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REPORT OF THE SECRETARY

1957

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

Gentlemen:

Submitted herewith is the Secretary's Report for the year 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 22% increase of those residing in foreign countries compared with 16.5% 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 8%, the number of Professional Group meetings 4.6% and the number of Student Branches 12%.

Respectfully submitted,

Haraden Pratt
Secretary

February 26, 1958

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Table I - Total Membership Distribution by Grades as of December 31, 1957

Grade	As of Dec. 31, 1956		As of Dec. 31, 1957		As of Dec. 31, 1957	
	Number	% of Total	Number	% of Total	Number	% of Total
Fellow	700		700	1.1	700	1.1
Senior Member	7,685		7,685	11.6	7,685	11.9
Member	26,115		26,115	34.6	26,115	34.2
Voting Associate	16,827***	25.8	16,827***	34.0	16,827***	43.2
Student	13,446	20.8	13,446	18.7	13,446	18.5
Associate	64,773	16,475	59,494	47,388	51,327	
Student		13,446				
Grand Total					64,773	

Table II - Total Membership Distribution by Grade by Percentage as of December 31, 1957

Grade	Grade Percentage	Total Percentage
Fellow	1.1	
Senior Member	11.9	
Member	40.3	
Voting Associate	.5	53.8
Associate	25.4	79.2
Student	20.8	100.0

Table III - Comparison of Total Membership Distribution by Grades, 1955-1957

Grade	As of Dec. 31, 1957		As of Dec. 31, 1956		As of Dec. 31, 1955	
	Number	% of Total	Number	% of Total	Number	% of Total
Fellow	700	1.1	635	1.1	565	1.2
Senior Member	7,685	11.9	6,486	11.6	5,643	11.9
Member	26,115	40.3	19,110	34.6	13,360	28.2
Associate	16,827***	25.9	18,879**	34.0	20,492*	43.2
Student	<u>13,446</u>	20.8	<u>10,384</u>	18.7	<u>7,328</u>	15.5
Totals	64,773		55,494		47,388	

Table IV - Analysis of Total Membership Distribution by Grades, 1957

	<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>
U. S.	618	5,711	1,372	14,059	9,868	324	4,674	10,066	12,657	59,349
U.S Posses- sions		6	3	48	34	1	38	39	17	186
U.S. Over- seas Military	2	21	6	84	135	1	24	135	18	426
	<u>620</u>	<u>5,738</u>	<u>1,381</u>	<u>14,191</u>	<u>10,037</u>	<u>326</u>	<u>4,736</u>	<u>10,240</u>	<u>12,692</u>	<u>59,961</u>
Canada	29	152	30	553	454	11	181	561	617	2,588
Foreign	<u>51</u>	<u>276</u>	<u>108</u>	<u>490</u>	<u>390</u>	<u>15</u>	<u>208</u>	<u>549</u>	<u>137</u>	<u>2,224</u>
Totals	700	6,166	1,519	15,234	10,881	352	5,125	11,350	13,446	64,773

- * Includes 396 Voting Associates
- ** Includes 388 Voting Associates
- *** Includes 352 Voting Associates

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

	<u>1957</u>	<u>1956</u>	<u>1955</u>	<u>1954</u>	<u>1953</u>
Total	64,773	55,494	47,388	41,778	37,134
U.S. and Possessions	59,961	51,551	43,977	38,923	34,505
Foreign (incl. Canada)	4,812	3,943	3,411	2,855	2,629
Per Cent Foreign	7.4	7.1	7.2	6.8	7.1

Table VI - Distribution of Members, by Grade, by Annual Dues Rate, 12/31/57

	<u>\$15.00</u>	<u>\$10.00</u>	<u>\$5.00</u>
Fellow	700		
Senior Member	6,166	1,519	
Member	15,234	10,881	
Voting Associate	352		
Associate	5,125	11,350	
Student			13,446
Totals	27,577	23,750	13,446

Table VII - Distribution of U. S. Members 1956 and 1957
(Including U. S. Possessions and U. S. Overseas Military)

