

1954
Year-Book
of
The Radio Club of America, Inc.



Founded 1909

CONTENTS

ARMSTRONG MEDALLISTS

LIST OF MEMBERS

CONSTITUTION

THE RADIO CLUB OF AMERICA

11 West 42nd Street ★ ★ ★ New York City

The Radio Club of America, Inc.

11 West 42nd Street, New York City

Telephone — LOnacre 5-6622

Officers for 1954

President

Frank H. Shepard, Jr.

Vice President

Frank A. Gunther

Corresponding Secretary

O. James Morelock

Treasurer

Joseph Stantley

Recording Secretary

W. Gordon Russell

Directors

Ernest V. Amy

Ralph R. Batcher

John H. Bose

George E. Burghard

Raymond A. Heising

Harry W. Houck

Charles F. Jacobs

Fred A. Klingenschmitt

Walter Knoop

Alexander A. McKenzie

Jerry Minter

Harry Sadenwater

Committee Chairmen

Advertising

O. F. Masin

Entertainment

Ernest V. Amy

Papers and Meetings

Walter Knoop

Affiliations

William H. Offenhauser, Jr.

Medals

Harry W. Houck

Publications

Craig Walsh

Budget

Joseph Stantley

Membership

Fred A. Klingenschmitt

Publicity

S. Ward Seeley

Year Book and Archives

Harry Sadenwater

Legal Counsellor

George E. Burghard

MEETINGS

Technical meetings are held on the second Thursday evening each month from September through May at the General Electric Auditorium, 51st Street and Lexington Avenue in New York City. The public is invited.

MEMBERSHIP

Application blanks for membership are obtainable at the Club office. For the Member grade the invitation fee is one dollar and the annual dues are three dollars.

PUBLICATIONS

Subscription: Four dollars per year, or fifty cents per issue. Back numbers to members, twenty-five cents each.

The Radio Club of America was organized in New York City on January 2, 1909 by a small group of young enthusiastic amateurs deeply interested in probing the mysteries of the then infant "Wireless" communication. Throughout its history of over forty-five years, the Club has adhered to the basic aims of its founders, namely, to perpetuate the free interchange of ideas among all enthusiasts interested in the technical knowledge of radio communication and its allied fields. The Club distinguishes itself from purely scientific and technical organizations by its freedom of speech and less commercial atmosphere in the interchange of ideas among individuals with its sustained effort to provide social rallying opportunities to members with this common interest in the ever expanding science of radio.

The membership includes outstanding men in the field of radio engineering and invention, both in this country and abroad.

The activities of the Club combines scientific education through the presentation and discussion of technical papers at its regular monthly meetings with the development of lasting friendships through the conduct and direction both of its technical discussions and purely social gatherings.

Of equal importance to the educational phases of the activities of the Club are its published Proceedings. For all these years the Proceedings have served for the publication of all suitable papers and discussions presented at the meetings. Thus they comprise a historical record of much that is basic and important to all radio communication. They provide, also, a current history of so wide a range of activities in the field of radio communication as to be a requisite portion of any complete radio library.

In addition to the social contacts provided by the gatherings at dinner preceding each monthly meeting and the opportunity for developing and cementing friendships which follow these meetings, an anniversary banquet, traditionally held near the end of each year, serves to bring together the large and varied membership of the Club.

THE ARMSTRONG MEDAL

From time to time members whose achievements entitle them to the distinction are awarded the Armstrong Medal. This is given in accordance with the conditions and requirements formulated in the establishment of this honor by the Board of Directors of the Club in 1935. These are: "The Radio Club this day hereby established an award to be known as the 'Armstrong Medal', to be bestowed by the Board of Directors of The Radio Club of America upon any person within its membership who shall have made, in the opinion of the Board of Directors, and within the spirit of the Club, an important contribution to Radio Art and Science."



Year Book and Archives Committee:

Harry Sadenwater, Chairman
E.V. Amy
George E. Burghard
Fred A. Klingenschmitt.

**CONSTITUTION
OF
THE RADIO CLUB OF AMERICA, Inc.**

ARTICLE I

Name, Object and Emblem

SECTION 1. The name of this organization shall be The Radio Club of America, Inc.

SEC. 2. Its object shall be the promotion of cooperation among those interested in scientific investigation and amateur operation in the art of radio-communication.

SEC. 3. The emblem of the Club shall be that shown in the margin. This emblem shall be made in the form of a pin and may be purchased from the Treasurer.

ARTICLE II

Membership

SECTION 1. The membership shall consist of:

- (a) Members
- (b) Fellows
- (c) Honorary Members

Fellows, Members or Honorary Members shall be entitled to all privileges of the Club except that Fellows only may hold office or be elected to the Board of Directors.

Honorary Members shall be presented with the Club pin.

SEC. 2. A Member shall be a male or female person, not less than seventeen years of age, who has been interested in the investigation of the principles of radio communication and in radio operation, either in its commercial or amateur aspects, for a period of at least one year.

SEC. 3. An Honorary Member shall be a person of high professional standing who is interested in the activities of the Club.

SEC. 4. A Fellow shall have been a member in the Club for five years or one whose contributions to the Radio Art are of such a nature as to qualify him. In addition, the application for membership as "Fellow" shall be left to the discretion of the Board of Directors.

SEC. 5. The emblem for Fellow shall be the reverse of that for Member i.e., black insignia on a gold background.

ARTICLE III

Admissions, Expulsions and Resignations

SECTION 1. An applicant for admission to membership shall present the prescribed application, properly filled out, to the Corresponding Secretary. The application shall contain the names of three Fellows or Members to whom the applicant is personally known.

SEC. 2. Applications for membership shall be acted upon at the discretion of the Board of Directors.

SEC. 3. The Corresponding Secretary shall notify an elected candidate of his election and forward to him a statement of entrance fee and initial dues.

SEC. 4. Members found delinquent in their duties may be tried by the Board of Directors, and upon decision of the Board their names shall be submitted to the Club to determine their suspension or expulsion. A three-quarters vote of the Club will be necessary to ratify such action of the Board.

SEC. 5. A member may resign his membership by a written communication to the Corresponding Secretary, who shall present the same to the Board of Directors; when, if all his dues have been paid, his resignation shall be accepted.

ARTICLE IV

Entrance Fee and Dues

SECTION 1. The annual dues payable by Members shall be Three Dollars; for Fellows, Five Dollars. The entrance fee payable by Members on election to membership shall be One Dollar. Honorary Members shall be exempt from payment of any dues or fees.

SEC. 2. The Annual dues shall be payable on the first day of each calendar year, in advance for the ensuing year. It shall be the duty of the Treasurer to notify each Member or Fellow of the amount due.

SEC. 3. Every Member or Fellow, upon payment of his annual dues, shall be furnished with a membership card bearing the signature of the Treasurer.

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

SEC. 5. Any Member or Fellow whose dues become two months in arrears shall be notified by the Treasurer. Should his dues then become four months in arrears, he shall again be notified by the Treasurer. Should his dues then become six months in arrears he shall forfeit his connection with the Club. The Board of Directors may, however, for sufficient cause temporarily excuse from payment of annual dues any Member or Fellow or extend the time for payment.

SEC. 6. Every person admitted to the Club shall be considered as belonging thereto and liable for the payment of all dues (except as per Sec. 7 of this Article) until he shall have resigned, been expelled, or have been relieved therefrom by the Board of Directors.

SEC. 7. Any Member or Fellow not in arrears, upon payment of One Hundred Dollars shall be exempt for life from the payment of annual Dues.

ARTICLE V

Officers

SECTION 1. The governing body of the Club shall be a President, a Vice-President, a Treasurer, a Corresponding Secretary, a Recording Secretary and thirteen Directors, who shall together constitute the Board of Eighteen Directors.

SEC. 2. The terms of all officers named in the preceding section shall be one year, shall begin at the first regular meeting of each year at which the results of the Annual Election are announced, and shall continue until successors are duly elected.

ARTICLE VI

Government

SECTION 1. The President shall have general supervision of the affairs of the Club. He shall preside at meetings of the Club and of the Board of Directors at which he may be present, and shall be an ex-officio member of all committees.

SEC. 2. The Vice-President shall assume all the duties of the President during the President's absence from meetings or whenever the President is otherwise unable to perform such duties. In the event of the Vice-President's inability to assume these duties a Chairman pro tem shall be appointed by those present at any meeting.

SEC. 3. The Treasurer shall collect and receive all dues and fees and shall have custody of all funds of the Club. He shall issue membership cards to Members or Fellows upon payment to him of their dues. He shall make such payments for the Club as are provided for in the Constitution or such as shall be ordered by the Board of Directors. He shall make an annual report and such other reports as may be prescribed by the Board of Directors.

SEC. 4. The Corresponding Secretary shall conduct the correspondence of the Club other than that conducted by the Treasurer. He shall keep full records of the correspondence conducted by him and make a report of such at each meeting of the Board of Directors.

SEC. 5. The Recording Secretary shall duly record all proceedings of all meetings of the Club and the Board of Directors. He shall have custody of all application blanks of persons admitted to membership and all other records of the Club.

SEC. 6. The Board of Directors shall manage the affairs of the Club in conformity with the provisions of the Constitution. It shall direct the care and appropriation of the funds of the Club; act upon applications for membership as heretofore provided; recommend Honorary Members; exercise discretionary power in the election to the grade of Fellow of Members or original applicants having the qualifications therefor (Art. II, Sec. 4); take measures to advance the interests of the Club, and generally direct its business. Six members of the Board of Directors shall constitute a quorum.

SEC. 7. The President, within fourteen days after the conclusion of the Annual Election, shall

appoint from the membership the following standing committees:

Committee on Papers,
Committee on Publications,
Membership Committee,
Publicity Committee,
Entertainment Committee,
Committee on Affiliation,
Year Book and Archives Committee.

ARTICLE VII

Nomination and Election of Officers

SECTION 1. At the Annual Meeting nominations for the offices of President, Vice-President, Treasurer, Corresponding Secretary, Recording Secretary and seven Directors shall be called for from the entire membership. Members unable to attend in person the Annual Meeting at which the above nominations are called for may obtain from the Corresponding Secretary a prescribed blank form on which they may nominate candidates for any or all of the above offices. Such nominations must be in the possession of the Corresponding Secretary within ten days after the Annual Meeting at which nominations were called for. Nominations made in this way must be three in number for any nominee to have him considered as such provided he has not already been nominated at the prescribed meeting. At least twenty-one days before the first regular meeting of the calendar year the Corresponding Secretary shall submit to the membership the list of nominees for each office. The membership shall then submit a written ballot voting for officers and seven directors from the list of nominees submitted. A majority vote up to the time of the closing of the polls (forty-eight hours before the opening of the first regular meeting of the calendar year), shall elect.

SEC. 2. Six additional Directors, three of whom shall not have previously held office in the Club, nor have served on the Board of Directors, shall be elected by a majority vote of the newly constituted Board of Directors at its first meeting.

ARTICLE VIII

Meetings

SECTION 1. The Annual Meeting of the Club shall be held within the first week in December, or as near thereto as may be possible, of each year.

SEC. 2. Regular monthly meetings shall be held as ordered by the Board of Directors. If possible such meetings shall be held on the second Wednesday evening of each month excluding July and August. At the first regular meeting of each calendar year the results of the election of Officers and seven Directors shall be announced and elected Officers shall be installed, and the Annual Reports of the previous year shall be read.

SEC. 3. The Board of Directors shall meet as soon as possible following the Annual Election and at such other times as are considered expedient by the President.

SEC. 4. At the regular monthly meetings of the Club items of interest from the minutes of the

Board of Directors may be read but no other business shall be conducted but that ordered by the Board of Directors. Any business of Club interest may be informally discussed after the formal adjournment of any meeting.

ARTICLE IX

Amendments

SEC. 5. At any meeting of the Board of Directors suggestions from the membership on matters appertaining to the welfare of the Club may be considered. Such suggestions shall at all times be encouraged by the Directors and they should be submitted in writing to the Corresponding Secretary, who will present the same at the Directors' meeting next following their receipt by him.

SECTION 1. Proposed amendments to this Constitution must be reduced to writing and signed by not less than twelve Members or Fellows and be submitted to the membership who shall vote thereupon by letter ballot. The amendment shall be adopted if seventy-five per cent of the votes received are in favor of such action, the polls having been open for at least one month after mailing to the qualified membership notices of the proposed amendments.

MEMBERSHIP

- ADELMAN, LEON L. (M) 1950** - Sales Representative, Leon L. Adelman Co., 25 Chittenden Avenue, New York City 33; b. Russia, August 19th, 1903; married; ed. Syracuse Central High School, Brooklyn Polytech 1 year, Cooper Union 1 year; Amateur since 1917; W2AFS since 1923; Charter Member - Syracuse Radio Amateur Club, 1917; Syracuse Central High Radio Club, 1921; Bronx Radio Club 1921; F.A.D. Andrea 1922/1923; Radio Editor "Science and Invention" "The Experimenter"; Technical Editor "Radio News", Associate Editor "Amateur Radio", "Radio World" 1923/1926, Assistant Advertising Manager of Chas. Freshman Co. 1926/1927; Sales Manager for A.M. Flechtheim & Co. 1927/1932; Manufactured "Supreme AF-100" All-band AM-FM Transmitters 1946/1948; Member Planning Committee for "Hugo Gernsback Testimonial Trophy" at Chicago, May 17th, 1953.
- AKIN, ROBERT M., JR. (F) 1925** - President, Hudson Wire Co., Ossining, N.Y.; res. Evergreen Way, North Tarrytown, N.Y.; ed. Morristown Preparatory; interested in radio since 1918; b. Ossining, N.Y., June 26, 1904; Professional Experience - Westchester Radio Laboratories 1923-1929, Director of Research, Hudson Wire Co. 1934; Radio Club of America Vice President 1948.
- ALEXANDER, LOUIS (F) 1924** - Sales Engineer, Cornell Dubilier Elec. Corporation, South Plainfield, N.J.; res. 322 West 72nd St., New York 23, N.Y.; b. New York City, February 1, 1900; married; ed. High School of Commerce, evening courses at Cooper Union and CCNY; Purchasing Agent for DeForest Radio 1918/1921; Sales Engineer Dubilier Condenser Co. 1921/1926; Sales Engineer for Aerovox Corp. 1926/1946 and Sales Engineer for Cornell Dubilier Elec. Corp. 1946 to date; Member IRE and Elmwood Country Club, Elmsford, N.Y.
- AMERMAN, EDWARD ANDREW (F) 1938** - Electronic Design Engineer, Kay Electric Company, 14 Maple Ave., Pine Brook, N.J.; res. 60 Johnson Avenue, West Caldwell, N.J.; b. September 16, 1908 at Newark, N.J.; ed. Grammar School Miller Street, Newark High School; Newark East Side Commercial; Two Terms Newark College of Engineering Army Signal School Fort Monmouth, N.J.; U.S. Army and N.J. National Guard since 22nd December 1926 (27 years), Present status Warrant Officer, Communications Officer on Staff of Combat Command Reserve Headquarters; 50th Armored Division; Paterson Armory; Sports - Hiking, Hunting Fishing; Hobbies - Rifle and Hand Gun Shooting, Radio; Societies - National Guard Association of the U.S., Communication Officers Club, Army and National Guard Radio Amateurs Association, Past Post Commander Newark Post 4 Legion of Guardsman and Member Army and Navy Union of U.S.
- AMY, ERNEST V. (CM, LM, F) 1910** - President, Amy Aceves and King, Inc., 11 West 42nd Street, New York City; res. 61 Bay Blvd., Atlantic Beach, Long Island, N.Y.; b. New York City, February 11, 1892; married; ed. E.E. Degree Columbia University 1917; U.S. Army 1917 and Test Department of New York Edison Company 1918/1920, Marconi Wireless Telegraph Co. 1920/1922; Radio Corporation of America 1922/1929; Treasurer Radio Club of America, Inc., 1911/1920; Director 1921, Vice President 1922; President 1926/1928; Director 1929/1953; Charter Member Radio Club of America 1910.
- ANDERSON, NORMAN J. (M) 1951** - Radio Engineer, Branson Corporation, Boonton, N.J.; res. 152 Fairview Avenue, Boonton, N.J.; b. Brooklyn, N.Y. April 24, 1916; ed. RCA Institute, Stevens Institute Graduate School; member IRE, ARRL.
- ANDERSON, COLONEL PIERSON A. (M) 1935** - Consulting Engineer, 5859 S.W. 28th Street, Miami, Fla.; b. October 17, 1888 at Brooklyn, N.Y.; ed. Arlington High School, Yale University; I.C.S. (Electrical Engineering), Alexander Hamilton (Business Administration); Military Staff Schools; 43 years in Wire, Radio Electronics including 10 years active service in U.S. Signal Corps Reserve and during World War Two; Director Radio, Advance Section E.T.O. in 16 countries; Senior Member IRE; Member Society of Military Engineers; Legion of Merit, Bronze Star, 5 Battle Stars, Poor Richard Club Gold Medal of Achievement, Councilman, Medford Lakes, N.J.; 2 years with Southern New England Telephone Co., 13 years Western Electric and Bell Telephone Laboratories, 12 years Radio Corporation of America and 5 years Private Consulting Practice.
- ANDREWS, Raymond W. (M) 1946** - Assistant to Vice President, Sylvania Electric Products Inc., res. Emporium, Pa.; b. September 15, 1907 at Buffalo, N.Y.; married; ed. Nichols Prep School, Buffalo, N.Y. - Lehigh University and University of Buffalo; 8CMF in 1925, W8OLB in 1935 and currently W3OLB; Employed since 1930 in various phases of electronics from Retail to Wholesale and Manufacturing as technician, supervisor, manager. Coordinated design, Distribution, Planning and Sales Service. In charge of Allocating, Expediting Navy Fire Control Radar 1942/1944, Command of Naval Activity engaged in assembly and test of combat guided missile units 1944/1945; Currently Commander, USNR; member ARRL, IRE, Society American Military Engineers, Reserve Officers Association of the U.S. and the Bucktail Radio Amateur Club.
- ARNOLD, JOHN WILLIAM (F) 1929** - Borough Superintendent, Bureau of Plant Operation, Board of Education, City of New York; res. 37 Washington Square, New York 11; b. Paulding, Ohio on September 13, 1899; married; ed. AB 1921, AM 1923, University of Illinois; radio since 1915; Engineer, Western Union Telegraph Company, 1923/1941, Artillery and Signal Corps Officer, Army of U.S. 1941/1946; Engineer, International Telephone and Telegraph Corporation 1946/1950, Various 1951/1953. Senior member Institute of Radio Engineers.
- ARON, MITCHELL (M) 1947** - Radio Receptor Co., Inc., Chief Engineer Commercial Products Division; res. 74 Manhattan Ct., Brooklyn 35, New York; b. Poland February 12, 1919; ed. BEE 1943 CCNY, MEE 1954 Brooklyn Polytechnic Institute; CCNY Evening Session Instructor, EE Department 1943-1949, Hazeltine Electronics Corporation 1943/1949, Teletone Radio and Television 1949/1950, Starrett Television 1950/1951, Radio Receptor 1951 to date; married; Parallel Resistor Chart, Electronics, July 1953.
- ATEN, DWIGHT CAMERON (M) 1949** - Consumers' Research, Inc., Washington, New Jersey; res. 25 No. Pickel Ave., Washington, N.J.; b. November 25, 1909 at Portland, Pa.; ed. B.S. 1931 New York University, Graduate School N.Y.U. 1931/1934; radio since 1919; Army Radar to present position; Institute of Radio Engineers, Audio Engineering Society, Sigma Phi Epsilon; married.

MEMBERSHIP

- AULL, WILSON, JR. (F) 1920 - Hogan Laboratories, Inc., 155 Perry Street, New York 14, N.Y.; Research and Development Engineer 1929 to present.
- BAILEY, GEORGE W. (F) 1948 - Executive Secretary, Institute of Radio Engineers; res. 61 East 66 Street, New York City; b. May 14, 1887 at Quincy, Mass.; ed. A.B. 1907 Harvard; radio since 1923; Director NE Division, ARRL 7 years, Vice President ARRL 4 years, President ARRL 12 years; Amateur Station W2KH; President's Certificate of Merit; Honorary Member, Veteran Wireless Operators Association, Marconi Medal of VWOA, QCWA, AFCA (Director), N.Y.R.C., Cosmos Club of Washington, D.C.; married.
- BAKER, W.R.G. (F) 1930 - Vice President, Electronics Department, General Electric Company, Syracuse, New York; b. Lockport, New York, November 30, 1892; married; ed. B.E., M.E.E. and Honorary Doctorate - Union College.
- BALLARD, FRANK W. (M) 1953 - Owner, Long Island Blue Print Company; res. 108-19 70th Avenue, Forest Hills 75, L.I., New York; b. Sewaren, New Jersey; radio since 1906; United Wireless Co., 1911 on coastwise ships, U.S. Army Radio Intelligence Section, Signal Corps, World War I in France; Society of Mayflower Descendants, Sons of the Revolution in the State of New York, St. Nicholas Society, Manhasset Bay Yacht Club, Veteran Wireless Operators Association, deForest Pioneers, American Radio Relay League; married.
- BARBER, ALFRED W. (M) 1951 - Chief Engineer, Alfred W. Barber Laboratories, Flushing, N.Y.; b. Portsmouth, N.H., July 24, 1906; ed. B.S. in Communication Engineering, Harvard Engineering School 1928; interested in radio for 34 years; Browning-Drake Corp., Radio Frequency Laboratories, Hazeltine Corporation, Electrical Research Products, Inc., own business from 1936; married; registered Patent Attorney with over 15 U.S. Patents in communications field; about 20 magazine articles and Rider's "Vacuum Tube Voltmeters"; Hobbies - Photography and Golf.
- BARCLAY, ROBERT HAMILTON (F) 1921 - Vice President-Engineering, The J.G. White Engineering Corporation, 80 Broad Street, New York; res. 95 Christopher St., New York 14, N.Y.; b. St. Louis, Missouri on August 10, 1887; ed. E.E. Washington University, St. Louis, Mo. 1908 and continued Electrical Engineering Studies at Washington University 1911-1912; Interested in radio for fifty years and member of Radio Club of America since 1919; Amateur Station 2BHR 1922 and 1923; Professional experience primarily in the fields of design and construction of electric utility and industrial properties, including power plants, transmission lines and distribution systems; Hobby - photography; Fellow A.I.E.E., member National Society of Professional Engineers, Society American Military Engineers, Theta Xi Fraternity, Engineers Club, New York; Washington University Club, New York; married.
- BARNETT, A. HOUSTON (M) 1943 - Consulting Engineer, res. 341 South Canon Drive, Beverly Hills, Calif.
- BARONE, SALVATORE A. (F) 1926 - res. 290 Rose Street, Freeport, L.I.; N.Y.; Radio Club of America Director 1950.
- BATCHER, RALPH R. (F) 1943 - Chief Engineer, Radio Electronics Television Manufacturing Association, 500 Fifth Avenue, New York City; res. 240-02 42nd Avenue, Douglaston, New York; b. Iowa 1897; ed. E.E. Iowa State College; Interested in radio since 1911; amateur stations 9IT and 9YI from 1911 to 1917; several patents and author "Prepared Radio Measurements", "Cathode Ray Oscillography", "Radio Engineering Handbook" and "Radio Control Handbook"; married.
- BAUM, ELMER (M) 1950 - Electrical Engineer, Federal Telecommunications Labs., 343 Cortland Street, Belleville, N.J.; res. 375 Fifth Avenue, River Edge, N.J.; b. Brooklyn, N.Y. November 7, 1917; ed. B.E.E. Polytechnique Institute of Brooklyn; interested in radio for 28 years; professional experience RCA, Radio Wire Television Co., Signal Corps Labs and Federal Telecommunications Labs; married.
- BAUNACH, EDWARD L. (M) 1927 - Photoengraver with News Syndicate Co., Inc., 220 East 42nd Street, New York 17, N.Y.; res. 2 Westminster St., Massapequa, Long Island, New York; b. New York City, June 19, 1907; ed. 8 years grade school, 4 years high school, 2 years college; interested in radio 35 years; Amateur station W2AZV since 1926; married.
- BEAN, L.P.R. (F) 1935 - Managing Director, Stromberg-Carlson (Australasia) Ltd., Box 3971 GPO Sydney, Australia; b. Melbourne, Australia, May 7; ed. E.E. Melbourne Technical College, University of Perth, Australia; professional experience - manufacturing Radio Receivers and Telephone Apparatus.
- BEHR, JOSEPH (F) 1948 - Secretary, Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, New York; res. 118-44 223 Street, Cambria Heights, New York; b. New York City, August 22, 1908; ed. Primary and High School graduate, Stuyvesant High School, 1925; radio ten years; Associate member Institute of Radio Engineers; married.
- BERNARD, HERBERT S. (M) 1941 - Owner, Radio and Television Service, 157 Cedarhill Avenue, Belleville, New Jersey; res. same; b. New York City, July 26, 1900; radio since 1912; amateur 1929 to 1947; Air Force, World War I; Hobby - Flying; Patents 2,521,564 and 2,520,749; married.
- BEVERAGE, HAROLD HENRY (F) 1920 - Director, Radio Research Laboratory, Radio Corporation of America, RCA Laboratories Division, 66 Broad Street, New York 4, New York; res. 250 Bronxville Road, Bronxville, New York; b. North Haven, Maine, October 14, 1893; ed. B.S.E.E. University of Maine, 1915. Honorary Degree, Doctor of Engineering, University of Maine, 1938; interest in radio since 1908; Amateur license in First District 1911/1915, W2BML 1919/1922; General Electric Company 1915/1920, Radio Corporation of America 1920 to date engaged in radio research and development; Institute of Radio Engineers (President 1937), American Institute of Electrical Engineers, American Association for the Advancement of Science, International Geophysical Union, American Radio Relay League; Hobbies - Amateur photography, sound recording; Eight published papers; Forty one U.S. Patents; married.
- BIGGS, J. ALLEN (M) 1949 - Sales Engineer, J. Alan Biggs Co., Doylestown, Pa., b. Indianapolis, Indiana, January 9, 1911; res. Gardenville, Pa.; ed. State School of Mines, Rapid City, South Dakota; interested

in radio thirty years; amateur 28 years; WSBXK, W9EH, W8LO, W2ZW, W1ZX, W3ZP; RCA International Division; Lulu Shrine, Philadelphia; Private Pilot, Huntington Valley Hunt Club, ACWA, Farmer; married.

- BINNS, JOHN ROBINSON (F) 1916** - Chairman, Hazeltine Corporation, 58-25 Little Neck Parkway, Little Neck, New York; res. 333 West 56th Street, New York 19, N.Y.; b. Lincolnshire, England; ed. Grade Schools and School of Arts and Sciences, Colchester, England; interested in radio since 1904; Marconi Operator 1904-1912 on German, British and U.S. Ships, Operator S/S Republic 1909; with Hazeltine Corporation 1924 to date; Adventurers Club, Rockefeller Center Luncheon Club, I.R.E., New York Athletic Club; married.
- BLITZER, RICHARD (M) 1948** - Teacher, RCA Institutes, 350 West 4th Street, New York; res. 362 South Buckhout Street, Irvington-on-hudson, New York; b. New York City, April 16, 1917; ed. C.C.N.Y., St. Louis University and Columbia University; interested in radio since 1936; Engineer with Emerson Radio Corporation, taught radar for Air Forces, Technical writer for Coastal Publications, teach electronics for RCA Institutes; member I.R.E., revised TV Book for Prentice-Hall; Tennis, fishing and motor-boating; married.
- BODNAR, CHARLES J. (M) 1940** - President, Charles J. Bodnar Co., Inc., Radio Laboratory, 58 Marbledale Road, Tuckahoe, N.Y.; res. 106 Fisher Avenue, Tuckahoe, N.Y.; b. New York City, April 3, 1897; ed. Stuyvesant High School, City College of New York, St. John's Law School.
- BOHMAN, ALBERT KASPER (F) 1926** - Assistant to Communication Superintendent, Pan American Airways, International Airport, Miami, Florida; res. 11705 NE 7th Avenue, Miami 38, Florida; b. Long Island City, New York on August 9, 1900; ed. Grade and High School, New York City, Brooklyn Polytechnic Institute, Brooklyn, N.Y.; interested in radio forty years; Engineering Department, Radio Corporation at Marion, Mass., New Brunswick, N.J. and 66 Broad Street, N.Y.C. from 1920 to February 1929, Communications Department of Pan American Airways from February, 1929 to date; Served in U.S. Naval Reserve from September 1917 to 1921, Active Service during World War 1, September 1917 to August 1919; married.
- BORDEN, CLIFFORD C. (M) 1950** - Electrical Engineering, Shepard Laboratories, Summit, N.J.; res. New Providence, N.J.; b. Sloatsburg, New York on February 22, 1903; ed. Rensselaer Polytechnical 1927, N.C.E. 1928 (EE); interested in radio 39 years; amateur since 1919 last license W2APK; electrical and electronic design engineer since 1928; duties with Shepard Laboratories include design and research on computers; magnetic amplifiers and devices; electronic instruments; radio and radar devices; sixteen patents in electrical instrument and conduit fitting fields; member I.R.E. and A.I.E.E., Secy. Board of Trustees of New Providence, N.J.; Methodist Church, Member Executive Board, American Cancer Society; married.
- BORST, JOHN M. (F) 1934** - Radio Engineer, Haskins Laboratories, 305 East 43rd St., New York City; res. 194 Columbia Heights, Brooklyn 1, N.Y.; b. Lienden, Province of Gelderland, Netherlands; ed. Technical University at Delft, Netherlands; interested in radio since 1914; Ship's radio operator 1922/1927, Broadcast station engineer 1926/1927, Technical Editor Radio News 1931/1937, Engineer Aerovox Corporation 1937/1938, Recording Engineer 1941, Engineer and Writer, John F. Rider 1941/1944, Engineer Halstead Traffic Communications Corporation 1944, Hammerlund Manufacturing Corporation 1944/1946, Haskins Laboratories 1946 to date; I.R.E. and Audio Engineering Society; single.
- BOSE, JOHN H. (F) 1938** - Engineer, Electronics Research Laboratory, 632 West 125th St., N.Y.C., Columbia University; res. 150 Claremont Ave., New York 27, N.Y.C.; b. New York, March 26, 1912; ed. B.S. 1934, E.E. 1935, Columbia School of Engineering, Gano Dunn Fellowship, Columbia 1934/1935; interested in radio from boyhood hobby; Assistant in Department of Electrical Engineering 1935/1937, 1937 to date Engineer for E.H. Armstrong, development in FM Transmitter, CW Radar, FM Multiplex Transmitters and Receivers; Tau Beta Pi, Sigma Xi, Epsilon Chi, I.R.E. (VA) 1933, Audio Engineering Society, Radio Club of America, President 1952/1953, Corresponding Secretary 1949, Recording Secretary 1944/1948; married.
- BOUCHERON, PIERRE (F) 1920** - General Manager, Broadcasting Station WGL, Fort Wayne, Indiana; res. RR 6 Bellaire Drive, Fort Wayne, Indiana; b. Paris, France on August 22, 1889; ed. Schools in France and U.S., Journalism, Radio, Naval Science plus residence and correspondence courses during adult years in radio, literature; interested in radio since 1910; amateur in New York City 1908-1912, ship wireless operator Marconi Co. 1912/1916, U.S. Navy 1917/1919, then editor of the original Radio News magazine 1919/1920, then Public Relations Director for RCA 1920/1928, then Sales Manager, Promotion Manager for RCA 1928/1932, then Merchandising Manager for Remington Arms 1933/1938, then General Sales Manager for Farnsworth Television Corporation, U.S. Navy 1941/1946, then retired as Captain (Permanent Grade) 1950; Senior Member I.R.E.; Life Member Veterans Wireless Operators Association, Army and Navy Club, Washington; Explorers Club; married.
- BOYAJEAN, JOHN A. (M) 1950** - Engineer, Fairchild Camera and Instrument Corp., Jamaica, L.I., N.Y.; res. 570 Upper Mountain Avenue, Upper Montclair, N.J.; b. Jersey City, N.J., February 20, 1916; ed. Stevens Institute of Technology.
- BRADLEY, WILLIAM D. (F) 1941** - Monmouth Radio Supply Co., 404 Shrewsbury Ave., Red Bank, N.J.; res. R.D. #1, Freehold, N.J.; b. November 18, 1908 at Lyons, N.Y.; ed. High School; interested in radio for 32 years; married; P.P. Red Bank Lions Club, P.P. MCBC of the Methodist Church, P.P. Red Bank Community Chamber of Commerce, P.C. JOUAM, Mystic Lodge #21, Tall Cedars, BPOE #233, Radio Old Timers; Radio Club about 10 years.
- BREMMER, LEROY (M) 1953** - Sales Engineer Langevin Mfg. Corporation, 37 West 65th Street, New York City; res. 610 Victory Blvd., Staten Island, N.Y.; b. May 23, 1900 in Iowa Falls, Iowa; married; ed. Public Schools through High School, Graduate Dodge's Radio Engineering Institute, U.S.M.S. Radar and Electronics School, Business and Management Courses; interested in radio since 1917; amateur 1917/1927; Professional experience: 1918/1921 Radio Operator (Shipboard) for Marconi and RCA; 1921/1924 Construction Engineer for RCA; 1924/1925 Construction Engineer for Inter-City Radio and Tel. Co.; 1941/1946 Lieutenant Commander USMS, Radar and Communications Officer, Combat Areas 33 Invasions; eight citations including Presidential citation, 1949/1950 National Schools of Los Angeles; wrote Radio and Television course; Built KERB at Kermit, Texas acting as General Manager and Chief Engineer; DuMont TV Network 1951

MEMBERSHIP

and Langevin to date; Senior Member IRE - Charter Member DeForest Pioneers - Member Radio Pioneers - Member Veteran Wireless Telegraph Operators Association - BPOE Elks.

