAN, HAROLD R.</td>
<td>General Counsel</td>
<td>Attorney at Law</td>
<td>42 Broadway, New York</td>
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<td>ZWICKER, ASHLY C.</td>
<td>Installer/Clerk</td>
<td>Capp, Eastern Co.</td>
<td>99 Yorktown St., West Roxbury, Mass.</td>
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**SUMMARY OF MEMBERSHIP**

**March 1, 1914**

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The Secretary, Institute of Radio Engineers,
81 New Street, New York.
## GEOGRAPHICAL DISTRIBUTION OF MEMBERSHIP

**March 1, 1914**

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**Total Membership 271**
### Geographical Distribution of Membership

**March 1, 1914**

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<td>West Virginia</td>
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<tr>
<td>Abroad Naval Vessels</td>
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<td>8</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>52</td>
<td>197</td>
</tr>
</tbody>
</table>

| Canada                       | 3       | 2          |
| Porto Rico                   | .       | 1          |
| Philippine Islands           | 1       | .          |
| Honduras (Spanish)           | .       | 1          |
| British Guiana               | 1       | 2          |
| Japan                        | 1       | 1          |
| Great Britain                | 3       | 4          |
| Germany                      | 3       | .          |
| **Totals**                   | 64      | 207        |

**Total Membership: 271**