

## REPORT OF THE SECRETARY

1956

To the Board of Directors  
The Institute of Radio Engineers, Inc.

Gentlemen:

The Annual Report for 1956, the 45th anniversary of the founding of the IRE, is herewith submitted.

Growth in all departments continues. The total membership went up 17.1 percent and it should be noted that a 15.6 percent increase in foreign members indicates expanding activity internationally. A significant statistic concerns the Student grade which had its largest net growth in seven years, the number going up 41.6 percent. The total membership of all grades at the close of the year was 55,494.

The popularity of the Professional Group system has now brought the total paid membership of the Groups to 53,015. Another index of Group activities expansion is the large increase in the number of TRANSACTIONS pages, which went up 44 percent during the year.

IRE affairs can be seen as continuing in a sound and satisfactory condition.

Respectfully submitted,

Haraden Pratt  
Secretary

February 6, 1957

## INDEX OF TABLE NUMBERS

Table I	Total Membership Distribution by Grades, 1956	Page 2
Table II	Total Membership Distribution by Grade by Percentage, 1956	Page 2
Table III	Comparison of Total Membership Distribution by Grades, 1954 - 1956	Page 3
Table IV	Analysis of Total Membership Distribution by Grades, 1956	Page 3
Table V	Five-Year Analysis of U.S. and Foreign Membership	Page 3
Table VI	Distribution of Members, by Grade, by Annual Dues Rate, 1956	Page 4
Table VII	Distribution of U.S. Members, 1955 and 1956	Page 5
Table VIII	Distribution of U.S. Members by Grade and State, 1956	Page 7
Table IX	Distribution of Membership by Region, by Section, by Grade, 1956	Page 10
Table X	Distribution of Foreign Members, 1955 and 1956	Page 16
Table XI	Distribution of Foreign Members by Grade and Country, 1956	Page 17
Table XII	Geographical and Grade Breakdown, Canada, U.S. Possessions and Overseas Military Membership, 1956	Page 21
Table XIII	Membership Changes, by Grades, 1956	Page 22
Table XIV	Analysis of Transfers, by Grades, 1956	Page 22
Table XV	Analysis of Higher Grade Applications, 1956	Page 23
Table XVI	Life Members, by Grades, 1956	Page 24
Table XVII	Yearly Membership, 1912 - 1956 (Numerical) (Figure 2, graphical)	Page 25
Table XVIII	Professional Group Membership, by Groups, 1955 and 1956	Page 26
Table XIX	Five-Year Analysis of Professional Group Membership, 1952 - 1956	Page 27
Table XX	Deceased Members, 1956	Page 28
Table XXI	IRE National Conventions, 1946 - 1956	Page 31
Table XXII	Summary of Income and Expenses, 1956	Page 32
Table XXIII	Balance Sheet, December 31, 1956	Page 33
Table XXIV	Editorial Department Activities, 1956	Page 34
Table XXV	Technical Department Activities, 1956	Page 38
Table XXVI	Section Activities, 1956	Page 49
Table XXVII	Section Meetings and Membership, 1956	Page 51
Table XXVIII	Subsection Meetings and Membership, 1956	Page 55
Table XXIX	Professional Group Chapter Meetings, 1956	Page 56
Table XXX	Student Branch Activities, 1956	Page 57

Table I - Total Membership Distribution by Grades as of December 31, 1956

Grade	Number	Percentage
Fellow	635	1.1
Senior Member	6,486	11.6
Member	19,110	34.6
Voting Associate	388	.7
Associate	18,491	33.3
Student	10,384	18.7
<b>Grand Total</b>	<b>55,494</b>	<b>100.0</b>

Table II - Total Membership Distribution by Grade by Percentage as of December 31, 1956

Grade	Grade Percentage	Total Percentage
Fellow	1.1	1.1
Senior Member	11.6	11.6
Member	34.6	34.6
Voting Associate	.7	.7
Associate	33.3	48.0
Student	18.7	81.3
<b>Grand Total</b>	<b>100.0</b>	<b>100.0</b>

\*Includes 893 Voting Associates  
 \*\*Includes 398 Voting Associates  
 \*\*\*Includes 388 Voting Associates

Table III - Comparison of Total Membership Distribution by Grades, 1954 - 1956

Grade	As of Dec. 31, 1956		As of Dec. 31, 1955		As of Dec. 31, 1954	
	Number	% of Total	Number	% of Total	Number	% of Total
Fellow	635	1.1	565	1.2	489	1.2
Senior Member	6,486	11.6	5,643	11.9	4,780	11.4
Member	19,110	34.6	13,360	28.2	6,107	14.6
Associate	18,879***	34.0	20,492**	43.2	24,846*	59.5
Student	<u>10,384</u>	18.7	<u>7,328</u>	15.5	<u>5,556</u>	13.3
Totals	55,494		47,388		41,778	

Table IV - Analysis of Total Membership Distribution by Grades, 1956

	<u>F(\$15)</u>	<u>SM(\$15)</u>	<u>SM(\$10)</u>	<u>M(\$15)</u>	<u>M(\$10)</u>	<u>VA(\$15)</u>	<u>A(\$15)</u>	<u>A(\$10)</u>	<u>S(\$5)</u>	<u>Total</u>
United States	559	5,484	487	12,336	5,113	358	4,738	11,972	9,929	50,976
U.S. Possessions		10	1	49	14	1	34	45	17	171
U.S. Overseas Military	1	22	1	83	78	1	31	167	20	404
	<u>560</u>	<u>5,516</u>	<u>489</u>	<u>12,468</u>	<u>5,205</u>	<u>360</u>	<u>4,803</u>	<u>12,184</u>	<u>9,966</u>	<u>51,551</u>
Canada	26	148	14	498	260	12	202	608	317	2,085
	<u>49</u>	<u>284</u>	<u>35</u>	<u>529</u>	<u>150</u>	<u>16</u>	<u>235</u>	<u>459</u>	<u>101</u>	<u>1,858</u>
Totals	635	5,948	538	13,495	5,615	388	5,240	13,251	10,384	55,494

Table V - Five-Year Analysis of U. S. and Foreign Membership

	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1953</u>	<u>1952</u>
Total	55,494	47,388	41,778	37,134	32,874
U. S. and Possessions	51,551	43,977	38,923	34,505	30,535
Foreign (including Canada)	3,943	3,411	2,855	2,629	2,339
Per Cent Foreign	7.1	7.2	6.8	7.1	7.1

\*Includes 803 Voting Associates  
 \*\*Includes 396 Voting Associates  
 \*\*\*Includes 388 Voting Associates

Table VI - Distribution of Members, by Grade, by Annual Dues Rate, 12/31/56

		<u>\$15.00</u>	<u>\$10.00</u>	<u>\$5.00</u>
Fellow	6373	635		
Senior Member	274	5,948	538	
Member	693	13,495	5,615	
Voting Associate	32	388		
Associate	1984	5,240	13,251	
Student	443			10,384
	258			
	191			
	193			
	53			
	1800			
	2866			
	889			
	466			
	185			
	560			
	32			
	84			
	21			
	119			
	4173			
	489			
	8673			
	335			34
	47			1
	1876			
	392			
	231			
	2493			
	91			
	99			
	52			
	191			
	1509			
	133			
	37			
	264			
	503			
	68			
	384			
	35			
	43521			
		25,706	19,404	10,384

Table VII - Distribution of U. S. Members 1955 and 1956  
(Including U. S. Possessions and U. S. Overseas Military)

<u>1956</u>	<u>1955</u>		<u>Gain</u>	<u>Loss</u>
320	234	Alabama	86	
505	366	Arizona	139	
123	94	Arkansas	29	
8031	6373	California	1658	
400	274	Colorado	126	
903	748	Connecticut	155	
72	64	Delaware	8	
894	693	District of Columbia	201	
868	634	Florida	234	
290	289	Georgia	1	
38	32	Idaho	6	
2335	1984	Illinois	351	
1006	834	Indiana	172	
520	448	Iowa	72	
326	255	Kansas	71	
200	191	Kentucky	9	
193	152	Louisiana	41	
93	89	Maine	4	
1966	1800	Maryland	166	
3346	2866	Massachusetts	480	
1069	889	Michigan	180	
555	406	Minnesota	149	
113	105	Mississippi	8	
713	560	Missouri	153	
35	32	Montana	3	
115	84	Nebraska	31	
26	21	Nevada	5	
140	119	New Hampshire	21	
4729	4173	New Jersey	556	
585	489	New Mexico	96	
9596	8673	New York	923	
301	335	North Carolina		34
46	47	North Dakota		1
2046	1876	Ohio	170	
469	392	Oklahoma	77	
250	231	Oregon	19	
2968	2603	Pennsylvania	365	
108	94	Rhode Island	14	
153	99	South Carolina	54	
96	52	South Dakota	44	
249	191	Tennessee	58	
1733	1509	Texas	224	
168	130	Utah	38	
37	37	Vermont	-	
1020	864	Virginia	156	
667	603	Washington	64	
76	68	West Virginia	8	
434	384	Wisconsin	50	
50	35	Wyoming	15	
<u>50976</u>	<u>43521</u>	<u>NET GAIN</u>	<u>7490</u>	<u>35</u>
			7455	

Table VII - Distribution of U. S. Members 1955 and 1956 - Continued  
 (Including U. S. Possessions and U. S. Overseas Military)

		<u>United States Possessions</u>							
<u>1956</u>	<u>1955</u>						<u>Gain</u>	<u>Loss</u>	
		Alaska					8	19	
47	39	Canal Zone					-	1,960	
4	4	Mariana Islands					30	80	2
1	3	Puerto Rico					1	235	
34	33	Territories of Hawaii					-	15	
84	84	Virgin Islands					-	120	
1	1								
<u>171</u>	<u>164</u>						<u>9</u>	<u>2</u>	
		<u>NET GAIN</u>							<u>7</u>
		<u>U. S. Overseas Military</u>							
404	292						112	632	
		<u>NET GAIN</u>							<u>112</u>

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/56

<u>State</u>	<u>F</u>		<u>SM</u>		<u>M</u>		<u>VA</u>		<u>A</u>		<u>S</u>	<u>Total</u>
	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$5</u>			
Alabama	-	10	-	39	29	-	7	72	163	320		
Arizona	2	63	7	118	67	1	29	126	92	505		
Arkansas	2	7	1	12	2	-	5	19	75	123		
California	66	842	87	2,063	949	47	797	1,960	1,220	8,031		
Colorado	1	38	7	87	35	1	30	80	121	400		
Connecticut	14	93	9	227	52	4	87	225	192	903		
Delaware	-	5	-	13	8	-	7	15	24	72		
Dist. of Columbia	28	142	20	260	75	13	76	180	100	894		
Florida	6	76	5	166	94	10	70	214	227	868		
Georgia	-	23	2	68	29	2	22	42	102	290		
Idaho	-	-	-	11	8	-	7	7	5	38		
Illinois	18	262	11	598	153	31	264	632	366	2,335		
Indiana	8	88	7	173	80	4	79	212	355	1,006		
Iowa	3	45	4	106	49	3	42	113	155	520		
Kansas	1	11	-	60	17	1	21	66	149	326		
Kentucky	1	16	3	38	21	-	13	36	72	200		
Louisiana	1	15	3	33	23	3	18	36	61	193		
Maine	1	4	-	16	6	-	7	11	48	93		
Maryland	17	260	44	619	200	27	163	487	149	1,966		
Massachusetts	47	321	41	798	382	13	222	748	774	3,346		
Michigan	5	70	4	238	80	15	106	258	293	1,069		
Minnesota	5	29	5	132	73	2	51	131	127	555		
Mississippi	-	2	-	11	4	-	5	19	72	113		

Continued

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/56

State	F		SM		M		VA		A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5			
Missouri	2	43	2	122	56	4	50	135	299	713		
Montana	-	-	-	9	-	1	3	4	18	35		
Nebraska	1	5	1	29	3	2	7	21	46	115		
Nevada	-	4	-	-	1	-	1	7	13	26		
New Hampshire	-	13	2	44	8	-	9	23	41	140		
New Jersey	132	763	54	1,281	480	38	462	1,092	427	4,729		
New Mexico	2	66	9	133	86	1	39	148	101	585		
New York	130	1,091	78	2,291	975	61	1,023	2,451	1,496	9,596		
North Carolina	1	29	4	86	40	5	36	10	90	301		
North Dakota	-	-	-	4	4	1	2	4	31	46		
Ohio	11	243	15	534	199	16	241	529	258	2,046		
Oklahoma	1	29	1	80	32	1	49	90	186	469		
Oregon	3	19	2	55	17	4	25	43	82	250		
Pennsylvania	28	364	30	698	284	27	255	716	566	2,968		
Rhode Island	-	3	2	26	7	1	10	28	31	108		
South Carolina	1	7	-	12	23	-	18	19	73	153		
South Dakota	-	-	-	9	4	-	4	6	73	96		
Tennessee	1	12	1	44	25	-	23	51	92	249		
Texas	7	163	14	418	189	4	136	385	417	1,733		
Utah	-	7	-	19	12	-	5	28	97	168		
Vermont	-	4	-	5	8	-	-	5	15	37		