- BRIDGELAND, CHARLES J. (M)** - Canadian National Telegraphs, Radio Engineer, 347 Bay Street, Toronto, Ontario; res. 266 S. Kingsway, Toronto, Ontario, Canada; b. December 1908 at Barrie, Ontario; ed. M.A. Sc. in radio engineering University of Toronto; interested in radio for thirty years; National Research Council, Ottawa, Research Enterprises, Ltd., Toronto on Propagation and Antenna Design for Radar - Canadian National Telegraphs on application of point to point and mobile radio for systems operation; Senior Member of IRE, Associate Member of Institute of Electrical Engineers; married; Hobbies - High Fidelity Sound.
- BRIGHAM, CECIL E. (F)** 1927 - Vice President, Richardson-Allen Corporation, 116-15 15th Avenue, College Point, New York; res. 330 Kenmore Road, Douglaston, New York; b. Worcester, Mass., March 6, 1897; ed. George Washington University in Electrical Engineering and Special Courses at Columbia University; married; interested in radio and entire professional experience all his life; Several patents which have expired; loud speakers, high frequency transformers, vacuum tube designs, Technical papers radio-rectifiers; Hobby languages; Radio Club of America 1931, Director.
- BROCINER, VICTOR (F)** 1941 - Owner - Brociner Electronics Laboratory, 324 East 32 Street, New York City; res. 310 East 75th Street, New York, N.Y.; b. May 9, 1910 at New York, N.Y.; ed. Columbia A.B. 1929, B.S. 1930, M.E. 1931; interested in radio 30 years, amateur experience constructing radios; Owner Luxtrol Co., industrial electronic control and measuring equipment to 1937, Vice President for Engineering, Philharmonic Radio Corporation to 1946; Phi Beta Kappa, Tau Beta Pi, member IRE and Audio Engineering Society; married.
- BROWN, DAVID SEYMOUR (F)** 1912 - res. 210 West 70 Street, New York City; b. New York City October 22, 1895; ed. Trinity School, New York City, M.E. Stevens Institute of Technology, Hoboken, N.J.; married; Signal Corps, U.S. Army, W.J. Murdock Co., New York Telephone Co., Radio Club Corresponding Secretary 1914/1916, Vice President 1919, Director 1921-1926, Recording Secretary 1927.
- BROWN, REYNOLDS D. Jr. (M)** 1930 - Radio Engineer, Philadelphia Storage Battery Co., C and Ontario Sts., Philadelphia, Pa.; res. 8208 Seminol Ave., Chestnut Hill, Philadelphia, Pa.; b. Philadelphia, Pa., Nov. 14, 1903; ed. University of Pennsylvania, 1924 - associated with Dr. A.N. Lucian, University of Pennsylvania, radio tube development, 1925, Engineering Dept., Music Master Corp., 1925/1926 operated Philadelphia Radio Manufacturing Co., Vacuum tubes; 1926 to date Engineering and patent work, Philadelphia Storage Battery Co.
- BRUNET, MEADE (F)** 1928 - Vice President and Managing Director, Radio Corporation of America RCA International Division, 30 Rockefeller Plaza, New York 20, N.Y.; res. Millsdale Farm, Mendham, New Jersey; b. Petersburg, Virginia June 21, 1894; ed. B.E. Union College, 1916; Sigma Phi, Sigma Xi; interested in radio since 1919; General Electric Company and Radio Corporation of America; Served as 1st Lieut., Co. A, 56th Engrs. World War I, military combat service with French 8th Army and First Am. Army A.E.F.; member IRE, Acad. of Polit. Science, American Society of Naval Engineers; Clubs - University (N.Y.), Army & Navy (Wash., D.C.), Somerset Hills (Bernardsville, N.J.) Radio Pioneers; Author; History of the 56th Engineers in First World War; married; Director of RCA Victor Argentina, S.A.; RCA Photophone of Australia, Pty. Ltd.; RCA Victor Co., Ltd. (Canada); Photophone Equipment Ltd. (India); Radio e Televisione Italiana, S.p.A. (Italy); RCA Victor Mexicana, S.A. de C.V.; Radiomarine Corporation of America; National Foreign Trade Council, Inc.; American-Indonesian Chamber of Commerce, Inc.; Industria Electronica, S.A. (Spain); Trustee; Union College, Schenectady, New York; United States Inter-American Council; Governor of Union University, Albany, New York.
- BURGHARD, GEORGE E. (CM, LM, F)** 1911 - Executive, Continental Sales Co. Inc., 521 Bloomfield Ave., Newark, N.J.; res. 240 Central Park South, New York 19, N.Y.; b. January 23, 1895, New York City; ed. Columbia College A.B. 1916, Law 1918; married; Amateur experience, owned and operated transmitting station since 1908; Commercial operator since 1915; President Continental Radio Corporation 1920 to 1934; Vice President Continental Sales Co. Inc. to date; Ensign Radio U.S. Navy 1917/1919; Senior member IRE; Radio Club of America Recording Secretary 1911/1913, President 1921/1925, Director 1920, 1926/1934, Legal Counsellor 1950/1954, Charter Member Radio Club of America; Armstrong Medal Award 1950; IBCG.
- BURKE, REGINALD (F)** 1935 - Radio Television Engineer, Philmore Mfg. Co., 113 University Place, New York 3, N.Y.; res. 602 West 139 Street, New York 3, N.Y.; b. Victoria, Australia, May 3, 1882; ed. Electrical Engineer Degree Australia, College Melbourne CEGS, Mell Technical College; interested in radio since 1920; Amateur licensed operator Australia VK3IC up to 1934; Professional experience Chief Engineer Radio Corporation of Australia 1925/1934, Consulting Engineer to Australian companies in U.S.A. 1934/1942, Chief Engineer Philmore to date; General Staff Officer Australian Military Forces, Staff Officer Australian Navy with retired rank of Lieutenant Commander; married; Hobbies - golf, tennis and swimming.
- BUTTNER, HAROLD H. (F)** 1928 - Executive International Telephone and Telegraph Corporation, 67 Broad St., N.Y.; res. Belmont Avenue, Rye, New York; b. November 3, 1892 at Port Costa, California; ed. B.S. in Electrical Engineering, University of California; interested in radio 43 years; amateur 1910/1915; Bay Counties Radio Club; 1915/1917 U.S. Navy Radio Development and Installation Mare Island Navy Yard and American Samoa; 1918/1920 U.S. Navy Installation Lafayette, France; 1921/1924, member of the staff of Western Electric Company and Bell Laboratories; 1926/1946 International Telephone and Telegraph Corporation; 1946/1951 President Federal Telecommunication Laboratories; 1951 to date Vice President in charge research and development, International Telephone and Telegraph Corporation; Decoration - Commendatore dell'Ordine della Corona d'Italia; married; Westchester Country Club, Downtown Athletic Club.
- CALLAHAN, JOHN L. (F)** 1921 - Assistant to Director, Radio Research Laboratory, RCA Laboratories Division, Radio Corporation of America, 66 Broad Street, New York 4, N.Y., res. 67 Nassau Avenue, Malverne, Long Island, New York; b. Minneapolis, Minnesota - December 9, 1898; married; ed. High School, Army Signal Training, Sorbonne University, Paris, France, New York University;

interested in radio since 1912; amateur crystal receiver and straight gap transmitter experiments 1912/1917; Signal Corps Laboratories, Little Silver, N.J. 1919/1920; Radio Corporation 1920 to date; research and development on marine shore station receivers and antennas; long distant point to point radiotelegraph, telephone and radiophoto receivers and antennas; aircraft beacon receivers; terminal facilities radiophoto, time division multiplex, teleprinters, etc.; IRE and American Institute of Electrical Engineers; Three published papers; six U.S. Patents; Sports, tennis; Hobby - gardening; Radio Club of America President 1941; Vice President 1940; Director 1935/1948.

- CANAVACIOL, FRANK E. (F) 1934 - Professor of Electrical Engineering Polytechnic Institute of Brooklyn, 99 Livingston Street, Brooklyn 2, N.Y.; res. 7119 Juno St., Forest Hills 75, New York; b. January 16, 1896 in New York City; ed. Polytechnic Institute of Brooklyn, E.E. 1918; married; interested in radio about 40 years; Professional experience in consulting and teaching fields; co-author "Radiophone Receiving" and Swope's Lessons in Electricity", Fellow AIEE, SM IRE, Member AAUP Member ASEE.
- CARDELLA, SALVATORE J. (M) 1950 - res. 191 Bartholdi Avenue, Jersey City 5, N.J.; b. Jersey City, N.J. November 10, 1931; RCA Institute.
- CARINI, LOUIS F.B. (F) 1930 - Electronics Engineer, LaPointe Electronics Inc., 155 West Main Street, Rockville Connecticut; res. 246 Wolcott Hill Road, Wethersfield 9, Connecticut; b. Salisbury, Conn. June 21, 1911; ed. Hillyer Junior College, Connecticut Teachers College, Temple Bar College; interested in radio since 1924; designed and built amateur station 1-BOC in 1928; Professional experience, since 1930 engaged in radio maintenance, technical writing and experimental and research work with E.H. Scott Radio Labs., Chicago, Ill.; Underwood Elliott Fisher Co.; Hershey Products Co.; U.S. Coast Guard 1943/1946 as instructor, laboratory technician and engineering writer; United Aircraft Corp.; Automatic Machine Products and as Project Engineer for LaPointe Plascomold Corp. 1950/1951, LaPointe Electronics, as Assistant Chief Engineer and Assistant Research Director; author "Drafting for Electronics" and technical writer on Electronics with articles in Radio and Television News, Electronics, Radio-Crafts; Hobby - sport cars and sports car racing; collection antique vacuum tubes and apparatus.
- CARLEBACH, WALTER M. (M) 1939 - Retired; res. 47 East 64 Street New York City; Electrical Engineer; Columbia University.
- CERULLI, Frank J. (M) 1952 - Electrical Engineer Shepard Laboratories, 480 Morris Avenue, Summit, N.J.; res. 871 Mountain Avenue, Berkeley Heights, N.J.; b. August 9, 1929 at Plainfield, N.J.; ed. B.S. from Newark College of Engineering Class of 1951; interested in radio 8 years; three years with F.H. Shepard in Research and Development as project engineer on telemetering systems and saturable reactors.
- CERVANTES, HOWARD T. (F) 1939 - President Electronicraft, Inc., 27 Milburn St., Bronxville, N.Y.; res. 274 Boulevard, Scarsdale, N.Y.; b. December 15, 1902 in New York City; married; ed. N.Y.C. Grade and High Schools and N.Y.U.; interested in radio 37 years; amateur 1920 to date with present call W2AB; Lieutenant Commander U.S. Navy Communications Officer 6½ years.
- CHALFIN, NORMAN LEONARD (M) 1948 - Electronic Patent Engineer, Hughes Aircraft Co., Culver City, Cal; res. 11128 Wagner Street, Culver City, Cal.; b. Philadelphia, Pa. October 16, 1913; married; ed. B.S. University of Georgia 1936; Graduate studies Columbia University 1936/1941; presently studying Law at Loyola University Law School; Professional experience - instructor, electrical engineer, chief engineer; technical editor and writer; W.E. Co. 1942; Crystal RES Lab 1943; Recordograph 1944; N.A. Philips 1945; Daven Co. 1946; Radio News 1947/1948; Crystal Devices Co., Inc. 1948/1951; Patents 2,477,160 and 2,632,811; Many articles in Radio and TV News, Radio Electronics, Popular Science, Popular Mechanics, Electronics, Televisor, Radio and TV Maintenance, Radio Service Dealer and Tele-Tech.
- CHAMBERLIN, RUDOLPHUS M. (M) 1952 - Owner Radio Station WGGG, Alachua County Broadcasting Co.; res. 123 N.W. 20th Drive, Gainesville, Fla.; b. August 15, 1910 Micanopy, Fla.; married; interested in radio 33 years; amateur station W4DOD; Bell Telephone Labs engineer; member IRE; Vice President Duval Broadcasters, Inc. at Jacksonville, Fla.
- CHAMBERS, ALBERT B. (M) 1949 - P.O. Box 93, Wyckoff, N.J.; b. Jersey City, N.J. August 18, 1896; ed. Pace Institute 1917/1919; member American Television Society.
- CHITTICK, K.A. (F) 1941 - Electronics Engineer, RCA Victor, Camden, N.J.; res. 518 Maple Avenue, Haddonfield, N.J.; b. Old Bridge, N.J. November 6, 1903; married; ed. B.S.E.E. Rutgers University; amateur pre World War I; General Electric Company 1925/1930; RCA 1930 to date; Ten patents; several papers; Fellow IRE; Franklin Institute Electronics Club; Many committees RTMA; Hobbies - Golf, fishing and baseball.
- CHRISTALDI, P. SAMUEL (F) 1940 - Assistant Division Manager, Instrument Division, Allen B. DuMont Laboratories, Inc., 760 Bloomfield Avenue, Clifton, N.J.; res. 132 Squire Hill Road, Upper Montclair, N.J.; b. November 26, 1914 in Philadelphia, Pa.; married; ed. Rensselaer Polytechnic Institute; E.E. 1935 Ph.D. (Physics) 1938; interested in radio since about 1931; amateur since 1931, W3BHT, W3AWZ, W3ZZBH, W2DMH, W2ZZDH, W2ENY; presently active on 50 mc; Professional experience DuMont - engineer on cathode ray tubes and oscillographs from 1938, 1941/1947 Chief Engineer CRO, oscillographs, TV receivers, transmitters; 1947/1952 Engineering Manager, Instrument Division; 1952 to present, Assistant Division Manager, Instrument Division; Numerous U.S. and Foreign Patents and applications; electronics; Numerous lectures and papers in technical journals; Hobbies - Ham Radio, Scouting (Committeeman); Montclair Society of Engineers (President 1953/1954).
- CIMORELLI, JOSEPH T. (M) 1950 - Assistant to Vice President and Director of Engineering, RCA Victor Division, Radio Corporation of America, Camden, N.J.; res. 133 Harrison Avenue, Hasbrouck Heights, N.J.; b. March 18, 1912 in Catskill, N.Y.; married; ed. St. Patrick's Academy, Catskill; Massachusetts Institute of Technology B.S. 1932, M.S. 1933; interested in radio 20 years; Professional experience, Tube Department RCA Victor Division Harrison, N.J. Laboratory 4 years,

MEMBERSHIP

Field Engineer 6 years, Manager Application Engineering Laboratory 8 years; IRE, Secretary, Treasurer of New York Section, Chairman of New York Section; Various IRE Section Committees; Charter member of Vatican Philatelic Society.

CLARK, LOUIS E. (M) 1939 - res. 298 Highwood Avenue, Glen Rock, N.J.; b. Jersey City, N.J. August 9, 1898; member IRE, Radio Servicemen of America.

COBB, HOWARD L (F) 1934 - Chief Draftsman, Aircraft Radio Corporation, Boonton, N.J.; res. 250 Rockaway Avenue, Boonton, N.J.; b. July 17, 1896 at Salina, Colorado; married; ed. MIT 1923 S.B. Electro-chemical Engineering; interested in radio since 1910; professional experience Radio Laboratory Philadelphia Navy Yard; RCA; Benjamin Elect.; Fansteel Products Co.; Ballantine Laboratories; Aircraft Radio Corporation; School Board; P.P. of A.E.S. Newark Branch; member A.S.M.; Mason.

COCKADAY, LAURENCE M. (F) 1915 - P.O. Box 902, Annapolis, Maryland; ed. St. Johns School Physics and Engineering; b. Greenville, N.J. June 18, 1894; Amateur station "IC" 1910, 20G 1912/1913, 2AAK 1916, W2XK 1919/1923; Editor Radio News 1934; Lecturer New York University.

COHN, HUGO (F) 1939 - Vice President Radio Receptor Co. Inc., 84 North 9 Street, Brooklyn, N.Y.; res. 905 West End Avenue, New York City; b. November 26, 1887 in New York City; married; ed. E.E. Columbia University; interested in radio 30 years; professional experience engineering and management with Radio Receptor Co., Inc. 1922 to date.

COLLISON, PERCE BRAUN (F) 1934 - Export Department, Terminal Radio Corporation, 85 Cortland Street, New York City; res. 9 Lorraine Drive, Tuckahoe, New York; b. Brooklyn, N.Y. June 15, 1891; married; ed. High School followed by various special courses in Physics, Electrical Engineering, Television; interested in radio since 1908; amateur 1906; 3KN with rotary spark gap until World War One; professional experience, United Wireless Co. installer, Marconi Co. shipboard inspector and superintendent of construction, sales of home radios, Lieutenant Commander U.S. Naval Reserve set up Radio Material School for Navy Radio, Radar, Sonar, and Visual Signalling. Presently exporting electronic components. Charter Member IRE, Wireless Institute, Wireless Association of America; Member ARRL, Armed Forces Communications Association, Military Order of World Wars, Naval Order of the United States; Radio Club Recording Secretary 1949, Membership Committee Chairman 1950/1953.

CONNOR, GEORGE C. (F) 1936 - General Sales Manager, Sylvania Electric Products, Inc., 1740 Broadway, New York City; res. 100 Valley Road, Larchmont, New York; b. Hoquiam, Washington May 28, 1903; married; ed. University of Wisconsin; interested in radio 40 years; Amateur 9CEK Chicago, Ill.; Radio Engineer with Brunswick Electronic Radio and Sylvania Electric; Member AAAS, IRE, Orienta Beach Club, Director NAPM, Vice President PMDA; Radio Club Vice President 1949.

COOK, LAWRENCE (M) 1915 - Radio Engineer, Boonton Radio Corporation, Boonton, N.J.; res. 610 William Street, Boonton, N.J.; b. Bryan, Ohio October 4th, 1908; ed. Bliss Electrical School; member IRE.

COOPER, CHARLES B. (F) 1924 - Retired; res. 2646 Wynsum Avenue, Merrick, L.I., N.Y.; b. Bracebridge, Ontario, Canada May 13, 1882; ed. One year High School; married; professional experience 1903 Wireless Operator Dr. Lee DeForest Toronto, Canada; 1904 Buffalo, Cleveland and St. Louis Worlds Fair with first paid message service between St. Louis and Springfield; 1905-1906 DeForest Superintendent of Construction for several stations in Colorado and Texas for point to point service but static licked us - 1907 Transferred to Seattle Wash. and built "PA" and "PC" at Astoria; 1908/1915 Various executive positions with United Wireless and Marconi in Construction and expansion of Ship to Shore communications; 1915 Radio Superintendent Alaska Steamship Co.; 1916/1917 Organized the Ship Owners Radio Service, Inc. for Kilbourne and Clark; 1918 Opened New York Office for Kilbourne and Clark's Navy transmitter business; 1919/1921 Reorganized Ship Owner's Radio Service for Kilbourne and Clark on service contract for Shipping Board vessels; 1932/1933 Factory representative for Crosley Radio and other receivers and parts manufacturers; 1931 Changed firm name from C.B. Cooper Co. to Cooper-DiBlasi which continues to date; Retired from firm in Fall of 1952; Life Member Veteran Wireless Operators Association; Charter Member DeForest Pioneers; F. and A.M. Lodge No. 856 Bay Ridge, Brooklyn.

CORWITH, HOWARD POST (F) 1927 - Vice President Development and Research, Western Union Telegraph Co., 60 Hudson Street, New York City; res. Green Village, N.J.; ed. M.E. Cornell University 1916; married; professional experience Western Union 1916, engineering apprentice, general inspection, U.S. Navy Ensign (Electrical) 1918/1919, Electrical Engineer Water Mill Western Union Laboratories 1925, New York Assistant Chief Engineer 1943, Director of Research 1946, Vice President 1949 to present; President New York Electrical Society 1949/1950; Fellow IRE, AIEE.

CONSTANZO, CHARLES A. (M) 1950 - res. 297 Danforth Avenue, Jersey City, N.J.; b. Jersey City, N.J. March 10, 1921; RCA Institute.

CLEMENT, LEWIS M (F) 1919 - Technical Advisor Crosley Division, Avco Mfg. Corp., 1329 Arlington Street, Cincinnati 25, Ohio; res. 30 West 8 Street, Cincinnati 2, Ohio; b. Oakland, California; married; ed. University of California B.S. in E.E. 1914; interested in radio 48 years; Amateur 1905/1914 at Oakland California; professional experience 1914/1954, radio operator summer 1911 and 1912, Western Electric; Federal Telegraph, Kolster Radio; ITT; RCA Victor; Crosley; many patents and technical articles; Chairman, Advisory Group Reliability of Electronic Equipment, Research and Development Board 1952/1953; Engineering Society of Cincinnati; The Cincinnati Club; Fellow IRE; Armed Forces Communications Association; Army Ordnance Association. Radio Club President 1929; Vice President 1928, Recording Secretary 1921, Director 1920 and 1930.

CRAWFORD, JOHN D. (M) 1939 - res. 16 Lodge Road, Great Neck, N.Y.; b. Barberton, Ohio April 30, 1904; Assistant Secretary and Assistant Advertising Manager IRE.

CRAWFORD, ROBERT V. (F) 1940 - Electrical Engineer, Bell Telephone Laboratories, Inc., 463 West Street, New York City; res. 10 Manor Place, Dobbs Ferry, New York; married; ed. Graduated Dobbs Ferry High School, Rennselaer Polytechnic Institute 1926/1928, Graduated New York University B.S.E.E. 1935;

interested in radio since 1921; Amateur station W2JLH since 1936; General Electric Co. Schenectady 1928/1930; member of the staff of Bell Telephone Laboratories in Radio Transmission Department since 1930; Senior Member IRE; Member of Telephone Pioneers of America; former President Westchester Amateur Radio Association.

- CRONKHITE, MINTON (F)** 1919 - Radio Club Corresponding Secretary 1920; Director 1921/1922; Armstrong Medal 1950; IBCG Group. P.O. Box 805, Rancho Sante Fe, Calif.; President Liberty Electric Co. 1928 at Stanford, Conn.; Radio Club of America Armstrong Medal 1950 - IBCG
- CROSBY, MURRAY G. (F)** 1939 - Radio Engineer Crosby Laboratories, Inc., Robbins Lane, Hicksville, New York; res. 30 Cathedral Avenue, Hempstead, New York; b. Elroy, Wisconsin September 1903; married; ed. University of Wisconsin 1927 B.S.E.E.; interested in radio 33 years; amateur W2CSY formerly 9AOX; professional experience RCA Laboratories 1927/1944; Press Wireless 1944/1945; Paul Godley Co. 1945/1948; Crosby Laboratories, Inc. 1948 to present; Approximately 180 U.S. Patents; 12 Technical Publications in Proceedings IRE, RCA Review, QST and others.
- CURTIS, PAUL EVART (M)** 1952 - Electronics Technician U.S. Weather Bureau, Box 6596 San Antonio 9, Texas; res. 128 W. Terra Alta Road, San Antonio 9, Texas; b. December 14, 1907 Chelsea, Michigan; married; ed. Wayne, Michigan High School 1924; one year of engineering at Georgia Tech; presently continuing University of Texas; interested in radio 30 years; amateur 8DLZ in 1923, 4VD in 1924, W4VD in 1938, W510J in 1940, and W5VE post war; professional experience 1930/1933 Operator Rebuilt XENT under John C. Strobel 1935/1936; Chief Engineer B/C KALB 1936/1937; Eastern Air Lines 1937/1951; Electronics Technician, Transco Gas Pipe Line Corp. 1951; presently install, modify, maintain and calibrate storm tracking radar, raob, Rawin and radiosonde ground equipment, ceilometers, telepsychrometers, solar radiation recorders and other equipment used for the recording of meteorological data.
- CUSHING, PHILBROOK (M)** 1950 - Engineer, New London Instrument Co., Dayton Road, New London, Conn.; b. Sunbury, Conn. November 14, 1912; professional experience in Development of Communication, Instrumentation and Control Equipment.
- DARRELL, ROBERT D. (M)** 1946 - Music Critic, free-lance, res. Balmoral, the Vly, Stone Ridge, New York; b. December 13, 1903 Newton, Massachusetts; single (div.); ed. Newton Public Schools, New England Conservatory of Music; interested in radio twenty years; amateur audio amplifiers and testing since 1942; professional experience Instruction Book Editor (IFF) Hazeltine Electronics Corporation 1943/1946; Magazine articles (Electronics, Saturday Review and lectures on audio subjects, Audio Engineering Society, Music Librarians Association, etc.); Books, Good Listening (Knopf, for October 1953); Schirmer's Guide to Books on Music and Musicians (1951); Gramophone Shop Encyclopedia on Recorded Music (1936); Editor of Phonograph Monthly Review; Review of Recorded Music; Music Lover's Guide; many articles and reviews (mostly on recorded music); Guggenheim Fellowship 1939; Societies AES (CM); IRE (A); Acoustical Society of America (A).
- DART, HARRY F. (F)** 1927 - Engineering Staff Assistant Westinghouse Electric Corporation, Box 284, Elmira, N.Y.; res. 923 Farnham Street, Elmira, N.Y.; b. October 20, 1895 Forrest, Illinois; married; ed. B.S.E.E. Purdue 1917; EE in 1923; Active in World War I Signal Corps; amateur at Rice Institute, Houston, Texas in 1920/1921; professional experience, taught EE at Rice Institute and Harvard two years; Western Electric Co. Chicago 2 years; Westinghouse Electric Corporation Electronic Tube Engineer 1922 to date; Methodist; Mason; Shriner.
- DAY, HOWARD BLOODGOOD (F)** 1912 - Electrical Engineer Pennsylvania Power and Light Co., 901 Hamilton Street, Allentown, Pa.; res. 27 North Jefferson Street, Allentown, Pa.; b. November 2, 1894 at New York, N.Y.; married; ed. Westfield, N.J. Public Schools and University of Illinois, B.S.E.E. 1922; interested in radio since 1908; Amateur station "HDF" Westfield in 1908 and licensed as 2KK 1913/1917; Commercial First Grade Radio Operator License No. 2488 in 1913; Chief Operator U.S. Ambulance Ship "Surf" in 1917 with Atlantic Fleet; Member AIEE; Pennsylvania Society of Professional Engineers; Lehigh Valley Engineers' Club and The Pennsylvania German Folklore Society which is a hobby or side study as is photography.
- DAY, JAMES R. (F)** 1938 - Radio Engineer Radio Engineering Laboratories, Inc, 36-40 37 Street, Long Island City, New York; res. Peconic Lane, Peconic, N.Y.; b. July 21, 1910, New York, N.Y.; married ed. Grade and High School (Stuyvesant) in New York City - B.S. 1931 M.I.T.; interested in radio over 20 years; Professional experience - E.H. Armstrong Laboratory - OSRD- RCA Laboratories - Press Wireless - Radio Engineering Laboratories - U.S. Patent 2,566,826.
- DEAN, CHARLES EARLE (F)** 1930 - Technical Editor, Hazeltine Corporation, 5825 Little Neck Parkway, Little Neck, N.Y.; res. 260-21 Pembroke Avenue, Great Neck, N.Y.; b. May 23, 1898, Pickens County, S.C.; married; ed. A.B. Harvard, 1921; A.M. Physics, Columbia, 1923; PH.D. Physics, 1927; Johns Hopkins; interested in radio since about 1921; professional experience 1921/1924 Bell Telephone Laboratories; 1924/1927 Department of Otolaryngology, Johns Hopkins Medical School; 1927/1929 American Telephone and Telegraph Co.; 1929 to date Hazeltine Corporation; Licensed Professional Engineer, New York State, 1934; Apprentice Seaman, U.S. Naval Reserve, World War I; Awarded Navy Certificate of Commendation for Civilian Work World War II; Member IRE and AIEE and Society for Ethical Culture, N.Y.C.
- DeCAMP, ROBERT T. JR. (M)** 1951 - Engineer, American Tel. and Tel. Co., 32 Sixth Avenue, New York 13, N.Y.; res. 155 Magnolia Avenue, Jersey City, N.J.; b. October 4, 1905; member Armed Services Communications Association.
- DeLANO, RALPH BENJAMIN JR. (M)** 1946 - 40 Forbus Street, Poughkeepsie, N.Y.; ed. B.S. in E.E. 1941 Massachusetts Institute of Technology.
- DiBLASI, JOHN (F)** - Electronic Sales, Cooper-DiBlasi, 259 West 14th Street, N.Y.C.; res. Bayview Road, Plandome, N.Y.; b. New York City November 5, 1898; married; ed. New York City Schools, Cooper Union, Electrical Engineering 1922; interested in radio since 1912; licensed as amateur 2AGD in 1915, relicensed as 2FD in 1920, presently W2FX; electronic sales business since 1915; taught radio in YMCA Schools and Jamaica Vocational High School; Senior Member IRE, member ARRL, Armed Forces Communications Association, North Shore Radio Club; Past President North Shore Radio Club; President Quarter Century Wireless Association.
- DiBLASI, JOHN S. (M)** 1951 - Salesman Cooper-DiBlasi 259 West 14 Street, N.Y.C.; res. 2002 Bly Road, East Meadow, Long Island, N.Y.; b. May 31, 1924, Elmhurst, L.I.; married; ed. Bayside High School,

MEMBERSHIP

- St. Johns University; interested in radio 15 years; amateur since 1941; W2QNR 1946; professional experience, salesman in electronic field 4 years; served with O.S.S. in World War II (Radio).
- DICKEY, EDWARD T. (F) 1927** - Engineer RCA Laboratories, Princeton, N.J.; res. 104 Jefferson Road, Princeton, N.J.; b. November 16, 1896 Oxford, Pa.; married; ed. B.S. College of the City of New York; interested in radio since 1909; held amateur license for station 2CN from about 1913/1928; professional experience RCA Research Department in New York 1919/1924; Technical and Test Department 1924/1929; RCA Victor 1929/1941, RCA Laboratories 1942 to date. Present position Administrative Assistant; several patents on radio; about ten technical articles on Radio; Hobby - Photography; Senior member IRE.
- DIEHL, WILLIAM FRANCIS (F) 1924** - Engineering Executive, Dumont-Airplane and Marine Instrument, Inc., Clearfield, Pa.; res. 1014 S. Second Street, Clearfield, Pa.; b. December 18, 1896 at New York City; ed. Flushing High School, Columbia University, Alexander Hamilton Institute, LaSalle; married; interested in radio since 1907; amateur 1907/1917; professional experience, Chief Radio U.S.N. 1918/1919, Chief Engineer A.H. Grebe 1919/1928, Assistant Chief Engineer and Division Manager RCA Mfg. Co. Camden 1928/1938; Director of Engineering and Manufacturing, Product Manager, Assistant Vice President Dumont, Airplane and Marine Instruments, Inc. 1928 to date; patents Cathode-Ray Oscillograph, Apparatus for Calibrating Piezo-Electric Elements, Crystal holder; Publications: Section (2) Properties of Materials, Pender-McIlwain, Electrical Engineers Hand Book, Volume (5) Electrical Communications and Electronics; Papers in Radio Club, Electronics, Radio; Philadelphia Section Chairman IRE Ninth Annual IRE Convention; Fellow IRE; Certificate of Commendation U.S.N. World War Two; Sports: Tennis, Badminton and Crokinole; Hobby - Photography including medical.
- DIETRICH, FREDERICH (F) 1925** - Retired 1 Wall Street, N.Y.C.; res. 1136 Fifth Avenue, New York City; b. New York City September 15, 1880; Grammar School, New York City, two years City College of New York; interested in radio since 1908; married.
- DOUCHA, ARTHUR FRANK (M) 1951** - Industrial Salesman Continental Sales Co., Inc., Newark, N.J.; res. Linden, N.J.; b. New York City September 30, 1907; ed. Grammar and High School, N.Y. Electrical School; married; interested in radio since 1924; built transmitters and receivers for amateur use in late 1920s; Radio Service business with a stress on sound installations; served in U.S. M.C.; member of A.E.S. and V.F.W.
- DREHER, CARL (F) 1923** - Writer, res. R.F.D. #3, Brewster, N.Y.; b. Vienna, Austria, February 16, 1896; married; ed. B.S. City College of New York 1917; Assistant Research Engineer, Marconi Wireless Telegraph Co.; Receiving Engineer, Broadcasting Station Engineer, Radio Corporation of America; Staff Engineer NBC; Chief Engineer RCA Photophone Co.; Radio Club of America Director 1927/1928, Vice President 1929.
- DRILLICK, JACOB H. (M) 1951** - res. 96 Haven Avenue, New York 32, N.Y.; member IRE.
- DROSTE, GEORGE THEODORE (M) 1926** - Estimator and Project Manager, Starrett Brothers and Eken, Inc., 63 Wall Street, New York City; res. 207 East 202 Street, Bronx 58, New York; b. New York City November 23, 1886; ed. Public School, Night and Trade Schools; married; interested in radio since 1903; School under Kolster 1904/1905; amateur 1912 2EU, after World War I call changed to W2IN; Signal Corps WW1; Production Engineer WW2 Bell Labs. at West Street and Western Electric at Kearney on radio, architect and builder since 1901; Infantry 1906/1911, Signal Corps 1911/1936, Grade Captain N.G.N.Y., 1940/1942 Lieutenant Colonel Infantry; Member Fordham Radio Club, Westchester Amateur Radio Club, IRE.
- DUBILIER, WILLIAM (F) 1920** - res. 72 Esplanade, New Rochelle, New York; b. New York City July 1888; married; ed. Technical Institute, Cooper Institute; interested in radio since 1903; professional experience: experimental and original development of high frequency generators 1906, Chief Electrician Continental Wireless and Telegraph Co. 1907, President and Technical Director Commercial Wireless and Telegraph Co. 1909, organized Dubilier Electric Co. London 1910, Dubilier Electric Co. 1912, Dubilier Condenser Corporation 1913, Radio Patents Corporation 1917, all leading up to many present companies in this country and abroad.
- DU MONT, ALLEN BALCOM (F) 1929** - President, Allen B. DuMont Labs., Inc., 750 Bloomfield Avenue, Clifton, N.J.; res. 275 Bradford Avenue, Cedar Grove, N.J.; b. Brooklyn, N.Y. January 29, 1901; ed. E.E. Rensselaer Polytechnic Institute 1924, Doctor of Engineering 1944, Doctor of Engineering Brooklyn Polytechnic Institute 1949; married; professional experience: Westinghouse Lamp Co. engineer 1924/1928, Chief Engineer DeForest Radio Co., Passaic, N.J. 1928/1931; President Allen B. DuMont Labs. Inc. since 1931, Director 1st National Bank of Cedar Grove, Radio-Television Manufacturers Association, Trustee Rensselaer Polytechnic Institute, Fellow Radio Club of America, Institute of Radio Engineers, American Institute of Electrical Engineers, Society of Motion Picture and Television Engineers, Television Society of England. Received Westinghouse Award 1927 for most outstanding accomplishment, received American Television Society Award 1943 for advancement of commercial television, Television Broadcasters Award 1944 for development of cathode-ray tube, Marconi Memorial Medal of Achievement 1945, Chevalier French Legion of Honor 1952; over 30 patents on cathode ray tubes and television.
- EASTHAM, MELVILLE (M) 1917** - Retired, formerly with General Radio Co., Cambridge, Mass.; res. 8 Gray Gardens, Cambridge, Mass.; b. June 26, 1885 at Oregon City, Oregon; married; interested in radio since 1902; professional experience: Design Engineer for over 40 years, Clapp Eastham Co. 1906/1915, then General Radio to retirement; Fellow IRE, AIEE, American Physical Society, Acoustical Society.
- EASTON, IVAN G. (F) 1946** - Engineer, General Radio Co., Cambridge, Mass.; res. Lexington, Mass.; b. Sweden November 20, 1916; ed. Northeastern University B.S. in E.E., Harvard M.S.; married; professional experience: Instructor Harvard 1939/1940, General Radio 1940 to date.