<u>1957</u>	<u>1956</u>		<u>Gain</u>	<u>Loss</u>
175	320	Alabama		145
733	505	Arizona	228	
154	123	Arkansas	31	
9580	8031	California	1549	
499	400	Colorado	99	
917	903	Connecticut	14	
91	72	Delaware	19	
912	894	District of Columbia	18	
1445	868	Florida	577	
320	290	Georgia	30	
41	38	Idaho	3	
2621	2335	Illinois	286	
1042	1006	Indiana	36	
638	520	Iowa	118	
458	326	Kansas	132	
270	200	Kentucky	70	
251	193	Louisiana	58	
118	93	Maine	25	
2124	1966	Maryland	158	
3966	3346	Massachusetts	620	
1173	1069	Michigan	104	
645	555	Minnesota	90	
115	113	Mississippi	2	
947	713	Missouri	234	
45	35	Montana	10	
194	115	Nebraska	79	
31	26	Nevada	5	
187	140	New Hampshire	47	
5329	4729	New Jersey	600	
737	585	New Mexico	152	
10,577	9596	New York	981	
447	301	North Carolina	146	
73	46	North Dakota	27	
2313	2046	Ohio	267	
543	469	Oklahoma	74	
297	250	Oregon	47	
3369	2968	Pennsylvania	401	
109	108	Rhode Island	1	
213	153	South Carolina	60	
144	96	South Dakota	48	
310	249	Tennessee	61	
2115	1733	Texas	382	
253	168	Utah	85	
53	37	Vermont	16	
1168	1020	Virginia	148	
745	667	Washington	78	
90	76	West Virginia	14	
699	434	Wisconsin	265	
73	50	Wyoming	23	
<u>59,349</u>	<u>50,976</u>		<u>8518</u>	<u>145</u>
<u>NET GAIN</u>			<u>8373</u>	

Table VII - Distribution of U. S. Members 1956 and 1957 - Continued
(Including U. S. Possessions and U. S. Overseas Military)

		<u>United States Possessions</u>							
<u>1957</u>	<u>1956</u>				<u>Gain</u>		<u>Loss</u>		
		Alaska			13				
		Canal Zone			1				
		Mariana Islands			1				
		Puerto Rico					6		
		Territories of Hawaii			6				
		Virgin Islands			-		-		
<u>186</u>	<u>171</u>				<u>21</u>		<u>6</u>		
		<u>NET GAIN</u>			<u>15</u>				
		<u>U. S. Overseas Military</u>							
					22				
426	404								
		<u>NET GAIN</u>			<u>22</u>				

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/57

State	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Alabama	-	4	-	14	26	-	2	15	114	175
Arizona	6	70	29	167	141	1	35	121	163	733
Arkansas	4	19	11	15	2	-	7	14	82	154
California	70	881	277	2,509	1,912	44	841	1,650	1,396	9,580
Colorado	2	37	20	104	61	2	29	80	164	499
Connecticut	8	94	16	259	106	4	70	172	188	917
Delaware	-	5	-	14	13	-	9	11	39	91
Dist. of Columbia	33	116	48	237	144	13	51	140	130	912
Florida	9	126	125	269	258	8	79	290	281	1,445
Georgia	-	23	4	59	41	2	13	46	132	320
Idaho	-	4	-	17	-	-	6	1	13	41
Illinois	17	260	38	611	331	30	240	519	575	2,621
Indiana	5	81	23	156	173	4	77	172	351	1,042
Iowa	2	52	12	112	97	3	29	94	237	638
Kansas	1	39	13	116	-	1	42	44	202	458
Kentucky	1	23	4	49	36	-	16	36	105	270
Louisiana	1	11	9	31	27	2	17	40	113	251
Maine	1	4	-	19	14	-	16	3	61	118
Maryland	15	231	6	753	299	16	241	329	234	2,124
Massachusetts	40	360	75	971	684	10	218	621	987	3,966
Michigan	9	72	14	284	151	16	103	201	323	1,173
Minnesota	5	33	6	164	121	2	45	104	165	645
Mississippi	2	-	-	2	25	-	2	20	64	115

Continued

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/57

State	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Missouri	2	73	16	174	70	3	63	127	419	947
Montana	-	-	-	8	4	1	2	4	26	45
Nebraska	-	-	11	27	23	2	6	34	91	194
Nevada	-	1	2	-	6	-	1	8	13	31
New Hampshire	-	15	1	46	22	-	8	27	68	187
New Jersey	137	794	53	1,498	859	27	458	898	605	5,329
New Mexico	2	76	8	148	172	1	37	137	156	737
New York	137	1,017	294	2,492	2,081	73	1,012	1,918	1,553	10,577
North Carolina	-	32	5	100	89	4	36	64	117	447
North Dakota	-	-	-	5	5	1	1	2	59	73
Ohio	26	252	98	579	308	13	211	459	367	2,313
Oklahoma	2	10	18	53	117	1	8	109	225	543
Oregon	3	19	3	59	20	4	28	49	112	297
Pennsylvania	53	479	6	808	415	21	233	586	768	3,369
Rhode Island	-	4	2	7	37	1	4	27	27	109
South Carolina	1	7	20	20	35	-	16	15	99	213
South Dakota	-	-	1	10	6	-	4	4	119	144
Tennessee	1	11	1	58	44	-	18	32	145	310
Texas	7	177	57	409	421	-	123	368	553	2,115
Utah	-	9	-	28	28	-	12	16	160	253
Vermont	-	5	-	7	13	-	1	9	18	53