Continued

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/56

<u>State</u>	<u>F</u>		<u>SM</u>		<u>M</u>		<u>VA</u>		<u>A</u>		<u>S</u>	<u>Total</u>
	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$5</u>		
Virginia	6	133	9	269	94	6	79	245	179	1,020		
Washington	4	35	1	168	68	3	77	136	175	667		
West Virginia	-	3	1	9	2	-	9	20	32	76		
Wisconsin	3	24	1	101	58	5	46	83	113	434		
Wyoming	-	2	-	4	2	1	1	4	36	50		
<b>Totals</b>	<b>559</b>	<b>5,484</b>	<b>487</b>	<b>12,336</b>	<b>5,113</b>	<b>358</b>	<b>4,738</b>	<b>11,972</b>	<b>9,929</b>	<b>50,976</b>		

Elmira-Corning	2	19	34	-	46	4	127
Ithaca	2	13	34	-	35	39	143
Rochester	2	45	125	4	93	17	286
Rome-Utica	1	56	147	-	168	12	384
Schenectady	13	82	119	3	93	88	398
Syracuse	14	149	279	-	223	55	720
Long Island	36	391	1,115	19	1,123	324	3,008
New York	53	266	745	25	942	713	2,744
Mid-Hudson Sub.	1	23	198	1	232	49	504
Monmouth Sub.	9	101	192	3	157	20	482
Westchester Sub.	5	70	253	8	157	33	523
Northern New Jersey	75	473	1,064	25	935	245	2,827
Princeton	31	87	143	1	132	63	457
Atlanta	-	32	146	2	112	295	593
Charleston Sub.	1	6	24	-	39	23	93

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/56

<u>Region</u>	<u>Section</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>VA</u>	<u>A</u>	<u>S</u>	<u>Section Total</u>	<u>Region Total</u>
1	Binghamton	-	10	104	1	85	23	223	7,237
	Boston	48	360	1,193	13	974	751	3,339	
	New Hampshire Sub.	-	15	51	-	32	42	140	
	Buffalo-Niagara	-	42	120	3	142	35	342	
	Erie Sub.	-	5	20	1	15	10	51	
	Conn. Valley	14	106	309	5	327	240	1,001	
	Berkshire Sub.	1	9	35	-	31	5	81	
	Elmira-Corning	2	19	54	-	46	6	127	
	Ithaca	2	13	34	-	35	59	143	
	Rochester	2	45	125	4	93	17	286	
	Rome-Utica	1	56	147	-	168	12	384	
	Schenectady	13	82	119	3	93	88	398	
	Syracuse	14	149	279	-	225	55	722	
2	Long Island	36	391	1,115	19	1,123	324	3,008	10,620
	New York	53	266	745	25	962	713	2,764	
	Mid-Hudson Sub.	1	23	198	1	252	49	524	
	Monmouth Sub.	9	101	192	3	157	20	482	
	Westchester Sub.	5	70	205	8	187	53	528	
	Northern New Jersey	75	473	1,064	25	935	285	2,857	
	Princeton	31	87	143	1	132	63	457	
3	Atlanta	-	38	146	2	112	295	593	9,298
	Charleston Sub.	1	6	24	-	39	23	93	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/56

<u>Region</u>	<u>Section</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>VA</u>	<u>A</u>	<u>S</u>	<u>Section Total</u>	<u>Region Total</u>
3	Baltimore	7	158	474	5	404	87	1,135	
	Central Florida	2	30	116	-	127	23	298	
	Gainesville Sub.	-	15	12	-	13	107	147	
	Florida West Coast	5	6	20	4	44	6	85	
	Huntsville	1	13	83	-	84	145	326	
	Memphis Sub.	-	-	9	-	26	29	64	
	Miami	1	25	58	11	63	82	240	
	North Carolina-Va.	3	19	93	-	80	197	392	
	Hampton Roads Sub.	-	5	56	1	47	6	115	
	Piedmont Sub.	-	23	80	4	60	13	180	
	Western No. Car. Sub.	-	3	14	1	25	6	49	
	Northwest Florida	-	3	36	-	35	9	83	
	Panama City Sub.	-	4	18	-	4	-	26	
	Philadelphia	32	402	1,029	34	1,014	377	2,888	
	Lancaster Sub.	2	35	78	2	89	15	221	
	Washington	40	430	915	30	737	211	2,363	
4	Akron	1	21	99	3	102	37	263	3,988
	Cincinnati	2	44	140	4	122	46	358	
	Cleveland	3	50	161	5	139	58	416	
	Columbus	2	15	68	1	80	58	224	
	Dayton	3	113	204	2	240	42	604	
	USAFIT Sub.	-	6	29	-	27	-	62	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/56

<u>Region</u>	<u>Section</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>VA</u>	<u>A</u>	<u>S</u>	<u>Section Total</u>	<u>Region Total</u>
4	Detroit	5	70	302	14	349	242	982	
	Emporium	1	39	44	1	30	8	123	
	Centre County Sub.	-	20	38	-	26	68	152	
	Pittsburgh	8	59	169	2	191	187	616	
	Toledo	-	9	42	1	60	31	143	
	Williamsport	1	1	14	-	9	20	45	
5	Cedar Rapids	3	51	149	2	152	150	507	5,376
	Chicago	18	270	747	33	834	450	2,352	
	Evansville-Owensboro	1	24	38	-	39	15	117	
	Fort Wayne	4	33	84	1	111	19	252	
	Indianapolis	3	41	99	2	93	195	433	
	Louisville	-	3	33	-	23	72	131	
	Milwaukee	3	25	149	5	117	253	552	
	Omaha-Lincoln	1	6	38	3	36	51	135	
	South Bend-Mishawaka	1	17	60	-	51	40	169	
	Twin Cities	5	34	242	3	206	238	728	
6	Alamogordo-Holloman	-	1	44	-	39	1	85	4,319
	Beaumont-Pt. Arthur	-	4	26	1	27	40	98	
	Dallas	4	76	196	-	155	84	515	
	Shreveport Sub.	-	9	20	-	16	19	64	
	Denver	1	47	127	2	115	154	446	
	El Paso	-	7	33	-	41	3	84	
	Las Cruces- White Sands Sub.	-	3	21	-	29	31	84	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/56

<u>Region</u>	<u>Section</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>VA</u>	<u>A</u>	<u>S</u>	<u>Section Total</u>	<u>Region Total</u>
6	Fort Worth	-	19	120	2	84	31	256	
	Houston	2	39	148	2	126	134	451	
	Kansas City	2	31	99	3	130	271	536	
	Little Rock	2	7	14	-	24	75	122	
	Lubbock	-	2	21	-	31	45	99	
	New Orleans	1	12	54	1	54	52	174	
	Oklahoma City	-	10	70	1	43	104	228	
	St. Louis	1	26	143	2	135	165	472	
	San Antonio	1	30	66	-	88	81	266	
	Tulsa	1	20	41	-	95	82	239	
	Wichita	-	2	37	-	37	24	100	
7	Albuquerque - Los Alamos	2	70	157	1	119	69	418	10,221
	China Lake	-	5	34	-	38	2	79	
	Fort Huachuca	1	13	27	-	16	2	59	
	Hawaii	-	8	32	1	41	2	84	
	Los Angeles	23	370	1,271	15	1,182	441	3,302	
	Buenaventura Sub.	2	17	74	1	55	13	162	
	Orange Belt Sub.	4	44	143	-	129	12	332	
	Pasadena Sub.	3	71	192	3	172	66	507	
	San Fernando Sub.	1	92	288	5	291	34	711	
	Phoenix	1	36	102	-	95	56	290	
	Portland	3	21	72	4	71	88	259	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/56

<u>Region</u>	<u>Section</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>VA</u>	<u>A</u>	<u>S</u>	<u>Section Total</u>	<u>Region Total</u>
7	Sacramento	1	6	50	2	60	26	145	
	Salt Lake	-	7	44	-	45	103	199	
	San Diego	1	62	242	3	186	66	560	
	San Francisco	5	41	188	12	191	118	555	
	East Bay Sub.	5	32	133	3	143	172	488	
	Palo Alto Sub.	21	195	386	2	330	278	1,212	2,558
	Seattle	5	34	214	3	203	152	611	
	Richland Sub.	-	2	32	1	15	39	89	766
	Tucson	-	20	58	1	46	34	159	
8	Bay of Quinte	1	9	20	1	27	16	74	2,085
	Hamilton	2	22	51	1	62	8	146	
	London	-	6	26	-	32	8	72	
	Montreal	7	39	196	6	159	55	462	
	Quebec Sub.	-	1	26	-	23	16	66	
	Newfoundland	-	1	21	-	20	1	43	
	Northern Alberta	-	3	19	-	39	30	91	
	Ottawa	8	26	90	-	92	15	231	
	Regina	-	-	17	-	28	2	47	
	Southern Alberta	-	-	20	-	35	3	58	
	Toronto	6	43	203	3	192	75	522	
	Vancouver	1	8	37	1	65	63	175	
	Winnipeg	1	4	32	-	36	25	98	

Continued

Table IX - Distribution of Membership by Region, by Section by Grade as of 12/31/56

Region	Section	1955				1956		Section Total	Region Total
		F	SM	M	VA	A	S		
-	Buenos Aires	2	19	21	-	63	20	125	125
-	Egypt	-	3	9	-	12	-	24	24
-	Israel	-	3	17	-	27	1	48	48
-	Rio de Janeiro	-	2	14	1	13	-	30	30
-	Tokyo	2	14	25	-	64	6	111	111
Totals		589	6,182	18,325	372	17,740	10,274	53,482	53,482
Grand Total		3,963		2,411		532			

Table X - Distribution of Foreign Members - 1955 and 1956

<u>1956</u>	<u>1955</u>		<u>1956</u>	<u>1955</u>	
1	-	Aden Colony	2	2	Indonesia
5	8	Arabia	1	1	Iran
125	136	Argentina	4	1	Iraq
1	1	Ascension Island	7	7	Ireland
1	1	Austria	48	53	Israel
79	78	Australia	59	49	Italy
1	1	Bahama Islands	111	71	Japan
17	15	Belgium	1	3	Korea
4	5	Bermuda	1	-	Kuwait
1	1	Bolivia	4	3	Lebanon
84	83	Brazil	8	7	Malaya
2	2	British Guiana	1	1	Malta
9	8	British West Indies	1	1	Marshall Islands
11	6	Burma	1	-	Mauritius
2,085	1,717	Canada	61	43	Mexico
4	3	Ceylon	4	3	Morocco
7	6	Chile	32	25	Netherlands
18	15	Colombia	12	13	New Zealand
5	2	Costa Rica	1	1	Nicaragua
22	21	Cuba	17	15	Norway
3	2	Cyprus	25	25	Pakistan
4	4	Czechoslovakia	2	1	Panama, Republic of
52	30	Denmark	7	11	Peru
1	1	Dutch Guiana	10	10	Philippine Islands
1	-	E. Caroline Island	6	7	Portugal
3	2	Ecuador	11	10	Scotland
24	32	Egypt	37	41	South Africa
2	-	El Salvador	12	17	Spain
347	344	England	5	4	Strait Settlements
1	-	Ethiopia	80	65	Sweden
1	-	Finland	71	63	Switzerland
3	6	Formosa	2	4	Syria
102	86	France	1	1	Tasmania
46	31	Germany	6	7	Thailand
18	12	Greece	14	10	Turkey
2	1	Guatemala	4	3	Uruguay
10	9	Hong Kong	4	-	U.S.S.R.
1	1	Hungary	32	24	Venezuela
4	2	Iceland	2	3	Wales
128	129	India	1	1	Yugoslavia

	<u>1956</u>	<u>1955</u>	<u>Net Gain</u>
Grand Total	3,943	3,411	532

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/56

<u>Country</u>	<u>F</u>	<u>SM</u>		<u>M</u>		<u>VA</u>	<u>A</u>		<u>S</u>	<u>Total</u>
	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$10</u>	<u>\$15</u>	<u>\$15</u>	<u>\$10</u>	<u>\$5</u>	
Aden Colony	-	-	-	1	-	-	-	-	-	1
Arabia	-	1	-	2	2	-	-	-	-	5
Argentina	2	18	1	17	4	-	20	43	20	125
Ascension Island	-	-	-	-	-	1	-	-	-	1
Austria	-	-	-	-	-	-	-	1	-	1
Australia	2	19	2	30	3	5	5	12	1	79
Bahama Islands	-	-	-	1	-	-	-	-	-	1
Belgium	-	1	-	5	4	1	1	4	1	17
Bermuda	-	1	-	2	-	-	1	-	-	4
Bolivia	-	-	-	1	-	-	-	-	-	1
Brazil	-	7	-	20	10	1	14	19	13	84
British Guiana	-	-	-	1	-	-	-	1	-	2
British West Indies	-	-	-	3	1	-	2	3	-	9
Burma	-	1	-	4	2	-	-	4	-	11
Canada	26	148	14	498	260	12	202	608	317	2,085
Ceylon	-	-	-	1	-	-	1	2	-	4
Chile	-	-	-	2	-	-	2	3	-	7
Colombia	-	1	-	5	2	-	3	6	1	18
Costa Rica	-	1	-	1	-	-	1	1	1	5
Cuba	1	2	-	5	2	-	3	9	-	22
Cyprus	-	-	-	2	-	-	-	1	-	3
Czechoslovakia	-	-	-	4	-	-	-	-	-	4