- EDINGER, JOHN RAYMOND (M) 1949 - Production Manager, Pickering and Co., Oceanside, L.I., N.Y.; res. 852 Henry Street, Uniondale, N.Y.; b. September 17, 1914 at Watervliet, N.Y.; ed. O.T.I. 1934; married; interested in radio 25 years; amateur W2JKF 20 years; professional experience radio operator, engineer; Audio Engineering paper - June 1947.
- EGOLF, RICHARD S. (F) 1945 - Technician, Program-Radiophoto Department, RCA Communications, Inc., 66 Broad Street, N.Y.C.; res. 90 Eighth Ave., Brooklyn 15, N.Y.; b. Brooklyn, N.Y. December 30, 1895; ed. Public School 131, Manual Training High School, Pratt Institute, Brooklyn; married; interested in radio since 1909; amateur station RS in 1909, licensed 2LE in 1913, relicensed W2WX in 1919 and active ever since, Hold Amateur Extra Class License and First Class Commercial Radiotelephone and Telegraph Licenses; Marine Radio Operator for Marconi Co. 1914, SS Hamilton and SS North Land 1915, SS Priscilla and SS Commonwealth for National Electric Signaling Co. and Station FNK Brooklyn; Senior Member IRE, Member Radio Intelligence Division Signal Corp. U.S. Army World War I, Quarter Century Wireless Association, Veteran Wireless Operators Association, Old Old Timers Club (40 Years), Charter Member DeForest Pioneers.
- ELTZ, GEORGE J. (CM, F) 1909 - Engineer, -Executive Signal Corps, Ft. Monmouth, N.J.; res. 225 Lincoln Avenue, Avon, N.J.; b. New York City March 7, 1893; ed. Electrical Engineer Columbia University 1917; married; interested in radio since 1907; amateur 1907 to date, all types and frequencies; professional experience in Research, Development, Manufacturing and Management, Operator United Wireless 1912, Western Electric 1914, Navy Aviation development 1917/1919; Radio Club of America President 1915, Vice President 1909/1914, Director 1916/1917, 1920/1922, 1926/1929; Charter Member Junion Wireless Club and The Radio Club of America, Inc.
- ENGLE, KARL D. (M) 1929 - Sales Representative Karl D. Engle Co., 4224 N. Sheridan, Chicago, 40, Ill.; res. 920 W. Carmen Avenue, Chicago 40, Ill.; b. February 9, 1899 Shelbyville, Ky.; ed. High School Ex Courses in E.E. at Columbia University; interested in radio thirty five years; married; professional experience in radio parts manufacturing since 1917, mostly as Factory Superintendent and Production Manager with large Eastern parts manufacturers; member Chicagoland Chapter "The Representatives" of Electronic Products Manufacturers, Inc., presently Secretary.
- ERHARD, JOHN ALLEN (F) 1940 - Transmitter Engineer Columbia Broadcasting (WCBS-AM), 442 Pelham Road, New Rochelle, N.Y.; res. 33 Moran Place, New Rochelle, N.Y.; b. March 21, 1901 Union City, N.J.; ed. High School, Marconi Institute, RCA Television School, Ft. Monmouth Signal School officers course 1929, CBS Television course conducted by Columbia University; married; interested in radio since 1912; amateur 1918/1924; 20 years with New Jersey National Guard, part as Divisional Radio Officer 44th Division; professional experience: Western Electric Machine Switching School, Bell Labs, QRV Radio Service, Master Antenna Systems, Remote control systems for Chrysler Motors Worlds Fair; Elder 1st Presbyterian Church, New Rochelle, Trustee Huguenot Yacht Club Men's Club.
- ESPENSCHIED, LLOYD (F) 1925 - Research Consultant Bell Telephone Laboratories, Inc., 463 West Street, New York City; res. 99-82nd Road, Kew Gardens 15, N.Y.; b. April 27, 1889 St. Louis, Mo.; ed. Pratt Institute 1909; married; interested in radio since 1904; amateur 1904/1909 Brooklyn, N.Y. Station "XY"; professional experience summers 1907/1908 ship operator United Wireless Telegraph Company, 1909/1910 Assistant Engineer Telefunken Wireless Telegraph Co. TWT at 111 Broadway, N.Y.C., 1910 to date with Bell Telephone System (AT&T Co. then Bell Telephone Labs.) on research and development in radio and carrier systems; over 100 U.S. Patents, dozens of technical papers, participated in many international conferences on electric communications; Hobby - library on early electrical origins - geneology; Fellow AIEE, IRE; Clubs Downtown A.C., Ocean Club of Forest Hills; Radio Club Director, 1931.
- FAIRMAN, HARRY E. (M) 1946 - Project Director, Warner, Inc., 522 Fifth Avenue, New York 36, N.Y.; res. 41-41 Forty First Street, Long Island City 4, N.Y.; b. November 7, 1907 Brooklyn, N.Y.; married; interested in radio since 1920; professional experience, Radio Engineer, technical writer, project director.
- FARRAND, CLAIR L. (F) 1921 - President, Farrand Optical Co., Inc., 4401 Bronx Blvd., New York 70, N.Y.; res. 133 Pondfield Road, Bronxville, N.Y.; b. October 22, 1895 at Newark, N.J.; ed. Central High School, Philadelphia, Pa. 1908/1911; married; interested in radio 45 years; amateur station WN 1908, Denver 1910; professional experience: 1912/1919 Design Engineer, Marconi Wireless Telegraph Co., 1919/1920 Assistant Chief Engineer Liberty Electric Corp., 1921/1922 Chief Engineer Wireless Improvement Co., 1922/1924 Consulting Engineer Atwater Kent, 1924/1929 President Farrand Manufacturing Co., 1930/1936 President United Research Corp. (subs. Warner Brothers Pictures), 1936/1937 Consulting Engineer Warner Brothers Pictures, 1937/1940 President Independent Res. Service, 1940 to date President Farrand Optical Co., Inc.; about 30 U.S. Patents, about 10 Foreign Patents; Sports - Tennis, Fly Fishing, Yachting; Societies - Fellow IRE, Society Motion Picture and Television Engineers, Member American Physical Society, British Kinematograph Society; Clubs - New York Yacht Club, West Side Tennis Club; Naval Ordnance Development Award, U.S. Navy December 10, 1945, Technical Mission to British Isles and Germany 1946, Honorary Degree of Mechanical Engineer, Stevens Institute of Technology, 1949.
- FELCH, EDWIN, PIERSON (F) 1939 - Military Systems Development Engineer, Bell Telephone Laboratories, Inc., Whippany, N.J.; res. 109 Fairmount Avenue, Chatham, N.J.; b. January 10, 1909 at Madison, N.J.; ed. A.B. Physics 1929 Dartmouth College; married; interested in radio about 32 years; amateur 1930/1937 W3AWT associate; professional experience Bell Telephone Labs. 1929 to date, electronic measuring apparatus development 1930/1953, Airborne Magnetometer Development World War Two, now in charge of military data transmission system development; several patents on automatic frequency control systems and Magnetometers; member AIEE, Senior member IRE; Hobby Sports cars.
- FELIX, EDGAR H. (F) 1928 - Planning Co-Ordinator, Government Division, Radio Corporation of America, Camden, N.J.; res. 221 Estaugh Avenue, Haddonfield, N.J.; b. March 29, 1898; married; ed. Sheffield Scientific School, Journalism at Columbia School of Journalism; interested in radio since 1912; amateur 1915 2ADQ; professional experience, technical writer on radio 1918/1922, allocation

MEMBERSHIP

practice before FRC and FCC 1922/1927, Director Radio Coverage Reports 1927/1942, Signal Corps 1942/1946, Hogan Laboratories 1946/1948, A.B. DuMont Labs. 1946/1953, Radio Corporation of America to date.

- FINK, DONALD G. (F) 1934 - Director of Research Philco Corporation, Tioga and "C" Streets, Philadelphia 24, Pa.; res. 845 Dale Road, Meadowbrook, Pa.; b. Englewood, N.J. November 8, 1911; married; ed. Bachelor of Science, M.I.T. 1931, Master of Science Columbia University 1942; interested in radio since 1921; amateur W2AFX 1928 to date, W3TV1 1952 to date; professional experience editorial staff Electronics 1934/1952, Editor-in-Chief 1946/1952, Staff Member MIT Radiation Laboratory 1941/1943, Expert Consultant, Office of Secretary of War 1943/1945, Director of Research Philco Corporation 1952 to date; Books: Engineering Electronics 1935, Principles of Television Engineering 1940, Microwave Radar 1942, Television Standards and Practice 1943, Radar Engineering 1947, Television Engineering 1952.
- FINLAY, ROBERT (F) 1939 - Manufacturers' Representative, 307 Lincoln Building, Ridgewood, N.J.; res. 104 Brookside Avenue, Ridgewood, N.J.; b. New York City December 17, 1901; ed. U.S.M.A. West Point 1924; married; West Point Society of New York, Association of Graduates, U.S.M.A., Armed Forces Communications Assn., The Representatives, Lake Shore Club of Chicago, PGA Hole-In-One Club.
- FOGARTY, JOHN PHILIP III (M) 1944 - res. 80 Plymouth Drive North, Glen Head, L.I., N.Y.; b. West Hartford, Conn. March 4, 1919; ed. Stevens Institute of Technology, RCA Institute.
- FOWLER, CHARLES J. (M) 1951 - Rigger and Maintenance Radio Station, KE2XCC Edwin H. Armstrong Estate, Alpine, N.J.; res. 135 E. Madison Avenue, Dumont, N.J.; b. Sea Bright, N.J. July 10, 1899; ed. Grade School; married; professional experience, Construction of Radio Stations for 27 years, Belfast, Maine, Tuckerton, N.J., Riverhead and Rocky Point, Long Island, N.Y., WEAJ at Bellmore, L.I., WJZ Bound Brook, N.J. - Past 17 years at Alpine, N.J.
- FREITAS, MANUEL (M) 1943 - res. 556 Bond Street, Elizabeth, N.J.; b. Elizabeth, N.J. November 25, 1918; ed. High School four years, Pratt Institute one year; member ARRL, Union County Amateur Radio Association.
- FRENCH, B.V.K. (M) 1947 - res. 2221 East 52 Street, Indianapolis, Ind.; b. Coudersport, Pa. February 19, 1903; ed. B.S. University of Buffalo; staff of Barnard Studios, 2136 East 52 Street, Indianapolis, 5, Ind.; Senior Member IRE.
- GAWLER, HENRY C. (F) 1921 - Engineer, Gawler-Knoop Company, 168 Eagle Rock Avenue, Roseland, N.J.; res. 102 North 22nd Street, East Orange, N.J.; b. Washington, D.C.; interested in radio 1904; professional experience, U.S. Radio Inspector, New England 1912/1920, Army and Navy Radio, Graduate of First Navy Wireless Class 1904 at Brooklyn Navy Yard; married; Senior Member IRE.
- GERNSBACK, HUGO (M) 1919 - Publisher - Gernsback Publications, Inc., 25 West Broadway, N.Y.C.; res. 263 West End Avenue, N.Y.C.; b. August 16, 1884 at Luxembourg, Luxembourg; ed. Ecole Industrielle, Luxembourg; Founded Electro Importing Co. 1905 offering first spark transmitters and receivers to public; Modern Electrics 1908, Electrical Experimenter 1913, Radio News 1919, Radio Craft 1929 and a series of technical publications to date.
- GHIRARDI, ALFRED A. (F) 1933 - Consulting Electronics Engineer, Technical Publications Consultant, Author Technical Books, self-employed; res. 94 Alpine St., Stamford, Conn.; b. New York City August 16, 1904; ed. Cooper Union Institute of Technology B.S. and Post Graduate E.E.; interested in radio since 1917; professional experience, Electrical Engineer, Livingston and Co. 1923/1924, Engineer of Experimental Laboratory and Associate Editor Radio Engineering Magazine 1924/1926, Head of Electrical and Radio Department technical Institute N.Y.C. 1926/1934, Technical Consultant Pilot Radio and Tube Corp. 1931/1934, President Radio and Technical Publishing Co. 1930/1943; author Radio Physics Course, Modern Radio Servicing, Radio and Television Receiver Troubleshooting and Repair, Pix-O-Fix TV Trouble Finder Guide.
- GILLEN, RICHARD G. (M) 1952 - Engineer, Cornell Aeronautical Laboratory, Inc., Flight Research Division, 4455 Genesee Street, Buffalo, N.Y.; res. Tockey Street, Burt, N.Y.; b. Dorchester, Mass. November 11, 1924; ed. B.E.E. New York University College of Engineering 1954; married; interested in radio since 1939; amateur W3JOS 1941/1948, W2ZCD 1948 to present; professional experience Commercial Operator's License 1941, Experimental Broadcasting license 1941/1942, Army Air Force Radio Maintenance 1942/1945; research assistant Edwin H. Armstrong Columbia University Laboratories 1945/1954; Member ARRL 1941 to present, Active in NYU Student Branch AIEE and IRE Officer 3 years, Chairman 2 years, Associate IRE; Hobbies - Amateur Radio, Photography.
- GILLETTE, EDWARD CLINTON JR. (M) 1947 - Colonel U.S. Army O-12697 Professor Physics and Chemistry U.S. Military Academy, West Point, N.Y.; res. West Point, N.Y. and Castine, Maine; b. Philadelphia, Pa. July 25, 1900; married; ed. B.S. West Point Military Academy 1920, M.S.E.E. Purdue University 1931; attended Harvard University, Columbia University, Penn State University 1949/1953; interested in radio since 1912; amateur 1929-1936; professional experience military service only 1918 to present in Regular Army, Artillery and Signal Corps, appointed permanent Professor of Physics and Chemistry at U.S. Military Academy 1946; World War Two service in ETO 1943/1945, Signal Division SHAEF, Chief Signal Officer First Allied Airborne Army and Chief Signal Officer Berlin District; Decorations include Legion of Merit, Bronze Star and ACM(US), Order of British Empire, Croix de Guerre (Belgium), Croix de Guerre (France); Sports - Tennis, Swimming, Handball, Squash, and Sailing; Hobbies - Radio and Electronics, metal and wood-working, collecting and refinishing antique furniture, collecting old clocks, repairing and restoring antique automobiles; Associate IRE, Member Army and Navy Club, Washington, D.C., Member AFCA, Member Castine Maine Golf Club.
- GLASER, EDWARD M. (M) 1946 - Senior Electrical Engineer, Kollsman Instrument Corporation, Elmhurst, L.I., N.Y.; res. 14 Wallace Avenue, Bellmore, L.I., N.Y.; b. Brooklyn, N.Y. September 19, 1905; ed. B.S. in E.E., assorted graduate courses; married; interested in radio since 1920; amateur W2BRB 1921 to date, 8AX during 1929, schedules Byrd Antarctic Expedition; professional experience

3 years in radio manufacturing, test, foreman, engineer, 5 years Pioneer Instrument Co., development engineering aviation instruments, 18 years Kollsman as Chief of Electrical Experimental Department in charge of laboratory; Senior Member IRE, Member AIEE; Hobbies - piano, tape recording, small orchestra, fishing, bowling, gardening, photography, piloting; Avocation - free servicing and consulting on electronic gear for friends, relatives and neighbors.

- GLASER, MARCUS (M) 1941 - Professional Engineer, DeWald Radio and TV Corp., 35-15 37 Avenue, Long Island City, N.Y.; res. 226-07 137 Avenue, Laurelton, N.Y.; b. Brooklyn, N.Y. February 5, 1903; ed. Pratt Institute E.E.; married; interested in radio since 1918; amateur ex-W8IE; professional experience 23 years Chief Engineer and Vice President United Scientific Laboratories and Chief Engineer and Past President DeWald Radio and DeWald Radio and TV Corporation; Senior Member IRE, Member Filicity Lodge 1100 New York, AIEE.
- GODLEY, PAUL F. (F) 1914 - Consulting Radio Engineer, Paul Godley Co., Great Notch, N.J.; res. 10 Marion Road, Upper Montclair, New Jersey; b. Garden City, Kansas September 25, 1889; ed. Defiance College and University of Illinois; married; professional experience United Wireless Telegraph Co. 1909, Radio Instructor 1909/1911, Radio Engineer Amazon River Radio Service 1912/1913, Adams Morgan Co. 1915/1924, Farrand Manufacturing Co. 1924/1925, Chalmers-Godley Corp. 1926/1927, Consulting Engineer 1927 to date; Radio Club of America President 1939, Vice President 1923/1925, Director 1915/1917, 1919/1922, 1926, 1931/1933; Armstrong Medal 1950 for IBCG reception at Ardrossen, Scotland.
- GOLDSMITH, DR. ALFRED N (HM) 1922 - Consulting Engineer 597, Fifth Avenue, N.Y.C.; b. New York, N.Y. September 15, 1888; ed. College of the City of New York, Columbia University; married; interested in radio since 1901; amateur 2XN, New York; professional experience Professor of Electrical Engineering, College of the City of New York, Vice President and General Engineer Radio Corporation of America, Director of Research, Marconi Wireless Telegraph Company of America, Consultant to General Electric Co.; about 200 patents; numerous technical papers; Fellow AIEE, Fellow American Physical Society, Fellow Acoustical Society of America, Fellow IRE; Medal of Honor IRE- Radio Pioneers Award.
- GOLDSMITH, T.T. JR. (F) 1939 - Vice President, Allen B. DuMont Labs.; res. 519 Highland Avenue, Upper Montclair, N.J.; ed. Furman University B.S. 1931, Cornell Ph.D. 1936; member IRE and American Physical Society.
- GOUDY, CARL F. (F) 1925 - Chairman of the Board of Technical Appliance Corp., Shelburne, N.Y.; res. South Main St., Sherburne, N.Y.; b. Enfield, Illinois May 26, 1890; ed. Grammar School and 1 year Fairbury Ill. High School, Bradley Horological School Peoria, Ill. 1 year, Graduate Pratt Institute, New York; interested in radio since 1920; married; professional experience, Assistant Instructor in Mechanical Laboratory Pratt Institute 1½ years, in charge of Engineering Pacent Electric Company, N.Y.C. 9 years, President Technical Appliance Corp., Sherburne, N.Y. 20 years; several patents assigned to Pacent Electric and TACO; Member Board of Directors, Chenango Memorial Hospital, Norwich, N.Y., Member Village Board of Trustees, Sherburne, N.Y.; military service 1918/1919 U.S. Naval Aviation; Member of Shrine, Ziyara Temple, Utica, N.Y., Member International Rotary Club, Sherburne, N.Y.; sports - motorcycling.
- GRAHAM, VIRGIL M. (F) 1931 - Director of Technical Relations, Sylvania Electric Products, Inc., Bayside, N.Y.; res. 67 Lincoln Avenue, New Hyde Park, N.Y.; b. Rochester, N.Y. January 22, 1902; ed. University of Rochester; married; interested in radio since 1916; professional experience 1923/1935 Head of Radio Laboratory, Stromberg Carlson, 1935/1942 Director of Tube Application Department Sylvania Electric, Plant Manager 1942-1946 and 1946 to date as above; Fellow IRE, IRE Australia, Member Engineers Club, AIEE and Societe' des Radioelectriciens,
- GREBE, ALFRED HENRY (M) 1952 - Electronics Engineer, Filtors, Inc., 30 Sagamore Hill Drive, Port Washington, Long Island, N.Y.; res. 40-05 59 St., Woodside, 77, N.Y.; b. Jamaica, L.I., N.Y. April 3, 1926; ed. B.S.E.E. (Electronics) Rensselaer Polytechnic 1950, eleven months school and training for aviation radio technician in U.S. Navy; professional experience Assistant Project Engineer Sperry Gyroscope Co., 1½ years, Owner Grebe Radio and Television Co., sales and service, 1½ years, Assistant to Chief Engineer, Filtors, Inc.; Two years U.S. Navy as Aviation Electronic Technicians Mate, Second Class; Member Board of Directors Hollis, L.I. Chamber of Commerce; Hobbies - boating fishing and golf and home lab for experimentation and construction.
- GRIM, W. MANNING (F) 1925 - Field Engineer, Lepel High Frequency Laboratories, Woodside, L.I., N.Y.; res. 136 Davis Ave., White Plains, N.Y.; b. Brooklyn, N.Y. September 14, 1900; ed. South Side High School, Ex. Courses Penn State College, Army Signal Corps School; married; interested in radio since 1913; W2AQJ 25 years; professional experience signal engineer, telephone, fire alarm, traffic control, communication radio, metal heating by high frequencies for 35 years, affiliated Signal Corps 1925/1935; Hobbies - old automobiles, models; Societies - ARRL, Army Ordnance Association, American Society for Metals, Municipal Signal Assn.
- GRINAN, JOHN F. (F) 1910 - Sugar planter; res. May Pen., Jamaica, B.W.I.; b. Kingston, Jamaica, Nov. 28, 1894; single; ed. N.Y. Military Academy, Peddie Inst. and Seton Hall College. Owned and operated station since 1907. Commercial operator's certificate of skill 1911. United Wireless Co. 1912, Marconi Wireless Tel. Co., Telefunken Co., Tropical Radio Tel. Co. 1913, Telefunken Co. Transatlantic Stn. Sayville L.I., 1914, British Gov. Wireless examiner Jamaica, 1933/1934. Member Jamaica Gov. Broadcasting Committee 1934, Vice President Continental Radio Corp. 1920/1934, Director Radio Club of America, Inc., 1926, 1927, 1930, 1931; Armstrong Medal 1950 for first Transatlantic Short Wave message IBCG in 1921.
- GROGAN, WILLIAM F. (M) 1949 - Purchasing for Government Contracts, Times Facsimile Corporation, 540 West 58th St., N.Y.C.; res. 243 East 39 St., N.Y.C.; b. Acworth, Georgia May 19, 1898; ed. High School; married; interested in radio since 1922; amateur licensed 4QY 1922, J9NB and J9ANB 1946 Okinawa; Commercial Telegraph and Telephone Operator Licenses; Professional experience 3 years commercial operator (ships), 1 year Blimps, Goodyear Rubber Co.; Commander, Naval Reserve, 8 years active duty World War Two, Two years instructor Navy Radio School, 3 years Commanding Officer, Naval Training School (pre-Radar) Grove City College, Pa.

MEMBERSHIP

- GRUETZKE, CHARLES P. Jr. (M)** 1932 - res. 1207 Pased Del Mar, San Pedro, Calif.; b. New York City February 13, 1903; ed. Marconi Institute, Mechanics Institute, CCNY, Chicago Tech., Electric Sound Institute; member IRE, Acoustical Society of America, ARRL, New York Electrical Society.
- GUNTHER, FRANK A. (F)** 1940 - Vice President, Radio Engineering Laboratories, Inc., 36-40 37 St., Long Island City 1, N.Y.; res. 10 High Point Road, Dongan Hills, Staten Island 4, New York; b. New York February 3, 1908; ed. Grade Schools, N.Y.C., Stuyvesant High School, Columbia University Ex. N.Y.C. Wagner College, S.I., N.Y.C.; interested in radio since 1919; married; amateur W2ALS since 1919; professional experience REL 28 years, - first two way police radio; Senior Member IRE, member ARRL, retired rank Major, U.S.A. A.F., Reserve Civil Air Patrol, Commercial Pilot.
- GUY, RAYMOND F. (F)** 1939 - Engineering Executive, National Broadcasting Company, 30 Rockefeller Plaza, N.Y.C.; res. Haworth, N.J.; b. Hartford, Conn. July 4, 1899; ed. E.E. Pratt Institute 1921; married; interested in radio since 1911; amateur station 1911 to present; professional experience Marconi Co. 1916, WJZ 1921, RCA Research 1924/1929, National Broadcasting Company 1929 to present; U.S. Army 1918/1919 AEF, President IRE 1950; Director IRE 9 years, Treasurer IRE, Chairman TV Advisory Committee N.A.R.T.B., Life Member VWOA, Fellow IRE, Member Radio and TV Executive Club, Manager Radio and Allocations Engineering, NBC; Radio Club Director 1941.
- HACKBUSCH, RALPH ANTHONY (F)** 1929 - President and Managing Director, Hackbusch Electronics, Ltd. and Stromberg-Carlson Co., Ltd. 23 Primrose Avenue, Toronto, Canada; res. 55 Arjay Cres RR#1, York Mills, Ontario, Canada; b. Hamilton, Ontario, Canada September 18, 1900; ed. Public Schools Hamilton, Hamilton Collegiate Institute, Hamilton Technical and Art College, Alexander Hamilton Institute; married; interested in radio since 1912; amateur 1912/1914, VE9AE 1937/1954; professional experience 1914/1926 Canadian Westinghouse Co., 1926/1930 Associate Radio Engineer Kolster Radio Co., Toronto, 1930/1939 Radio Engineer, Chief Engineer, Vice President and General Manager Stromberg-Carlson, Co., Ltd., 1940/1943 Vice President and Director Radar Division Research Enterprises, Ltd., 1944 to present as above; Fellow IRE, Member Acoustical Society of America, member Rochester Engineering Society, Member Royal Canadian Society, Golden Fleece Lodge AF and AM, registered Professional Engineer, Past Vice President and Director IRE, Past President RTMA of Canada, President Canadian Radio Technical Planning Board 1949/1953, American Physical Society; Granite Club, Toronto.
- HALL, F. SUMNER (M)** 1949 - Audio Engineer, F. Sumner Hall, Inc. 153 West 33 St., New York 1, N.Y.; res. 38 Riverleigh Place, Amityville, N.Y.; b. Worcester, Mass. February 26, 1907; ed. High School; married; interested in radio since 1920; professional experience Control Room and Field Engineering (broadcasting), theatre sound service and inspection, disc and film recording, design and installation broadcast audio facilities and recording facilities, presently design production and sales; Charter member Audio Engineering Society.
- HAMILTON, Hugh G. (M)** 1950 - res. 147 South Grand Avenue, Baldwin, N.Y.; b. July 21, 1905; ed. B.S. in Engineering (Communications) M.I.T.; amateur 2GK 1921/1926, W2AIF Schenectady; President Eastern Air Devices, Inc.
- HANLEY, JOHN F. (M)** 1926 - Radio Engineer, Signal Corps Engineering Laboratories, Ft. Monmouth, N.J.; res. 28 Park Lane, Fair Haven, N.J.; b. Boston, Mass. October 23, 1901; ed. Radio and Electrical Engineering night courses at Columbia University 1920/1924; married; interested in radio since 1914; professional experience electron tube manufacturing 1918/1920, telephone equipment 1920-1924, radio and EE Investigations 1925/1940, Electrical Testing Laboratories, N.Y.C., Electron Tubes and Devices Research, Development, Production and Procurement for Military Applications 1941 to present; member IRE.
- HANSEN, LEON A. (M)** 1951 - Vice President, Freeport Communications, Inc., 300 Woodcleft Avenue, Freeport, N.Y.; res. 217-34 53 Avenue, Bayside 64, N.Y.; b. Chicago, Ill. July 9, 1895; interested in radio since 1923; amateur for 30 years; professional experience 32 years with the New York Telephone Co., in various departments, the last six in television micro-wave relay work; married; LCDR in the U.S. Naval Reserve and served in both World Wars.
- HARNETT, DANIEL E. (F)** 1926 - Engineer, General Electric Co., Syracuse, N.Y.; res. DeWitt, N.Y.; b. Elmira, N.Y. July 20, 1899; ed. Columbia University A.B. 1922, E.E. 1925; married; interested in radio since 1923; professional experience Pacent Electric Co. 1925/1929, Hazeltine 1929/1948, Emerson Radio-Phonograph 1948-1949, General Electric Co. 1949 to date.
- HAYNES, N.M. (M)** 1940 - res. 1115 Beach 9th Street, Far Rockaway, L.I., N.Y.; b. Brooklyn, N.Y. June 15, 1908; ed. Brooklyn Technical High School, CCNY, Long Island University Ph.G.; Amplifier Co. of America 1944.
- HAZARD, Thomas T. (M)** 1939 - Pensioner Public Service Corporation, Newark, N.J.; res. Brookside, N.J.; b. August 5, 1875; single; interested in radio since 1922; member American Radio Relay League, The Universal Radio DX Club, Newark News Radio Club.
- HAZELTINE, (LOUIS) ALAN (F)** 1915 - Technical Consultant 15 Tower Drive, Maplewood, N.J.; b. Morristown, New Jersey August 7, 1886; ed. M.E. 1906 Stevens, Sc. D. (Hon.) 1933 Stevens, A.M. 1938 Columbia; married; interested in radio since 1914; professional experience Professor of Electrical Engineering at Stevens 1918/1925, Professor of Physical Math at Stevens 1933/1944, President IRE 1936, Consultant Washington Navy Yard 1918-1919 radio receiver design, OSRD 1944/1945; many patents including the Neutrodyne", Book "Electrical Engineering" (MacMillan, 1924), many papers mostly on radio and education; Fellow IRE, AIEE, American Physical Society, AAAS, Member ASEE, American Mathematical Society, Mathematical Association of America, American Association of Physics Teachers, Optical Society of America; Radio Club of America President 1946/1947, Armstrong Medal 1937.
- HEALEY, WILLIAM J. (M)** 1952 - Sales Manager, Weston Electrical Instrument Co., 50 Church Street, N.Y.C. res. Glen Ridge, N.J.; b. Tacoma Washington March 5, 1895; ed. Electrical Engineering ICS; interested in radio since 1924; professional experience in engineering and sales; Boy Scouts, Scout Master 18 years, Church Trustee 12 years, Masonic Orders.