Continued

Table VIII - Distribution of U. S. Members by Grade and State as of 12/31/57

State	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Virginia	7	122	38	262	242	5	75	234	183	1,168
Washington	5	38	1	203	111	3	72	105	207	745
West Virginia	-	3	3	10	9	-	12	17	36	90
Wisconsin	4	20	4	112	66	5	45	89	354	699
Wyoming	-	2	-	4	3	1	-	5	58	73
Totals	618	5,711	1,372	14,059	9,868	324	4,674	10,066	12,657	59,349

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

Region	Section	F	SM	M	VA	A	S	Section	Region
								Total	Total
1	Binghamton		19	221	1	66	19	326	8,483
	Boston	44	428	1,669	11	846	986	4,210	
	New Hampshire Sub.		16	67	-	34	66	-	
	Northern Vermont Sub.		3	20	-	7	13	-	
	Buffalo-Niagara		41	169	3	115	41	436	
	Erie Sub.		7	26	-	22	12	-	
	Connecticut	14	110	369	4	242	185	924	
	Elmira-Corning	2	20	72	-	33	13	140	
	Ithaca	2	13	48	-	23	74	160	
	Rochester	2	61	184	4	107	70	428	
	Rome-Utica	1	63	206	-	113	26	409	
	Schenectady	13	78	144	2	55	113	405	
	Syracuse	17	144	385	-	182	91	819	
	Western Mass.	2	13	73	1	47	90	226	
2	Long Island	43	478	1,538	18	1,031	419	3,527	11,935
	New York	52	276	1,013	21	794	738	4,643	
	Mid-Hudson Sub.	1	28	344	1	227	42	-	
	Monmouth Sub.	9	113	240	3	127	18	-	
	Westchester Sub.	4	94	249	9	180	60	-	
	Northern New Jersey	85	551	1,304	18	811	437	3,206	
	Princeton	37	95	205	-	127	95	559	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

Region	Section	F	SM	M	VA	A	S	Section Total	Region Total
3	Atlanta	-	40	153	2	91	342	760	10,783
	Charleston Sub.	1	8	50	-	36	37	-	
	Baltimore	8	164	581	4	329	112	1,198	
	Central Florida	1	69	250	-	159	40	696	
	Gainesville Sub.	1	16	26	-	13	121	-	
	Florida West Coast	7	26	86	3	97	23	242	
	Huntsville Sub.	-	11	104	-	58	95	413	
	Memphis Sub.	-	-	15	-	19	15	-	
	Nashville Sub.	1	4	32	-	6	53	-	
	Miami	-	30	82	5	64	82	263	
	North Carolina	-	27	120	3	54	21	443	
	East. No. Car. Sub.	-	8	38	-	23	84	-	
	West. No. Car. Sub.	-	3	27	1	22	12	-	
	Northwest Florida	-	5	56	-	34	6	139	
	Panama City Sub.	-	5	31	-	2	-	-	
	Philadelphia	38	436	1,343	22	790	484	3,479	
	Lancaster Sub.	2	37	95	2	66	23	-	
	Lehigh Valley Sub.	-	15	34	4	18	70	-	
	Virginia	2	23	147	1	95	139	407	
	Washington	47	486	1,210	37	647	316	2,743	
	Omaha-Lincoln	-	12	33	3	49	95	212	
	So. Bend-Mishawaka	-	34	94	-	49	32	199	
	Twin Cities	-	47	126	3	166	231	871	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