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/56

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Denmark	1	4	1	10	1	-	8	10	17	52
Dutch Guiana	-	-	-	1	-	-	-	-	-	1
E. Caroline Island	-	-	-	-	-	-	-	1	-	1
Ecuador	-	1	-	1	1	-	-	-	-	3
Egypt	-	3	-	8	1	-	1	11	-	24
El Salvador	-	-	-	1	-	-	-	-	1	2
England	19	85	8	129	28	3	36	30	9	347
Ethiopia	-	-	-	1	-	-	-	-	-	1
Finland	-	-	-	-	1	-	-	-	-	1
Formosa	-	-	-	2	-	-	-	1	-	3
France	5	24	1	25	8	1	10	26	2	102
Germany	3	13	8	5	7	-	1	8	1	46
Greece	-	-	-	1	2	-	2	13	-	18
Guatemala	-	-	-	-	-	-	1	1	-	2
Hong Kong	-	-	-	5	1	-	2	2	-	10
Hungary	-	-	-	-	-	-	1	-	-	1
Iceland	-	-	-	-	1	-	1	1	1	4
India	1	21	-	40	11	-	23	32	-	128
Indonesia	-	-	-	1	-	-	1	-	-	2
Iran	-	-	-	-	-	-	-	1	-	1
Iraq	-	-	-	2	1	-	-	1	-	4
Ireland	-	1	1	-	-	-	2	3	-	7
South Africa	-	-	-	-	-	-	-	-	-	-

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/56

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Israel	-	3	-	12	5	-	3	24	1	48
Italy	-	5	1	16	5	-	13	18	1	59
Japan	2	9	5	14	11	-	7	57	6	111
Korea	-	-	-	1	-	-	-	-	-	1
Kuwait	-	-	-	-	-	-	-	1	-	1
Lebanon	-	-	-	1	-	-	2	1	-	4
Malaya	-	1	-	4	1	-	2	-	-	8
Malta	-	-	-	1	-	-	-	-	-	1
Marshall Islands	-	-	-	-	-	-	1	-	-	1
Mauritius	-	-	-	-	1	-	-	-	-	1
Mexico	1	7	-	10	5	1	6	10	21	61
Morocco	-	1	-	1	-	-	1	1	-	4
Netherlands	2	8	3	9	2	-	1	5	2	32
New Zealand	-	1	-	4	1	1	4	1	-	12
Nicaragua	-	-	-	1	-	-	-	-	-	1
Norway	-	3	1	5	1	1	1	5	-	17
Pakistan	-	7	-	5	5	-	1	7	-	25
Panama, Republic of	-	-	-	1	-	-	1	-	-	2
Peru	-	1	-	2	1	-	-	3	-	7
Philippine Islands	-	-	-	4	-	-	2	4	-	10
Portugal	-	1	-	2	-	-	1	2	-	6
Scotland	1	1	-	3	-	-	3	2	1	11
South Africa	-	6	-	17	4	-	7	3	-	37

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/56

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Spain	-	2	-	6	-	-	-	4	-	12
Strait Settlements	-	-	-	4	-	-	1	-	-	5
Sweden	3	6	1	24	8	-	17	21	-	80
Switzerland	6	12	2	21	2	-	7	21	-	71
Syria	-	-	-	2	-	-	-	-	-	2
Tasmania	-	-	-	1	-	-	-	-	-	1
Thailand	-	-	-	1	-	-	1	4	-	6
Turkey	-	-	-	5	1	1	2	5	-	14
Uruguay	-	-	-	3	-	-	1	-	-	4
U.S.S.R.	-	-	-	-	-	-	-	4	-	4
Venezuela	-	6	-	8	4	-	7	6	1	32
Wales	-	-	-	1	-	-	1	-	-	2
Yugoslavia	-	-	-	1	-	-	-	-	-	1
<b>Totals</b>	<b>75</b>	<b>432</b>	<b>49</b>	<b>1,027</b>	<b>410</b>	<b>28</b>	<b>437</b>	<b>1,067</b>	<b>418</b>	<b>3,943</b>
<i>Caribbean</i>										
<i>Puerto Rico</i>			2	9	1		5	7	10	24
<i>Hawaii</i>			7	27	5	1	21	20	2	63
<i>Virgin Islands</i>				1						1
<b>Totals</b>			<b>9</b>	<b>37</b>	<b>6</b>	<b>1</b>	<b>26</b>	<b>27</b>	<b>12</b>	<b>102</b>
<i>Overseas Military</i>										
<i>P.O. San Francisco, Calif.</i>			8	39	34		17	79	10	108
<i>P.O. Seattle, Wash.</i>			2	2	8		2	6	2	20
<i>P.O. New York, N. Y.</i>			1	42	36	1	27	82	9	196
<b>Totals</b>			<b>11</b>	<b>83</b>	<b>78</b>	<b>1</b>	<b>46</b>	<b>167</b>	<b>21</b>	<b>404</b>

Table XII - Geographical and Grade Breakdown - Canada, U. S. Possessions and Overseas Military Membership as of December 31, 1956

<u>Canadian</u>	F	SM		M		VA	A		S	<u>Total</u>
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Bay of Quinte	1	6	3	12	8	1	8	19	16	74
Hamilton	2	19	3	33	18	1	17	45	8	146
London	-	6	-	19	7	-	10	22	8	72
Montreal	7	35	5	133	89	6	46	136	71	528
Newfoundland	-	1	-	8	13	-	-	20	1	43
Northern Alberta	-	3	-	12	7	-	7	32	30	91
Ottawa	8	26	-	70	20	-	25	67	15	231
Regina	-	-	-	6	11	-	-	28	2	47
Southern Alberta	-	-	-	11	9	-	1	34	3	58
Toronto	6	42	1	148	55	3	53	139	75	522
Vancouver	1	7	1	27	10	1	28	37	63	175
Winnipeg	1	3	1	19	13	-	7	29	25	98
Totals	26	148	14	498	260	12	202	608	317	2,085
<u>U. S. Possessions</u>										
Alaska	-	1	-	12	8	-	6	15	5	47
Canal Zone	-	-	-	-	-	-	1	3	-	4
Mariana Islands	-	-	-	-	-	-	1	-	-	1
Puerto Rico	-	2	-	9	1	-	5	7	10	34
Hawaii	-	7	1	27	5	1	21	20	2	84
Virgin Islands	-	-	-	1	-	-	-	-	-	1
Totals	-	10	1	49	14	1	34	45	17	171
<u>Overseas Military</u>										
P.O.San Francisco, Calif.	-	8	1	39	34	-	17	79	10	188
P.O.Seattle, Wash.	-	2	-	2	8	-	1	6	1	20
P.O.New York, N. Y.	1	12	-	42	36	1	13	82	9	196
Totals	1	22	1	83	78	1	31	167	20	404

Table XIII - Membership Change, by Grades, in 1956

<u>Gains</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>S</u>	<u>Total</u>
Elections		441	2,706	1,597	6,421	11,165
Reinstatements	3	38	114	387	111	653
Transfers to	75	583	4,501	355	-	5,514
<b>TOTAL GAIN</b>	<b>78</b>	<b>1,062</b>	<b>7,321</b>	<b>2,339</b>	<b>6,532</b>	<b>17,332</b>
<hr/>						
<u>Losses</u>						
New Elections (Unpaid)	-	17	87	90	1	195
Transfers from	-	73	348	2,825	2,268	5,514
Voided Elections	-	-	6	28	-	34
Deaths	7	22	39	30	3	101
Resignations	1	20	101	431	140	693
Delinquents	-	87	990	548	1,064	2,689
<b>TOTAL LOSS</b>	<b>8</b>	<b>219</b>	<b>1,571</b>	<b>3,952</b>	<b>3,476</b>	<b>9,226</b>
<hr/>						
<u>Net Gain</u>	<b>70</b>	<b>843</b>	<b>5,750</b>	<b>-1,613</b>	<b>3,056</b>	<b>8,106</b>

The Net Gain of 8,106 shown above compares with 5,610 for 1955

Table XIV - Analysis of Transfers, by Grades, 1956

<u>TRANSFERS FROM</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>S</u>	<u>Total</u>
Transfers to F	73	2	-	-	75
Transfers to SM	-	346	237	-	583
Transfers to M	-	-	2,588	1,913	4,501
Transfers to A	-	-	-	355	355
<b>TOTAL</b>	<b>73</b>	<b>348</b>	<b>2,825</b>	<b>2,268</b>	<b>5,514</b>

Table XV - Analysis of Higher Grade Applications for 1956

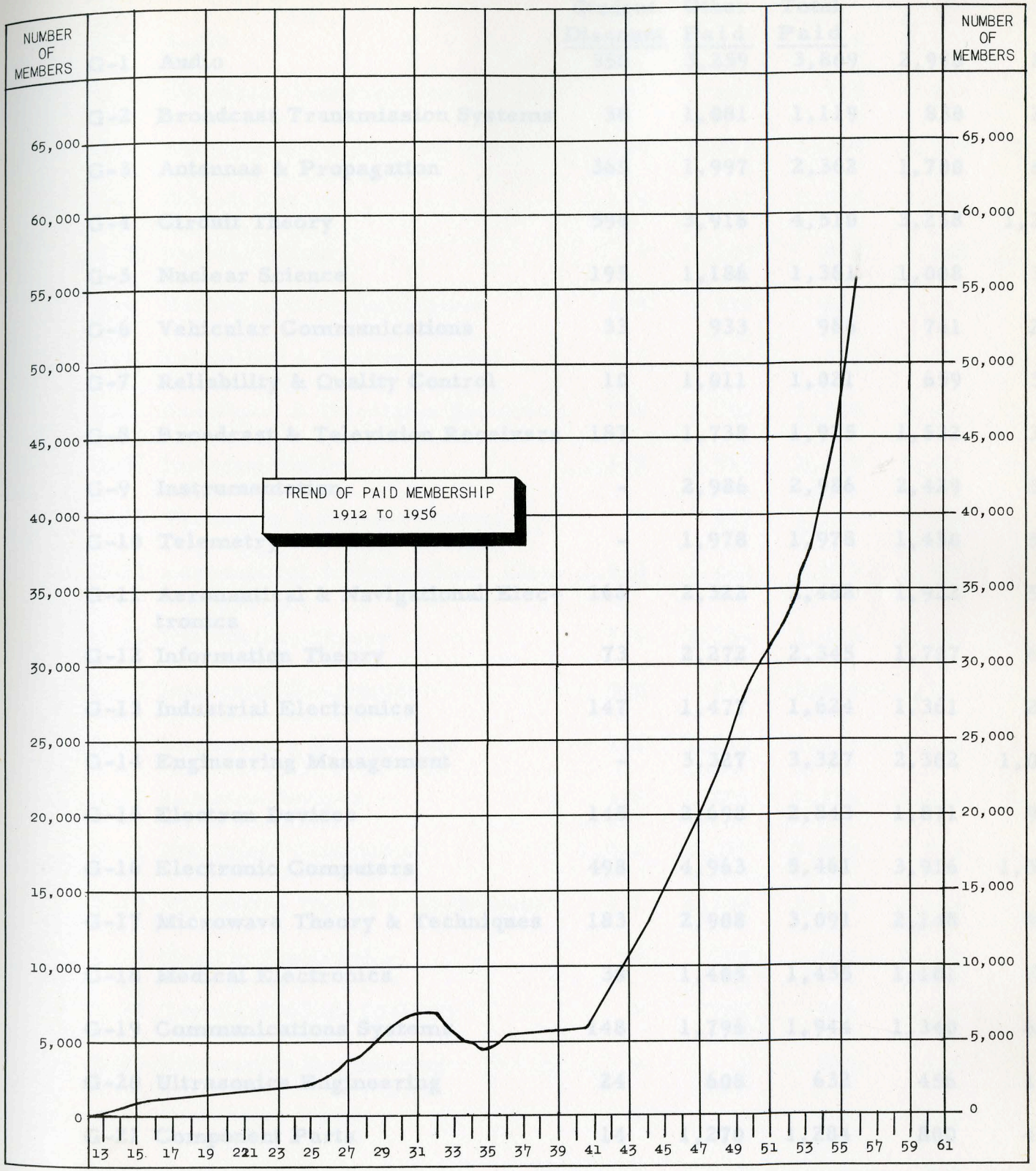
	<u>Domestic</u>	<u>Canadian</u>	<u>Foreign</u>	<u>Total</u>
<b>Admission Applications</b>				
Senior Member	46	441	6	53
Member	23	2,706	2	25
	18	-	1	11
<b>Transfer Applications</b>				
Senior Member	-	583	-	36
Member	91	4,501	9	34