- HEES, GEORGE C (M) 1943 - Chief Buyer, Sperry Gyroscope Co., Great Neck, N.Y.; res. 701 5th Avenue, New Hyde Park, N.Y.; b. Brooklyn, N.Y. May 19, 1899; ed. Pratt Institute, Brooklyn, N.Y.; married; interested in radio since 1918.
- HEISING, RAYMOND A. (F) 1921 - Consulting Engineer and Patent Agent, 232 Oak Ridge Avenue, Summit, N.J.; b. Albert Lea, Minn. August 10, 1888; ed. E.E. University of North Dakota 1912, M.S. (physics) University of Wisconsin 1914; married; interested in radio since 1907; professional experience Western Electric Co. and Bell Telephone Laboratories 1914 to date; research and development on all pioneer commercial and military radio telephone applications; retired from Bell Telephone Laboratories 1953; over 120 U.S. Patents, dozen engineering papers, 1 book; American Physical Society, AIEE, Radio Club of America Director, Armstrong Medal 1952 for Heising Modulation.
- HELT, SCOTT (M) 1947 - License Administrator Allen B. DuMont Labs., 570 Bloomfield Ave., Clifton, N.J.; res. 53 West 72 Street, New York City; b. January 30, 1907 Prichard, Alabama; ed. Barton Academy Mobile, Alabama 1923; member IRE
- HENNEY, KEITH (F) 1927 - Editor, McGraw-Hill Publishing Co., 330 West 42 St., New York City; res. Garden City, N.Y. and Skowville, N.H.; b. McComb, Ohio October 28, 1896; ed. A.B. Western Reserve University 1921, A.M. Harvard University 1925; married; interested in radio since 1913; amateur 8ZD and 8ADP Marion, Ohio 1915, 2EJ-1925, W1QGU-1947, K2BH-1948; professional experience Engineer Western Electric Co. 1923-1924, Radio Broadcast Magazine 1925-1930, McGraw-Hill 1930 to date; Radio Operator United Wireless 1918 and Marconi 1922; Books - "Principles of Radio" 1930, "Color Photography for the Amateur" 1938, "Electron Tubes in Industry" 1934, "Handbook of Photography" 1939, "Radio Engineering Handbook" 1933; Fellow IRE, Member Harvard Club of N.Y.C.; Radio Club of America, President 1940, Vice President 1939, Recording Secretary 1934-1938.
- HIGGS, HAROLD P. (M) 1950 - Chief Electronics Engineer, Jeffers Electronics, DuBois, Pa.; res. 312 East Scribner, DuBois, Pa.; b. Toronto, Canada December 4, 1907; ed. Chicago Radio Institute, Detroit Institute of Technology; interested in radio since 1920; amateur 9CKS; professional experience mostly responsible for engineering groups dealing with design of radio and recording apparatus for home entertainment, also military equipment; married; Hobby - Photography.
- HINNERS, FRANK A. (F) 1942 - President, Hinners-Galaneck Radio Corporation, 25-14 Broadway, Long Island 6, N.Y.; res. 233 Raymond St., Rockville Centre, N.Y.; b. New York City February 19, 1894; ed. E.E. Pratt Institute, N.Y. 1915; married; Office Boy, Radio Telephone Co. (Lee DeForest, Metropolitan Tower) 1910 forward; Charter Member IRE via Wireless Institute 1912, Fellow IRE 1926.
- HIRSCH, CHARLES JOACHIM (F) 1947 - Chief Engineer, Hazeltine Corporation, 58-25 Little Neck Parkway, Little Neck, N.Y.; res. 49-23 Forest Drive, Douglaston, N.Y.; b. Pittsburgh, Pa. October 25, 1902; ed. Columbia College A.B. 1923, Columbia Engineering School E.E. 1925; married; interested in radio since 1920; professional experience since 1925, several patents, papers in IRE Proceedings, Electronics, Proceedings of the Radio Club of America, McIlwain Electrical Engineers Handbook, Advances in Electronics; Chairman of Long Island Subsection IRE, Military Certificate of Commendation from the U.S. Navy, Fellow IRE, Member American Association Advancement Science.
- HOGAN, JOHN V. L. (HM) 1915 - President, Hogan Laboratories, Inc., 155 Perry St., New York 14, N.Y.; res. 239 Greenway South, Forest Hills 75, L.I., N.Y.; b. February 14, 1890 Philadelphia, Pa.; ed. University School, New Haven, Conn., Sheffield Scientific School, Yale University 1915; married; interested in radio since 1902; amateur stations in New York City, Northport, L.I. and Cos Cob, Conn. 1902-1908; professional experience Telegraph Engineer, Chief Research Engineer and Manager, Fessenden Companies, Consulting Engineer (Professional, President WQXR, World War Two Special Assistant to Director of OSRD; presently member ITAC (RTMA and IRE), Chairman Panel on ECM (RDB), Senior Warden St. Luke's Episcopal Church Forest Hills, L.I., N.Y.; numerous patents, including single control tuner and Rectifier Heterodyne; Author of "Outline of Radio" and many articles and technical papers; Hobbies - Swimming and sailing, coin and book collecting; Fellow IRE, ASA, AAAS, Member AIEE, ACA, Cosmos Club, Washington, The Players, Yale Club (N.Y.), Founders Award IRE, Armstrong Medal, Radio Club of America, Radio Pioneers Award.
- HOLD, HENRY WALTER (F) 1942 - Sales Engineer, Art Cerf and Co., 744 Broad St., Newark, N.J.; res. 147 Styles St., Elizabeth, N.J.; b. Brooklyn, N.Y. November 18, 1902; ed. Brooklyn Grade Schools, Bushwick High School, 2 years Electrical Engineering M.I.T.; married; interested in radio since 1916; Pirate amateur 1916-1917 and have kept interest though no station; professional experience 1925-1930 General Motors Delco Division, Service work in Elizabeth 1931-1938, Continental Sales Co., Newark 1938-1945, Art Cerf and Co., Mfrs. Representatives 1945 to present; member AES, Associate IRE, member PPOE, Hobbies - High Fidelity and 3D Photography and Binaural Sound.
- HOPKINS, SIDNEY K. (F) 1950 - Sales Engineer, Chemical Coatings Corp., Rocky Hill, Conn.; res. 45 Carolin Road, Rocky Hill, Conn.; b. Upper Montclair, N.J. February 22, 1896; ed. one year Electrical Engineering Polytechnic Institute Brooklyn interrupted by First World War; married; interested in radio since 1909; professional experience, Radio Operator United Wireless and American Marconi Co. 1912-1915; Radio Section Signal Corps 1917 to 1919; First Lieutenant Signal Corps AEF; Hobby - Good Musical Reproduction.
- HORN, CHARLES W. (F) 1921 - Partner, Impulsora Mexicana S.A., Radio Manufacturers, Calle Rhin #33, Mexico City D.F., Mexico; res. Av. LaFontaine 45, Colonia Polanco, Mexico City, D.F., Mexico; b. New York City July 9, 1894; ed. High School, 2 years college and special courses in electricity; married; Amateur station HN at Far Rockaway, N.Y. 1908 before licenses; United Wireless Ship operator 1909, United Fruit five years, World War One Lieutenant (JG) and World War Two as Captain as Assistant Chief of Naval Communications; Westinghouse 1920-1929 as Manager of Radio Operations; National Broadcasting Co. as Vice President and Director of Research and Development 1929-1941; number of patents including parabolic microphone, rectifier; Member IRE, VWOA, Princeton Engineering Association, Captain in U.S. Naval Reserve; In Mexico - Churubusco Country Club, Rotary Club, American Club, American Society, Radio Club Vice President 1932, President 1933.

MEMBERSHIP

- HOUCK, HARRY WILLIAM (F) 1920** - Vice President and General Manager, Measurements Corporation, Boonton, N.J.; res. Intervale Road, Mountain Lakes, N.J.; b. New Cumberland, Penna. April 11, 1896; ed. High School and Extension Courses; married; interested in radio since 1909; operated amateur station 1909-1917; professional experience, 1917/1919 World War One U.S. Signal Corps Laboratory in Paris, France; original development of super-heterodyne method of reception with Major Edwin H. Armstrong, later designed the first second harmonic super-heterodyne broadcast receiver to be placed in commercial production, 1922/1923 Consulting Engineer, Dubilier Condenser Radio Corp. Chief Engineer 1923/1931; research on capacitors made practicable the filter systems used in all modern receivers, Federal Telegraph Co. 1931/1933 Special Research and Development, Consulting Engineer through 1937 and Measurements Corporation to the present; His pioneer work on alternating current operated radio receivers resulted in many patents including 20 listed in the questionnaire; member AIEE, Engineers Club New York, former Manager IRE; Radio Club President 1934, Vice President 1933, Recording Secretary 1930-1932, Director 1928.
- HUFFMAN, CHARLES E. (F) 1946** - Consultant Huffman Laboratories, Montclair, N.J.; res. 90 Wildwood Avenue, Upper Montclair, N.J.; b. St. Joseph, Missouri January 26, 1900; ed. One year at University of Illinois; married; interested in radio since 1914; amateur 9RV-1916, 2RU 1919, Commercial license 1917; professional experience 3 years Manhattan Electrical Supply Co. sales and development, 1920-1930 Westinghouse Development Engineering Vacuum Tubes, 1930 Director of Laboratories, DeForest Radio Corporation, 1931/1933 American Television Laboratories, Hollywood, Cal. (Dr. Lee DeForest), Past nine years Consultant.
- HUGHES, MATTHEW J. (M) 1938** - res. 541 Park Place, Lyndhurst, N.J.; b. Harrison, N.J. March 17, 1902; radio serviceman.
- HULL, LEWIS M. (F) 1951** Chairman of Board, Aircraft Radio Corporation, Boonton, N.J.; res. Boonton, N.J.; b. Great Bend, Kansas February 27, 1898; ed. University of Kansas, Harvard University; married; interested in radio since 1911; active as amateur 1912/1917 - none since; professional experience World War One Signal Corps Laboratory at Bureau of Standards, 1918/1920 Assistant and Associate Physicist Radio Section Bureau of Standards; Consulting Engineer and various engineering positions 1920 to date; various patents in radio field 1922/1930; contributor to technical journals; Clubs - Metropolitan, Anglers of New York, Orange Lawn Tennis, Rockaway River C.C. (New Jersey), University (Washington), Tabusintac N.B. Canada; President IRE 1933.
- HULTS, ELLSWORTH, H. III** - res. 18 Milburne Court, Baldwin, N.Y.; b. Pennsylvania February 23, 1904; ed. Germantown High School 1918/1922; United Nations Sound 1947.
- IRELAND, FREDERICK (F) 1937** - Field Engineer, General Radio Company, 1000 N. Seward St., Los Angeles 38, Cal.; b. New York City May 19, 1911; ed. Harvard A.B. Physics 1933; married; interested in radio since 1921; amateur WLDK 1930/1939; professional experience General Radio Company Engineering Department 1934/1937, Field Engineer New York 1937/1940; Los Angeles 1940/date; Senior member IRE, Chairman Los Angeles Section 1944, Society of Television Engineers, Registered Professional Engineer, State of California.
- JACOB, FREDERICK N. (M) 1940** - res. 5843 North Rockwell Avenue, Chicago 45, Ill; b. Chicago, Ill. October 8, 1908; ed. Armour Institute of Technology B.S. in E.E.; Radio Engineer General Electric Co. 1929/1930, RCA Victor 1930/1931, Manager Meissner Mfg. Co. 1931/1934; member IRE.
- JACOBS, CHARLES F. (F) 1941** - Secretary and Treasurer, Jacobs Label Co., Inc., 270 Lafayette St., New York 12, N.Y.; res. 25 Clark St., Brooklyn 2, N.Y. mail address P.O. Box 408: New York 8, N.Y., Church Street Station; b. Brooklyn, N.Y. June 16, 1898; ed. Alexander Hamilton High School, Brooklyn, N.Y., Pratt Institute mechanical engineering at Evening School of Science and Technology Brooklyn; single; interested in radio since 1911; amateur station W2EM 1912/1941, two commercial first class licenses; professional experience Assistant Engineer Western Electric Co. Kearny on Radar 1942/1945; invented and manufactured Jacobs Antenna Spreader (cage Antennas) 1925, invented and manufactured Jacobs Adjustable Spreader (two-wire open feed lines); member IRE, Town Hall Club, N.Y.C.; about 70 letters to editor" published in past five years.
- JAFFE, D. LAWRENCE (M) 1953** - President and Director of Research, Polarad Electronics Corporation, 100 Metropolitan Avenue, Brooklyn, 11, N.Y.; res. 33 Nassau Drive, Great Neck, N.Y.; b. Brooklyn, N.Y. July 6, 1913; ed. B.S. in E.E. City College 1935, M.S. in E.E. Columbia University 1936, Ph.D. in E.E. Columbia University 1940; married; interested in radio since 1940; professional experience College of the City of New York Instructor 1935/1937, Awarded Bridgman Fellow in E.E. at Columbia University, associated with Professor E. H. Armstrong on fundamental problems in frequency modulation 1937/1939; Columbia Broadcasting System, television Studio equipment 1939/1942; Raytheon Manufacturing Company, Waltham, Mass. Radar 1942/1944; Templetone Radio Manufacturing Corp. Chief Research Engineer 1944/1945, Polarad Electronics Corp. 1945 to date; eleven technical papers in various publications; Fellow IRE, Member RTMA Technical Products Division, Broadcast Transmitter Section.
- JAMES, WALLACE M. (F) 1930** - Engineering Manager, Radio Corporation of America, Harrison, N.J. res. West Caldwell, N.J.; b. Hutchinson, Kansas September 2, 1901; ed. University of Kansas, 5 years, B.S. in E.E. and B.S. in Engineering, other miscellaneous courses; married; interested in radio since 1925; professional experience radio and electric engineering since 1925; Director 1940.
- JARVIS, KENNETH W. (F) 1935** - President, Jarvis Electronics Corporation, 6058 West Fullerton, Avenue, Chicago 39, Illinois; res. 1140 Winnetka, Ill.; b. Mansfield, Ohio October 18, 1901; ed. Graduated E.E. Ohio State University 1923; married; interested in radio since 1912; amateur 1915/1916; professional experience Westinghouse Engineering School and Radio Laboratory, Crosley, Colonial, U.S. Radio, Director of Engineering Zenith, Consulting Engineer 18 years, Manager Electronics Department Autooati Electri; 20 Patents several pending; Chapter on Detection and Modulation Henney's Radio Engineering Handbook, many papers IRE; Fellow IRE, AIEE, Member ASM, AAAS, AFCA, Chicago Radio Engineers Club; Lecturer Graduate School Northwestern University; Reserve Officer Signal Corps, Boy Scout Leader; Hobbies - Camping, Travelling, Flying own Plane.

THE RADIO CLUB OF AMERICA, Inc.

- JENKINS, VICTOR E. (M) 1946 - 27 Park Place, New York 7, N.Y.; b. Pennsylvania May 22, 1896; ed. Penn State College B.S. in E.E. 1919; J. M. Forshay Co. Sales Engineer, Weston Instrument, Jewell Instrument.
- JENNINGS, MALBON H. (F) 1948 - Assistant Director of Engineering, Laboratory for Electronics, Inc., 75 Pitts Street, Boston, Mass.; res. Summer Lane, Framingham Centre, Mass.; b. Haverill, Mass. April 3, 1917; ed. University of Maine - Columbia University; married; interested in radio since 1930; professional experience E.H. Armstrong Junior Engineer 1938/1942, Radiation Laboratory MIT Staff Member 1942, BuShips U.S. Navy 1942/1943, Radio Engineering Laboratories 1943/1951 (Chief Engineer 1944/1951), Laboratory for Electronics 1951 to present; Patent on FM Recording on film or tape; Hobbies - private flying, restoration of early American houses and furniture.
- JOFFE, MOE (M) 1952 - res. 348 Park Street, Hackensack, N.J.; with Radio Receptor Co. 84 North 9 Street, Brooklyn, N.Y.; b. March 13, 1917; ed. Stuyvesant High School, Pratt Institute; interested in radio since 1923; member Radio Club of Brooklyn, Quarter Century Wireless Association.
- JOHNSON, JOHN KELLY (F) 1927 - Consulting Engineer, 511 Fifth Avenue, N.Y.C.; res. 184 South Avenue, New Cannan, Conn.; b. Oskaloosa, Iowa January 27, 1903; ed. A.B. and B.S. Penn College, Oskaloosa, Iowa 1923; A.B. Columbia 1924, B.S. Columbia 1925, E.E. Columbia 1927; married; interested in radio since 1916; professional experience - Instructor in E.E. Columbia 1927/1929; Chief Engineer Silver Marshall 1930, Wells Gardner 1934/1937, Engineer Hazeltine Corporation 1930/1934 and 1937/1942, U.S. Navy Consultant 1943/1944, Hammerlund 1944/1945 and Consultant 1945 to present; Numerous patents all assigned to Hazeltine; Fellow IRE, Associate AIEE; Columbia University Club, N.Y.C.
- JOLLIFFE, CHARLES BYRON (F) 1939 - Radio Executive, Radio Corporation of America, 30 Rockefeller Plaza, New York 20, N.Y.; res. 181 Library Place, Princeton, N.J.; b. Mannington, West Virginia November 13, 1894; ed. West Virginia University B.S. 1915, M.S. 1920, HonLL.D. 1942, Cornell University Ph.D. 1922; widower; interested in radio since 1917; professional experience: Instructor in Physics West Virginia University 1917/1918 and 1919/1920, Physics Instructor Cornell University 1920/1922, Physicist Bureau of Standards Radio Section 1922/1930, Chief Engineer Federal Radio Commission and Federal Communications Commission 1930/1935, Radio Corporation of America Engineer-in-Charge RCA Frequency Bureau, Chief Engineer of RCA Laboratories, Assistant to President, Vice President and Chief Engineer RCA Manufacturing Company 1935/1945, Vice President of RCA in charge of RCA Laboratories 1945, Executive Vice President in Charge of RCA Laboratories Division since 1945; World War Two Chairman of Communication Division of the National Defense Research Committee, Secretary of the Industry Advisory Committee, Board of War Communications, Member Engineers Defense Board, Certificates of Appreciation from Army and Navy; Fellow AAAS, AIEE, IRE. Member Radio Pioneers.
- JONES, CARY BODLEY (M) 1937 - Electrical Engineer, Director of Palo Alto Physicists and Consulting Engineers, P.O. Box 1059 Palo Alto, Calif; b. St. Louis County, Missouri August 9, 1910; married; ed. B.S. in E.E. Lehigh University 1934; interested in radio since 1927; professional experience Research in Electronics at Sperry Products 1936/1937, Engineering Laboratories, Tulsa 1938/1940, Research in Magnetic Recording Brush Development 1940/1945, Research Stanford University 1946 to date, Director Palo Alto Physicists 1948 to present.
- KAHN, LEONARD R (M) 1953 - Owner and Research Director, Kahn Research Laboratories, Elizabeth Building, 22 Pine Street, Freeport, New York; res. 46 West 95th Street, N.Y.C.; b. New York City June 16, 1926; ed. B.E.E. Polytechnic Institute of Brooklyn; single; interested in radio since 1940; amateur W2NOW since 1940; professional experience Consultant in Communications and Electronics, Research Director of Communications Laboratory, Member of the Electrical Engineering Department, Polytechnic Institute of Brooklyn; number of patents and patentpendings. Papers published in Proceedings of IRE and AIEE Electrical Engineering.
- KARDAUSKAS, EDMUND (M) 1950 - Electronic Engineer, Coles Signal Laboratory, Signal Corps Engineering Laboratories, Red Bank, N.J.; res. 24 East Price Street, Linden, N.J.; b. Elizabeth, N.J. October 26, 1924; ed. B.S.EE Newark College of Engineering 1949; married; interested in radio since 1938; professional experience Shepard Laboratories and Prese; Hobby - Audio.
- KEIM, LLEWELLYN B. (F) 1943 - res. 825 Fifth Avenue, New York 21, N.Y.; ed. A.B. Harvard College; b. New York City February 24, 1908.
- KELLERMAN, KARL F. (F) 1946 - Engineer, self employed, 1625 Connecticut Avenue, Washington, D.C.; res. 2243 49th Street NW, Washington, D.C.; b. Washington, D.C. May 11, 1908; ed. E.E. Cornell University 1929, Graduate work in Law, Economics and Electronics; married; interested in radio since 1921; amateur work extensive but unlicensed; member IRE, Cornell Society of Engineers, AAAS, Cosmos Club, Columbia Country Club, ex-Commander USNR; Hobby - Golf.
- KELLY, LEO A. (F) 1938 - res. 34-38 87 Street, Jackson Heights, N.Y.; b. July 7, 1897 Arlington, Mass.; ed. M.I.T., Harvard B.S. in E.E. 1918; professional experience - U.S. Signal Corps 1918/1919; Engineering Department Western Electric Co. 1920/1925, AT and T 1925/1929, International Communications Laboratories 1929/1932.
- KENNEDY, ROBERT E.L. (F) 1942 - Consulting Engineer, Kear and Kennedy, Washington, D.C.; res. Forest Heights, Md.; b. Norfolk, Va. January 19, 1910; ed. High School, Engineering Courses University of Virginia extension, George Washington University and Catholic University; married; interested in radio since 1921; Amateur station 3RT 1924/1928, W3CQK 1930/1935; professional experience 1945 to date Partner Kear and Kennedy, 1942/1945 Assistant Head Radio Section Bureau of Aeronautics, 1940/1942 Senior Engineer with John Barrow, 1938/1940 Engineer with Paul Godley; Lt. Cmdr. U.S.N.R. Senior Member IRE, Charter Member Association Federal Communications Consulting Engineers, Engineers Club of Washington; Hobby - Yachting, Capitol Yacht Club, Washington.
- KENNEDY, THOMAS R. JR. (F) 1951 - Associate Radio Editor and Radio Writer, New York Times, 229 West 43 Street, N.Y.C.; res. 128 Howard Terrace, Leonia, N.J.; b. Wheeling, W.Va. December 13, 1892;

MEMBERSHIP

ed. Carnegie Institute of Technology, E.E. Radio Engineering Navy Radio School Harvard 1917/1918; married; interested in radio since 1907; professional experience Ensign, U.S. Navy 1918, Navy Radio Inspector 1919/1920, qualified as Expert Radio Aide, Eagle Radio Company, Newark 1922/1923, Radio Editor Pittsburgh Post and Sun 1924/1926, Philadelphia Evening Ledger (Associate Editor) 1926/1927, The New York Times 1927 to present; wrote or contributed to many technical papers for the Navy, first assistant to Navy's first radio compass officer (Bowden Washington, deceased) Senior member IRE; Hobby - experimental work on circuitry (audio), loudspeakers, pickups; upwards of 25,000 records of radio music, largely Toscanini, all taken from FM broadcasts of concerts.

KENT, ROSCOE (F) 1949 - Professional Engineer and Manufacturers Representative self-employed; 495 43rd Avenue North, St. Petersburg, Fla.; b. St. Paul, Minn. February 22, 1885; ed. School, Navy, Correspondence, home study; interested in radio since 1904; professional experience, Chief Engineer Great Lakes Radiotelephone 1908/1910, Radio Telephone and Telegraph Co., DeForest Radio, Radio Inventions, Hogan Laboratories, Consultant and Manufacturers Representative to date; Builder of first two commercial radio telephone instruments for Sandusky tests 1907, Chief Engineer Radio Telephone Co. and supervised building and installation for Navy, Admiral Evans World cruise 1908, operating the equipment from Hampton Roads to San Francisco; Senior Member IRE, Charter member DeForest Pioneers.

KING, FRANK (CM,F,LM) 1909 - Consulting Engineer, Amy Aceves and King, Inc., 11 West 42 Street, New York City; res. 45 East 85 Street, New York City; b. New York City January 12, 1893; ed. New York University, Columbia University E.E. 1917; interested in radio since 1907; married; amateur station "FK" 1907, later 2MP 1925, W2MP 1929, constructed and operated first amateur Telephone Broadcasting Station in U.S. in 1911; professional experience, Radio Operator S/S Montgomery 1912, President King Radio Corporation New York 1922/1926, 1926 to date Consulting Engineer New York City, Licensed Professional Engineer New York State 1941; military, organized and was officer in Charge of the First U.S. Naval Aircraft Radio Laboratory, Hampton Roads, Va. 1918, Officer in Charge of Aircraft Radio Telephones Headquarters Northern Bombing Group (U.S. Navy) France 1919, U. S. Naval Headquarters Washington, D.C., and Anacostia; Sports - Tennis, Golf, Horseback, Hunting; Societies - Senior Member IRE, Life Member Friendly Sons of St. Patrick, Phi Gamma Delta; Radio Club of America Charter Member and First President.

KISHPAUGH, A.W. (M) 1921 - res. 10 Yale Terrace, West Orange, N.J.; ed. E.E. University of North Dakota; Western Electric Co. 1921 to date.

KLINGENSCHMITT, FRED A. (F) 1929 - Sales Engineer, Amy Aceves and King, Inc., 11 West 42 Street, New York City; res. Hudson View Gardens, New York City; b. New York City September 8, 1892; ed. High School; married; interested in radio 44 years; amateur 1908-1910; professional experience 1910/1916 commercial operator, installation and inspection, United Wireless Telegraph Co. and Marconi Wireless Telegraph Co. of America; World War One Military Intelligence Branch Lieutenant, Vice President, Sleeper Radio Corporation 1921/1927, E.T. Cunningham, Inc. 1928/1929; Amy, Aceves and King 1929 to present; Radio Club of America President 1944/1945, Vice President 1938, Corresponding Secretary 1934/1937.

KNOOP, WALTER A., JR. (F) 1942 - Professional Engineer, Gawler-Knoop Co. 178 Eagle Rock Avenue, Roseland, N.J.; res. Hathaway Lane, Essex Falls, N.J.; b. Chicago, Ill. May 14, 1919; married; ed. B.E.E. Rensselaer Polytechnic Institute; amateur W9KHG 1932, W2PXR and operated at W8XYR Whiteface Mountain Observatory; professional experience Manager Contract Division DuMont Laboratories until 1946; two patents on CR Tubes, articles for QST, Radio News, IRE Proceedings, Instruments Magazine; Member AIEE, IRE and Montclair Society of Engineers.

KRANZ, FRED W. (F) 1937 - Vice President, Sonotone Corporation, Elmsford, N.Y.; res. Pleasantville, N.Y.; b. Dixon, Ill. September 26, 1887; ed. A.B. Lawrence College (Appleton, Wisc.) M.A. University of Wisconsin, Ph.D. University of Chicago; married; interested in radio since 1917; professional experience Research Laboratories of Western Electric Co., Riverbank Laboratories, United Reproducers, Grigsby-Grunow, Magnavox and Sonotone; about ten patents, some in radio field, published about 20 papers.

KUNIK, I. JORDAN (M) 1952 - Patent Lawyer, 521 Fifth Avenue, New York, N.Y.; b. Hartford, Conn. November 10, 1912; ed. Wesleyan University, Harvard Law School; single; interested in radio since 1938; professional experience in Patent Law work in all phases of electronics; IRE, AAAS, American Bar Association, New York Patent Law Association.

LAFFERTY, RAYMOND E. (M) 1947 - Development Engineer, National Broadcasting Company, 30 Rockefeller Plaza, New York 20, N.Y.; res. 12-05 Sumner Place, Fairlawn, N.J.; b. Brooklyn, N.Y. July 12, 1918; ed. High School, RCA Institutes General Engineering Course; married; interested in radio since 1930; Amateur W8VTJ in Ogdensburg, N.Y. (expired); professional experience: engineer with Boonton Radio Corporation, Ferris Instrument Corporation, A.B. DuMont Laboratories; Chief Engineer WSLB, instructor with N.Y. State Signal Corps Training School, Paterson Radio Institute. Presently Development engineer with NBC since 1948; Several patents and a number of papers dealing with audio devices and radio frequency measurements; member of IRE and Audio Engineering Society.

LAMB, FRANCIS XAVIER (F) 1945 - Chief Engineer, Weston Electrical Instrument Corp., 614 Frelinghuysen Avenue, Newark 5, N.J.; res. 49 Mountainview Avenue, East Orange, N.J.; b. Newark, N.J. August 5, 1905; ed. Newark Technical School 1927-AE, Newark College of Engineering B.S. in E.E. 1930; married; interested in radio since 1920; amateur non-licensed experiments; professional experience Electrical Engineer with Weston Corp. from 1927 to 1937, Resident Engineer in Japan for Weston 1937/1939, Assistant Chief Engineer (Electrical) 1947, Chief Engineer 1952; Professional Engineer License 5773; 17 U.S. Patents; Member AIEE, IRE, ISA.

LANGER, PETER LAWRENCE (M) 1954 - Sylvania Electric Products Co., 209-10 Willets Point Blvd., Bayside, L.I., N.Y.; res. 43-55 168 Street, Flushing, L.I., N.Y.; b. New York City February 17, 1915; ed. Lawrence High School 1928/1934, Navy Electronics School 1943/1944; professional experience - Philco Field Service Engineer 1946/1949.

- LANGLEY, RALPH H. (F) 1928** - Assistant to President, Farrand Optical Co., 4401 Bronx Blvd. New York 70, N.Y.; res. 19 Alden Place, Bronxville, N.Y.; b. New York City January 5, 1889; ed. Columbia University E.E. 1913; married; interested in radio since 1906; built LKW Quenched Gap Transmitter in the Electro-Chemical Laboratory at Columbia; professional experience 1913/1916 with Colonel John Firth, 1916/1920 Marconi Wireless Telegraph Co. of America, 1920/1927 General Electric Co., Radio Department, Schenectady, 1927/1931 Director of Engineering Crosley Radio Corporation, Cincinnati, Ohio, then several years as Consulting Engineer following 1931; Coveleigh Club; Radio Club of America President 1935/1936, Vice President 1934, Corresponding Secretary 1933, Director 1932.
- LaPENNA, FRANK (M) 1949** - Instructor, Veterans Vocational School, Troy, N.Y.; res. Staten Island, New York City; b. New York City December 18, 1898; ed. RCA Institutes; married; interested in radio since 1933.
- LeBEL, CLARENCE J. (F) 1926** - Chief Engineer, Audio Instrument Co., 133 West 14 Street, New York 11, N.Y.; res. 370 Riverside Drive, New York 25, N.Y.; b. New York, N.Y. December 16, 1905; ed. S.B. and S.M. in E.E. MIT; single interested in radio six years, audio 27 years; professional experience 26 years Raytheon, Inc. Research Engineer 1927/1929, 1929/1932 Research Engineer, Hygrade Sylvania Co., Consulting Engineer, Audio Devices Inc. Maico Co., Audio Instrument Co.; 8 Patents, many papers, one book now in preparation; member AIEE, Acoustical Society of America, SMPTE, Fellow AES, Past President and now Secretary; Radio Club of America Director.
- LEE, RICHARD H. (M) 1948** - Account Executive Radio Station, KULH, Honolulu, T.H.; res. same; b. Pleasantville, N.Y. August 21, 1913; ed. University of Virginia (Law); married; interested in radio since 1928.
- LEMMON, WALTER S. (F) 1914** - President Radio Industries Corporation, 1 East 57 Street, New York 22, N.Y.; res. Greenwich, Conn.; b. New York City February 3, 1896; ed. E.E. degree Columbia University; married; Amateur Station "AX" New York 1908 and later licensed 2LE until 1917; professional experience U.S. Navy Radio Officer, Development Engineering Radio Receivers, general radio executive work, developed radiotype for International Business Machines Corp., International Broadcasting stations Boston; Radio Club of America Recording Secretary 1917/1920, Director 1915/1916, 1921/1922.
- LEMPERT, IRVING E. (M) 1941** - Engineer Allen B. DuMont Labs, Inc., Passaic, N.J.; res. 51 Linden Avenue, Metuchen, N.J.; b. New York City April 11, 1917; ed. Lehigh University B.S. in E.E.
- LESCARBOURA, AUSTIN C. (F) 1919** - Advertising Consultant, Austin C. Lescarbours and Staff, The Adshop, Croton-on-Hudson, New York; res. 105 Narragansett Avenue, Ossining, N.Y.; b. New York City June 5, 1891; ed. High School of Commerce, N.Y.C., evening courses, correspondence courses, Hon. D. Litt. Syracuse University and guest lecturer at School of Journalism; married; interested in radio since 1907; amateur spark coil station "JR" in New York 1908/1909; professional experience: Engineer with Telefunken Wireless Telegraph Company in New York 1908/1909, editor "Modern Electrics 1907/1908, Associate Editor of Dun's Review 1911/1912, Editor of Modern Electrics and Mechanics (Now Popular Science Monthly) 1912/1915, Managing Editor of Scientific American 1915/1924, Editor with Hardware Age 1925, owner industrial advertising agency 1925 to present; co-inventor of adjustable pitch mechanical phonograph reproducer; Books: "Radio for Everybody" (1921); "This Thing Called Broadcasting" (1931); Chevalier French Legion of Honor, Past Governor of Rotary International (New York Area); Hobby Photography; Advertising Club of N.Y., Rotary Club of Peekskill; Avocations: Lay preacher and Lay reader in Protestant-Episcopal Church; Radio Club of America Director 1927/1929.
- LEWIS HAROLD MILLER (F) 1925** - Patent Adviser U. S. Signal Corps, Evans Signal Laboratories, Belmar, N.J.; res. 510 Blanchard Parkway, West Allenhurst, N.J.; b. Geneva, N.Y. January 12, 1893; married; ed. B.E. Union College 1916, Radio Engineering Course Sorbonne, Paris 1919; interested in radio since 1906; amateur: electrolytic receivers 1906/1910; professional experience General Electric Research 1916/1917, Signal Corps Division of Research Paris 1918/1919, Radio Engineer Signal Corps 1919/1921, President Radio Service Laboratories 1921/1925; President LeMon Radio 1925/1927, Signal Corps Fort Monmouth 1927/1930, Hazeltine Electronics Corp. Engineer in charge of Television 1930/1937, Consulting Engineer 1939/1941, Hazeltine Corp. in Charge of I.F.F. Training 1942/1944, Technical Adviser Hazeltine Patent Department 1945/1946, Patent Adviser Signal Corps 1948 to present; about 60 U.S. Patents, papers in IRE and Electronics; original superheterodyne development with E.H. Armstrong 1918, Television Standards Committee 1931/1936, devised Whip Antenna for Army Tanks; member AIEE, IRE, American Physical Society.
- LONG, ESCO C. (M) 1950** - Project Engineer, Shepard Laboratories, Summit, N.J.; res. New Providence, N.J.; b. Twin Rocks, Penna. August 24, 1906; ed. Indiana State Teachers College B.S., Penn State and University of Pittsburgh Graduate Work; married; interested in radio since 1918; amateur: built various types transmitters and audio amplifiers; professional experience Radio Engineer Naval Research Laboratory, Washington, D.C., nine years Shepard Laboratories as Project Engineer in Electronics; High School instructor in Mathematics (12 years), Metropolitan Life Insurance Co. (2 years); U.S.N.R. (Electronics) during World War Two, Boy Scout (Eagle Scout), Played Baseball, Football, Basketball and Tennis; Hobbies - Gardening, Hunting, and Fishing; Lions Club (Secretary), PTA (President)
- LOUGHLIN, BERANRD D. (F) 1940** - Consulting Engineer, Hazeltine Electronics Corporation, 58-25 Little Neck Parkway, Little Neck, N.Y.; b. New York City, May 19, 1917; ed. Cooper Union B.E.E. 1939; Senior Member IRE, member AIEE.
- LOUGHREN, ARTHUR V. (F) 1925** - Director of Research, Hazeltine Corporation, Executive Vice President Hazeltine Research Corporation, 58-25 Little Neck Parkway, Little Neck, N.Y.; res. 22 Broadlawn Avenue, Great Neck, N.Y.; b. Rensselaer, N.Y. September 15, 1902; ed. B.A. 1923 E.E. 1925 Columbia University; married; interested in radio since 1913; Research Laboratory and Radio Engineering Department General Electric Co. 1925/1929, Engineering Department RCA Victor Co. 1930/1934, Hazeltine to present; and continuously in radio and TV since 1925; 29 U.S. Patents, Vice Chairman of National Television System Committee, and Chairman of N.T.S.C. Panel 13, Chairman of Joint Technical Advisory Committee; Fellow and Director of Institute of Radio Engineers.

MEMBERSHIP

- LYNCH, ARTHUR H. (F)** 1922 - Field Engineer, Arthur H. Lynch and Associates, Box 466, Fort Myers, Florida; b. Brooklyn, N.Y. July 2, 1894; ed. 3 Years High School several correspondence courses electronics etc.; married; interested in radio since 1908; amateur station Brooklyn and Jamaica, L.I. 1908; presently W4DKJ all bands; professional experience Marconi Wireless Telegraph Co. 1912, Army Officers Training School, Tours France World War One, Radio Department New York Times 1920, Director of Publicity RCA 1920, Editor Radio Broadcast 1924/1928, Manufacturer Fixed Resistors 1929/1940 and Noise Reducing Antennas 1937/1942, Editor Radio News 1935/1936, now represents 65 manufacturers in Florida; Senior Member IRE, Life Member VWOA and Recipient VWOA Marconi Medal; Hobbies - amateur radio, flying, yachting; Director Lee County Chamber of Commerce, Florida; Radio Club of America Recording Secretary 1924/1926
- LYON, WALTER (M)** 1951 - Communications Engineer, RCA Communications, Inc., 66 Broad Street, New York City; res. 3326 160 Street, Flushing, L.I., N.Y.; b. October 5, 1906 New York City; ed. Morris High School, McGill University B.S. in Engineering 1928, M.Sc. in Physics and Mathematics 1932; married; interested in radio since 1918; Professional experience Hazeltine Service Corporation 1929/1932, 1934/1937, Chief Engineer Wells-Gardner 1933/1934, Chief Engineer Emerson Radio TV Corp., Assistant Chief Engineer Majestic Radio and TV Corp. 1937/1938, RCA Victor design Engineer 1938/1945, RCA Institutes Division Staff engineer 1945/1946, RCA Communications senior design engineer 1946 to present; 11 U.S. Patents, several papers in "Electronics" "RCA Review"; member IRE, Cold Iron Society, Roslyn Rifle and Revolver Club; Chairman RTMA TR 6 Committee on Communications and Marine Aids 1949 to date; Professional Engineer, N.Y. State, Consulting Communications Engineer.
- MAC DONALD, WILLIAM ALEXANDER (F)** 1937 - Chairman of the Board, Hazeltine Electronics Corporation, 58-25 Little Neck Parkway, Little Neck, N.Y.; res. Bayville Road, Locust Valley, N.Y.; b. New York, N.Y. December 27, 1895; ed. University of Paris, France; married; interested in radio since 1913; amateur 2 years; professional experience 38 years, Radio Operator Marconi Wireless Telegraph Co. 1913/1915 aboard munitions ships, Laboratory assistant Western Electric Co. 1916, U. S. Army Signal Corps 1917/1918 advancing through grades to commissioned officer, assisted Edwin H. Armstrong in establishing at Paris first Laboratory, Division of Research and Inspection. Set up school at Orly and instructed pilots and observers in first air-borne radio-telephone equipment. During 1918, constructed first superheterodyne receiver under Armstrong guidance, Assistant Radio Engineer Civil Service Commission 1919/1920, Engineer Radio Corporation of America 1920-1924, Chief Engineer Hazeltine Corporation since 1924, Director since 1934, Vice President 1934-1952, President since 1952, President Hazeltine Electronics Corp. 1942-1952, Director since 1939, Chairman since 1952, President Hazeltine Research Corp. of California 1946-1952, director since 1946, Vice President, Director Latour Corp. Dover Delaware since 1935; 28 patents in radio; American Society of Naval Engineers, National Security Industrial Association, Armed Forces Communications Association, Army Ordnance Association, Fellow Institute of Radio Engineers, Director Radio-Electronics Television Manufacturers Association, Member Electronics Equipment Industry Advisory Committee of the Munitions Board, Member of the Joint Electronics Industry Committee, Awarded Certificate of Merit World War Two, Engineers Club.
- MacKAY, JOHN R. (M)** 1935 - Wallace and Tiernan Products, Inc., Bellville, N.J.; b. Framingham, Mass. October 26, 1900; ed. Wentworth Institute, Eastern Radio School, Hawley School of Engineering, amateur station 1914; four years marine operator.
- MacLAREN, FRED B. (M)** 1951 - Engineering Consultant, F.B. MacLaren Co., 15 Bay Drive West, Huntington, L.I., N.Y.; res. same; b. Jersey City September 9, 1915; ed. B.E. Degree E.E. Yale University 1936; married; interested in radio since 1928; amateur W1GYE; professional experience Engineering Consultant electronic and mechanical component design, development and production, Perkin-Elmer Corp. computer design 2 years, Glenn L. Martin Co. (airborne Fire Control System) 2½ years, Officer in Charge A.A. Fire Control Development Army Ordnance Department 4½ years, The Bristol Co. Electronic Development Engineer 4½ years; six patents on various industrial electronic instruments; "Servo-mechanisms for Industry" Applied Hydraulics 1953; Hobbies - Tennis, swimming, golf, bridge.
- MANSON, RAY H. (F)** 1931 - Retired from Stromberg, Carlson C.; res. 373 Beresford Road, Rochester, N.Y.; b. Bath, Maine August 25, 1877; ed. University of Maine B.S. (E.E.) 1898, E.E. 1901, D. Eng. 1933; married fifty years 1953; interested in radio over 36 years; professional experience: design and manufacture of Broadcast Radio Receivers and Components for Stromberg-Carlson Co. at Rochester, N.Y.; over 100 United States Patents on Communications and Kindred Subjects; President of IRE in 1931, member Acoustical Society, Fellow IRE, Fellow AIEE. At present Honorary Chairman of Board of Directors, Stromberg-Carlson Co.
- MARTIN, DEVEREAUX (M)** 1947 - Maryland Electronic Mfg. Co. 5009 Calvert Road, College Park, Maryland; b. Malden, Mass. December 26, 1905; ed. Malden High School 1920-1924, M.I.T. 1925-1929; professional experience: design engineer Federal Tel. and Radio Corp. 1939-1942, Factory Manager J.H. Bunnell and Co. 1942/1944, Chief Engineer Wilcox-Gay 1944/1946, Transmitter Design Radio Receptor Co. 1946/1947.
- MARX, ERNEST A. (M)** 1949 - Director International Division, Allen B. DuMont Laboratories, Inc., 350 Fifth Avenue, N.Y.C.; res. 446 Park Avenue, Manhasset, N.Y.; b. New York City March 9, 1896; ed. Columbia University B.S. E.E., U.S. Naval Research Laboratory, Bowdoin College, Electronics; married; interested in radio since 1910; Amateur 1910/1917; professional experience: General Manager DuMont Television, Chief Radio Theory Instructor U.S. Navy World War One, Electronics Officer Third Naval District (Radar) World War Two; Hobbies - Sailing (Ocean), Painting.
- MASIN, OLDRICH F. (F)** 1946 - Field Engineering Representative, O.F. Masin Co., 1 Wolf's Lane, Pelham, New York; res. 65 Durham Road, Bronxville, N.Y.; b. New York City June 7, 1900; ed. B.S. in E.E. Cooper Union Day Technical School; married; interested in radio since 1921; professional experience: Radio Corporation of America Harrison, N.J. Development 200A and 201A, Ward Leonard Electric Co., Mt. Vernon, N.Y. Design and Development of resistors and rheostats 9 years, past 20 years in O.F. Masin Co. representing Companies such as Cannon Electric, Ohmite Mfg. Co., Leach Relay Co., Switchcraft Inc., Lenz Electric Mfg. Co., Sigma Instruments, Inc., Diamond Mfg. Co., Industrial Timer Co.

- MAYER, WILLIAM G. (F) 1921** - Electronic Engineer, Evans Signal Laboratories, U. S. Army Engineering Labs., Belmar, N.J.; res. 404 Sixth Avenue, Asbury Park, N.J.; b. New York City January 13, 1900; ed. Columbia University B.S. 1922; single; interested in radio since 1912; amateur since 1916, W2NF Class A license, First Class Radiotelephone license; professional experience: Marconi Wireless Telegraph Co., Aldene, N.J. Engineering Department World War One, Signal Corps Engineering Laboratory 12 years since 1941; 3 Patents relative to "Electronic Ignition System for internal combustion engines", "Triggered spark gap for Radar Modulators," "Improvement in Ignitrons"; Member ARRL, U. S. Power Squadrons; Hobbies - Boating and deep sea fishing; amateur radio, Collector of Chinese Art, Paintings.
- MAYHEW, B. ALLEN (M) 1928** - Chief Engineer, National Sugar Refining Co., New York City; res. 4 Coppel Drive Tenafly, N.J.; b. Englewood, N.J. March 12, 1897; ed. M.E. Stevens Institute of Technology, P.E. N.Y. State; married; interested in radio since 1911; amateur 1913 2HP, 1KB in 1916, W2BYW 1921, K2DD 1951, extra class 1953; member of Tenafly Boro Council 1944/1951 (Police Commissioner); Hobbies - Amateur Radio, photography; Societies - ASME, Sugar Industry Technicians, N.N.J. Radio Association.
- MCAINSH, NEVILLE J. (M) 1936** - Radio Engineer, General Electric Co., Ltd., Stoke, Coventry, England; b. Manchester, England October 28, 1899; ed. Associate of College of Technology, Manchester; professional experience: design and development Broadcast Receivers and allied apparatus since 1912.
- MCCOY, DANIEL C. (F) 1921** - General Sales Department, Frigidaire Division, General Motors Corp., 300 Taylor Street, Dayton 1, Ohio; res. R.R. 2 Box 319, Dayton 10, Ohio; b. New York City December 22, 1894; ed. Public Schools of Tarrytown and Yonkers, N.Y., Cornell University (Chemistry); married; interested in radio since 1900; active amateur since 1906 except for war periods and brief periods due to change in residence; professional experience: Marine operator 1911-1916 (summer vacations), Lecture Assistant Department of Chemistry Cornell University 1914/1917, Commanding Officer Signal Corps and Air Service World War One, Sales and Sales Management in automobile business 1919/1925, Frigidaire Division General Motors 1925 to present, activities included sales and sales engineering work on ice cream cabinets, commercial and industrial refrigeration and air conditioning editing three commercial engineering manuals on refrigeration, direction of frozen food research during and after World War Two; member Institute of Food Technologists, American Society of Agricultural Engineers, American Society of Refrigerating Engineers; Engineer's Club of Dayton, ARRL, Old Timers Club, Quarter Century Wireless Association, Dayton Amateur Radio Association (Past President), Delta Upsilon Fraternity, Scabbard and Blade, Alembic (Cornell); Hobbies - Amateur radio, Fishing and Sailing.
- MCDUGALL, DUGALD S. (M) 1950** - Patent Attorney, Casper W. Ooms, 209 S. LaSalle Street, Chicago 4, Ill.; res. 1204 Gregory, Wilmette, Ill.; b. Indianapolis, Indiana May 15, 1916; ed. A.B. University of Chicago 1935, J.D. University of Chicago 1937, special courses Harvard University radar and ultra-high-frequency techniques 1943, MIT 1943; married; interested in radio since 1927; amateur W9CVQ since 1929, presently W9CVQ; professional experience: practiced patent law since 1946 with emphasis on electronics, Instructor in Radar U.S. Naval Reserve 1943-1945, Naval Research Laboratories 1945/1946; member IRE, American Bar Association.
- McKENZIE, ALEXANDER ANDERSON (F) 1948** - Associate Editor, Electronics Magazine, McGraw-Hill Publishing Co., 330 West 42nd Street, New York 36, N.Y.; res. 245 Poplar Avenue, Hackensack, N.J.; b. Albany, N.Y. October 2, 1908; ed. Albany public Schools and Albany Academy 1928, Dartmouth College A.B. 1932; married; interested in radio since 1920; amateur W1BPI (1931) and W2SOU 1946 but continuously licensed; professional experience: radio operator or radio operating engineer at Mt. Washington, N.H. Observatory, Research Assistant Yankee Network, Inc., Research Assistant Carnegie Institution of Washington, Staff member Radiation Laboratory MIT; Member (SM) IRE, Institute of Navigation, ARRL, Appalachian Mountain Club, Mt. Washington Observatory Inc.; Active in Hackensack politics, PTA and similar school-centered work, local church work; Co-editor "Loran", author and publisher "Key and Answers to New Radiotelegraph Examination Questions", "Radio Operating Questions and Answers"; pioneered in 5 meter and 2.5 meter communications between Mt. Washington and Blue Hill Observatory 1935/1937 and with Radiosonde at 60 mc and during 1937 on similar sounding at the Bartol Research Foundation, returned to Mt. Washington to install Yankee Network 41 mc FM station and heard first FM Signals from Alpine in 1938; transferred to Paxton 1939 on first 50 KW FM station, Radiation Laboratory MIT 1942 on Loran with field work in U.S., Canada, Labrador and Newfoundland; Electronics 1945 to present.
- McMANN, RENVILLE H. (F) 1919** - Eastern District Radio and Television Manager, Westinghouse Electric Corporation, 40 Wall Street, New York City; res. 60 East 96th Street, New York City 28, N.Y.; b. New York City June 29, 1895; ed. Choate, U.S. Naval Radio School, Harvard University; married; interested in radio since 1912; amateur 2 MC from 1919 to 1928; professional experience R.H. McMann, Inc. radio distributors, 12 Warren Street, N.Y.C., Procurement Director Republic Aviation, December 1942 to 1945, then Westinghouse to present; Past President West Side Tennis Club, Vice President United States Lawn Tennis Association; Radio Club of America Corresponding Secretary 1921/1924.
- McMANN, RENVILLE H., JR. (F) 1944** - Television Engineer, National Broadcasting Co., 30 Rockefeller Center, New York City; res. 60 East 96th Street, New York City; b. New York City August 20, 1927; ed. B.E. Yale University 1950; single; interested in radio since 1941; amateur pioneer in Teletype activities; professional experience: two summers and one and one-half years in Columbia University Laboratory of Major E.H. Armstrong, National Broadcasting Co. Research and Development 1952/1954.
- MEYERS, JAMES G. (M) 1949** - Government Electronics Inspector, Department of Defense, 70 East 10th St., N.Y.C.; res. 1056 Sheridan Avenue, Bronx 56, New York; b. New York City January 13, 1914; ed. University of Illinois, RCA Institute, Capitol Radio Engineering Institute; interested in radio since 1933; married; ex-amateur and ship's operator, American Export Line; professional experience: radio operator 2 years, Chief Engineer 5 years, Laboratory Electronic Engineer 10 years, Government Electronics Inspector 1 year, U.S. Marines 2 years; Captain U.S. Marines Radar School, Senior Member IRE, Charter Member AES; Hobbies - Radio, Audio Amplifiers; Contributor Radio and Television News; Sports - wrestling.
- MILLER, ARTHUR G. (M) 1949** - Electrical Manufacturing, Delta Electronics, 259 Green Street, Brooklyn, N.Y.; res. 149 Greenway Blvd., Elmont, L.I., N.Y.; b. New York City January 3, 1916; ed. Cooper Union; married; interested in radio since 1925; First Class Radio Operator.

MEMBERSHIP

- MILLER, DONALD H. (M) 1944 - New York District Manager, Electronics, McGraw-Hill Publishing Co., 330 West 42nd Street, New York City; res. 2 Chester Terrace, Hastings on Hudson, N.Y.; b. Cambridge, Mass. May 4, 1902; ed. B.S. in Engineering Tufts College; married; interested in radio since 1921.
- MILLER, JOHN HAROLD (F) 1933 - Vice President, Weston Electrical Instrument Co., Newark, N.J.; res. Short Hills, N.J.; b. Oak Park, Illinois June 6, 1893; ed. B.S.E.E. University of Illinois 1915; married; interested in radio since 1907; amateur spark transmitter and receiver Oak Park, Illinois 1907/1911; professional experience in conjunction with engineering work on electrical measurements, application to radio in all its aspects has always played a prominent part; some 35 patents, miscellaneous papers on measurement before AIEE and IRE; Radio Club of America President 1937/1938, Vice President 1936, Director 1934.
- MINTER, JERRY B. (F) 1942 - President, Components Corporation, Denville, N.J.; res. Box 1, Boonton, N.J.; b. Ft. Worth, Texas October 31, 1913; ed. B.S. MIT 1934; married; interested in radio since 1925; amateur ex-WIEQC and ex-W2RDH; professional experience: Boonton Radio Corporation 1935 development band-pass intermediate frequency transformers, Radio Frequency Laboratories 1936 aircraft radio receivers, Malcolm P. Ferris 1936/1939 in charge of development of a signal generator, a radio noise and field strength meter, 1939 assisted in organizing Measurements Corporation and Vice President and Chief Engineer until 1953; member Aircraft Owners and Pilots Association, American Society for Metals, Executive Vice President Audio Engineering Society; assisted in organizing Northern New Jersey Sub-section IRE and acted as Chairman of the Sub-section 1947/1948; numerous RMA, IRE, SAE and ASA Standards Committees; several patents in his field of work and numerous papers ranging from Audio Distortion to Standard Signal Generators; Radio Club of America President 1948/1949, Director.
- MORELOCK, O. JAMES (F) 1937 - Assistant Chief Engineer, Weston Electrical Instrument Co., Newark 5, N.J.; res. Millington, N.J.; b. Lockport, N.Y. Rensselaer, Brooklyn Polytechnic Institute E.E.; married; interested in radio since 1928; professional experience: electronics in the field of measurement, tube testing, signal generators, component design and associated instrument problems; about ten patents; avocation: country estate at Millington with 30 acres, riding horses and some cattle; Radio Club of America President 1950, (conducting the IBCG Monument Dedication), Vice President 1944/1947, Corresponding Secretary 1942/1943.
- MORTON, ALFRED HAMMOND (F) 1928 - General Electric Co., Radio Corporation of America, European Director Paris; National Broadcasting Co., Vice President; 1950 Twentieth Century Fox Film Corporation, Director of TV; President Artists and Concert Bureau, Voice of America, State Department.
- ODGERS, ARTHUR J. (M) 1950 - Vice President, Northern Radio Co.; res. 80 Heights Road, Plandome, L.I., N.Y.; b. Calumet, Mich. August 6, 1912.
- OFFENHAUSER, WILLIAM H. (F) 1936 - Engineer, self-employed and Andre Debrie of America, Inc., 1947 Broadway, New York 23, N.Y.; res. New Cannan, Conn.; b. Brooklyn, N.Y. May 8, 1904; ed. B.A. Columbia (with Engineering Option); married; interested in radio since 1915; always on fringe of amateur station, still have hopes of running ham set; made first recordings of mosquito sounds, confirming Hiram Maxim's findings after 75 years; about 20 patents, one book on 16mm sound motion pictures another in preparation on micro-recording, numerous technical papers; Board of Governors SMPTE, member Acoustical Society of America, IRE.
- OSBAHR, BERNARD FREDERICK (M) 1951 - Executive Editor, Tele-Tech and Electronic Industries (Caldwell-Clements) 480 Lexington Avenue, New York City; res. 16 Silver Beach Road, Old Greenwich, Conn.; b. Brooklyn, N.Y. December 17, 1918; ed. University of Pennsylvania, RCA Institutes Inc.; married; interested in radio since 1933; professional experience 1939/1942 Engineer RCA Mfg. Co. Camden, N.J.; 1942 Chief Engineer New York School of Radio; 1943/1946 U.S. Army Signal Corps; 1946/1947 Chief Electrical and Mechanical Procurement USFET Corps of Engineers (Germany); 1947/1948 Director Services Division U.S. Army Exchange Service; 1948 to present Editor Tele-Tech; member IRE, AES; Hobbies - fishing, golf, boating.
- OSBORN, PERRY H. (M) 1944 - Radio Engineer, Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, N.Y., res. Haworth, N.J.; b. Buskirk, N.Y. August 31, 1904; ed. E.E. Rensselaer, Polytechnic Institute, M.Sc. University of Pittsburgh; married; interested in radio since 1920; amateur W2FAA; Radio Engineer with Westinghouse, Signal Corps, RCA and E.H. Armstrong.
- OSTERLAND, EDMUND (M) 1950 - Electronic Instrument Design and Manufacture, Edmund Osterland Co., Denville, N.J.; res. Mountain Lakes, N.J.; b. Brooklyn, N.Y. August 5, 1909; ed. B.S.E.E. New York University; married; interested in radio since 1925; professional experience Chief Engineer, Ballantine Labs., Inc. until January 1952, own business since that time.
- OTIS, G. EDWIN (M) 1953 - Engineer, Otisonde, Inc., 380 Clinton Avenue, Albany, N.Y.; res. 832 Jay Street, Albany, N.Y.; b. Plattsburg, N.Y. August 11, 1915; Graduate Union College 1938; married; interested in radio since 1930; professional experience - General Electric Co., 1941/1943, U.S. Army Signal Corps 1943/1946, instructor in radio and television at Veterans Vocational School, Troy, N.Y.; presently President of Otisonde, Inc., majoring in Hi-Fi Custom Sound Installations and Industrial Television; Technical article in "Radio" 1943 on volume expander, U.S. Army, - developed special test equipment for carrier telephone and a noise suppressor for background line noise.
- PACKARD, LUCIUS E. (F) 1940 - Engineer, President, Sales Manager, Technology Instrument Corporation, Acton, Mass.; res. Framingham Centre, Mass.; b. Somerville, Mass. January 21, 1914; ed. Graduate MIT 1935; married; interested in radio since 1928; amateur WIDFL; patent, variable resistor, Patent Electric method and system for measuring Impedance and Phase Angle (conjunction with Hermon H. Scott).

THE RADIO CLUB OF AMERICA, Inc.

- PAGE, ESTERLY CHASE (M) 1945 - Consulting Engineer, Partner, Page, Creutz, Garrison and Waldschmitt, 710 14th Street NW, Washington 5, D.C.; b. Cook, Ill. July 16, 1902; Senior Member IRE, member Engineers Club, New York, ex-Lieut. Colonel AUS Signal Corps.
- PAINE, ROBERT C. (F) 1935 - Test Engineer, Measurements Corporation, Boonton, N.J.; res. 436 Cornelia Street, Boonton, N.J.; b. South Randolph, Vermont, August 10, 1895; ed. Electrical Engineering at Worcester Polytechnic Institute and Marine Engineering at Webb Institute of Naval Architecture 1914/1917; married and two granddaughters; interested in radio since 1928; left college for Army 302nd Field Artillery 1917/1919, attended Royal Technical College 1919, Technical Staff Bell Telephone Laboratories 1923/1932, Ferris Instrument Corporation 1934 specializing on signal generators to the present; senior member IRE, Masonic Lodge.
- PALMER, CHARLES WALTER (F) 1935 - Engineer, Western Electric Co., Inc., Chatham Road, Winston-Salem, N.C.; res. 2429 Fairway Drive, Winston-Salem, North Carolina; b. Kingsbridge, N.Y. August 26, 1907; ed. E.E. Cooper Union and Cornell University, also studied at Columbia University, New York University and Stanford University; married; interested in radio since 1919; amateur formerly W2EV, W2BOY until 1940; professional experience: Technical Assistant Bell Telephone Laboratories 1928, Engineer Dresser Mfg. Co. 1929, Engineer Western Electric Co. 1929, Technical Editor Radio News Magazine 1931, Technical Editor and Managing Editor Radio-Craft Magazine 1933, Engineer, Section Chief and Department Chief Western Electric Co., Inc. Radio Division 1936 to date, presently Chief of Test Set Design Department; numerous articles in technical publications AIEE, Radio Magazine, Radio News, Radio-Craft; associated with radar and sonar engineering since 1940; Senior Member IRE, District Commissioner Boy Scouts of America.
- PANTER, PHILIP F. (M) 1946 - Electronics Engineer, Federal Telecommunication Laboratories, Nutley, N.J.; res. 6 Hooper Avenue, West Orange, N.J.; b. Poland January 9, 1908; ed. McGill University 1929/1936, B.S. 1933, B.Eng. 1935 and Ph.D. 1936; married; professional experience: teaching one year in Palestine, teaching mathematics and physics Sir George Williams College, Montreal and staff of Physics Department McGill University until 1945, 1941 Canadian Marconi Co. Montreal, 1945 Federal Telegraph and Radio Corporation, Senior Engineer in Charge of Development of FM Broadcast Equipments, International Standard Electric Corporation technical adviser on telephone installations in Israel, Federal Telecommunications Laboratories since June 1952; Senior Member IRE and Member American Technion Society; author of various papers on FM and PCM.
- PAPAMARCOS, GEORGE (F) 1940 - Project Engineer, Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, N.Y. res. 50 Clay Lane, Levittown, N.Y.; b. New York August 6, 1914; ed. Brooklyn Technical High School, RCA Institute; married; interested in radio since 1933; amateur W2FZM advanced class; professional experience: five years with U.S. Navy as Chief Radio Technician and Electronics Officer, 8 years with REL as Junior Engineer and Project Engineer on FM Broadcast and Radio Relay transmitters; Associate Member IRE, member ARRL.
- PARETTO, ARMANDO (M) 1954 - Technical Assistant, Bell Telephone Laboratories; res. 248 Boerum Street, Brooklyn 6, N.Y.; b. New York City January 31, 1927; ed. Metropolitan 1941/1944, RCA Institutes; professional experience: E. H. Armstrong Laboratory Columbia University 1954.
- PARKES, ALANSON WILLISTON JR. (M) 1947 - Radio Engineer, Aircraft Radio Corporation, Boonton, N.J.; res. 47 Cobb Road, Mountain Lakes, N.J.; b. Sandwich, Mass. December 24, 1899; ed. Clark University A.B. 1922, Lafayette College A.M. 1926, Harvard University A.M. 1929; married; interested in radio since 1912; amateur intermittently 1912/1930; Physics Instructor 1922/1930, Radio Engineer 1930 to present; U. S. Navy World War One Chief Electrician Radio; currently Vice President in charge of Field Engineering and Sales Division of Aircraft Radio Corp. since 1948.
- PETRY, CHARLES B (M) 1942 - Senior Project Engineer, Hoffman Radio Corp. 6200 South Avalon Blvd., Los Angeles 3, Calif.; res. 2739 Orange Avenue, La Crescenta, Calif.; b. Paterson, N.J. May 13, 1904; ed. Paterson High School, Bell Laboratories Technical School, Columbia University Extension courses; married; interested in radio since 1918; amateur W6NIV; professional experience: in all branches of engineering since 1923; several patents; Senior Member IRE; Hobbies - Gunsmithing and Gem and Lapidary Work, amateur radio.
- PICKARD, GREENLEAF WHITTIER (F) 1915 - Consulting Engineer, Pickard and Burns, 240 Highland Avenue, Needham, Mass.; res. 59 Dalton Road, Newton Centre, Mass.; b. Portland, Maine February 15, 1877; ed. Lawrence Scientific School (Harvard) and M.I.T.; married; interested in radio since 1898; amateur experience, technically began in summer 1898 and continues to present; professional experience: Blue Hill Observatory 1898-1899, American Wireless Telegraph and Telephone Co. 1900/1902, Engineer at A.T. & T. Co. 1902-1906, Wireless Specialty Apparatus Co. 1907-1931, General Radio Co. 1931/1932, Consultant Yankee Network 1933/1941, Director Research American Jewels Corp., Attleboro, Mass. 1941/1945, President and then Chairman of the Board Pickard and Burns 1945 to present; 102 U.S. and Foreign patents, principally in radio; many technical papers on radio and largely in IRE Proceedings; Fellow and Past President IRE, Fellow AIEE, Fellow American Academy of Arts and Sciences, member American Meteorological Society, A.G.U., Old Old Timers Club, Radio Pioneers, V.W.O.A.
- PICONE, JOHN B. (M) 1930 - 2016 West 8th Street, Brooklyn, N.Y.; b. Italy December 3, 1906; ed. Commercial High School and YMCA Radio Institute.
- PITMAN, DONALD A (M) 1951 - Engineer Manager, Marconi Wireless Telegraph Co., 23 Beaver Street, New York City; res. 71 Harbor Vidor Place, Staten Island, N.Y.C.; b. Birmingham, England; married; ed. South-end Technical College, Essex England; interested in radio since 1931; professional experience 22 years in design, development and production and sales; 2 British Patents.
- POPKIN, CLURMAN, J.R. (M) 1950 - President (Radio Engineer), Telechrome, Inc., Amityville, L.I., N.Y.; res. 46 Lee Street, Roosevelt, L.I., N.Y.; b. Brockton, Mass. August 29, 1916; ed. M.I.T. S.B. 1938, Harvard Business School 1940, also Brooklyn Polytechnic Institute and Columbia; married; interested in radio since 1922; amateur W1EPH, W2LNP; professional experience Hazeltine Electronics