Table XVI - Life Members, by Grades, as of December 31, 1956

Year	Higher Grade	Student	Yearly		Total
			Increase (Decrease)	% (Decrease)	
		<u>Domestic</u>	<u>Canadian</u>	<u>Foreign</u>	<u>Total</u>
1913					109
			122	12.9	231
Fellow		46	1	6	53
			402	17.6	633
Senior Member		23	-	2	25
			351	27.4	984
Member		10	-	1	11
			134	11.2	1,327
Voting Associate		12	-	-	12
			244	32.2	1,686
Associate		-	-	-	-
			199	15.3	1,382
			(-140)	(-11.8)	1,242
			176	14.2	1,418
			635	31.9	2,953
Total		91	1	9	101
			1,995	21.5	2,248
			482	21.4	2,730
			1,488	54.3	4,218
			613	14.6	4,831
			872	17.8	5,703
			848	14.8	6,551
			199	2.9	6,750
1932	6,361	182	(-331)	(-4.9)	6,423
1933	5,811	168	(-1,284)	(-20.1)	5,119
1934	4,863	86	(-236)	(-4.9)	4,839
1935	4,388	121	(-388)	(-7.8)	4,509
1936	4,896	299	686	15.2	5,195
1937	5,099	369	244	5.1	5,459
1938	5,089	314	(-36)	(-1.0)	5,403
1939	5,213	399	209	3.9	5,612
1940	5,289	496	93	1.7	5,785
1941	6,112	909	1,316	23.1	7,021
1942	7,261	1,533	1,773	25.3	8,794
1943	8,793	2,224	2,285	26.0	11,079
1944	11,034	2,083	2,058	18.6	13,137
1945	13,881	1,898	2,642	20.1	15,779
1946	15,962	2,252	2,375	15.1	18,158
1947	17,463	3,624	2,823	15.9	21,039
1948	17,498	3,939	2,408	11.4	23,437
1949	18,573	4,194	1,332	14.2	24,769
1950	21,442	7,068	2,233	8.3	29,003
1951	24,981	4,427	406	1.4	29,408
1952	28,591	4,287	2,466	11.8	32,574
1953	32,604	4,930	4,260	12.9	37,134
1954	36,222	3,954	4,644	12.8	41,778
1955	40,060	7,328	5,610	13.4	47,388
1956	45,110	10,384	8,184	17.1	55,494

Table XVII - Yearly Membership, 1912 - 1956

<u>Year</u>	<u>Higher Grade</u>	<u>Student</u>	<u>Yearly</u> <u>Increase</u> <u>(Decrease)</u>	<u>%</u> <u>Increase</u> <u>(Decrease)</u>	<u>Total</u>
1912			-	-	109
1913			122	112.0	231
1914			402	174.0	633
1915			351	55.4	984
1916			208	21.2	1,193
1917			134	11.2	1,327
1918			(-505)	(-38.1)	822
1919			264	32.2	1,086
1920			199	18.3	1,285
1921			197	15.3	1,382
1922			(-140)	(-10.0)	1,242
1923			176	14.2	1,418
1924			635	31.0	2,053
1925			195	9.5	2,248
1926			482	21.4	2,730
1927			1,480	54.3	4,210
1928			613	14.6	4,823
1929			872	17.6	5,695
1930			840	14.8	6,535
1931			199	2.9	6,734
1932	6,301	102	(-331)	(-4.9)	6,403
1933	5,011	108	(-1,284)	(-20.1)	5,119
1934	4,803	86	(-230)	(-4.5)	4,889
1935	4,388	121	(-380)	(-7.8)	4,509
1936	4,896	299	686	15.2	5,195
1937	5,099	360	264	5.1	5,459
1938	5,089	314	(-56)	(-1.0)	5,403
1939	5,213	399	209	3.9	5,612
1940	5,209	496	93	1.7	5,705
1941	6,112	909	1,316	23.1	7,021
1942	7,261	1,533	1,773	25.3	8,794
1943	8,793	2,286	2,285	26.0	11,079
1944	11,054	2,083	2,058	18.6	13,137
1945	13,881	1,898	2,642	20.1	15,779
1946	15,902	2,252	2,375	15.1	18,154
1947	17,403	3,634	2,883	15.9	21,037
1948	17,498	5,939	2,400	11.4	23,437
1949	18,573	8,196	3,332	14.2	26,769
1950	21,442	7,560	2,233	8.3	29,002
1951	24,981	4,427	406	1.4	29,408
1952	28,591	4,283	3,466	11.8	32,874
1953	32,604	4,530	4,260	12.9	37,134
1954	36,222	5,556	4,644	12.5	41,778
1955	40,060	7,328	5,610	13.4	47,388
1956	45,110	10,384	8,106	17.1	55,494



G-22 Production Techniques	5	635	640	318	322
G-23 Automatic Control	214	1,642	1,856	709	1,147
G-24 Military Electronics	-	1,988	1,758	-	1,933
<b>Totals</b>	<b>3,819</b>	<b>49,395</b>	<b>55,033</b>	<b>36,362</b>	<b>16,431</b>

Table XVIII - Professional Group Membership, by Groups, 1955, 1956  
(Paid Membership Only)

<u>Code</u>	<u>Group</u>	1956			1955	<u>Net Gain</u>
		<u>Student Discount</u>	<u>Other Paid</u>	<u>Total Paid</u>		
G-1	Audio	550	3,259	3,809	2,996	813
G-2	Broadcast Transmission Systems	38	1,081	1,119	838	281
G-3	Antennas & Propagation	365	1,997	2,362	1,700	662
G-4	Circuit Theory	594	3,916	4,510	3,258	1,252
G-5	Nuclear Science	195	1,186	1,381	1,008	373
G-6	Vehicular Communications	33	933	966	741	225
G-7	Reliability & Quality Control	10	1,011	1,021	659	362
G-8	Broadcast & Television Receivers	187	1,738	1,925	1,532	393
G-9	Instrumentation	-	2,986	2,986	2,429	557
G-10	Telemetry & Remote Control	-	1,978	1,978	1,450	528
G-11	Aeronautical & Navigational Electronics	166	2,322	2,488	1,922	566
G-12	Information Theory	73	2,272	2,345	1,707	638
G-13	Industrial Electronics	147	1,477	1,624	1,361	263
G-14	Engineering Management	-	3,327	3,327	2,302	1,025
G-15	Electron Devices	145	2,698	2,843	1,871	972
G-16	Electronic Computers	498	4,963	5,461	3,916	1,545
G-17	Microwave Theory & Techniques	183	2,908	3,091	2,148	943
G-18	Medical Electronics	30	1,405	1,435	1,101	334
G-19	Communications Systems	148	1,796	1,944	1,340	604
G-20	Ultrasonics Engineering	24	608	632	456	176
G-21	Component Parts	14	1,270	1,284	800	484
G-22	Production Techniques	5	635	640	318	322
G-23	Automatic Control	214	1,642	1,856	709	1,147
G-24	Military Electronics	-	1,988	1,988	-	1,988
Totals		3,619	49,396	53,015	36,562	16,453

Table XIX - Five-Year Analysis of Professional Group Membership, 1952 - 1956  
(Paid Membership Only)

<u>Code</u>	<u>Group</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>
G-1	Audio	1,681	2,147	2,510	2,996	3,809
G-2	Broadcast Transmission Systems	358	661	729	838	1,119
G-3	Antennas & Propagation	1,008	1,219	1,344	1,700	2,362
G-4	Circuit Theory	1,192	2,151	2,565	3,258	4,510
G-5	Nuclear Science	*	109	802	1,008	1,381
G-6	Vehicular Communications	419	584	669	741	966
G-7	Reliability & Quality Control	315	476	520	659	1,021
G-8	Broadcast & Television Receivers	750	1,106	1,349	1,532	1,925
G-9	Instrumentation	1,477	1,961	2,127	2,429	2,986
G-10	Telemetry & Remote Control	*	827	1,169	1,450	1,978
G-11	Aeronautical & Navigational Elec- tronics	1,048	1,400	1,599	1,922	2,488
G-12	Information Theory	771	1,154	1,403	1,707	2,345
G-13	Industrial Electronics	530	839	1,064	1,361	1,624
G-14	Engineering Management	742	1,243	1,634	2,302	3,327
G-15	Electron Devices	479	1,086	1,359	1,871	2,843
G-16	Electronic Computers	1,241	2,267	2,896	3,916	5,461
G-17	Microwave Theory & Techniques	471	1,144	1,630	2,148	3,091
G-18	Medical Electronics	*	695	898	1,101	1,435
G-19	Communications Systems	*	721	966	1,340	1,944
G-20	Ultrasonics Engineering	*	7	325	456	632
G-21	Component Parts	*	*	600	800	1,284
G-22	Production Techniques	*	*	*	318	640
G-23	Automatic Control	*	*	*	709	1,856
G-24	Military Electronics	*	*	*	*	1,988
Totals		12,482	21,797	28,158	36,562	53,015

\* No assessment levied

Table XX - Deceased Members - 1956

It is with deep regret that this office records the death of the following members of the IRE during the year 1956.

FELLOWS

Beltz, Willis Henry (SM'53, F'56)  
d'Humy, Fernand E. (A'41, SM'45, F'49)  
Ehret, Cornelius D. (F'16) (L'51)  
McDonald, Arthur Stephen (M'23, F'41)  
Pickard, Greenleaf W. (M'12, F'15) (L'47)  
Pierce, George W. (M'13, F'15) (L'48)  
Reoch, Alexander Ernest (M'14, F'16) (L'49)

SENIOR MEMBERS

Bagnall, Vernon B. (A'30, M'40, SM'43)  
Burns, Elmer E. (A'28, SM'45)  
Carlton, Milton B. (SM'54)  
Davis, William C. (SM'49)  
Dixon, George P. (SM'46)  
Duncan, R. D., Jr. (A'13, M'25, SM'43) (L'55)  
Filgate, John T. (A'29, M'36, SM'43)  
Franks, Christopher J., III (M'35, SM'43)  
Giroud, Pierre (SM'55)  
Hanscom, William Wallace (A'12, M'14, SM'43) (L'47)  
Hershman, Joseph B. (A'28, SM'45)  
Hollenberg, Arthur V. (M'50, SM'50)  
Lett, Robert Pritchard (A'44, M'45, SM'51)  
Malsch, Johannes R. (M'54, SM'54)  
McMillan, Fred O. (M'41, SM'43)  
Meyer, Raymond B. (SM'48)  
Nelson, James Richard (A'27, M'29, SM'43)  
Okolicsanyi, Ferenc (SM'54)  
Reiskind, H. I. (SM'52)  
Robertson, Norman C. (A'30, M'39, SM'43)  
Salton, Lynn V. (M'23, SM'46)  
Wankel, Ferdinand A. (SM'48)

MEMBERS

Adams, Atlas O. (M'52)  
Allen, Wilfrid G. D. (M'54)  
Bailey, Bruce (A'46, M'55)  
Bales, Nicolas M. (M'50)  
Carlisle, Charles H. (M'46)  
Carty, Maurice F. (S'54, M'55)

Table XX - Deceased Members - 1956 - Continued

MEMBERS

Fenton, Norman L. (S'48, A'50, M'54)  
Foster, Arnot P. (A'41, M'45)  
Fuller, John S. (M'55)  
Hannigan, Walter T. (M'53)  
Hayes, George W. (A'13, M'55) (L'49)  
Hazlehurst, Edward (A'38, VA'39, M'55)  
Helt, Scott (A'47, M'48)  
Hills, Elmer G. (A'41, M'55)  
Hintz, Robert T. (A'30, VA'39, M'55)  
Hollander, Albert G., II (S'46, A'50, M'55)  
Hurwitz, Arthur M. (S'51, A'52, M'54)  
Jacobsen, Per Kjeldberg (M'55)  
Korb, Anton W. (M'47)  
Lasby, Ray O. (S'49, A'50, M'55)  
Laube, Otto T. (A'39, M'55)  
Laurie, Bill A. (M'46)  
Liebmann, Gerhard (A'40, M'56)  
Michon, Alfred Edgar (A'37, M'45)  
Nowick, Chester A. (M'53)  
Plusc, Igor (M'45)  
Rand, Donald M. (S'54, M'56)  
Reed, DeWitt M. (M'46)  
Robinson, Bruce Ross (M'53)  
Shanklin, John P. (M'47)  
Shields, Russell A., Jr. (S'46, A'49, M'55)  
Silent, Harold C. (A'19, M'55)  
Sorg, Harold E. (M'48)  
Sutton, Robert A. (M'48)  
Tedder, Paul M. (A'46, M'55)  
Trimmer, Fred H. (M'54)  
Tringham, William S. L. (A'39, M'55)  
Weeman, Roy La Vergne (M'56)  
Weiss, Walter A. (A'41, M'55)

VOTING ASSOCIATES

Bainbridge-Bell, L. H. (A'26, VA'39)  
Gatkin, Thomas E. (J'37, A'39, VA'39)  
Thornley, Howard W. (A'38, VA'39)

ASSOCIATES

Abramson, Arthur S. (S'53, A'54)  
Alig, Robert J. (A'52)  
Almy, John Wehn (A'54)

Table XX - Deceased Members - 1956 - Continued

ASSOCIATES

Boulay, Henry E. (S'49, A'51)  
 Cole, John C., Jr. (S'52, A'53)  
 Elliott, Ralph W. (A'54)  
 Faiella, Albert L. (A'55)  
 Fryburg, Charles H. (A'50)  
 Fryer, Leonard (A'38)  
 Gentry, William E. (A'50)  
 Ghirlando, Felix L. (A'38)  
 Gorden, Henry Colin (A'53)  
 Gottesman, Noel Henry (A'53)  
 Hinton, Robert Donald (A'55)  
 Hobgood, Marion P. (S'49, A'51)  
 Hommel, Ralph E. (A'54)  
 Kropf, Robert G. (A'51)  
 McHugh, Joseph Edwin, III (S'51, A'52)  
 Norcross, James B. (S'44, A'49)  
 Noyes, Robert A. (A'53)  
 Riggins, H. C. (A'52)  
 Short, Kenneth R. (S'53, A'54)  
 Sulpizio, Thomas John (A'51)  
 Titherington, Richard H., Jr. (A'55)  
 Van Landingham, Francis H. (S'52, A'54)  
 Walker, Paul M. (A'50)  
 Zilles, Frank J. (A'50)