MEMBERSHIP

- Corp., Panoramic Radio Corporation, Servo Corp. of America, Signal Corps, Automatic Radio; 4 Patents pending; over 30 technical articles published; Senior Member IRE, Nassau Radio Club.
- POPPELE, J.R. (F) 1940** - Voice of America, Washington, D.C.; res. 9 Crest Circle, South Orange, N.J.; b. Newark, N.J. Feb. 4, 1898; married; professional experience: radio operator on commercial vessels 1915/1920, Chief Engineer WOR Broadcasting Station 1922/1952, Vice President 1946/1952, Secretary 1936/1948, Director 1936/1952, Mutual Broadcasting System Board of Directors 1947/1952, Radio Consultant to New Jersey State Police; President of Television Broadcasters Association for seven years, Founder of original FM Broadcasters Association, President Radio Pioneers Club, Fellow IRE, Member Board of Directors Veteran Wireless Telegraph Operators Association, Trustee South Orange Presbyterian Trinity Church, member Advertising Council Upsala College, member American Physics Society, Society of Motion Picture Engineers, member Committee on Civil Defense Planning under office of Secretary of Defense; Hobbies - Golf, Photography.
- PORTER, H.F. (M)** - Old York and Tetson Roads, Elkins Park, Philadelphia 7, Pa.
- PRATT, HARADEN (F) 1930** - Engineer, Retired, 800 Quaint Acres Drive, Silver Spring, Md.; b. San Francisco, Calif. July 18, 1891; ed. University of California B.S. in Electrical Engineering 1914; married; interested in radio since 1905; amateur 1905/1915; President and Secretary Bay Counties Wireless Telegraph Association 1910/1914; professional experience: United Wireless Telegraph Company and Marconi Wireless Telegraph Co. San Francisco ship and shore station operator and installer 1910/1914, Marconi high power 300 kw trans-Pacific stations at Bolinas and Marshall, California 1914/1915; U.S. Navy Department Bureau of Steam Engineering Expert Radio Aide at Mare Island Navy Yard and then at Washington in charge of construction and maintenance of all high power naval radio stations during World War One; Federal Telegraph Co. engineer in charge of factory and design and construction of its Pacific Coast public service telegraph system 1920/1923; private business in California 1923/1928; Western Air Express constructed and supervised high frequency radio telegraph system between Los Angeles and Salt Lake City 1925/1927; Bureau of Standards Washington development radio aids for air navigation 1927/1928; Mackay Radio and Telegraph Company Chief Engineer in 1928 and then Vice President until 1951; Telecommunications Advisor to the President of the United States 1951/1953; Fellow, Director, Secretary and past President of IRE, Fellow AIEE, Associate Fellow Institute of Aeronautical Sciences, Honorary Life Member of the Institution of Radio Engineers Australia, Life Member VWOA.
- QUIST, ANDREW HAROLD (M) 1940** - Electronic Engineer, Signal Corps, Ft. Monmouth, N.J.; res. 160 Grand Avenue, Long Branch, N.J.; b. Brooklyn, N.Y. December 31, 1911; ed. Brooklyn Technical High School; Cooper Union; married; interested in radio since 1931; professional experience: radio servicing 5 years, production foreman and FM Test Engineer Radio Engineering Laboratories, Inc. 5 years, Signal Corps Maintenance Planning Engineer 10 years; Papers "FM Mobile Equipment" FM Magazine 1942, "Radio Control for your Model Railroad" The Model Railroader 1941; Hobbies - High Fidelity Audio, model railroad electronic control; AIEE, National Model Railroad Association.
- RANDALL, HERBERT D. JR. (M) 1948** - 102 High Street, Weekapaug, R.I.; b. Providence, R.I. November 17, 1916; ed. University of Rhode Island B.S.; married; interested in radio since 1943.
- RANGER, RICHARD H. (F) 1929** - President Rangertone, Inc., 73 Winthrop Street, Newark 4, N.J.; res. 574 Parker Street, Newark 4, N.J.; b. Indianapolis, Ind. June 13, 1889; ed. B.S. Mass. Inst. Tech. 1911; married; interested in radio since 1907; amateur first station in Indianapolis 1909; professional experience: RCA 1920/1930, Rangertone 1930, Captain Signal Corps World War One, Colonel Signal Corps World War Two, Commanding Officer Signal Laboratories, Ft. Monmouth 1919, pioneer in radio facsimile and tape recording; 55 patents, books "Radio Pathfinder", Artillery Lines of Information"; Hobby - music; Member IRE, AIEE, Acoustical Society of America, Audio Engineering Society, Franklin Institute, American Optical Society, Royal Society American Guild Organists.
- REDINGTON, JOHN H. (F) 1935** - Radio Engineer, Measurements Corporation, Boonton, N.J.; res. 324 Cornelia Street, Boonton, N.J.; b. Brooklyn, N.Y. October 5, 1904; ed. High School and supplementary engineering courses; married; interested in radio since 1923; amateur W3FNM 1936/1941; professional experience Bell Telephone Laboratories 10 years, past 20 years engaged in design development and manufacturing of radio test equipment and in the sales engineering field.
- REPLOGLE, DELBERT E. (F) 1928** - Engineer, Electronic Mechanics, Inc., 101 Clifton Road, Clifton, N.J.; res. 300 Godwin Avenue, Ridgewood, N.J.; b. Douglas, Alaska July 31, 1896; ed. Pacific College A.B. and B.S. 1916, M.I.T. B.S. 1924, M.S. 1925; married; interested in radio since 1916; built and operated station NZO in Alaska, 60 miles north of Arctic Circle, W2XAE at Ridgewood; professional experience: Vice President and Chief Engineer DeForest Radio 1930/1934, President Electronic Mechanics 1936 to present, President of General Electronics 1942/1952, President of Arcturus Electronics 1952 to present; patents on cable protection devices, radio and television circuits; Member DeForest Pioneers; Radio Club Director 1932.
- RETTENMEYER, F.X. (F) 1928** - Engineer, Philco Corporation, Tioga and "C" Streets, Philadelphia, Pa.; res. 709 Stanwick Road, Moorestown, N.J.; b. Kendrick Oklahoma July 27, 1900; ed. M.A. Columbia University 1925; married; professional experience: Bell Telephone Laboratories 1922/1935, RCA Mfg. Co. 1935/1940, Federal and Philco to date; Radio Club of America Vice President 1935, Recording Secretary 1933, Director 1929, 1931/1932.
- RICE, C. THOMAS S. (M) 1954** - Edgar L. Scillotoe Engineering Laboratories, 617 Brooklyn Avenue, Brooklyn, N.Y.; res. 347 East 51 Street, New York 22, N.Y.; b. Brooklyn, N.Y. October 27, 1893; professional experience: instructor in communications U.S. Maritime Service 1944, product specialist Geophysical Equipment 1945/1951, U.S. Air Force A.M.C. 1952.

- RICHARDSON, AVERY G. (F)** 1941 - Division Head, Radio Direction Finders, Federal Telecommunication Laboratories, 500 Washington Avenue, Nutley, N.J.; res. 180 Vreeland Avenue, Boonton, N.J.; b. Brooklyn, N.Y. March 22, 1901; ed. Boys High School, Brooklyn, Polytechnic Institute Brooklyn E.E. 1924; married; interested in radio since 1928; professional experience: radio receiver design for Brunswick, Bremer Tully and DeWald, Radio Compasses at Fairchild, FM Signal Generators at Boonton Laboratories, military Direction Finders at Federal; about 18 patents, IRE papers at Rochester and Dayton; member IRE, AIEE, Institute Aeronautical Sciences, Acoustical Society of America.
- RICHARDSON, HARRIE K. (M)** 1951 - res. 551 Doremus Avenue, Glen Rock, N.J.; b. Pauls Valley, Oklahoma July 27, 1909; Associate Editor Audio Engineering Magazine.
- RICHARDT, JOHN W. Jr. (M)** 1951 - Electronic Engineer, J.W. Richardt Engineering Co., Lyons, N.J.; res. Cove Lane Road, Whippany, N.J.; b. May 29, 1922; ed. B.S. Physics, B.S. Mathematics Indiana State, working on MS in EE at Stevens; married; interested in radio since 1933; amateur W2WIIY since 1947; professional experience Bell Telephone Laboratories six years, Chief Project Engineer at Tel-Instrument Corp. on Navy Subcontract, last three years as field engineer; One patent on electronic circuit assigned Bell Labs; member Essex County Sheriffs Department, North Jersey Mobile Amateur Radio Club.
- RIDER, JOHN F. (F)** 1931 - Author and Publisher, 480 Canal Street, New York City; b. New York City, April 30, 1900; ed. High School of Commerce and Cooper Union. Radio Engineer, J.W. Jones Radio Mfg. Co. 1921/1923; Chief Engineer, J.W. Jones Mfg. Co. 1924/1925; Radio Research and Consulting Work 1926-1928; radio feature writer 1921 to date for New York Sun, New York Telegram, New York Herald Tribune, New York World. Associate Editor Radio Engineering; Managing Editor, Radio Listener Guide & Call Book; Technical Editor, Motion Picture News. Publisher of radio books since 1927.
- ROBERTS, WILLIAM (M)** 1952 - res. Littleneck Road, RFD #5 Huntington, L.I., N.Y.
- ROBERTSON, JOHN F. (M)** 1942 - 129 Soundview Avenue, Huntington, N.Y.; ed. B.S. University of Wisconsin.
- ROCKETT, FRANCIS, H. (M)** 1949 - Technical Report Consultant, Airborne Instruments Laboratory, Inc., 160 Old Country Road, Mineola, N.Y.; res. 226 Sylvan Drive, West Hempstead, N.Y.; b. Philadelphia, Pa. September 9, 1919; ed. B.S. in E.E. Lehigh University 1942; married; interested in radio since 1932; professional experience: Junior Radio Engineer The Johns Hopkins University, Laboratory Assistant Lehigh University, Laboratory Instructor Columbia University, Associate Editor "Electronics"; member IRE, AIEE.
- RONALD, THOMAS T. (M)** 1946 - res. 470 Piaget Avenue, Clifton, N.J.; b. Vrdnik, Yugoslavia January 19, 1906; ed. Technical College Mittweida, Germany, Newark College of Engineering E.E. 1933.
- ROSS, RICHARD M. (M)** 1953 - District Sales Manager, Sylvania Electric Products, Inc., 1740 Broadway, N.Y.C.; res. Flushing, N.Y.; b. Cambridge, Mass. June 13, 1923; ed. B.S.E.E. University of Maine 1948; graduate of Lexington, Mass. High School and Hebron, Maine Academy; married; interested in radio since 1938; professional experience: 5 years with Sylvania as Test Engineer, Applications Engineer and Sales Engineer, 4 years U.S. Navy as radio technician U.S.S. Guadalcanal; member IRE; Hobbies - Golf, boating, photography.
- ROUND, HENRY JOSEPH (HM)** 1952 - Physicist, self-employed, 88 Lyonsdown Road, New Barnet, England; b. Worcester-shire, England June 2, 1881; ed. Cheltenham Grammar School, Royal College of Science, London, City and Guild Technical College, London; married, seven children, eight grandchildren; interested in radio since 1902; professional experience Marconi Wireless Telegraph Co. of England, Marconi Wireless Telegraph Co. of America (now Radio Corporation of America) and since 1932 own laboratory, pioneered in development of radio frequency amplifiers and their application to direction finders that spotted the departure of the German fleet leading to the famous Jutland engagement of World War One; very many patents on radio, gramophones, microphones, loudspeakers, talking pictures, underwater signalling, magneto-stricture transducers; large number of technical papers and one book on Tetrodes (1927); Institute of Electrical Engineers (Britain) Duddell Premium (Twice); Radio Club of America Armstrong Medal 1952.
- RUNYON, CARMAN A. JR. (F)** 1912 - Pres., Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, N.Y.; res. Glen Cove, L.I., N.Y.; b. East Orange, N.J. August 9, 1893; ed. Cornell; married; interested in radio since 1908; professional experience: U.S. Naval Reserve Ensign World War One, U. S. Navy Commander World War Two; pioneered in the development and demonstration of frequency modulation broadcasting with Major E.H. Armstrong beginning in 1934; amateur station 2AG since 1908; Radio Club of America Vice President 1927, Treasurer 1926. Armstrong medal 1945.
- RUNYON, C.R. III (F)** 1948 - Purchasing Agent, Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, N.Y.; res. 27 Robin Lane, Levittown, Long Island, N.Y.; professional experience: Sales Manager, Sales Engineering and Purchasing.
- RUSSELL, WILLIAM GORDON (F)** 1926 - Engineer, General Precision Instrument; res. 62 Farragut Avenue, Hastings-on-Hudson, N.Y.; b. Yonkers, N.Y. October 14, 1906; ed. Columbia University, United States Navy, Mechanics Institute, RCA Institutes; married; interested in radio since 1923; professional experience: E.H. Armstrong Laboratory, Columbia University; Radio Club of America Recording Secretary 1954.
- RUSSELL, WILLIAM T. (F)** 1915 - Retired Superintendent Electrical Tests, New York Central Railroad Co.; res. 62 Farragut Avenue, Hastings-on-Hudson, N.Y.; b. London, England 1879; ed. Grade School and Trinity School, New York City; widower; interested in radio since 1898; early amateur stations and railroad storm detection tests; co-laborator with E. H. Armstrong on feed back tests. Radio Club of America Recording Secretary 1928, Director 1927, 1929.
- SADENWATER, HARRY (F)** 1913 - Radio Sales Representative, Radio Engineering Laboratories, Inc., 36-40 37th Street, Long Island City 1, N.Y.; res. 1165 Fifth Avenue, New York 29, N.Y.; b. New York City

MEMBERSHIP

- September 3, 1894; ed. Extension Courses Mechanics Institute, Columbia University, Union College and University of Pennsylvania; married; interested in radio since 1908; amateur "SW" 1908 in the Bronx, 2PZ, W3EPZ and currently W2YI; professional experience: Marconi ship operator 1912/1913, Radio Instructor East Side YMCA 1913/1914, U.S. Assistant Radio Inspector New York 1914/1917, Radio Officer Lieut. (jg) U.S. Naval Reserve Force 1917/1919, Radio Engineer General Electric Co. 1920/1929, RCA Camden Engineering and Sales 1930/1941, RCA Laboratories Princeton Manager Laboratory Services 1941/1944, RCA Victor Sales Manager Engineering Products New York City 1944/1947, Technical Sales Representative New York City to date; U.S. Navy Cross first transatlantic NC-1 Flight 1919; member Army Navy Club, Washington, Veteran Wireless Operators Association; Radio Club of America President 1931, Corresponding Secretary 1946/1947, Director at intervals between 1916 and 1954.
- SADENWATER, PAUL OSGOOD (M)** 1952 - Electrical Engineer, Bell Telephone Laboratories, 463 West Street, N.Y.C.; res. 127 Maple Street, Summit, N.J.; b. Schenectady, N.Y., February 1, 1927; ed. B.A. Columbia University 1949, B.S. in E.E. Columbia University 1950; single; interested in radio since 1935; amateur W2SLD 1946 to present; professional experience U.S. Navy Technician 1945/1946, E.H. Armstrong Laboratory, Columbia University 1950/1951, Bell Telephone Laboratories 1952 to present; Member IRE, Hobbies - High Fidelity, Columbia Engineering School Alumni Association and Music.
- SAFIR, ROBERT (M)** 1946 - Owner and Engineer, Electro-Physics Co., 287 Broadway, New York 7, N.Y.; res. 40 Argyle Road, Brooklyn 18, N.Y.; b. U.S.A. May 29, 1926; interested in radio since 1942; professional experience: design and development of Electronic Scientific Instruments also Production and Sale of Electronic Scientific Instruments.
- SAMPSON, HARVEY E. (M)** 1941 - Executive Harvey Radio Co. Inc., 103 West 43rd Street, N.Y.C.; res. 269 West Shore Drive, Massapequa, N.Y.; b. Jamaica, British West Indies November 17, 1907; interested in radio since 1923; married; amateur W2IJL; professional experience: distribution and sale of electronic equipment to laboratories, schools, amateurs and home users and hobbyists.
- SARA, JOSEPH (M)** 1930 - Owner, Sara Electronics and Mfg. Co., 15 Ward Street, Bloomfield, N.J.; res. 836 Bloomfield Avenue, Montclair, N.J.; b. Avola, Italy December 10, 1885; ed. Technical Schools, Italy; professional experience 25 years radio designers and manufacturers.
- SARNOFF, DAVID (HM)** 1926 - Chairman of the Board, Radio Corporation of America, 30 Rockefeller Plaza, New York 20, N.Y.; res. 44 East 71 Street, New York 21, N.Y.; b. Uslan, Russia February 27, 1891; ed. Special Course E.E. Pratt Institute, Brooklyn, N.Y.; married; interested in radio since 1906; professional experience: Wireless Operator 1908/1912, Chief Radio Inspector and Assistant Chief Engineer Marconi Co. 1913, Commercial Manager Marconi Co. 1917, Commercial Manager Radio Corporation of America 1919, General Manager Radio Corporation of America 1921, Vice President and General Manager Radio Corporation of America 1922, Executive Vice President Radio Corporation of America 1929, President Radio Corporation of America 1930, and Chairman of the Board Radio Corporation of America 1947 to date; 2 patents; U.S. Army Signal Corps Reserve Lieutenant Colonel 1924, Colonel 1931, Brig. General 1944; appointed Member of Committee on Department of Defense Organization 1953; appointed by President Eisenhower (1953) to serve indefinite term as Brigadier General (Res.), Army of the U.S.; Member of New York State Chamber of Commerce, A.I.E.E., Armed Forces Communications Association, Economic Club of New York, IRE, Newcomen Society of England, Poor Richard Club, Royal Society of Arts, U.S. Naval Institute, VWOA; Member of Army and Navy Club of Washington, D.C., Metropolitan Club, Washington, D.C., India House, Century Country Club and Engineers' Club of Philadelphia.
- SAUBER, ALVIN (M)** 1950 - Institute Aeronautic Sciences, 2 East 64 Street, New York 21, N.Y.; res. 27 West 181 Street, Bronx 53, N.Y.; b. Bronx, N.Y. November 11, 1927; ed. Public High School, Radio Television Institute.
- SCHMIDT, FRED W. Jr. (M)** 1950 - Project Engineer, Allen B. DuMont Laboratories, Inc., 11845 West Olympic Blvd., Los Angeles, Calif.; res. 11468 Allerton Street, Whittier, Calif.; b. Buffalo, N.Y. November 25, 1908; ed. B.S. Canisius College, Buffalo, N.Y., Certificate Courses in UHF, Newark College of Engineering; married; interested in radio since 1938; professional experience: Colonial Radio Corp., Buffalo, N.Y. eight years test equipment design, A.B. DuMont Laboratories ten years Oscillograph and TV receiver front-end design, Standard Coil Products Project Engineer Front End design for TV Receivers, Hoffman Laboratories Senior Project Engineer receiver designs; one patent tuning device.
- SCHNEIDER, ROBERT E. (M)** 1946 - Technical Writer, res. 10 Wagg Avenue, Malverne, N.Y.; ed. Pekin, Ill. Community High School, University of Illinois 1922, B.S. 1924; b. Iowa, U.S.A. June 11, 1902; Editor Hazeltine "Scope", Instructor RCA Institute.
- SCHNOLL, NATHAN (F)** 1928 - Chairman Industrial Instruments, Inc., Cedar Grove, N.J.; res. 804 Anderson Avenue, Palisade, N.J.; b. New York City March 20, 1904; ed. Stuyvesant High School, B.S. Columbia University 1947; married; interested in radio since 1917; amateur 2AGG 1919/1927; professional experience: Assistant Chief Engineer Polymet Mfg. Co. 1929/1932, Chief Engineer Solar Mfg. Co. 1932/1939, President and Chief Engineer Industrial Instruments Inc. 1939/1949, Chairman to date; Senior Member IRE; about 15 U.S. Patents in electronic and capacitor fields.
- SCHUMACKER, ALLAN L. (M)** 1937 - Development Engineer, Arma Corporation, Roosevelt Field, Garden City, New York, res. 170 Aspinwall Street, Westbury, L.I., N.Y.; b. Brooklyn, N.Y. September 14, 1904; interested in radio since 1915; amateur 2AJ 1923/1925; held First Grade Radiotelephone operators license 1933; professional experience: Freshman Radio Co. Laboratory Assistant 1923/1929, Colonial Radio Corp. Engineer 1929/1931, Wired Radio Inc. engineer 1931/1940, Research and Development Department Arma Corporation in charge of development of precision computer components for analog computers 1942 to present; Associate Member IRE 1932 to present; one paper "The Electromagnetic Resolver" AIEE 1951; Hobbies - 35 mm Photography, music.
- SEELEY, S. WARD (F)** 1948 - Vice President, Copy Chief St. Georges and Keyes, Inc., 250 Park Avenue, New York 17, N.Y.; res. 400 East 58th Street, New York 22, N.Y. and RFD 1, Carmel, N.Y.; b. Philadelphia, Pa. October 9, 1890; married 1920, Rosemary Clarke; ed. Central High School, Philadelphia,

- Universite de Montpellier, France; interested in radio since 1904; amateur spark coils but not licensed; professional experience: Editorial Work on various Publications, Managing Editor The Wireless Age 1922/1923, subsequently associated with advertising agencies, N.W. Ayer & Son, Lord & Thomas as writer, consultant, executive on radio and technical accounts; World War One Sgt. Co. A. (Radio Company) 326th Field Signal Battalion, service in A.E.F.; Associate Member IRE; Hobbies - 35mm photography, keeping country place in order; Radio Club of America Chairman Publicity Committee 1951/1954.
- SEGER, LUDWIG, (M) 1937 - Technical Writer, Rider Publications; res. RFD Newfane, Vermont; b. Zurich, Switzerland March 6, 1893.
- SEKLEMIAN, ROBERT S. (M) 1942 - Manager, Real Estate Department, RCA Communications, Inc., 66 Broad Street, New York 4, N.Y.; res. RFD 3, Babylon, L.I., N.Y.; b. Fresno, Calif. April 20, 1902; ed. LL.B., J.D., LL.D.; married; interested in radio since 1922; professional experience: Announcer, radio operator, in charge of terminal office installations of RCAC domestic radiotelegraph network; Former Ensign U.S.N.R.; member IRE Morse Telegraph Club, Real Estate Board of New York (Rental Conditions Committee).
- SHACKELFORD, BENJAMIN E. (F) 1943 - Director, License Department, RCA International Division, 30 Rockefeller Plaza, New York 20, N.Y.; res. 743 Mosswood Avenue, Orange, N.J.; b. Richmond Mo. August 12, 1891; ed. University of Missouri A.B. 1912, A.M. 1913, University of Chicago Ph.D. 1916; married; "working" interest in radio since 1918; amateur experience, none, father of one; professional experience Westinghouse Physical Laboratory Tube Engineering 1916/1929, RCA Research, Patent and License activities 1930 to present.
- SHEA, RICHARD F. (F) 1934 Electronics Engineer, General Electric Co., Electronics Park, Syracuse, N.Y.; res. 225 Twin Hills Drive, Syracuse 4, N.Y.; b. Boston, Mass. September 13, 1903; ed. B.S. in E.E. M.I.T. 1924; married; interested in radio since 1917; amateur 1AZG, 1ADZ, W1BEC, W3BAI 1919/1931; professional experience 1925 to present American Bosch, Amrad, Kolster, Atwater Kent, Pilot (Chief Engineer), Freed-Eiseman (Chief Engineer), Fada (Chief Engineer), General Electric; 10 patents on electronic circuits; numerous technical magazine articles over past 35 years; Editor of "Principles of Transistor Circuits" Wiley 1953; Chairman, Syracuse Section IRE, Senior Member IRE, member IRE Receivers, Standards and Papers Committees; currently Supervisor Semiconductors Applications G.E. Electronics Laboratory.
- SHENIER, HENRY L. (M) 1951 - Patent Lawyer, Own Office, 230 Park Avenue, New York City; res Forest Hills, N.Y.; b. New Jersey 1902; ed. U.S. Naval Academy B.S. 1922; Georgetown School of Law LLB 1931; married; professional experience: Communication Officer U.S. Navy 1925/1927.
- SHEPARD, FRANCIS H. JR. (F) 1936 - Consulting Engineer, Shepard Laboratories, Inc., 480 Morris Avenue, Summit, N.J.; res. Lee Lane, Countryside, Summit, N.J.; b. New York City May 6, 1906; ed. B.S. in M.E. Yale, Sheffield Scientific School 1929; married; interested in radio since 1930; professional experience: Laboratory Assistant to E.H. Sperry, Sperry Products Co. Diesel Engineering 1929/1933, Tube Application Engineering RCA Harrison 1933/1940, Consulting Engineer 1940 to present for I.E. DuPont ten years, Bureau of Standards ten years; Frankfort Arsenal, Transonic Range Aberdeen, Bristol Co., United Shoe Mfg. Co., Chief Engineer Revaluation Patents Co. 1942/1945; about fifty patents mostly in electronics field on hearing aids, synthetic base response; Associate Member IRE, member ASME, Director Kiwanis, member Chamber of Commerce Summit, N.J.; Radio Club of America President 1954.
- SHORTT, HUBERT L. (M) 1945 - res. 191 Main Street, Tarrytown, New York
- SIEMENS, Rudolph H. (M) 1937 - Sales Manager, RCA Tube Department, Harrison, N.J.; res. 7 Knollwood Drive, North Caldwell, N.J.; b. New York City June 12, 1905.
- SIEMINSKI, EDWARD (F) 1935 - Research Laboratory, Sylvania Electric Products, Inc. 21-20 Francis Lewis Blvd. Bayside, New York; res. 134-14 Franklin Avenue, Flushing 55, N.Y.; b. New Bedford, Mass. January 30, 1912; ed. M.I.T. B.S. in E.E. 1934, Polytechnic Institute of Brooklyn Master in E.E. 1953; married; interested in radio since 1927; amateur W1DFD in New Bedford 1929/1934; professional experience: Press Association, Inc. (Research) 1940/1941, Amy, Aceves and King (Research) 1935/1940 and 1941/1942, Fairchild Camera and Instrument Corp. Project Engineer 1942/1945, Aero-Aeronics, Inc. Chief Engineer 1945/1947, Sylvania 1947 to present; member IRE, AIEE, ARRL, Society of Professional Engineers; several articles on Television; Hobbies - swimming and ice skating.
- SIMON, WILLIAM C. (M) 1946 - General Manager and Radio Engineer, United Fruit Co., Tropical Radio Service Corp., Pier 7, North River, New York 6, N.Y.; res. 149 President Street, Lynbrook, L.I., N.Y.; b. Midway Kentucky June 16, 1899; ed. Grammar and some High School, U.S. Naval (Marine Corps) Radio School Parris Island 1917/1918; interested in radio since 1915; married; amateur 1913/1915; professional experience: U.S. Marine Corps 1917/1920, United Fruit Co. 1920 to present; Senior Member IRE, LM, Director and Secretary of VWOA, Member Marine Corps League, American Legion; Served on numerous committees with RTCA, RTCM, American Merchant Marine Institute dealing with Marine Radio matters; Marconi Memorial Medal of Merit, VWOA 1947.
- SINGER, CHARLES H. (F) 1947 - Chief Engineer WOR, 1440 Broadway, New York City; b. Bayonne, N.J. March 17, 1903.
- SINGLETON, HAROLD C. (F) 1935 - Consulting Radio Engineer, 1320 SW Broadway, Portland 1, Oregon; res. 4488 SW Council Crest Drive, Portland 1, Oregon; b. Golden, Colorado February 7, 1904; ed. B.S. (EE) and E.E. University of Colorado; married; interested in radio since 1918; professional experience General Electric Co., RCA Victor Division, United Air Lines, Chief Engineer KGW Broadcasting Station; Resident Associate Harvard University (during World War Two); several patents on photo-electric controls.
- SKIPPER, LIONEL CARLYLE (M) 1946 - Project Engineer, Sperry Gyroscope Co., Lake Success, Great Neck, New York; res. 5 Warner Avenue, Roslyn Heights, L.I., N.Y.; b. Clacton-on-Sea, Essex, England November 30, 1915; ed. Ascham College, Clacton, England, Brighton Technical College, Brighton England, British Institute of Engineering-Technology, London, England; married; interested in

MEMBERSHIP

- radio since 1933; professional experience: 1932/1935 Assistant Engineer Brighton Radio Circuit, Ltd., 1935/1940 Engineer Manager Radio Distribution Trinidad, Ltd., Port of Spain, Trinidad, BWI, 1940/1941 Director of Field Service, Radio Coverage Reports, New York City, 1941 to present Technician-Project Engineer Sperry Gyroscope Co. (Radar Engineering); U.S. Citizen June 10, 1947; Senior Member IRE, member Engineers Association, Massapequa Lodge No. 822 F & A.M., Rosicrucian Order AMURC, Civil Defense Resque Service, Green Mountain Club, Dale Carnegie Club International; fond of all outdoor activities including flying (Student Pilot Rating).
- SKROTZKI, FREDERICK H. (M)** 1946 - Electronic Engineer, Military Division, Eagle Electric Mfg. Co., Inc., 23-10 Bridge Place South, Long Island City, N.Y.; res. 75-01 60th Lane Ridgewood, L.I., N.Y.; b. Bremen, Germany March 17, 1904; ed. Grade School, High School, Special Courses; married; interested in radio since 1918; amateur W2HND for about 20 years to date; professional experience: owner Ridgewood Radio Shop 1922/1931, 10 years with Wholesale Radio Group, Clarion, Lafayette and Sec.-Treasurer of Transformer Corporation of America, 2 years Instructor N.Y. State Signal Corps Training School, 2 years Instructor Radio-Television Institute N.Y.C. 2 years Chief Electronic Engineer Military Products Division, Eagle Electric, 5 years Vice President in charge of Engineering and Development National Transformer Corporation, 3 years to present back with Eagle Electric Mfg. Co., Inc.; one patent on fluorescent ballast; Hobbies - radio, photography and construction of a new home in Hopewell Junction, N.Y.
- SLATER, IRA M. (M)** 1946 - Sales Manager, P.R. Mallory and Co., Inc., 3029 East Washington Street, Indianapolis 6, Ind.; res. 810 North Bolton Avenue, Indianapolis 19, Indiana; b. Lebanon, Indiana July 14, 1906; ed. High School, College two years; married; interested in radio since 1919; amateur 9DHE 1922/1926; professional experience Engineer, Divisional Chief Engineer, Industrial Engineer, Sales Engineer, Divisional Sales Manager P.R. Mallory and Co. Inc., 22 years; 4 issued patents; several papers on vibrators to IRE section meetings; senior member IRE; Hobbies - Photography and Aviation (Private Pilot).
- SLEEPER, MILTON BLAKE (F)** 1925 - Publisher, Music at Home, 207 East 37th Street, New York 16, N.Y.; res. Monterey, Mass.; b. Chicago, Ill. November 13, 1897; amateur 1" Spark Coil transmitter in Newtonville, Mass. from 1910 to 1914; professional experience: Radio Operator U.S. Navy 1914/1915, Associate Editor Electrical Experimenter, Laboratory Assistant DeForest Radio 1915/1916, Aircraft Radio Research Sperry Gyroscope 1916/1917, Pilot British Royal Flying Corps. 1917/1918, Laboratory Assistant Western Electric Co. 1918/1919, Radio Editor Everyday Engineering Magazine 1919/1920, President Sleeper Radio Corporation 1929/1934, Mobile radio sales and service manager Gamewell Co. 1934/1935, Domestic Sales Manager Pilot Radio 1935/1937, Domestic Sales Manager Andrea Radio 1937/1938, Domestic Sales Manager Pilot Radio 1938/1940, Publisher FM Magazine, Communication Engineering 1940-1954, High Fidelity 1951/1953, President Audiocom, Inc. and Radiocom, Inc.; Senior Member IRE, member Eastern States Police Radio League.
- SMITH, JAMES ERNEST (F)** 1930 - President National Radio Institute, Inc., 16th and U Streets, N.W., Washington 9, D.C.; res. "Macamor" RFD 1, Box 228, McLean, Virginia; b. Rochester, New Hampshire February 3, 1881; ed. B.S. in E.E. Worcester Polytechnic Institute; married; interested in radio since 1909; amateur station McKinley Technical High School 1910/1914 and at National Radio School Washington 1915/1922; professional experience: introduced study of wireless in Washington D.C. high schools 1912, organized and conducted National Radio School 1914/1920, President National Radio Institute 1920 to present, supervised instruction of 800 soldier-students in wireless during First World War 1918; co-inventor of the Natrometer, an instrument for teaching Radio Code; Senior Member IRE, Life Member AIEE, member Adult Education Association of U.S.A., American Association for the Advancement of Science, American Radio Relay League, Engineers Club of Washington, National Educational Association of U.S., Washington Golf and Country Club, University Club, Washington Round Table, Mason (K.T., Shriner).
- SMITH, MYRON T. (F)** 1934 - Engineering and Sales Manager, General Radio Co., 275 Massachusetts Avenue, Cambridge 39, Mass.; res. Lowell Road, Concord, Mass.; b. Meriden, Conn. July 11, 1908; ed. S.B. and S.M. M.I.T. Cambridge, Mass; married.
- SPIES, DAVID (M)** 1942 - Sales Manager-Owner, International Distributing Co., 185 Central Avenue, Newark, N.J.; res. 166 Sanford Street, Newark, N.J.; ed. Newark College of Engineering E.E.; married; long interest in radio.
- STANTLEY, JOSEPH J (F)** 1912 - Merchant, Continental Sales Co., Inc., 521 Bloomfield Avenue, Newark 7, N.J.; res. 686 Maywood Avenue, Maywood, N.J.; b. Brooklyn, N.Y. September 16, 1891; married; ed. High School 2 years, Mechanics Institute 3 years, Pratt Institute 3 years; interested in radio since 1906; amateur 1906/1933 W2SC; professional experience: Secretary and Treasurer, Continental Radio Corporation 1920/1930, General Manager Continental Radio Corporation 1922/1930; Continental Sales (Radio Distributor) 1930 to present; Radio Club of America Director 1926, Treasurer 1927 to 1954.
- STANTLEY, JOSEPH J. Jr. (F)** 1944 - Secretary and Treasurer, Continental Sales Co., Inc. 521 Bloomfield Avenue, Newark 7, N.J.; res. 686 Maywood Avenue, Maywood, N.J.; b. Teaneck, N.J. May 10, 1926; ed. Rutgers University (Business Administration); single.
- STANTON, SAMUEL WARD (M)** 1940 - Patent Engineer, A.B. DuMont Laboratories, Inc., 2 Main Avenue, Passaic N.J.; res. Box 383, Halsey Road, Parsippany, N.J.; b. Tottenville, Staten Island, N.Y. June 25, 1908; ed. B.S. in E.E. Rutgers University; married; interested in radio since 1918; amateur 2AHY-1923, W2QZ-1929, W2EEW and W2EHR 1932; professional experience: United Electric Light and Power Co. 1931/1935, RCA 1936, Western Electric 1937/1939, DuMont 1939 to date; Two U.S. Patents.
- STEEN, JEROME REED (M)** 1947 - Director, Quality Control, Sylvania Electric Products Inc., 1740 Broadway, New York 19, N.Y.; res. 35 Top Hill Drive, Manhasset, N.Y.; b. West Bloomfield, New York June 29, 1901; ed. University of Wisconsin; married; interested in radio since 1928.