STUDENTS

Collins, Frank J. (S'54)  
 Strumer, Jay K. (S'55)  
 Tufts, Frank C. (S'55)

Table XXI - IRE National Convention

The IRE National Convention continues to increase in importance each year and is now internationally recognized as one of the largest conventions of its kind in the world. The growth in Convention activities for the years 1946 through 1956 is indicated in the comparison figures itemized below:

<u>Year</u>	<u>Attendance</u>	<u>Exhibits</u>	<u>No. of Firms Represented</u>	<u>Net Space Occupied</u>	<u>Total Number of Papers Presented</u>
1946	7,200	135	1,571	*13,200'	88
1947	12,013	177	2,845	20,830'	118
1948	14,459	180	3,059	25,900'	130
1949	15,710	225	3,427	30,700'	144
1950	17,689	253	4,088	33,600'	163
1951	22,919	277	5,082	45,672'	198
1952	28,673	365	6,306	54,246'	211
1953	35,642	412	7,493	63,033'	214
1954	39,302	605	8,799	87,192'	242
1955	42,133	704	9,504	95,782'	248
1956	**41,017	716	8,851	98,684'	277

\* Estimated

\*\* Reduction in attendance due to severe blizzard

Table XXII - Summary of Income and Expense, 1956

INCOME

Advertising	\$ 1,143,942.50	
Member Dues and Convention	1,061,128.02	
Subscriptions	125,112.72	
Sales Items: Binders, Emblems, etc.	92,397.82	
Investment Income	26,942.55	
Miscellaneous Income	1,714.06	
		<hr/>
Total Income		\$ 2,451,237.67

EXPENSE

Proceedings Editorial Pages	\$ 377,197.56	
Advertising Pages	636,698.64	
Directory	194,979.63	
Section and Student Branch Rebates	109,507.15	
Professional Group Expense	142,759.85	
Sales Items	66,073.44	
General Operations	449,986.29	
Convention Cost	330,479.09	
		<hr/>
Total Expense		2,307,681.65
		<hr/>
Reserve for Future Operations - Gross		\$ 143,556.02
		<hr/>
Depreciation		19,787.40
		<hr/>
Reserve for Future Operations - Net		\$ 123,768.62

Table XXIII - Balance Sheet - December 31, 1956

ASSETS

Cash and Accounts Receivable	\$	459,113.46	
Inventory		<u>26,387.65</u>	
Total Current Assets	\$		485,501.11
Investments at Cost		1,182,109.69	
Buildings and Land at Cost		912,316.70	
Furniture and Fixtures at Cost		205,388.46	
Other Assets		<u>50,507.21</u>	
Total			<u>2,350,322.06</u>
Total Assets	\$		<u><u>2,835,823.17</u></u>

LIABILITIES AND SURPLUS

Accounts Payable	\$		101,515.74
Deferred Liabilities	\$	718,861.25	
Professional Group Funds on Deposit		<u>135,222.62</u>	<u>854,083.87</u>
Total Liabilities			955,599.61
Reserve for Depreciation			81,110.35
Surplus Donated		595,286.61	
Surplus		<u>1,203,826.60</u>	
Total Surplus			<u>1,799,113.21</u>
Total Liabilities and Surplus	\$		<u><u>2,835,823.17</u></u>

IRE publication activities continued their healthy growth during 1956, due largely to the substantially increased output of the TRANSACTIONS of the Professional Groups. The total IRE publication output for the year reached a new high of 97 issues totaling 12,908 pages, a 16% increase over the previous year.

PROCEEDINGS OF THE IRE

Two new monthly features were added to the PROCEEDINGS in 1956: an editorial page, called "Poles and Zeros," where matters of general interest to the membership are discussed by the Editor; and "Scanning the Issue," in which the papers in the issue are briefly reviewed by the Managing Editor. In addition, the program of publishing invited review and tutorial papers on important topics reached full stride during the year, with eight such papers appearing in the ten regular issues.

The year was highlighted by the appearance of two special jumbo issues: the October Ferrites issue and the December Single Sideband issue. The latter was published with the collaboration of the Joint Technical Advisory Committee in connection with studies they are making for the Federal Communications Commission.

The number of PROCEEDINGS pages published during 1956 is shown in Table 1 and Fig. 1. The number of papers, 164, was about the same as the previous year's total of 170. A record high of ten IRE Standards also appeared.

Table 1 - Volume of PROCEEDINGS Pages

	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1953</u>
Editorial	1996	2060	1884	1860
Advertising	<u>2800</u>	<u>2372</u>	<u>2072</u>	<u>2146</u>
Total	4796	4432	3956	4006

The backlog and publication time of papers, which were greatly reduced two years ago, remained at a satisfactorily low point. The backlog of extra material awaiting publication amounted to about one-half to one issue, and the speed with which papers were published averaged five to six months.

The volume of material reviewed for PROCEEDINGS was approximately the same as in the previous year. A total of 273 papers comprising 2,106 pages was considered. The percentage of papers accepted dropped from 40% in 1955 to 32% in 1956, while the percentage referred to the TRANSACTIONS for publication consideration rose from 29% to 40%. The proportion rejected dropped slightly from 31% to 27%. These figures reflect the continuing shift of the more specialized papers from the PROCEEDINGS into the TRANSACTIONS.

### TRANSACTIONS

The year 1956 saw the TRANSACTIONS output of the Professional Groups continue to increase greatly, as shown in Fig. 1. The Editorial Department published 69 issues of TRANSACTIONS totaling 5,044 pages for 23 Groups during 1956, representing a 44% increase over the 1955 totals of 56 issues totaling 3,504 pages for 21 Groups. Thirteen of the Groups employ letterpress printing and the remainder, offset reproduction. A breakdown of TRANSACTIONS material published in 1955 and 1956 is given in Table 2.

Table 2 - Volume of TRANSACTIONS Pages

	1956		1955	
	<u>Issues</u>	<u>Pages</u>	<u>Issues</u>	<u>Pages</u>
Aeronautical and Navigational Electronics	4	188	4	188
Antennas and Propagation	4	702	4	248
Audio	6	196	6	236
Automatic Control	1	104	-	-
Broadcast and Television Receivers	3	100	4	196
Broadcast Transmission Systems	4	212	2	168
Circuit Theory	4	332	4	396
Communications Systems	3	380	1	96
Component Parts	3	144	2	144
Electron Devices	4	232	4	228
Electronic Computers	4	296	4	196
Engineering Management	3	100	1	56
Industrial Electronics	1	116	1	88
Information Theory	4	404	3	184
Instrumentation	1	228	1	188
Medical Electronics	4	254	2	104
Microwave Theory and Techniques	4	292	6	480
Nuclear Science	4	256	1	20
Production Techniques	1	64	-	-
Reliability and Quality Control	3	188	1	60
Telemetry and Remote Control	1	28	3	72
Ultrasonics Engineering	1	80	1	76
Vehicular Communications	2	148	1	84
Totals	69	5,044	56	3,504

## IRE CONVENTION RECORD

The practice of publishing a CONVENTION RECORD containing papers presented at the IRE National Convention, begun in 1953, was continued. The 1956 CONVENTION RECORD, containing 261 papers and 17 abstracts totaling 1,696 pages, was issued in nine parts. Approximately 40,000 paid members of Professional Groups received free of charge a copy of that Part pertaining to the field of interest of his Group.

## IRE STUDENT QUARTERLY

The IRE STUDENT QUARTERLY, begun in 1954 was issued 4 times in 1956 and totalled 226 pages. The publication is sent free to all IRE Student Members as part of a program of increased services to students.

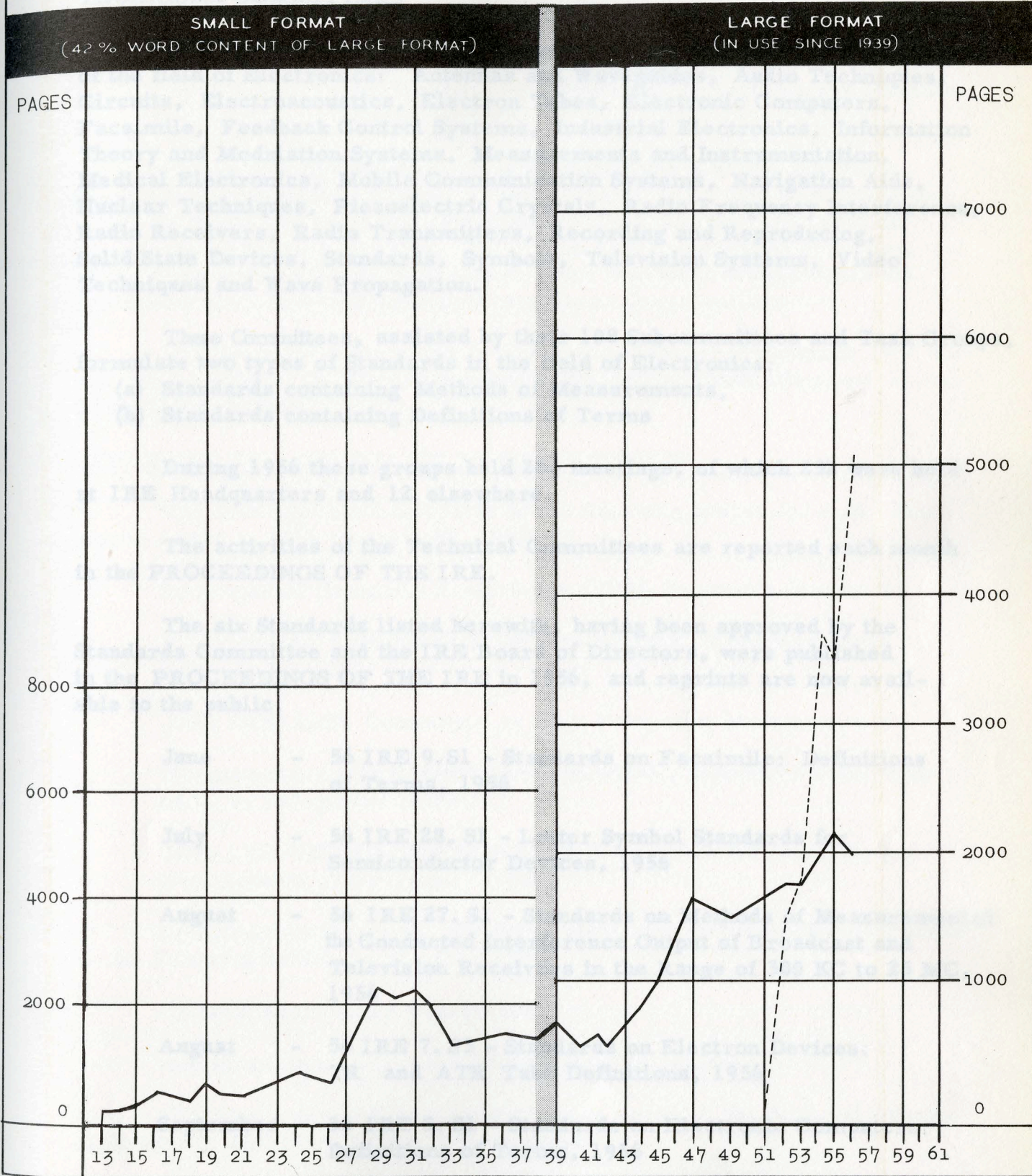
## IRE DIRECTORY

The 1956-1957 IRE DIRECTORY was published in September, containing 1,004 pages including covers, of which 417 were membership listings and information, and 587 were advertisements and listings of manufacturers and products.

## CONFERENCE PUBLICATIONS

The Proceedings of the 1955 Eastern Joint Computer Conference, sponsored jointly by the IRE, AIEE and Association for Computing Machinery, was published by the Editorial Department in June, 1956. The issue contained 104 pages.

# VOLUME OF TECHNICAL AND EDITORIAL MATTER PUBLISHED IN THE PROCEEDINGS AND THE TRANSACTIONS 1913 TO 1956



————— PROCEEDINGS

- - - - - TRANSACTIONS

Table XXV - Technical Activities

TECHNICAL COMMITTEES

IRE sponsors 26 Technical Committees covering the following phases of the field of Electronics: Antennas and Waveguides, Audio Techniques, Circuits, Electroacoustics, Electron Tubes, Electronic Computers, Facsimile, Feedback Control Systems, Industrial Electronics, Information Theory and Modulation Systems, Measurements and Instrumentation, Medical Electronics, Mobile Communication Systems, Navigation Aids, Nuclear Techniques, Piezoelectric Crystals, Radio Frequency Interference, Radio Receivers, Radio Transmitters, Recording and Reproducing, Solid State Devices, Standards, Symbols, Television Systems, Video Techniques and Wave Propagation.

These Committees, assisted by their 108 Subcommittees and Task Groups, formulate two types of Standards in the field of Electronics:

- (a) Standards containing Methods of Measurements,
- (b) Standards containing Definitions of Terms

During 1956 these groups held 244 meetings, of which 232 were held at IRE Headquarters and 12 elsewhere.

The activities of the Technical Committees are reported each month in the PROCEEDINGS OF THE IRE.

The six Standards listed herewith, having been approved by the Standards Committee and the IRE Board of Directors, were published in the PROCEEDINGS OF THE IRE in 1956, and reprints are now available to the public.

- June - 56 IRE 9. S1 - Standards on Facsimile: Definitions of Terms, 1956
- July - 56 IRE 28. S1 - Letter Symbol Standards for Semiconductor Devices, 1956
- August - 56 IRE 27. S1 - Standards on Methods of Measurement of the Conducted Interference Output of Broadcast and Television Receivers in the Range of 300 KC to 25 MC, 1956
- August - 56 IRE 7. S3 - Standards on Electron Devices: TR and ATR Tube Definitions, 1956
- September - 56 IRE 8. S1 - Standards on Electronic Computers: Definitions of Terms, 1956
- November - 56 IRE 28. S1 - Standards on Solid State Devices: Methods of Testing Transistors, 1956

The following two Standards were approved by the Standards Committee in 1956 and will be published in the PROCEEDINGS OF THE IRE early in 1957:

56 IRE 7. S4 - Standards on Electron Tubes:  
Physical Electronics Definitions

56 IRE 14. S1 - Standards on Piezoelectric Crystals:  
The Piezoelectric Vibrator: Definitions and Methods  
of Measurement

IRE is directly represented on 30 Committees of the American Standards Association and sponsors two of them: the ASA Sectional Committee on Radio and Electronic Equipment, C16, and the ASA Sectional Committee on Sound Recording, Z57. One IRE Standard received approval of the American Standards Association as an American Standard in 1956, and is now available to International Standards Organizations.

IRE actively participated in International Standardization in 1956 and was represented at the Munich meeting of the International Electrotechnical Commission in June, 1956.

#### APPOINTED IRE DELEGATES ON OTHER BODIES

The IRE appointed delegates to the following bodies for a one-year period - May 1, 1956 to April 30, 1957:

International Scientific Radio Union (URSI) Executive Committee

U. S. National Committee of the International Electrotechnical Commission (IEC)

Joint IRE-AIEE Committee on High Frequency Measurements

International Radio Consultative Committee, Executive Committee of U. S. Delegation (CCIR)

Joint IRE-RETMA-SMPTE-NARTB Committee for Inter-Society Coordination (Television) (JCIC)

In addition to the above, the IRE appointed a Representative to serve on the following bodies for the year 1956:

National Electronics Conference

American Association for Advancement of Science

IRE also appointed Representatives to serve on the National Bureau of Standards Technical Advisory Committee.

The Annual Spring Meeting of the International Scientific Radio Union (URSI) was held on April 30 - May 2, 1956 at the National Bureau of Standards in Washington, D. C. It was co-sponsored by the following IRE Professional Groups: Antennas and Propagation, Circuit Theory, Instrumentation and Microwave Theory and Techniques. The URSI Fall Meeting was held on October 11-12, 1956 at the University of California, Berkeley. The URSI Spring Meeting for 1957 has been scheduled for May 22 - 25 at the Hotel Willard, Washington, D. C. The 12th General Assembly of URSI will be held August 22 to September 5, 1957 in Boulder, Colorado.

Numerous responses to the questions under study by the various CCIR Study Groups have been received in IRE during 1956. A list of all material received from these organizations was distributed quarterly to the Chairmen of all Technical Committees, Professional Groups and Definitions and Measurement Subcommittees. During 1956 the Executive Committee of the U. S. Preparatory Committee of CCIR held 6 meetings and the 14 Study Groups held approximately 56 meetings.

#### THE JOINT TECHNICAL ADVISORY COMMITTEE

The Joint Technical Advisory Committee and its Subcommittees held a total of 11 meetings in addition to the annual dinner.

Volume XIII, the cumulative annual report of the JTAC Proceedings was published in 1956. This included in Section I - official correspondence between the Federal Communications Commission and the Joint Technical Advisory Committee (IRE - RETMA). Also included were other items of correspondence pertinent to the actions of the JTAC. Section II of the report contained approved Minutes of Meetings of the Joint Technical Advisory Committee for the period 1 July 1955 to 30 June 1956.

A new Subcommittee was formed by JTAC. The Subcommittee on Study of Single Sideband Transmission (56.1) was formed on January 26, 1956 for the purpose of reviewing and summarizing in form suitable for integrated publication, all available information relating to single sideband transmission and to analyze the technical factors that relate to the most favorable integration of this form of single sideband transmission. IRE was commended by the Federal Communications Commission for its outstanding contribution to the literature on single sideband theory and practice in the December 1956 issue of the PROCEEDINGS OF THE IRE.

The JTAC Subcommittee on Study of Spurious Radio Emissions (52.2) presented a report on "Principles Affecting the Probability of Serious Interference" which will be included in the Annual Volume of the Proceedings of JTAC. A study in the operation of the Cooperative Interference Committees was completed by Subcommittee 52.2.

The JTAC Subcommittee on Radio Frequency Interference from Arc Welders (54.2) submitted a response to FCC concerning the Notice of Proposed Rule Making FCC 56-459, 31405 in Docket No. 11467. JTAC offered assistance to the JIC group on further investigation of reduced duty cycle operation.

## THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

The International Electrotechnical Commission held its meeting in Munich June 26 - July 6, 1956. Fifteen countries were represented: Belgium, Czechoslovakia, Denmark, Finland, France, German Federal Republic, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, United Kingdom, United States of America and Yugoslavia.

IRE members were active in IEC Technical Committee 12 on Radio Communication, and Technical Subcommittee 12-1 on Measurements.

A list of all documents and material received in the Technical Department from the IEC was distributed to the Chairmen of all Professional Groups, Technical Committees and Subcommittees.

### PROFESSIONAL GROUP SYSTEM

GENERAL. There are currently 24 Professional Groups operating actively within the IRE. A new Professional Group on Education is in the process of formation and it is expected that it will be approved before the 1957 National Convention.

Approximately 50% of all IRE members have taken advantage of the Professional Group System which now has a total membership of 54,261. Included are 3,619 Student members of the IRE who have joined the Groups at the special Student member rate of \$1.00 annually.

All of the Groups have levied publications assessments and 53,015 members have paid these assessments and are receiving the pertinent Group TRANSACTIONS regularly. In addition, a large number of company, university and public libraries have subscribed to the TRANSACTIONS of all the Groups and there is also a demand for individual Group subscriptions and individual copies of the TRANSACTIONS from outside sources.

Financial and editorial assistance were among the many services rendered by Headquarters to the Groups during 1956. In addition, the Office of the Technical Secretary provided administrative services for Group operations, the planning of meetings, advance publicity and the recording and mailing for all activities, including 847 mailings to Group members.

SYMPOSIA. The procurement of papers and actual management of national symposia are entirely in the hands of the Professional Groups. Each of the Groups sponsored one or more technical meetings in the past year in addition to Technical Sessions at the IRE National Convention, the WESCON, The National Electronics Conference and other joint meetings, for a total of 44 meetings of national import in 1956 (see list attached).

PUBLICATIONS. 23 Groups are currently publishing IRE TRANSACTIONS covering their specific fields of interest and to date 236 issues (15,564 pages) have appeared. The 24th Group will begin to publish its TRANSACTIONS early in 1957. TRANSACTIONS were first published in 1951 when the Audio and Airborne Groups issued 6 TRANSACTIONS containing 98 pages. In 1952 10 Groups published 22 TRANSACTIONS containing 1,474 pages. In 1953 15 Groups published 32 TRANSACTIONS containing 1,798 pages. In 1954 20 Groups published 51 TRANSACTIONS containing 3,714 pages. In 1955 21 Groups published 56 TRANSACTIONS containing 3,504 pages. During the past year 23 Groups published 69 TRANSACTIONS containing 5,044 pages.

Nine of the Groups are currently on a regularly stated publication schedule and the remaining Groups are working toward this goal.

Thirteen of the Groups' TRANSACTIONS are now printed by letterpress and the remaining Groups will follow this practice as soon as their circulation warrants it.

In addition to IRE TRANSACTIONS, several Groups are issuing Proceedings of meetings jointly sponsored with other societies, such as the Eastern and Western Joint Computer Conferences, the Electronic Components Conference, et al.

PROFESSIONAL GROUP CHAPTERS. 185 Professional Group Chapters have been organized by Group members in 44 IRE Sections (see list attached). Chapter growth is continuing at a healthy rate. The Chapters are meeting regularly and sponsoring meetings in the fields of interest of their associated Groups in the various Sections. The newest Group, the Professional Group on Military Electronics, formed on September 7, 1955, already has 10 official Chapters.

G-2	Broadcast Transmission Systems	8	Boston Chicago Cleveland Houston	Los Angeles Pittsburgh San Francisco Twin Cities
G-4	Circuit Theory	10	Albuquerque Chicago Urbana China Lake Dallas-Fort Worth	Los Angeles Montreal Philadelphia Seattle Syracuse
G-19	Communications Systems	8	Chicago Philadelphia	Reno-Utica Syracuse Washington, D.C.
G-21	Component Parts	8	Buffalo-Niagara Dayton Los Angeles	Long N. Y., No. N. J. and L. I. Philadelphia Washington, D. C.

Professional Group Chapters  
Established as of December 31, 1956

Group Code No.	Name of Group	No. of Chapters	Section Location	
G-11	Aeronautical and Navigational Electronics	10	Akron Baltimore Boston Dallas-Fort Worth Dayton	Kansas City Los Angeles New York Philadelphia St. Louis
G-3	Antennas and Propagation	8	Albuquerque Chicago Denver Los Angeles	Orange Belt (L. A.) Philadelphia San Diego Washington, D. C.
G-1	Audio	18	Albuquerque Baltimore Boston Chicago Cincinnati Cleveland Dayton Hawaii Houston	Milwaukee Philadelphia Phoenix San Antonio San Diego San Francisco Seattle Syracuse Washington, D. C.
G-23	Automatic Control	6	Akron Baltimore Boston	Dallas-Fort Worth Los Angeles Twin Cities
G-8	Broadcast and Television Receivers	2	Chicago	Los Angeles
G-2	Broadcast Transmission Systems	8	Boston Chicago Cleveland Houston	Los Angeles Pittsburgh San Francisco Twin Cities
G-4	Circuit Theory	10	Albuquerque Chicago Urbana China Lake Dallas-Fort Worth	Los Angeles Montreal Philadelphia Seattle Syracuse
G-19	Communications Systems	5	Chicago Philadelphia	Rome-Utica Syracuse Washington, D. C.
G-21	Component Parts	6	Buffalo-Niagara Dayton Los Angeles	Joint N. Y., No. N. J. and L. I. Philadelphia Washington, D. C.

Professional Group Chapters  
Established as of December 31, 1956  
(Continued)

<u>Group Code No.</u>	<u>Name of Group</u>	<u>No. of Chapters</u>	<u>Section Location</u>
G-15	Electron Devices	9	Boston Elmira-Corning Emporium, Pa. Los Angeles Jt. N.Y., No. N. J. and L.I. Philadelphia San Francisco Schenectady Washington, D.C.
G-16	Electronic Computers	15	Akron Baltimore Boston Chicago Dallas-Fort Worth Dayton Detroit Houston Los Angeles Montreal New York Philadelphia Pittsburgh San Francisco Washington, D.C.
G-14	Engineering Management	10	Boston Chicago Dayton Los Angeles Jt. N.Y., No. N. J. and L.I. Philadelphia Rome-Utica San Francisco Syracuse Washington, D.C.
G-13	Industrial Electronics	3	Chicago Cleveland Schenectady
G-12	Information Theory	4	Albuquerque Los Angeles Washington, D.C. White Sands Proving Grounds (El Paso)
G-9	Instrumentation	6	Atlanta Chicago Houston Long Island Los Angeles Washington, D.C.
G-18	Medical Electronics	10	Boston Buffalo Chicago Connecticut Valley Los Angeles Montreal Jt. N.Y., No. N. J., L.I., and Princeton Philadelphia San Francisco Washington, D.C.
G-17	Microwave Theory and Techniques	13	Albuquerque Baltimore Boston Buffalo Chicago Long Island Los Angeles Northern New Jersey New York Philadelphia San Diego San Francisco Schenectady

Professional Group Chapters  
Established as of December 31, 1956  
(Continued)

<u>Group Code No.</u>	<u>Name of Group</u>	<u>No. of Chapters</u>	<u>Section Location</u>
G-24	Military Electronics	10	Boston Buffalo-Niagara Chicago Dayton Fort Wayne Long Island Los Angeles Philadelphia Syracuse Washington, D.C.
G-5	Nuclear Science	9	Albuquerque Boston Chicago Connecticut Valley Dayton Los Alamos Oak Ridge, Tenn. (Atlanta Sec.) Pittsburgh Washington, D.C.
G-22	Production Techniques	4	Los Angeles Jt. N.Y., No.N. J. and L. I. San Francisco Washington, D.C.
G-7	Reliability and Quality Control	3	Chicago Los Angeles Washington, D.C.
G-10	Telemetry and Remote Control	6	Albuquerque Chicago Dayton Central Florida Los Angeles Philadelphia
G-6	Vehicular Communications	10	Baltimore Boston Chicago Detroit Houston Los Angeles Jt. N.Y., No.N. J. and L. I. Philadelphia Portland Washington, D.C.