- STEVENS, ARCHIE McDONALD (F) 1928** - Radio Engineer, International Standard Electric Corporation, 67 Broad Street, New York City; res. 539 Prospect Avenue, Mamaroneck, N.Y.; b. Glidden, Iowa September 22, 1887; ed. Glidden High School 1904, LeLand Stanford Jr. University 1909 A.B. in Engineering, post graduate courses in Columbia University; married; interested in radio since 1910; professional experience 1910/1913 Poulsen Wireless Tel. and Tel. Co. San Francisco, 1913/1914 Universal Radio Syndicate, London, Poulsen System, 1915/1921 Lt. Commander U.S.N.R.F., U.S. Navy Lafayette Station, Bordeaux, France, 1922/1928 International Radio News Co., New York, 1928/1950 International Tel. and Tel. Corp. 1950/1952 Federal Tel. and Radio Corporation, 1952 to present International Standard Electric Corporation; Fellow (life member) IRE, Senior Member AIEE (life member), member Telephone Pioneers of America, member Armed Forces Communication Association.
- STEVENS, HERBERT V. (M) 1952** - Radio Engineer Station WBTA, Batavia, N.Y.; res. 12 Otis, Batavia, N.Y.; b. Buffalo, N.Y. June 11, 1904; ed. High School and Buffalo Normal (2 years), University of Michigan (two summers and two falls); single; interested in radio since 1914; amateur 8AYT-1922; Hobbies - Music, 6 copyrights, criminology, law, chess, tennis, golf.
- STOCKMAN, WILLIAM E (M) 1947** - Research Engineer, Solid State Research Institute, 155 East 44 Street, New York 17, N.Y.; res. 949 West End Avenue, New York 25, N.Y.; b. Stockholm, Sweden May 26, 1904; ed. equivalent to B.S.; married; amateur about seven years; professional experience: 20 years as a radio engineer.
- STOKES, WILLIAM EARL DODGE JR. (CM,F) 1909** - Economist, self-employed, Lenox, Mass.; res. "Lake Cottage" Lenox, Mass.; b. New York City January 6, 1896; ed. Browning School, New York City, Andover, Sheffield Scientific School, Annapolis, University of Chicago (Law School); married; interested in radio since 1909; early amateur stations in New York City and Monmouth Beach, N.J.; First President Junior Wireless Club and Senate Committee witness 1910; Assistant Communications Officer USS Delaware Grand Fleet World War One; Four early U.S. Patents in radio; American Institute of Mining and Metallurgical Engineers, Chicago Bar Association, Econometric Society, Foundation for Study of Cycles, Berzelious (Yale), American Mining Congress, Union Club (NY), University (Wash.), Stock Exchange Lunch (NY), Lenox Club, Country Club of Pittsfield, Mid-Ocean Club, Royal Bermuda Yacht Club, Military: Naval Reserve Surface Division 1-14 LCDR USNR-R (Administration Officer); Publications: "Government Assistance to Small Gold Mines", "Free Power", "Report of the Aviation Committee-AIME", "Planetary Configurations and Stock Market Sentiment", "Origin of the Pennyweight" and numerous technical publications for the Navy on Torpedo manufacture, "Survey of the U.S. Army Catalog System" for the Navy, "Plan for a U.S. Navy Catalog System" (for the Navy), "Electrostatic Origin of Ore Deposits"; Sports and Hobbies - Golf; family, stamps, sailing, education (Trustee etc.), Navy anti-Communist Activities (various); Radio Club of America President 1909-1911.
- STONE, CLARENCE GEORGE (F) 1925** - Consulting Engineer, Self-employed, 304 South First Avenue, Mt. Vernon N.Y.; res. same; b. Detroit, Mich. December 10, 1888; ed. E.E. and A.M. Columbia University, Professional Engineer since 1922; married; interested in radio since 1898; professional experience: taught physics at Columbia up to September 1952, also courses in Electronics and consulting work in this field; AIEE, IRE, American Physical Society, Acoustical Society of America.
- STONE, G. EDGAR (F) 1935** - Machine Shop Owner, self-employed, 607 Cedar Street; res. 413 West Main Street, Boonton, N.J.; b. Charleston, Mass. November 3, 1899; interested in radio since 1914; married; professional experience: 23 years as receiver design engineer, 5 years owner of machine shop specializing in mechanical parts for electronic equipment.
- STYLES, THOMAS J. (LM) 1915** - E.H. Armstrong Estate, Room 204 Philosophy Hall, Columbia University, 117 Street and Amsterdam Avenue, New York City; res. 160-01 84th Drive, Jamaica, N.Y.; b. Ansonia, Conn. July 25, 1887; ed. Walworth Institute, Pace Institute and Columbia University; Hartley Research Laboratory since 1924; Radio Club of America Recording Secretary 1916, corresponding secretary 1917/1920 and 1925/1927, Director 1928/1929.
- SUYDAM, CLINTON, H. (F) 1932** - Federal Telegraph Co. Newark; res. 451 Heywood Avenue, Orange, New Jersey; ed. Stanford University A.B. 1918, E.E. 1925; b. Los Gatos, Calif. October 25, 1896.
- SWINYARD, WILLIAM O. (M) 1941** - Radio/TV Engineer, Hazeltine Research, Inc. 325 W. Huron Street, Chicago, Ill.; res. 4948 Jerome Avenue, Skokie, Ill.; b. Logan, Utah July 17, 1904; ed. B.S. Utah State College, graduate studies Columbia and Northwestern; married; interested in radio 1924; professional experience: Hazeltine since 1930, Chief Engineer 1942 to present; Technical papers: Measurement of AM and FM radio receivers in Pender-McIlwain Handbook, Measurement of Loop Antenna Receivers IRE 1941; Member Chicago Radio Engineers Club, National Society of Professional Engineers, Lake Shore Club, Fellow IRE, Registered Professional Engineer, Illinois.
- TALLEY, DAVID (M) 1949** - Staff Engineer, Federal Tel. and Radio Division, International Tel. and Tel. Corp. Clifton, N.J.; res. 130 Martense Street, Brooklyn 26, New York; b. New York City October 20, 1903; ed. E.E. from Brooklyn Polytechnic Institute 1935; married; interested in radio since 1915; amateur since 1915, W2PF in 1919, extra first grade amateur license; professional experience: telephone engineer New York Telephone Co. 1923 to 1946 except World War Two 1940/1945 as Lt. Colonel in Signal Corps, Telephone and Radio Engineer with International Tel. and Tel. Co. 1946/1951, Federal Tel. and Radio Corporation Govt. Contract Section 1951 to present; one patent on Signaling Systems; Senior Member IRE, member AIEE, ARRL, Radio Society of Great Britain, Reserve Officers Association of U.S. Military Order of World Wars, Secretary of N.Y. Chapter of Armed Forces Communications Association, Treasurer of Quarter Century Wireless Association, member Radio Club of Brooklyn; Active Reserve Officer as Lt. Colonel in Signal Corps. USAR assigned to Electronics Warfare Center; engineered and installed mobile radio telephone systems in Buenos Aires 1947, Mexico City 1948, Havana 1949 and Cairo, Egypt in 1948.
- TAYLOR, WILLIS H. JR. (F) 1925** - Patent Attorney, Pennie, Davis, Marvin and Edwards, 247 Park Avenue, New York 17, N.Y.

MEMBERSHIP

- THOMAS, HARRY ELLIOT (M) 1950** - Radio Engineer, Federal Telecommunication Laboratories, Washington Avenue, Nutley, N.J.; res. 25 Stanford Place, Montclair, N.J.; b. Lynn, Mass. April 6, 1902; ed. B.S. Tufts College, M.S. M.I.T.; married; interested in radio since 1923; professional experience as radio engineer with RCA, Philco and DuMont; 13 patents, miscellaneous papers, Professional Engineer in New Jersey; Hobbies - play and coach tennis; member Montclair Dramatic Club.
- THOMAS, LESLIE G. (M) 1928** - President, Sheffco Mfg. Co., Palisades Park, N.J.; res. Marcotte Avenue, Tenafly, N.J.; b. London, England; ed. M.E.; married; interested in radio since 1912; professional experience: manufacturing executive, Vice President International Resistance Co., Philadelphia, General Manager Dejur-Amsco Corp. N.Y.C., Works Manager Fada Radio Co., Bronx 1926/1931; various patents on variable condensers.
- THORP, WILBUR E. (F) 1948** - Electronic Engineer, Northrop Aircraft, Hawthorne, Calif.; res. 7371 West 83rd Street, Los Angeles 45, Calif.; b. Santa Cruz, Calif. July 6, 1910; ed. B.S. in Engineering University of California; married; interested in radio since 1923; professional experience: 10 years Don Lee Television, Los Angeles, 3 years U.S. Navy Electronics Officer, Bureau of Aeronautics, 4 years Radio Engineering Laboratories as Development Laboratory Supervisor, 3 years Northrop Aircraft as Supervisor Telecommunications Development Section to present; member IRE, Lt. Commander United States Naval Reserve; Hobby - recorded music reproduction.
- THURSTON, WILLIAM R. JR. (M) 1951** - Engineer, General Radio Co., New York City; res. Teaneck, N.J.; b. Brooklyn, N.Y. August 31, 1921; ed. M.I.T. B.S. 1943, M.S. 1948; married; interested in radio since 1935; professional experience: Development and Sales with General Radio Co. since 1943; papers on H-F Measurements and Bridge Techniques and Loudspeaker Measurements; Hobbies - Photography, Woodworking, low cost student housing project for M.I.T.; member IRE, AIEE, and AES.
- TITTLE, HULBERT, C. (M) 1941** - Sylvania Electric Products, 70 Forsyth Street, Boston 15, Mass.; b. Rapid City, South Dakota December 13, 1903; ed. E.E. South Dakota School of Mines; formerly Chief Radio Engineer Colonial Radio.
- TOEGEL, BURT JOSEPH (M) 1941** - Engineer, B.J. Toegel, Inc., 130 New Street, res. 725 Park Avenue, Plainfield, N.J.; b. Austria August 29, 1901; ed. Public, Vocational, Night School; married; amateur since 1912, W2LI; professional experience: receiver design Engineer 1921 Garod Corp., Thomas A. Edison, Pilot Radio, Fada Radio, owner Coil Business since 1945; member Tri County Radio Club, Q.C.W.A., A.R.R.L.
- TOTH, ALBERT F. (F)** res. 36-08 29th Street, Long Island City, N.Y.; b. Hungary, September 4, 1902; ed. E.E. Polytechnic Institute of Brooklyn.
- TUCKERMAN, LUCIEN P. (F) 1928** - Radio Engineer, National Bureau of Standards, Washington 25, D.C.; res. 1911 East-West Highway, Silver Spring, Maryland; b. Wallingford, Conn. May 15, 1905; ed. Bell Telephone Labs. Electrical Communication Course; married; interested in radio since 1923; professional experience: DeForest Radio Co., Kolster Radio Corp., Federal Telegraph Co., U.S. Navy, National Bureau of Standards; Commander U.S. Naval Reserve, Member IRE, AIEE, SMPTE, Engineers Club of Washington, National Rifle Association; one patent "Peak Limiting Amplifier".
- TUNICK, HARRY (M) 1939** - President, Joseph Tunick and Sons, Furniture Store, Port Chester, N.Y.; res. Rye, N.Y.; ed. Rensselaer Polytechnic Institute E.E., New York University J.D.; married; interested in radio since 1926, professional experience: Patent Attorney Radio Corporation of America; 4 U.S. Patents and several others.
- TUXEN, NILS (M) 1952** - Export Manager, Communications and Electronics Division, Philips Export Co., 100 East 42 Street, N.Y.C.; res. 22 Michaels Lane, Croton-on-Hudson, N.Y.; b. Copenhagen, Denmark November 23, 1915; U.S. Citizen 1943; ed. Soroe Academy, Denmark and graduated in 1939 from Aarhus Electrotechnium, Aarhus, Denmark (B.S.E.E.); married; amateur OZ9T 1931; ship's radio operator Danish and British merchant marine early part of World War Two; four years with 9th Airforce in Europe; member Danish Engineers Club, New York City.
- ULM, ERNEST, H. (M) 1950** - Sales Manager, Sylvania, Woburn, Mass.; res. Winchester, Mass.; b. Ft. Dodge, Iowa January 8, 1916; ed. Carleton College A.B., Graduate work at University of Iowa and Northwestern Technological Institute; married; interested in radio since 1928; amateur license 1930; professional experience: Instructor in Radio and Electronics in High School and Vocational School and Army Signal Corps and Navy (Western Electric); member IRE, and AIEE.
- ULRICH, VINTON K. (F) 1936** - Distributor Sales Manager, David Bogen Co., Inc., 29 Ninth Avenue, New York, 14, N.Y.; res. 1 Treadwell Avenue, Madison, N.J.; b. Malden, Mass. August 12, 1914; ed. B.S. in Communications Engineering M.I.T. 1935; married; interested in radio since 1923; professional experience: Managing Editor "Radio Today" to 1939, to 1941 Sales Manager Hytronic Labs Division of Hytron, to 1945 Engineer in charge War Activities Hytron, to 1950 Manager Commercial Engineering Division Hytron, to 1953 Manager Renewal Sales Division National Union Radio; Senior Member IRE, Member AIEE and Lions International.
- VAN BUREN, JOHN M. (F) 1942** - Chief Research Engineer, Measurements Corporation, Boonton, N.J.; res. Morristown, N.J.; b. New York City March 4, 1915; ed. Princeton University 1933/1936; married; interested in radio since 1931; amateur First Class License 1933/1941; professional experience: Research and Development for Measurements Corp. 1939/1953; several patents on electronic devices; Hobby - Music and Hi-Fi; member Engineers Club, New York City.
- VAN DEN MEERSCHÉ, A.J. (M) 1930** - res. 22 St. Pieters Aalst Straat, Ghent, Belgium; b. Ghent, Belgium November 29, 1903; ed. E.E. University of Ghent; instructor University of Ghent; Associate IRE.

- VAN RENSSELAER, HENRY C. (M) 1949 - Investment Counselor, The Bank of New York, 48 Wall Street, New York City; res. Rock Ridge, Greenwich, Conn.; b. Sao Paulo, Brazil May 17, 1920; ed. Kent School, Kent, Conn., Princeton University; married; interested in radio since 1933; amateur W1HSY, 1933; professional experience Major U.S. Air Force, Communications and Radar, 1942/1946 and 1951/1952, Sales Manager Electronic Parts Division Allen B. DuMont Laboratories 1947/1950; member Colonial Club, Princeton, N.J.; Hobbies - tennis, golf, skiing.
- VOGEL, WILLIAM H. JR. (M) 1940 - Senior Electronic Engineer, Transmitter Division, Allen B. DuMont Laboratories, Inc., 1500 Main Avenue, Clifton, N.J.; res. 59 Crane Street, Caldwell, N.J.; b. Brooklyn, N.Y. October 23, 1909; ed. Graduate Cornell University E.E. 1931; interested in radio since 1926; amateur W2BXM since 1931, member M.A.R.S. AF2BXM; professional experience: television and FM transmitters and communication equipment 1945 to date; active service Air Force 1941/1945 Radar Officer; Associate member IRE.
- VORPERIAN, HARRY (M) 1941 - Foreman in charge of Electronic Wiring Department, Aeroflex Laboratories, Inc., 34-06 Skillman Avenue, Long Island City 1, N.Y.; res. 210 Clinton Avenue, Brooklyn 5, N.Y.; b. New York City January 19, 1909; interested in radio since 1923; ed. Graduate Washington Irving High School, RCA Institutes and extra-curricula courses at Pennsylvania University, Temple University and New York University; professional experience: Electronic Technician with Federal Telecommunication Laboratories, Radio Engineering Laboratories and Aeroflex Research Laboratories; married; First Class Radio Telephone License; Associate member IRE.
- WALSH, DR. A. LAFAYETTE (M) 1952 - Dentist, self-employed; 509 Madison Avenue, New York City; res. 785 Park Avenue, New York City; b. New York City December 17, 1896; ed. College Dental and Oral Surgery of Columbia University; married; interested in radio since 1912; amateur since 1912, 2SP, 2BW since 1920.
- WALSH, CRAIG (F) 1940 - Engineer, Sylvania Electric Products Inc., Bayside, N.Y.; res. 117 Spindle Road, Hicksville, N.Y.; b. Elizabeth, N.J. November 29, 1912; ed. Stevens Institute of Technology, Hoboken, N.J.; married; interested in radio since 1930; professional experience: Sylvania Technical Relations and Public Relations, Walsh Engineering Co., Engineer, Electronics Magazine Associate Editor; member IRE, AIEE and Elks.
- WALSH, LINCOLN (F) 1934 - Consulting Engineer, Walsh Engineering Company and Caledonia Electronics and Transformer Corp. 34 DeHart Place, Elizabeth, N.J.; res. 34 DeHart Place, Elizabeth 2, N.J.; b. Rhode Island November 3, 1903; ed. Stevens Institute of Technology M.E. 1926, Post-Graduate Columbia, Brooklyn Polytechnic and Stevens; married; interested in radio since 1916; professional experience: Designer of transformers, high quality audio systems and radio receivers, Colonial (now Sylvania) Bell Telephone Laboratories and Hazeltine.
- WARE, PAUL (F) 1921 - Engineer, DuMont Laboratories, Coconut Grove, Fla.; b. East Orange, N.J. June 26, 1893; ed. M.E. Stevens Institute of Technology 1917; widower; interested in radio since 1906; amateur station at East Orange, N.J. before World War One; professional experience: marine wireless operator 1907 to 1912; Second Lieut. Signal Corps during World War One, manufactured Ware Neutrodyne receivers, invented the INDUCTUNER and the INPUTUNER for Mallory and DuMont respectively; sailed Atlantic Ocean in 17 days on Yacht Aloha in 1912 averaging 8.06 knots; Hobbies - Fifty Foot Elco and seeking sunken treasure by electronic metal detection; Radio Club of America President 1942/1943.
- WASHINGTON, GEORGE JR. (M) 1951 - Retired, res. 9 Alvord Road, Morristown, N.J.; b. New York City August 6, 1899; ed. High School; married; interested in radio since 1921; Inventor of Photo-Electric Engraver known as the Fairchild Scan-o graver.
- WATSON, PAUL GRISTOCK (F) 1922 - Commander USNR Retired, res. 27 Price Street, West Chester, Pa.; b. West Chester, Pa. January 6, 1900; ed. High School and 1923 Pratt Institute E.E.; widower; interested in radio since 1912; amateur 3BV spark and 2CJU in Brooklyn while attending Pratt, station 4ZD-4XX at Savannah working Dr. A. Hoyt Taylor at NKF; professional experience: commercial radio operator 1918/1923, Radio Inspector U.S. Shipping Board, N.Y., U.S. Radio Inspector Savannah, Ga. 1924/1926, Direction Finder Engineer RCA 1927/1928, Plant Engineer, Eastern Malleable Iron Co. Wilmington, Del. 1928/1940, Shop Superintendent U.S. Navy Yard Philadelphia with Rank of Commander USNR 1940/1946; about 30 articles in Radio News, Pacific Radio, QST during 1919/1925 period, dropped out of radio in 1928 and entered ship construction (engineer) and participated in building over 100 ships in Philadelphia Navy Yard during World War Two; Life member The American Legion, Military Order of the World Wars, The Society of American Military Engineers, member DeForest Pioneers, Society of Naval Architects and Marine Engineers, The U.S. Naval Institute; Hobby - Collecting of early vacuum tubes and old apparatus and parts; Awarded Navy Commendation Ribbon for "outstanding performance of duty" during World War Two.
- WATTSON, HARRY B. (M) 1946 - res. 157 Prospect Place, Rutherford, N.J.; ed. Columbia University A.B. 1925, M.S. Harvard 1928; Sperry Gyroscope Co. Garden City, 1945.
- WEED, EDGAR M. (M) 1950 - Technical Writer, Bell Telephone Laboratories, Whippany, N.J.; res. 53 Burnham Road, Morris Plains, N.J.; b. Morris Township, N.J. March 15, 1907; ed. Morristown High School graduated 1925, Rutgers Extension Courses (Electronics); interested in radio since 1919; married; amateur W3JF in 1922, W3FSR and now K2B0; professional experience: Advertising Manager daily newspapers until 1943, Test Department Aircraft Radio Corp. Boonton, N.J. to 1945, Advertising Manager and Technical Writer Measurements Corp. Boonton, N.J. 1946/1952, joined Bell Labs. February 1, 1952; writer of many newspaper and magazine articles; member Morris Radio Club, Par-Troy Radio Association former Northern District Director (Amateur radio) for N.J. Civil Defense, Member Board of Education Morris Township, N.J.; Hobbies - radio, fishing; Radio Club of America Chairman of the Advertising Committee, 1953.
- WEHRMAN, NELSON AUGUST (F) 1936 - res. 2021 Warren Avenue, Cheyenne, Wyoming; b. New York City December 11, 1902; ed. Graduate Stuyvesant High School; professional experience: Assistant Sales Manager

MEMBERSHIP

Amy, Aceves and King 3 years, RCA Tube Sales Department, Cunningham Field Representative, Sleeper Radio Service Manager 1927/1929.

- WEINBERG, SIDNEY (M) 1950** - Chief Production Engineer, Plant Manager, United Scientific Laboratories, Inc. 35-15 37th Avenue, Long Island City, N.Y.; res. 252-08 Cullman Avenue, Little Neck, L.I., N.Y.; b. New York City January 2, 1909; ed. B.S. in E.E. Cooper Union, Electronics Columbia University, Time and Motion Studies and Methods Polytechnic Institute of Brooklyn; married; interested in radio since 1923; amateur W2AMI since 1925, Quarter Century Wireless Association, New York Civil Defense; professional experience: engaged in manufacturing electronic equipment for more than 25 years with United Scientific Labs at executive level, presently Vice President in Charge of Production Engineering; Senior Member IRE, member Radio and TV Square Club, Cooper Union Alumni Association, N.Y. Social Club, Mt. Scopus Lodge #1075 Free and Accepted Masons.
- WHEELER, HAROLD A. (F) 1935** - Radio Engineer, Wheeler Laboratories, Inc., 122 Cutter Mill Road, Great Neck, N.Y.; res. 18 Melbourne Road, Great Neck, N.Y.; b. St. Paul, Minnesota May 10, 1903; married; ed. George Washington University B.S. in Physics with distinction, John Hopkins University, Physics Department (3 years); interested in radio since 1913; amateur station 3QK 1918/1922; professional experience: Hazeltine Corp. 1924/1945 Vice President and Chief Consulting Engineer Bay-side and Little Neck Laboratories, Consulting Radio Physicist 1946 to date, President Wheeler Laboratories, Inc. 1947 to date; more than 150 U.S. patents and many foreign patents; Book "Wheeler Monographs Vol. 1" 1953; many technical papers in Proceedings IRE etc.; Fellow of IRE and AIEE, Director IRE 1940/1945; Morris Liebman Prize IRE 1940 for "Theory of Wideband Amplifiers and Paired Echos in Television".
- WILLIAMS, ROGER (M) 1930** - Patent Attorney, 34 Park Row, New York City; b. Providence, R.I., U.S.A. August 13, 1892; ed. Brown University Ph.B.; married; interested in radio since 1906; amateur 1CPX after World War One, coherer, electrolytic detector, crystals, spark coils; professional experience: First commercial license in Rhode Island, Operator on S.S. Mount Hope 1915, Consulting Radio Engineer, Chief Engineer Ceco Co. (electronic valves) and of Trico Co. (electronic valves) 1925/1929, Chemical Engineer 1915/1922; Specialize in Chemical, Electrical and Foreign Patents; Hobbies - Philologist, Linguist, Life Member Providence Engineering Society.
- WORTHEN, CHARLES E. (F) 1936** - Publicity Manager, General Radio Co., Cambridge, Mass.; res. Newtonville, Mass.; b. Haverill, Mass. 1906; ed. S.B. M.I.T. 1928; married; interested in radio since 1918; amateur 1AYB and 1DX 1921/1925; professional experience: development engineering, sales engineering and sales promotion, also technical writing and publishing, Editor "General Radio Experimenter".
- YOKUM, CHARLES H. (F) 1937** - Sales Engineer, Hermetic Seal Products, 29 South 6 Street, Newark, N.J.; res. 421 Franklin Avenue, Hasbrouck Heights, N.J.; b. Deposit, N.Y. July 13, 1906; ed. East Orange Grammar School and High School and B.S. 1927 Princeton University; married; interested in radio since 1937; Major Signal Corps Sig. 0 23 HQ.
- ZARET, MATTHEW E. (M) 1950** - Professor, Electrical Engineering, The Cooper Union, Cooper Square, New York City; res. Nutley, N.J.; b. New York City September 13, 1909; ed. B.S. College of the City of New York 1931, Sc.M. New York University 1936; married; interested in radio since 1922; professional experience: Fada Radio Co. 1928, Sonotone Corp. (electronic Research Engineer) 1942/1946, Polytechnic Research and Development Co. (Project Engineer) 1947, Teaching of Electronics and related fields Newark College of Engineering, Columbia, Cooper Union 1947 to date; publications "Development of Midget Earphones for Military Use" Journal of the Acoustical Society of America October 1946, "Electroacoustics", Newark College of Engineering Press 1949, "Electron Tube Circuits Laboratory Manual" NCE Press 1949; Senior Member IRE, Member American Physical Society, Charter Member Audio Engineering Society, Fellow American Association for the Advancement of Science, Member Acoustical Society of America, Member American Association of University Professors; Hobby - Music, President of Nutley Symphony Society (1953/1954).
- ZAYAC, FRANK R. (M) 1948** - Vice President, Ballantine Laboratories, Inc., Boonton, N.J.; res. Boonton, N.J.; b. Boonton, N.J. March 28, 1911; ed. Boonton High School; married; interested in radio since 1929; amateur W3FFY 1938, now W2FFY; member IRE and ARRL.
- ZENNECK, JONATHAN A.W. (HM) 1922** - Professor (Retired) of Experimental Physics at the Institute Technology of Brunswick, Danzig and Munich; res. Althegnberg uber Mering (13b) Bavaria, Germany; b. Ruppertshofen, Kreis Schwabish Gmund, Germany April 15, 1871; ed. Doctor of Science University Tübingen, Assistant Physics Laboratory University of Strassbourg; married; interested in radio since 1899; professional experience: Research in high frequency work; Books "Elektromagnetische Schwingungen und Drahtlose Telegraphie" 1905, "Lehrbuch die Drahtlose Telegraphie" first edition 1909 fifth edition 1924, "Elektronen und Ionen-Strom" 1923, "Die Verwertung des Luftstickstoffs mit Hilfe des elektrischen Flammenbogens" aus Physik und Technik 1930, "Physik der hohen Atmosphäre" 1938; about 120 scientific papers in various Journals on various subjects; Military: Reserve Captain of German Marines; Sports - Bicycling, skiing, riding on horseback, sailing, fishing, shooting; Hobby - Painting; Societies - Verband deutschen physikalischer Gesellschaften, also Honorary Member, Verband deutscher Elektrotechniker, Verein deutscher Ingenieure, Fellow Institute of Radio Engineers; Fraternities - "Konigsgesellschaft" University of Tübingen; Clubs - Rotary International.
- ZITNIAK, WALTER (M) 1941** - Electronic Laboratory Supervisor, Kearfott Manufacturing Corp. 125 Sussex Avenue, Newark, N.J.; res. 515 Grove Street, Irvington 11, N.J.; b. Newark, N.J. June 25, 1906; ed. Czechoslovakia; interested in radio since 1920; professional experience: Radio Servicing, Television Servicing and Airborne Equipment Manufacturing; Hobby - radio and television experimenting.

Total Membership December 1954. . . . 344

Note CM - Charter Member F - Fellow
LM - Life Member M - Member

DECEASED MEMBERS
THE RADIO CLUB OF AMERICA, INC.

Aceves, Julius G.
Allen, George Y.
Armstrong, Edwin H.
Ayer, Oliver G.
Baker, Thomas S.
Ballantine, Stuart
Bingham, Wilbur Fisk
Brett, Harold M.
Browne, Walram S.
Burlingame, Bruce O.
Capen, William H.
Clark, Herbert A., Jr.
Clark, LeRoy
Cooney, J.K.
DeVine, Alexander A.
Dunn, Gano
Ehrmann, Gustav J.
Ferris, Malcom
Forbes, Henry C.
Glavin, Edward F.
Godfrey, Dr. Charles C.
Goulden, Stanley W.
Grebe, Alfred H.

Guggenheim, Dr. Sigmund
Guilfoyle, Thomas James
Haas, John G.
Hebert, Arthur A.
Hoppenberg, Joseph A.
Horle, Lawrence C.F.
Hubley, Warren F.
Hutchens, Ray
Inman, Walker P.
Jackson, Samuel Jr.
Jones, Walter R.
Knapp, Joseph F.
Lacault, Robert E.
Lidbury, F.A.
Logwood, Charles V.
Loughlin, William D.
Lovejoy, D. Ross
Marriot, Robert H.
McCann, John
Moulton, Albert B.
Murdock, Daniel R.W.
Nicholas, Edwin A.
Pacent, Louis G.
Potts, John H.

Roos, Oscar C.
Rosenthal, Leon W.
Seibt, Dr. George
Shonhale, Charles L.
Silver, McMurdo
Simmons, M. Theodore
Singer, Benjamin
Smith, Luther C. Jr.
Snyder, Harvey C.
Stewart, Charles H.
Stone, John Stone
Taussig, Charles W.
Thompson, Sylvester T.
Trube, Carl E.
Tsubouchi, Akira
Vansize, William B.
Vaughan, Wilbur Southwood
Weare, John
Weber, Victor J.
Whiting, Donald F.
Winterbottom, William A.
Wise, Roger M.
Yokachi, Shin-ichi

ARMSTRONG MEDALISTS

- 1937 - Professor Alan Hazeltine
- 1938 - Dr. Harold H. Beverage
- 1940 - Greenleaf Whittier Pickard
- 1941 - Harry W. Houck
- 1945 - Carman Randolph Runyon, Jr.
- 1946 - Charles Stuart Ballantine
- 1947 - John V. L. Hogan
- 1950 - Ernest V. Amy
Edwin H. Armstrong
George E. Burghard
Minton Cronkhite
Paul F. Godley
John F. Grinan
Walker P. Inman
- 1952 - Captain Henry J. Round
- 1953 - Raymond A. Heising

The Board of Directors of
of
The Radio Club of America
to
Edwin Howard Armstrong
and to all others to whom these presents may come
Greeting

Be it known that at a special meeting of the Board of Directors of The Radio Club of America held December 19, 1935, in New York City, the following Resolution was adopted by unanimous consent:

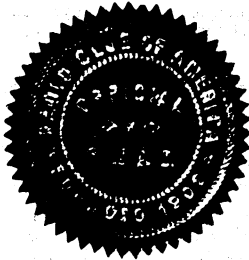
Whereas- Edwin Howard Armstrong for many years has diligently, earnestly and effectively given council and encouragement in the guidance of The Radio Club of America, and

Whereas- We look back with pride and honor to the presentations before our meetings of his basic inventions: The Regenerative Circuit, The Superheterodyne and Super-Regenerative Systems and tonight The New System for Eliminating Noise by Frequency Modulation, each of outstanding importance in the Radio Art. Therefore be it

Resolved That a properly engrossed parchment copy of this Resolution be presented to Edwin Howard Armstrong at the conclusion of the presentation of his Paper on Noise Suppression by Frequency Modulation this evening as an expression of our deep appreciation of his keen technical knowledge and untiring willingness to work, and his outstanding contributions to Radio Art and Science. And be it further

Resolved That, in further token of appreciation, The Radio Club this day hereby establishes an award to be known as the "Armstrong Medal", to be bestowed by the Board of Directors of The Radio Club of America upon any person within its membership who shall have made, in the opinion of the Board of Directors, and within the spirit of the Club, an important contribution to Radio Art and Science.