---

23 Groups	185 Chapters	44 Sections
--------------	-----------------	----------------

National Technical Meetings, 1956

<u>Name of Meeting</u>	<u>Sponsoring PG's</u>	<u>Place</u>	<u>Date</u>
2nd Nat'l Symposium on Reliability & Quality Control	PGRQC; ASQC; RETMA	Washington, D.C.	January 9-10
Nat'l Simulation Symposium	PGEC	Dallas, Texas	January 19-21
Symposium on Microwave Theory & Techniques	PGMTT; PGAP; Phila. Section	Philadelphia, Pa.	February 2-3
Western Joint Com- puter Conference	PGEC; AIEE; ACM	San Francisco, California	February 7-8-9
Southwestern Reg. Conf. & Elec. Show	Region 6	Oklahoma City, Oklahoma	February 9-11
Conference on Tran- sistor Circuits	PGCT; AIEE; Univ. of Pa.	Philadelphia, Pa.	February 16-17
Scintillation Counter Symposium	PGNS; AIEE	Washington, D.C.	February 28-29
IRE National Con- vention	All Profession- al Groups	New York, N. Y.	March 19-22
The Application of Ferrite Devices to Microwaves	Harvard Univ.; Cambridge Res. Center; PGMTT	Cambridge, Mass.	April 2-3-4
Conference on Magnetic Amplifiers	PGIE; PGED; AIEE; ISA	Syracuse, N. Y.	April 5-6
7th Regional Tech. Conference & Trade Show	Region 7	Salt Lake City, Utah	April 11-13
10th Annual Spring Tech. Conference	Cinn. Section; PGB TVR; PGB TS	Cincinnati, Ohio	April 13-14
International Elec- tronics Show	El Paso Section	El Paso, Texas	April 13-15
New England Radio Eng. Meeting	Region 1	Boston, Mass.	April 23-24

National Technical Meetings, 1956  
(Continued)

<u>Name of Meeting</u>	<u>Sponsoring PG's</u>	<u>Place</u>	<u>Date</u>
Symposium on Non-linear Network Theory	PGCT; PIB	New York, N. Y.	April 25-27
URSI Spring Meeting	PGAP; PGMPTT; PGI; URSI	Washington, D. C.	April 30-May 3
Joint Elec. Components Conference	PGCP; AIEE; RETMA; WCEMA	Washington, D. C.	May 1-3
Nat'l Aeronautical & Navigational Conference	PGANE; Dayton Section	Dayton, Ohio	May 14-16
Symposium on Reliable Applications of Electron Tubes	RETMA; PGED	Philadelphia, Pa.	May 21-22
2nd International Congress on Acoustics	PGA; ASA; Acoustical Soc. of America	Cambridge, Mass.	June 18-24
Nat'l Telemetering Conference	PGTRC; AIEE; IAS; ISA	Los Angeles, Calif.	August 20-21
WESCON	L. A. & S. F. Sec; WCEMA; All P.G.'s	Los Angeles, Calif.	August 21-24
17th Annual Summer Seminar	Emporium Section	Emporium, Pa.	August 24-26
Information Theory Symposium	PGIT; M. I. T.	Cambridge, Mass.	September 10-12
6th Annual Broadcast Transmission Systems Fall Symposium	PGBTS	Pittsburgh, Pa.	September 14-15
Conference on Communications	Cedar Rapids Section	Cedar Rapids, Ia.	September 14-15
PGNS Annual Meeting	PGNS	Pittsburgh, Pa.	September 20-21
Industrial Elec. Conference	PGIE; PGPT; AIEE	Cleveland, Ohio	September 24-25
Nat'l Elec. Conference	IRE; AIEE; RETMA; SMPTE; Universities	Chicago, Illinois	October 1-3

National Technical Meetings, 1956

<u>Name of Meeting</u>	<u>Sponsoring PG's</u>	<u>Place</u>	<u>Date</u>
IRE Canadian Convention	Region 8	Toronto, Canada	October 1-3
2nd Annual Symposium on Aeronautical Communications - Civil & Military	PGCS; Rome-Utica Section	Utica, N. Y.	October 8-9-10
URSI Fall Meeting	URSI; PGAP	Berkeley, Calif.	October 11-12
Radio Fall Meeting	RETMA; PGBTR; PGED; PGRQC	Syracuse, N. Y.	October 15-17
Conference on Magnetism & Magnetic Materials	PGED; AIEE; APS; AIMME	Boston, Mass.	October 16-18
PGED 2nd Annual Technical Meeting	PGED	Washington, D.C.	October 25-26
East Coast Aeronautical & Navigational Conf.	PGANE; Baltimore Section	Baltimore, Md.	October 29-30
Conference on Elec. Tech. in Medicine & Biology	PGME; AIEE; ISA	New York, N. Y.	November 7-9
Kansas City IRE Technical Conference	Kansas City Section	Kansas City, Kans.	November 8-9
Symposium on Optics and Microwaves	PGAP; George Washington Univ.; Optical Society of America	Washington, D.C.	November 14-16
New England Radio Engineering Meeting	Region 1	Boston, Mass.	November 15-16
PGVC Annual Meeting	PGVC	Detroit, Mich.	November 29-30
Midwest Symposium on Circuit Theory	PGCT; Michigan State University	Lansing, Mich.	December 3-4
2nd IRE Instrumentation Conference & Exhibit	PGI; Atlanta Section	Atlanta, Georgia	December 5-7
Eastern Joint Computer Conference	PGEC; AIEE; ACM	New York, N. Y.	December 10-12

Table XXVI - Section Activities

We were glad to welcome ten new Sections into the IRE during the past year. They are as follows:

Alamogordo-Holloman	May 1956
Florida West Coast	November 1956
Fort Huachuca	November 1956
Fort Worth	January 1956
Regina	May 1956
Rio de Janeiro, Brazil	August 1956
South Bend-Mishawaka	November 1956
Southern Alberta	May 1956
Tucson	April 1956
Wichita	November 1956

The total number of Sections is now 90. Reference to Table XXVII will show a membership increase in 81 of the 90 Sections.

The Tucson, Wichita and Fort Huachuca Subsections became full Sections in the year 1956. The Des Moines-Ames Section was dissolved by the Board of Directors on November 14, 1956.

The Subsections of Sections now total 26, the following being formed in 1956:

Gainesville (Central Florida)	November 1956
Hampton Roads (North Carolina-Virginia)	August 1956
Las Cruces-White Sands Proving Ground (El Paso)	August 1956
Memphis (Huntsville)	May 1956
New Hampshire (Boston)	September 1956
Panama City (Northwest Florida)	September 1956
San Fernando Valley (Los Angeles)	May 1956
Shreveport (Dallas)	September 1956
Western North Carolina (North Carolina-Virginia)	June 1956

A growing major activity of many Sections and the larger Subsections in recent years is the publication of a local monthly Bulletin to fulfill the need for announcing to the Section member the increasing activities of the Section, including (1) Section Meetings (2) Professional Group Chapter Meetings and (3) Information on the local and national level of interest to the Section member.

Thirty-three of the Sections and Subsections now issuing these monthly publications are listed below.

Akron	"Bulletin"
Albuquerque-Los Alamos	"The Blast"
Alamogordo-Holloman	"The Missile"
Baltimore	"The Speaker"
Boston	"The Reflector"
Central Florida	"Newsletter"
Chicago	"Scanfax"
Cleveland	"Cleveland Section News"
Dallas	"Direction"
Dayton	"Waveguide"
Denver	"The Denver Decibel"
Detroit	"Cross Talk"
El Paso	"El Band Paso"
Houston	"Scope"
Huntsville	"The Live Wire"
Kansas City	"The Local Oscillator"
Long Island	"The Pulse"
Los Angeles	"The Bulletin"
Miami	(no name)
Monmouth Subsection (N. Y. Section)	"The Scanner"
New York	"The Monitor"
Northern New Jersey	"IRE Newsletter"
Ottawa	(no name)
Philadelphia	"Almanack"
Phoenix	(no name)
Pittsburgh	"Bulletin"
Princeton	"P. S."
Rome-Utica	"IRE Echoes"
St. Louis	"The Mighty Mho"
San Diego	"Bulletin"
San Francisco	"The Grid"
Tucson	"The Wire"
Washington	"Bulletin"

Table XXVII - Section Meetings and Membership  
(Including Subsections)

<u>Sections</u>	<u>Number of Meetings</u>			<u>Membership of Sections</u>					
	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1956</u>	<u>%**</u>	<u>1955</u>	<u>%**</u>	<u>1954</u>	<u>%**</u>
Akron	10	10	11	263	+ 2	258	+ 5	247	+18
*Alamogordo-Holloman	5	-	-	85	-	-	-	-	-
Albuquerque-Los Alamos	10	10	12	418	+15	363	+ 5	345	+14
Atlanta	11	10	12	686	+14	601	+ 4	579	+32
Baltimore	10	10	10	1,135	+10	1,034	+17	880	+16
Bay of Quinte	7	2	1	74	+11	63	-	-	-
Beaumont-Port Arthur	9	10	10	98	- 7	105	+70	62	- 6
Binghamton	8	7	8	223	+25	178	+12	159	+17
Boston	4	2	4	3,479	+14	3,060	+18	2,594	+17
Buenos Aires	14	11	9	125	- 8	136	+43	95	- 7
Buffalo-Niagara	14	13	14	393	+ 7	366	-	366	+ 4
Cedar Rapids	9	10	12	507	+61	315	+20	262	+11
Central Florida	6	1	6	445	+47	303	+46	207	+67
Chicago	5	5	6	2,352	+ 8	2,175	+10	1,982	+ 5
China Lake	10	11	12	79	-	79	+ 1	78	+13
Cincinnati	9	6	10	358	+17	307	+ 4	295	- 1
Cleveland	5	8	9	416	+ 1	411	+ 3	401	+13
Columbus	5	10	8	224	+29	174	+18	148	- 9
Connecticut Valley	13	14	14	1,082	+20	905	+10	824	+17
Dallas	14	11	22	579	- 6	614	+ 8	571	+17
Dayton	16	11	15	666	+10	608	+ 4	583	+ 7
Denver	8	10	9	446	+46	306	+12	274	+31

Table XXVII - Section Meetings and Membership - Continued  
(Including Subsections)

<u>Sections</u>	<u>Number of Meetings</u>				<u>Membership of Sections</u>				
	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1956</u>	<u>%**</u>	<u>1955</u>	<u>%**</u>	<u>1954</u>	<u>%**</u>
Detroit	9	8	5	982	+18	834	+ 4	804	+ 6
Egypt	4	2	-	24	-25	32	-	-	-
Elmira-Corning	7	7	6	127	+15	111	+10	101	+40
El Paso	8	11	10	168	-26	226	+17	194	+ 4
Emporium	8	13	16	275	+23	223	+13	197	+17
Evansville- Owensboro	9	10	9	117	+ 6	110	+17	94	+ 7
*Florida West Coast 1	-	-	-	85	-	-	-	-	-
*Fort Huachuca	8	-	-	59	-	-	-	-	-
Fort Wayne	9	11	9	252	+26	200	+13	177	- 1
*Fort Worth	7	-	-	256	-	-	-	-	-
Hamilton	8	9	9	146	+26	116	+ 7	109	+ 7
Hawaii	8	11	10	84	-	84	- 2	86	- 5
Houston	9	10	9	451	+17	385	+17	329	+41
Huntsville	13	11	10	390	+45	269	+38	195	+ 3
Indianapolis	7	7	7	433	+13	384	+26	306	+31
Israel	7	5	1	48	- 9	53	+29	41	-
Ithaca	8	9	4	143	+ 2	140	+11	126	-
Kansas City	8	10	4	536	+12	480	+14	421	+14
Little Rock	8	9	9	122	+30	94	+49	63	-22
London	7	9	10	72	+10	65	-15	77	+ 3
Long Island	19	12	9	3,008	+ 9	2,754	+ 8	2,553	+12
Los Angeles	28	24	24	5,014	+21	4,147	+25	3,314	+17
Louisville	0	4	6	131	+35	97	+13	86	- 2
Lubbock	8	9	-	99	+19	83	-	-	-

Table XXVII - Section Meetings and Membership - Continued

<u>Section</u>	<u>Number of Meetings</u>				<u>Membership of Sections</u>				
	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1956</u>	<u>%**</u>	<u>1955</u>	<u>%**</u>	<u>1954</u>	<u>%**</u>
Miami	9	10	9	240	- 5	252	+25	202	-16
Milwaukee	10	6	18	552	+40	394	+22	323	+18
Montreal	16	5	6	528	+17	453	+19	382	+13
Newfoundland	6	1	-	43	+23	35	-	-	-
New Orleans	6	7	9	174	+12	155	+13	137	-
New York	32	23	30	4,298	+ 7	4,000	+ 7	3,747	-31
North Carolina- Virginia	14	8	7	736	+13	652	+48	441	-11
Northern Alberta	3	3	-	91	+ 1	90	-	-	-
Northern New Jersey	9	7	5	2,857	+12	2,542	+ 6	2,393	-
Northwest Florida	10	2	-	109	+31	83	-	-	-
Oklahoma City	11	9	7	228	+29	177	+72	103	+ 4
Omaha-Lincoln	2	2	4	135	+29	105	+15	91	+10
Ottawa	8	9	7	231	+14	203	+ 4	196	+22
Philadelphia	16	20	32	3,109	+15	2,692	+11	2,420	+14
Phoenix	10	16	19	290	-22	370	+50	246	+40
Pittsburgh	10	10	10	616	+ 7	576	+20	481	+12
Portland	8	12	13	259	+ 9	238	+10	217	+ 4
Princeton	7	8	10	457	+15	397	+ 2	391	+15
*Regina	5	-	-	47	-	-	-	-	-
*Rio de Janeiro	1	-	-	30	-	-	-	-	-
Rochester	5	9	9	286	+20	238	+16	205	+25
Rome-Utica	7	9	10	384	+30	295	+24	238	+19
Sacramento	8	10	10	145	+16	125	+29	97	+33