Done at New York this 19th day of December, one thousand nine hundred and thirty-five.

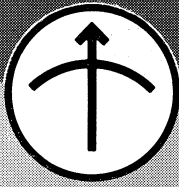


Rayph. H. Lingley President
Wm. H. S. ... Corresponding Secretary

Wm. H. S. ... *H. H. ...* *R. H. ...* *Joseph Stantley*
H. C. ... *A. W. ...* *James C. ...* *Ernest V. ...*
Wm. H. ... *...* *John H. ...* *Frank ...*
Al Chamberlain *Harry ...* *Paul ...*
Board of Directors

IN EVERY FIELD

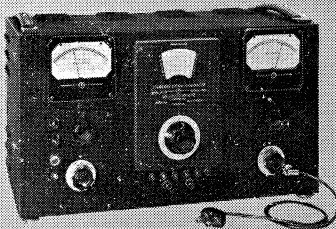
There is a Leader!



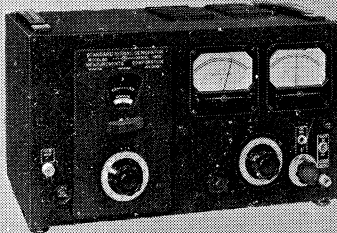
—and following every leader are those who would rather copy than create!

Substitutes are not acceptable where precision instruments are required, that is why engineers the world-over specify the MEASUREMENTS line. They know that—

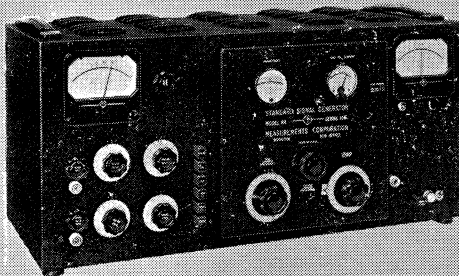
STANDARDS ARE ONLY AS RELIABLE AS THE REPUTATION OF THEIR MAKER



Model 65-B
STANDARD SIGNAL GENERATOR



Model 80
STANDARD SIGNAL GENERATOR



Model 84
STANDARD SIGNAL GENERATOR

**MEASUREMENTS
CORPORATION**

BOONTON • NEW JERSEY

**MEASUREMENTS
"FAMOUS FIRSTS"**

in

Laboratory Standards

- 1939** MODEL 54 STANDARD SIGNAL GENERATOR—Frequency range of 100 Kc. to 20 Mc. The first commercial signal generator with built-in tuning motor.
- MODEL 65-B STANDARD SIGNAL GENERATOR—This instrument replaced the Model 54 and incorporated many new features including an extended frequency range of 75 Kc. to 30 Mc.
- 1940** MODEL 58 UHF RADIO NOISE AND FIELD STRENGTH METER—With a frequency coverage from 15 Mc. to 150 Mc. This instrument filled a long wanted need for a field strength meter usable above 20 Mc.
- MODEL 79-B PULSE GENERATOR—The first commercially-built pulse generator.
- 1941** MODEL 75 STANDARD SIGNAL GENERATOR—The first generator to meet the need for an instrument covering the I.F. and carrier ranges of high frequency receivers. Frequency range, 50 Mc. to 400 Mc.
- 1942** SPECIALIZED TEST EQUIPMENT FOR THE ARMED SERVICES.
- 1943** MODEL 84 STANDARD SIGNAL GENERATOR—A precision instrument in the frequency range from 300 Mc. to 1000 Mc. The first UHF signal generator to include a self-contained pulse modulator.
- 1944** MODEL 80 STANDARD SIGNAL GENERATOR—With an output metering system that was an innovation in the field of measuring equipment. This signal generator, with a frequency range of 2 Mc. to 400 Mc. replaced the Model 75 and has become a standard test instrument for many manufacturers of electronic equipment.
- 1945** MODEL 78-FM STANDARD SIGNAL GENERATOR—The first instrument to meet the demand for a moderately priced frequency modulated signal generator to cover the range of 86 Mc. to 108 Mc.
- 1946** MODEL 67 PEAK VOLTMETER—The first electronic peak voltmeter to be produced commercially. This new voltmeter overcame the limitations of copper oxide meters and electronic voltmeters of the r.m.s. type.
- 1947** MODEL 90 TELEVISION SIGNAL GENERATOR—The first commercial wide-band, wide-range standard signal generator ever developed to meet the most exacting standards required for high definition television use.
- 1948** MODEL 59 MEGACYCLE METER—The familiar grid-dip meter, but its new design, wide frequency coverage of 2.2 Mc. to 400 Mc. and many other important features make it the first commercial instrument of its type to be suitable for laboratory use.
- 1949** MODEL 82 STANDARD SIGNAL GENERATOR—Providing the extremely wide frequency coverage of 20 cycles to 50 megacycles. An improved mutual inductance type attenuator used in conjunction with the 80 Kc. to 50 Mc. oscillator is one of the many new features.
- MODEL 112 U.H.F. OSCILLATOR—Designed for the many applications in ultra-high frequency engineering that require a signal source having a high degree of frequency accuracy and stability. Range: 300 Mc. to 1000 Mc.
- 1950** MODEL 111 CRYSTAL CALIBRATOR—A calibrator that not only provides a test signal of crystal-controlled frequency but also has a self-contained receiver of 2 microwatts sensitivity.
- 1951** MODEL 31 INTERMODULATION METER—With completely self-contained test signal generator, analyzer, voltmeter and power supply. Model 31 aids in obtaining peak performance from audio systems, AM and FM receivers and transmitters.
- 1952** MODEL 84 TV STANDARD SIGNAL GENERATOR—With a frequency range of 300-1000 Mc., this versatile new instrument is the first of its kind designed for the UHF television field.
- 1953** MODEL 59-UHF MEGACYCLE METER—With a frequency range of 430 to 940 megacycles, the first grid-dip meter to cover this range in a single band and to provide laboratory instrument performance.
- 1954** FM STANDARD SIGNAL GENERATOR. Designed, originally, for Military service, the commercial model embodies performance far surpassing that of equipment presently available. Wide modulation frequency response, extremely low distortion, and high stability make this instrument useful for critical FM, multiplex, and telemetering applications.



In the words of Dr. Samuel Johnson, "The future is purchased by the present."

I know of no better way for industry to assure its future and our country's future than to join wholeheartedly in the full utilization of scientific research for the common good.

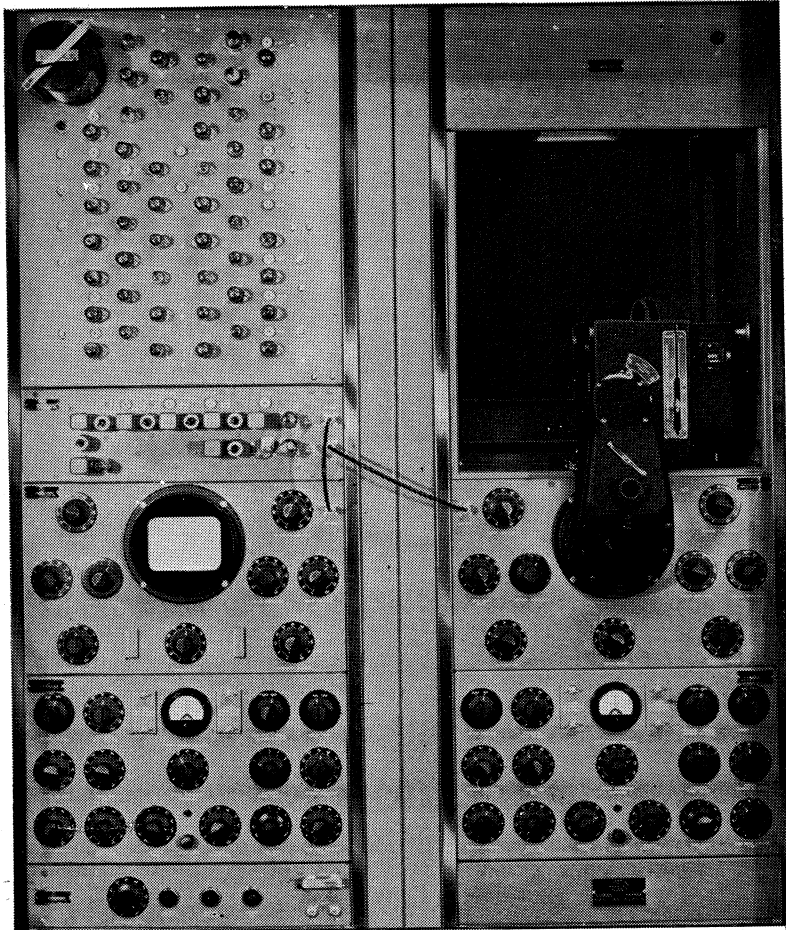
RCA, with pioneering and research as its foundation, is dedicated to the achievement of continued progress in radio, television, electronics, recorded sound and world-wide communications.

A handwritten signature in cursive script that reads "David Sarnoff".

Chairman of the Board

RADIO CORPORATION OF AMERICA

Electronics for Living



500 mc recording receiver, front section

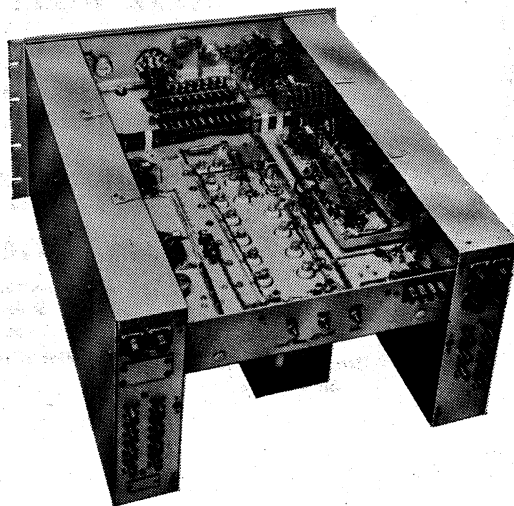
Solutions Unlimited

During its thirty-two years, Radio Engineering Laboratories has received world-wide acclaim for superior designs and production of dependable radio equipment. REL gear is continuing to achieve outstanding performance in these and other current applications:

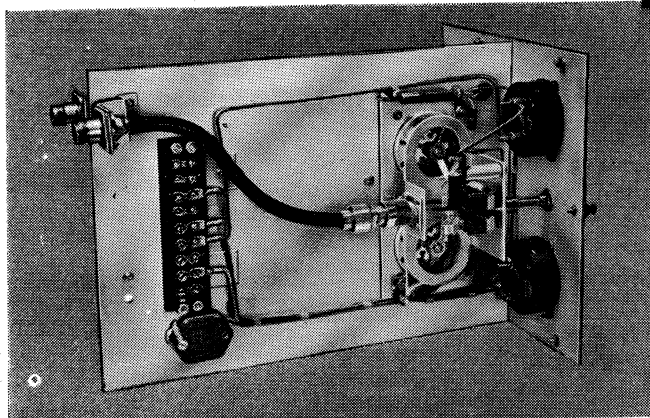
- Thin route telephone toll service*
- Guided missile control*
- Wave propagation research*
- Point-to-point communications (long and short range)*

- Radio frequency bands: 50 to 1500 mc*
- Output powers: 2 watts to 10 kw*
- Modulation base bands: 20 kc to .5 mc*
- Receiver noise factors: 3 to 7 db*

Your specialized radio problems are invited; REL has the experience and facilities to solve them.



Sweep generator, bottom view



150 mc output amplifier, bottom view

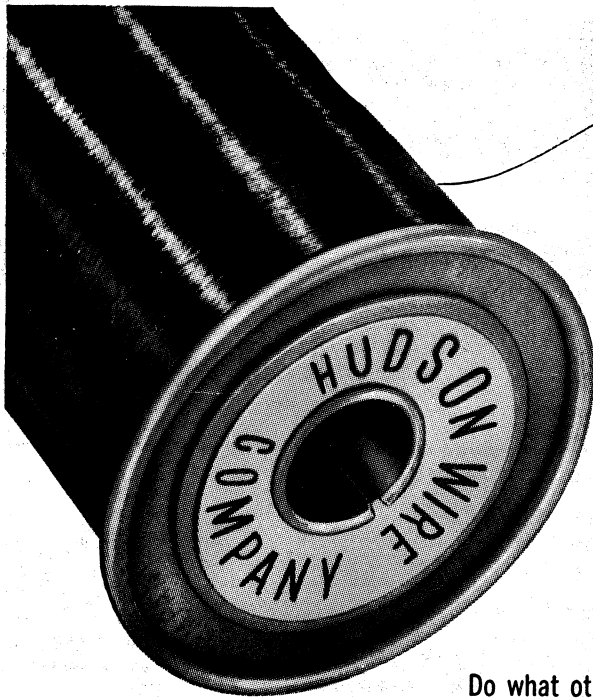
RADIO ENGINEERING LABORATORIES · INC.

36-40 37th St · Long Island City 1, N. Y.
Stillwell 6-2100 · Teletype: NY 4-2816

Canadian representative:
Ahearn & Soper Co., P. O. Box 715, Ottawa

International representative:
Rocke International Corp., 13 E. 40, N. Y. C. 17





FINE WIRE

made finer

Do what other electronic and electrical manufacturers have done for years: Turn your fine-wire problems and requirements over to Hudson Wire. You will be served promptly, satisfactorily, economically, by craftsmen backed by over 50 years of fine-wire specialization.

BARE WIRES

Coppers	Tin
Brasses	Cadmium
Bronzes	Oxygen-free Copper
Phosphor-bronze	Silver
Nickel-silvers	Fuse
Zinc	Stainless Steel
Lead	Brush Wires

SPECIALTY WIRES

Silver-plated Coppers, Brasses, Bronzes	Aluminum and Silver-Plated
Electro-tinned Copper	Tape for Voice Coils
Stranded and Bunched Silver-plated	Flat-Wire Ribbons

TEXTILE-COVERED WIRES

Nylon	Cotton
Celanese	Rayon
Silk	Fiberglas

Available on bare or enameled wire, single- or double-coated

INSULATED WIRES

MATERIALS	TYPES	COVERINGS
Copper	Instrument	Plain and Heavy
Aluminum	Tubing	Enamel
Iron	Litz	Formvar
Copper-clad	Multiple and	EZsol (Liquid Nylon)
Steel	Twisted	Cement-coated
		Enamel
		Dow-Corning
		1360 Silicone

FOR BARE & SPECIALTY WIRES

Hudson Wire Company
Ossining, N. Y.

FOR INSULATED WIRES

Winsted Division
Hudson Wire Company
Winsted, Conn.

Cassopolis Division
Hudson Wire Company
Cassopolis, Mich.

Here's your own
WIRE DEPARTMENT!

Research and development facilities to solve your problems. Exceptionally flexible production to provide "custom" service. Lowest cost with highest quality.

HUDSON WIRE COMPANY



BALLANTINE

World's Leading Electronic Voltmeters

AUDIO to 150 kc MODEL 300

Voltage Range..... 1mv—100v
 Frequency Range..... 10cps—150kc
 Accuracy..... 2% ENTIRE RANGE
 Input Impedance..... ½ meg shunted by 30µf



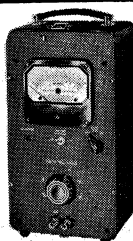
INFRASONIC to 30 kc MODEL 316

Voltage Range..... 20 mv—200 v pk-to-pk
 Frequency Range..... 0.05 cps—30 kc
(Down to .01 cps with corrections)
 Accuracy..... 3% ENTIRE RANGE
 Input Impedance..... 4.4 meg shunted by 50 µf



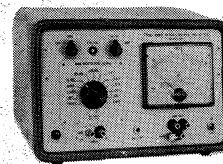
SUB-AUDIO to 150 kc MODEL 302B Battery Operated

Voltage Range..... 100µv—100v
 Frequency Range..... 2cps—150kc
 Accuracy..... 3% 5cps—100kc
 5% elsewhere
 Input Impedance..... 2 meg shunted by 15 µf*



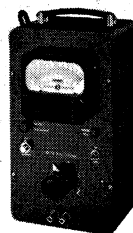
TRUE RMS INDICATION MODEL 320

Voltage Range..... 100 µv—320 v
 Frequency Range..... 5 cps—500 kc
 Accuracy..... 3% 15 cps—150 kc
 5% elsewhere
 Stability of Internal Calibrator..... 0.5%
 Input Impedance . . .
 10 megs shunted by 25 µf below 10 mv
 10 megs shunted by 8 µf above 10 mv



PEAK-to-PEAK MODEL 305

Voltage Range..... 1mv—1000v pk-to-pk
 Frequency Range..... 10cps—100kc (sine wave)
 Pulse width..... 3µsec—250µsec
 Min Rep Rate..... 20 pulses per sec
 Accuracy..... 5% for pulses
 Input Impedance..... 2 meg shunted by 15 µf*



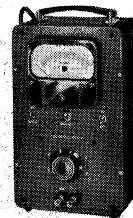
DC & AC PRECISION CALIBRATOR MODEL 420

Voltage Range..... 0-10 v RMS; Pk-to-Pk; or DC
 Frequency (Std Model)..... 1 kc
(other values on special order)
 Accuracy (long term) . . . Better than 0.5% above 1 mv
 Distortion and Hum..... Less than 0.5%
 Setting Resolution . . . Approaches 0.01% above 10 mv
 Output Impedance (AC)..... 2-20 ohms depending on range setting



AUDIO to 2 mc MODEL 310A

Voltage Range..... 100µv—100v
Down to 40 uv at reduced accuracy
 Frequency Range..... 10cps—2mc
As null detector 5cps—4mc
 Accuracy..... 3% 10cps—1mc
 5% elsewhere
 Input Impedance..... 2 meg shunted by 15µf*



SENSITIVE INVERTER MODEL 700

For Measuring DC Voltages when combined with any AC Voltmeter

Voltage Range..... 1µv—100v DC
 Ratios DC Input to RMS Output..... 1:100 & 10:1
 Accuracy..... 1% 100µv—100v
 Input Resistance..... >10 meg for 1:100
 50 meg for 10:1



AUDIO to 6 mc MODEL 314

Voltage Range..... 1mv—1000v
(100µv—1mv without probe)
 Frequency Range..... 15cps—6mc
 Accuracy..... 3% 15cps—3mc
 5% elsewhere
 Input Impedance..... 11 meg shunted by 7.5 µf
(1 meg shunted by 25µf without probe)



DECADE AMPLIFIER MODEL 220A

For Increasing the Sensitivity of any AC Voltmeter by 10 or 100 times

Voltage Range..... 10µv—50mv
 Frequency Range..... 10cps—150kc
 Accuracy..... 2% ENTIRE RANGE
 Input Impedance..... 5 meg shunted by 15µf



ACCESSORIES are available for all voltmeters to extend voltage measurements down to 20 uv and up to 10 kv, and to measure alternating currents from 0.1 uamp to 10 amp, and to provide DC from the Model 300 Voltmeter to drive external recorders or remotely located meters.

Famous for SENSITIVITY • ACCURACY • STABILITY

Each Ballantine Voltmeter

- Has only ONE voltage scale with decade range switching.
- Provides the same accuracy of reading at ALL points on the logarithmic voltage scale.
- Has a linear decibel scale.

- May be used as a high gain wide band amplifier.
- Responds to the average value of the input voltage wave, thus avoiding "turn-over" discrepancy.

WRITE FOR MORE DETAILED INFORMATION TO—

*Shunt capacitance is 8µf on all ranges except two most sensitive ranges.

BALLANTINE LABORATORIES, INC.

BOONTON, NEW JERSEY

*Third in the series of
important new instruments
by DuMont type 327*

- Vertical bandwidth, D-C to 5 MC; rise time of 0.07 usec
- Distortion-free, mono-accelerator cathode-ray tube
- Direct, accurate, reliable time measurement
- Measures signal amplitude accurately from calibrated screen



Continuing the pace set by the now-famous Du Mont Types 323 and 329, the new Type 327 provides the truly modern approach to the broad "middle range" of oscillography, offering superb performance characteristics from DC to 5MC.

At modest price — not a major investment in any sense — the Type 327 features accurate, time and amplitude calibration. And, measuring facilities are not degraded by the cathode-ray tube since a virtually distortion-free mono-

accelerator tube is used.

Useful from DC through the low-frequency spectrum and for many applications in the high-frequencies as well, the Type 327 is expected to find more actual use than any other single instrument.

By combining the best features of low- and high-frequency oscillographs this new instrument provides a uniquely efficient and practical tool for production as well as research.

MAJOR SPECIFICATIONS

VERTICAL AMPLIFIER: Frequency response, flat from zero (d. c.) to down not more than 30% at 5 mc; Rise time, 0.07 usec; Deflection factor, 0.25 volts peak-to-peak per inch; Signal delay, 0.4 usec allows sweep to start before signal is applied.

CALIBRATED SWEEPS: (1) High-level calibrated, 19 steps from 1 sec/inch to 1 usec/inch; Accuracy $\pm 5\%$; (2) Calibrated expansion, by factors of 2, 3, 4, or 5

with full positioning and accuracy of 15%; (3) Continuously variable, uncalibrated.

AMPLITUDE MEASUREMENT: Calibrating voltage, 0.5 volts p-p internal; Range, 10 full scale ranges from 0.5 to 500 volts full scale.

CATHODE-RAY TUBE: Distortion-free Mono-accelerator Type 5AMP—; Accelerating potential, 2500 volts, equivalent to operation at 3 kv on post-accelerator types.

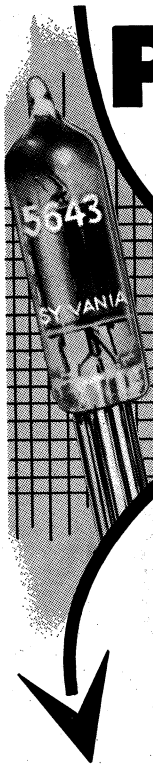
DU MONT

ALLEN B. DU MONT LABORATORIES, INC.

TECHNICAL SALES DEPARTMENT • 760 BLOOMFIELD AVENUE • CLIFTON, N. J.

ANNOUNCING EXTRA PREMIUM PERFORMANCE

in a new line of reliable
tubes built to
CLOSE DESIGN CENTERS



SYLVANIA MILITARY CONTROL SUBMINIATURE TUBES

From the leading pioneer in the development of tubes for reliable use comes a new line of extra premium performance tubes—Sylvania Military Control subminiatures. Built to twice-tightened tolerances and tested under sampling plans of high discriminating power, these Sylvania subminiature tubes meet the most stringent specifications for tubes used by the Armed Forces in guided missiles, modern aircraft, and other military equipment.

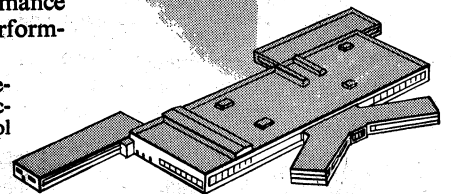
Ruggedized to withstand shock tests at 500 G, Sylvania extra premium performance subminiatures offer maximum reliability under severe environmental conditions.

Important tube-design advancements im-

proving every critical element have been incorporated in Sylvania Military Control subminiatures. New manufacturing techniques have been developed to produce the most rugged tube ever built, and all-point quality control methods have been innovated to guard against catastrophic failures.

Only Sylvania, with integrated facilities which provide complete control of all parts from raw materials to finished product, could initiate the high quality and performance standard of these extra premium performance tubes.

New technical bulletin reveals complete design details, testing methods and manufacturing facilities for Sylvania Military Control subminiature tubes. Write for it.



Sylvania's new plant in Burlington, Iowa, is devoted exclusively to the design and production of subminiature tubes.

Here is the complete line of Sylvania Military Control (extra premium performance) subminiature tubes

5636A..... Pentode Mixer	5840A/6205A..... Sharp Cut-off Pentode
5639A..... Video Output Pentode	5896A..... Double Diode Detector
5641A..... Rectifier	5899A/6206A..... Semi-Remote Cut-off Pentode
5643..... Thyatron	5902A..... Audio Power Pentode
5644A..... Voltage Regulator	5977A..... Low Mu Triode
5647A..... T-1 Detector	6021A..... Medium Mu Double Triode
5718A..... Medium Mu Triode	6110..... Double Diode Detector
5719A..... High Mu Triode	6111A..... Low Mu Double Triode
6112A..... High Mu Double Triode	

SYLVANIA

SYLVANIA ELECTRIC PRODUCTS INC. • 1740 BROADWAY, NEW YORK 19, N. Y.
In Canada: Sylvania Electric (Canada) Ltd., University Tower Bldg., St. Catherine Street, Montreal, P.Q.

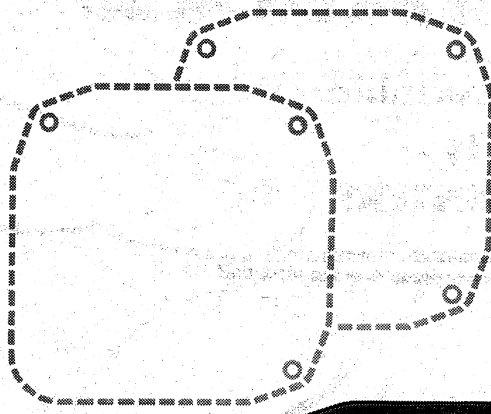
Sylvania Electric Products Inc., Dept. B 23P,
1740 Broadway, New York 19, N. Y.
Please send Technical Bulletin on Sylvania Military Control subminiature tubes.

Name _____
Company _____
Address _____
City _____
Zone _____ State _____

LIGHTING • RADIO • ELECTRONICS • TELEVISION • ATOMIC ENERGY

new **ARC**
course indicator gives you

two **instruments**



in **one!**

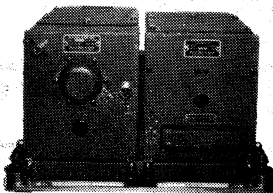


ARC #16706

TYPE 15D EQUIPMENT

Compact... Lightweight... CAA Certificated

For Airborne Reception of Omni-Directional
 Ranges • Visual-Aural Ranges • Runway Localizers
 Simultaneous Voice • GCA Voice



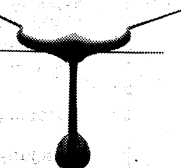
R-13B Receiver with D-10A Dynamotor
 B-13 Converter, E-14 Rack and
 M-10 Mounting



Course Selector and
 Cross-Pointer Meter
 in a single unit



C-22A Control Unit, M-18 Mounting



A-13B Antenna

Now users of the light, compact ARC Type 15D navigational receiving equipment can employ a single panel instrument that performs the work of two units previously used. The cross-pointer meter and the course selector have been combined into one part that fits a standard 3 1/8" instrument hole.

This saving in instrument panel space is important, particularly now that dual VOR installations are so popular. In addition to the space saving, installation costs are cut.

Ask your dealer to specify the new #16706 Course Indicator as part of your 15D installation — whether single or dual.

The indicator may be purchased separately for use with older Type C and D equipment. Write for complete data.



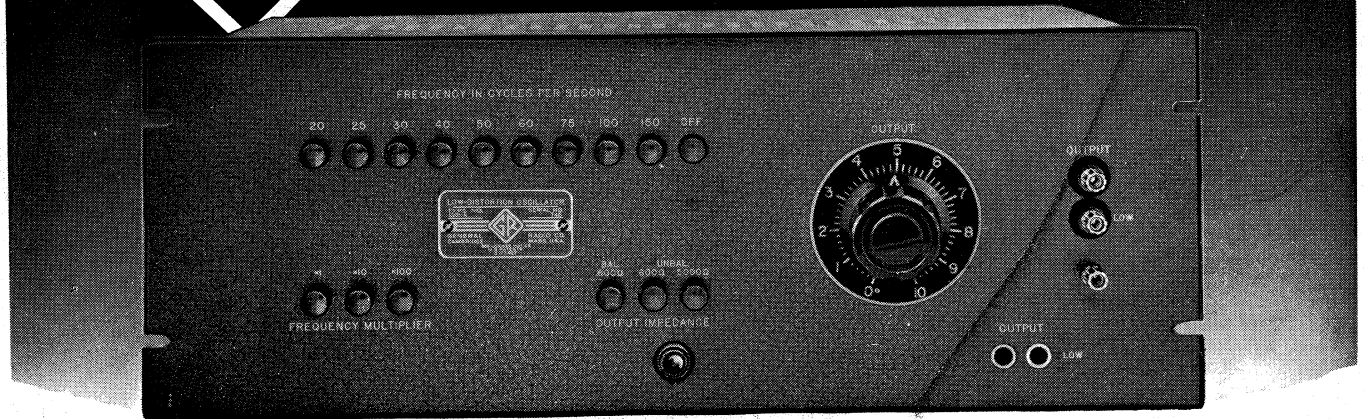
Aircraft Radio Corporation

BOONTON • NEW JERSEY



Low Distortion Oscillator

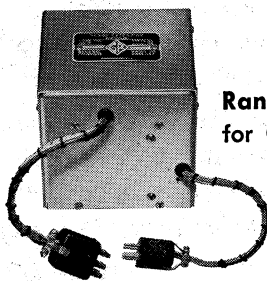
Provides Exceptionally Pure Waveform
Over the Audio Range



This highly stable oscillator with unusually low distortion is ideally suited to general-purpose laboratory measurements. It makes an exceptionally fine audio-frequency power source for bridge use, for general distortion measurements, for checking of high-fidelity audio equipment, and to obtain frequency characteristics and to make rapid measurements of distortion in broadcast transmitter systems.

Distortion is less than 0.1% between 40 and 7,500 cycles, and not more than 0.15% to 15,000 cycles. Frequency drift is less than 0.02% per hour at any setting, and changes in load have practically no effect upon frequency. Pushbuttons provide rapid and convenient selection of any of the 27 fixed frequencies between 20 and 15,000 cycles.

If you have need for an accurate and stable, low-distortion oscillator which can be rapidly set, we're sure you'll find this instrument to your liking.



Range Extension Unit for Coverage from 2 to 15 Cycles

The Type 1301-A Low-Distortion Oscillator provides frequencies from 20 to 15,000 cycles. The Range Extension Unit lowers this range by a full decade to 2 to 15 cycles at slight sacrifice in waveform purity.

This frequency extension feature greatly broadens the oscillator's usefulness. The lower frequencies find application in servo-

Frequency Range: 20 to 15,000 cycles in 27 fixed steps — 2 to 15,000 cycles with Type 1301-P1 Range Extension Unit

Very Low Distortion: Unique frequency selective network provides complete degeneration at all frequencies above and below frequency selected
5,000-ohm Output — less than 0.1% distortion from 40 to 7,500 cycles; 0.15% from 7,500 cycles to 15 kc — 1% with Extension Unit from 2 to 15 cycles

600-ohm Output — distortion is less than 0.25% from 20 to 40 cycles; 0.1% from 40 to 7,500 cycles; and 0.15% above 7,500 cycles to 15 kc

Rapid Coverage: Pushbuttons select any of 27 frequencies (in approximately logarithmic order)—any desired frequency between steps is obtained by plugging in external resistors

High Stability: Frequency not affected by changes in load or plate voltage; drift less than 0.02% per hour after a few minutes operation

Accurate Frequency Calibration: Instruments individually adjusted to $\pm(1\frac{1}{2}\% + 0.1 \text{ cycle})$

Output Power: 18 mw into 600 ohms and 100 mw into 5,000 ohms — output is constant within 1 db over the range

No Temperature or Humidity Effects: Operation is unaffected by ordinary climatic conditions

Dimensions: 19 x 7 x 12 inches Net Wt: 31½ lbs.
Type 1301-A Low-Distortion Oscillator **\$495**

mechanisms research, vibration work, medical investigations, study of underwater propagation of subsonic signals, calibration of seismic equipment for geophysical explorations, pen-and-ink recorder development . . . and, in general, wherever stable, low-distortion signals may be required.

Type 1301-P1 Range Extension Unit . . . \$80.00

Since 1915



Manufacturers of Electronic Apparatus for Science and Industry

GENERAL RADIO Company

275 Massachusetts Avenue, Cambridge 39, Massachusetts, U.S.A.

90 West Street NEW YORK 6
8055 13th St., Silver Spring, Md. WASHINGTON, D. C.
920 S. Michigan Avenue CHICAGO 5
1000 N. Seward Street LOS ANGELES 38

ADMITTANCE METERS
AMPLIFIERS
COAXIAL ELEMENTS
DISTORTION METERS
FREQUENCY MEASURING APPARATUS
FREQUENCY STANDARDS
IMPEDANCE BRIDGES
LIGHT METERS
MEGOhmmeters

MODULATION METERS
MOTOR CONTROLS
NULL DETECTORS
OSCILLATORS
PARTS & ACCESSORIES
POLARISCOPES
PRECISION CAPACITORS
PULSE GENERATORS
R-L-C DECADES
R-L-C STANDARDS

SIGNAL GENERATORS
SOUND & VIBRATION METERS
STROBOSCOPES
TV & BROADCAST MONITORS
U-H-F MEASURING EQUIPMENT
UNIT INSTRUMENTS
VARIACS
V-T VOLTMETERS
WAVE ANALYZERS
WAVE FILTERS