Table XXVII - Section Meetings and Membership - Continued

Section	Number of Meetings				Membership of Sections				
	1956	1955	1954	1956	%**	1955	%**	1954	%**
St. Louis	0	2	10	472	+17	405	+11	365	+24
Salt Lake	4	4	7	199	+29	154	+ 5	147	+19
San Antonio	11	15	12	266	+12	237	+ 7	222	+24
San Diego	10	11	11	560	+34	418	+15	365	+ 7
San Francisco	15	13	10	2,255	+38	1,634	+18	1,384	+19
Schenectady	4	6	6	398	+ 1	393	+12	350	+ 6
Seattle	15	12	5	700	+30	537	- 9	592	+17
*South Bend- Mishawaka	1	-	-	169	-	-	-	-	-
*Southern Alberta	3	-	-	58	-	-	-	-	-
Syracuse	9	7	12	722	+17	618	+ 9	571	- 8
Tokyo	7	-	-	111	+56	71	-	-	-
Toledo	10	9	10	143	+10	130	+ 3	127	+13
Toronto	10	10	6	522	+18	444	+ 6	421	+12
*Tucson	9	-	-	159	-	-	-	-	-
Tulsa	9	9	8	239	+12	214	+ 3	208	+13
Twin Cities	6	8	11	728	+37	529	+14	466	+ 6
Vancouver	10	10	10	175	+27	138	-25	184	+14
Washington	10	10	9	2,363	+12	2,107	+ 3	2,039	+ 8
*Wichita	0	-	-	100	-	-	-	-	-
Williamsport	2	8	9	45	+22	37	-12	42	-13
Winnipeg	9	9	10	98	-11	110	+ 4	79	+13
Totals	777	717	749	53,482	+17	45,614	+13.5	40,187	+13

Total Membership of IRE

55,494 +17.1 47,388 +13.4 41,778 +12.5

\*Sections formed during 1956

\*\*Percentage increase or decrease based on preceding year

Table XXVIII - Subsection Meetings and Membership, 1956

<u>Subsection</u>	<u>Parent Section</u>	<u>Membership</u>	<u>No. of Meetings</u>
Berkshire County	Connecticut Valley	81	7
Buenaventura	Los Angeles	162	9
Centre County	Emporium	152	-
Charleston	Atlanta	93	3
East Bay	San Francisco	488	7
Erie	Buffalo-Niagara	51	6
Gainesville	Central Florida	147	-
Hampton Roads	North Carolina-Virginia	115	1
Lancaster	Philadelphia	221	7
Las Cruces-White Sands Proving Grounds	El Paso	84	-
Memphis	Huntsville	64	3
Mid-Hudson	New York	524	5
Monmouth	New York	482	8
New Hampshire	Boston	140	2
Orange Belt	Los Angeles	332	5
Palo Alto	San Francisco	1,212	4
Panama City	Los Angeles	26	-
Pasadena	Los Angeles	507	2
Piedmont	North Carolina-Virginia	180	7
Quebec	Montreal	66	6
Richland	Seattle	89	6
San Fernando Valley	Los Angeles	711	2
Shreveport	Dallas	64	3
USAFIT	Dayton	62	8
Westchester County	New York	528	9
Western North Carolina	North Carolina-Virginia	49	-
			<hr/>
		Total	110

Table XXIX - Professional Group Chapter Meetings, 1956

<u>Section</u>	<u>G1</u>	<u>G2</u>	<u>G3</u>	<u>G4</u>	<u>G5</u>	<u>G6</u>	<u>G7</u>	<u>G8</u>	<u>G9</u>	<u>G10</u>	<u>G11</u>	<u>G12</u>	<u>G13</u>	<u>G14</u>	<u>G15</u>	<u>G16</u>	<u>G17</u>	<u>G18</u>	<u>G19</u>	<u>G20</u>	<u>G21</u>	<u>G22</u>	<u>G23</u>	<u>G24</u>	<u>Total</u>	
Akron																3									3	
Albuquerque- Los Alamos	4		3	3	6							7						3							26	
Baltimore																3	1								4	
Boston	5	2			3									3	4	4	5								1	27
Buffalo-Niagara																			3						3	
Central Florida										4																4
Chicago	3		2		3	2	1	3					2	2		1	2		1							22
China Lake				2																						2
Cleveland	3																									3
Connecticut Valley					9																					9
Dayton	3				3					4	4				5	1						4			1	25
Denver			6																							6
Detroit						4										2										6
Fort Wayne																									4	4
Houston	2	1			1				2																	6
Long Island									3																1	5
Los Angeles		1	7	5	2	5	5		9		3		2	4	7	3					5		6	2		66
Montreal																4										4
New York											6			5	3	2	1	4			2	2				25
Northern New Jersey																										7
Philadelphia	3		1	2					1	2				4		5	1					1				20
Phoenix	2																									2
Pittsburgh		2			2											1										5
Rome-Utica												2							3							5
San Antonio	1																									1
San Francisco	3													3	4	5	4	5					3			27
Seattle				1																						1
Syracuse	2														3					1						6
Washington	3		2		2	1		2			1		2	5	5				2		1	4		3		33
	<u>34</u>	<u>6</u>	<u>21</u>	<u>13</u>	<u>28</u>	<u>10</u>	<u>6</u>	<u>8</u>	<u>7</u>	<u>18</u>	<u>12</u>	<u>11</u>	<u>2</u>	<u>31</u>	<u>20</u>	<u>43</u>	<u>28</u>	<u>12</u>	<u>7</u>	<u>-</u>	<u>13</u>	<u>9</u>	<u>6</u>	<u>12</u>	<u>357</u>	

GRAND TOTAL: 357

-96-

TABLE XXX - STUDENT BRANCHES, 1956

The number of Student Branches formed during 1956 was 5, all of which operate as IRE-AIEE Branches. The total number of Student Branches is now 135, 107 of which operate as joint IRE-AIEE Branches.

Following is a list of the Student Branches:

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Agricultural and Mechanical College of Texas	IRE-AIEE	
Akron, University of	IRE-AIEE	
Alabama, University of	IRE-AIEE	8/21/56
Alabama Polytechnic Institute	IRE	
Alberta, University of	IRE-AIEE	
Arizona, University of	IRE-AIEE	
Arkansas, University of	IRE-AIEE	
British Columbia, University of	IRE-AIEE	
Brooklyn, Polytechnic Institute of	IRE-AIEE (Day Div.)	
Brooklyn, Polytechnic Institute of	IRE-AIEE (Eve. Div.)	
Brown University	IRE-AIEE	
Bucknell University	IRE-AIEE	
California Institute of Technology	IRE-AIEE	
California State Polytechnic College	IRE	
California, University of	IRE-AIEE	
Carnegie Institute of Technology	IRE-AIEE	
Case Institute of Technology	IRE	
Cincinnati, University of	IRE-AIEE	
Clarkson College of Technology	IRE-AIEE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Clemson College	IRE-AIEE	
Colorado, University of	IRE-AIEE	
Colorado Agricultural and Mechanical College	IRE-AIEE	
Columbia University	IRE-AIEE	
Connecticut, University of	IRE-AIEE	
Cooper Union	IRE-AIEE	
Cornell University	IRE-AIEE	
Dayton, University of	IRE-AIEE	
Delaware, University of	IRE-AIEE	
Denver, University of	IRE-AIEE	
Detroit, University of	IRE-AIEE	
Drexel Institute of Technology	IRE-AIEE	
Fenn College	IRE	
Florida, University of	IRE-AIEE	
George Washington University	IRE-AIEE	
Georgia Institute of Technology	IRE	
Illinois Institute of Technology	IRE	
Illinois, University of	IRE-AIEE	
Iowa, State University of	IRE	
Iowa State College	IRE-AIEE	
John Carroll University	IRE	
Johns Hopkins University	IRE-AIEE	
Kansas State College	IRE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Kansas, University of	IRE-AIEE	
Kentucky, University of	IRE	
Lafayette College	IRE-AIEE	
Laval University	IRE-AIEE	3/1/56
Lehigh University	IRE-AIEE	
Louisiana State University	IRE-AIEE	
Louisville, University of	IRE-AIEE	
Maine, University of	IRE	
Manhattan College	IRE-AIEE	
Marquette University	IRE-AIEE	
Maryland, University of	IRE-AIEE	
Massachusetts, University of	IRE-AIEE	
Massachusetts Institute of Technology	IRE-AIEE	
Miami, University of	IRE	
Michigan College of Mining and Technology	IRE-AIEE	
Michigan State University	IRE-AIEE	
Michigan, University of	IRE-AIEE	
Minnesota, University of	IRE-AIEE	
Mississippi State College	IRE	
Missouri School of Mines and Metallurgy, University of	IRE-AIEE	
Missouri, University of	IRE-AIEE	
Montana State College	IRE-AIEE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Nebraska, University of	IRE-AIEE	
Nevada, University of	IRE-AIEE	
Newark College of Engineering	IRE	
New Hampshire, University of	IRE-AIEE	
New Mexico College of Agriculture and Mechanic Arts	IRE-AIEE	
New Mexico, University of	IRE-AIEE	
New York, College of the City of	IRE	
New York University	IRE (Day Div.)	
New York University	IRE-AIEE (Eve. Div.)	
North Carolina State College	IRE-AIEE	
North Dakota, University of	IRE-AIEE	
North Dakota Agricultural College	IRE-AIEE	
Northeastern University	IRE-AIEE	
Northwestern University	IRE-AIEE	
Norwich University	IRE-AIEE	
Notre Dame, University of	IRE-AIEE	
Ohio State University	IRE-AIEE	
Ohio University	IRE-AIEE	
Oklahoma, University of	IRE-AIEE	
Oklahoma Agricultural and Mechanical College	IRE-AIEE	
Oregon State College	IRE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Pennsylvania, University of	IRE-AIEE	
Pennsylvania State University, The	IRE-AIEE	
Pittsburgh, University of	IRE	
Pratt Institute	IRE-AIEE	
Princeton University	IRE-AIEE	
Purdue University	IRE-AIEE	
Rensselaer Polytechnic Institute	IRE-AIEE	
Rhode Island, University of	IRE-AIEE	
Rice Institute	IRE-AIEE	
Rose Polytechnic Institute	IRE-AIEE	
Rutgers University	IRE-AIEE	
St. Louis University	IRE	
San Diego State College	IRE	
San Jose State College	IRE	
Santa Clara, University of	IRE-AIEE	11/13/56
Seattle University	IRE	
South Carolina, University of	IRE-AIEE	
South Dakota School of Mines and Technology	IRE	
South Dakota State College	IRE-AIEE	11/13/56
Southern California, University of	IRE-AIEE	
Southern Methodist University	IRE-AIEE	
Stanford University	IRE-AIEE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Stevens Institute of Technology	IRE-AIEE	
Swarthmore College	IRE-AIEE	
Syracuse University	IRE-AIEE	
Tennessee, University of	IRE	
Texas, University of	IRE-AIEE	
Texas College of Arts and Industries	IRE	
Texas Technological College	IRE-AIEE	
Toledo, University of	IRE-AIEE	
Toronto, University of	IRE	
Tufts University	IRE-AIEE	
Tulane University	IRE-AIEE	
U. S. Naval Postgraduate School	IRE	
Utah State Agricultural College	IRE	
Utah, University of	IRE-AIEE	
Vermont, University of	IRE-AIEE	
Vanderbilt University	IRE-AIEE	5/9/56
Villanova University	IRE-AIEE	
Virginia Polytechnic Institute	IRE-AIEE	
Virginia, University of	IRE-AIEE	
Washington University	IRE-AIEE	
Washington, State College of	IRE-AIEE	
Washington, University of	IRE-AIEE	

TABLE XXX - STUDENT BRANCHES, 1956 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1956</u>
Wayne University	IRE-AIEE	
West Virginia University	IRE-AIEE	
Wisconsin, University of	IRE-AIEE	
Worcester Polytechnic Institute	IRE-AIEE	
Wyoming, University of	IRE-AIEE	
Yale University	IRE-AIEE	

1957. The statistics in it show the increasingly ramified activities of your IRE and the continued growth in all departments. Membership went up some 17%. Of interest was the 23% increase of those residing in foreign countries compared with 15.5% of those residing within the United States. Significantly, the number of members holding professional grades now exceeds those having non-professional status. Also, members of Professional Groups now exceed in numbers those that have membership in the IRE, because many members belong to more than one Group.

Publication volume has moved up some 20%. The production of the Student Quarterly has been strengthened by the addition of an assistant to the headquarters editorial staff.

Technical activities continue unabated. The number of Section meetings went up almost 6%, the number of Professional Group meetings 4.4% and the number of Student Branches 12%.

Respectfully submitted,

Harold Pratt  
Secretary

February 26, 1958