<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 Region</u>	
								<u>Total</u>	<u>Total</u>
4	Akron	3	31	110	2	97	41	284	4,416
	Central Pennsylvania	1	23	61	-	16	114	215	
	Cincinnati	3	46	180	4	101	59	393	
	Cleveland	4	55	197	5	123	106	490	
	Columbus	2	23	98	1	60	70	254	
	Dayton	3	117	281	2	212	41	714	
	USAFIT Sub.	-	8	30	-	17	3		
	Detroit	9	82	403	13	290	265	1,062	
	Emporium	1	44	51	-	25	4	125	
	Pittsburgh	9	60	230	1	174	190	664	
	Toledo	-	11	60	1	46	47	165	
	Williamsport	2	2	17	-	12	17	50	
5	Cedar Rapids	2	61	190	3	121	221	623	6,261
	Burlington Sub.	-	4	15	-	3	3		
	Chicago	17	321	926	31	750	639	2,684	
	Evansville-Owensboro	1	27	46	-	39	11	124	
	Fort Wayne	3	32	104	-	82	15	236	
	Indianapolis	3	42	124	2	83	186	440	
	Louisville	-	3	40	1	22	93	159	
	Milwaukee	4	24	167	5	134	379	713	
	Omaha-Lincoln	-	12	53	3	49	95	212	
	So. Bend-Mishawaka	-	24	94	-	49	32	199	
	Twin Cities	5	40	326	3	166	331	871	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

Region	Section	F	SM	M	VA	A	S	Section	Region
								Total	Total
6	Beaumont- Port Arthur	-	3	32	1	26	47	109	5,029
	Dallas	3	113	300	-	145	129	690	
	Denver	2	60	171	2	112	164	511	
	El Paso	-	9	54	-	34	7	183	
	Las Cruces- White Sands Subsection	-	2	30	-	18	29	-	
	Fort Worth	-	29	157	2	76	42	306	
	Houston	2	49	173	1	127	165	517	
	Kansas City	2	35	138	3	132	313	623	
	Little Rock	2	8	18	-	20	79	127	
	Lubbock	-	2	23	-	21	48	94	
	New Orleans	1	11	68	1	51	105	237	
	Oklahoma City	-	12	98	1	39	111	261	
	St. Louis	1	39	191	1	136	259	627	
	San Antonio	2	31	91	-	68	92	284	
	Shreveport	-	8	21	-	16	24	69	
	Tulsa	2	16	69	-	78	98	263	
	Wichita	-	1	52	-	33	42	128	
	East Bay Sub.	-	-	104	3	117	189	-	
	Palo Alto Sub.	-	-	908	3	316	302	-	
	Seattle	-	-	296	1	163	174	750	
	Richland Sub.	-	-	45	1	14	39	-	
	Tucson	-	-	45	1	35	5	90	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

Region	Section	F	SM	M	VA	A	S	Section	Region
								Total	Total
7	Alamogordo-Holloman	-	5	55	-	32	4	96	12,422
	Albuquerque-Los Alamos	2	74	226	1	119	121	543	
	China Lake	-	5	55	-	32	3	95	
	Fort Huachuca	1	22	44	-	15	2	84	
	Hawaii	-	6	43	1	35	5	90	
	Los Angeles	27	489	1,821	14	1,064	386	5,999	
	Buenaventura Sub.	-	8	57	-	26	7	-	
	Orange Belt Sub.	4	63	214	1	123	43	-	
	Pasadena Sub.	4	78	219	4	156	105	-	
	San Fernando Sub.	1	123	390	4	247	52	-	
	Santa Barbara Sub.	2	21	51	-	24	171	-	
	Phoenix	3	57	188	-	108	91	447	
	Portland	3	22	81	4	66	118	294	
	Sacramento	1	13	65	3	53	37	172	
	Salt Lake	-	9	75	-	32	183	299	
	San Diego	1	76	338	3	174	68	660	
	San Francisco	4	57	249	9	159	133	2,763	
	East Bay Sub.	6	45	164	3	117	189	-	
	Palo Alto Sub.	29	280	698	3	316	302	-	
	Seattle	5	39	286	3	168	174	790	
	Richland Sub.	-	1	40	1	14	59	-	
	Tucson	-	6	43	1	35	5	90	

Continued

Table IX - Distribution of Membership by Region, by Section, by Grade as of 12/31/57

Region	Section	F	SM	M	VA	A	S	Section	Region
								Total	Total
8	Bay of Quinte	1	12	29	1	24	19	86	2,588
	Hamilton	-	11	42	-	28	26	171	
	Kitchener- Waterloo Sub.	-	7	26	1	17	13	-	
	London	1	7	33	-	35	31	107	
	Montreal	8	45	284	5	149	69	660	
	Quebec Sub.	-	1	32	-	22	45	-	
	Newfoundland	-	-	21	-	21	-	42	
	Northern Alberta	-	3	25	-	30	38	96	
	Ottawa	10	33	133	-	78	32	286	
	Regina	-	-	17	-	21	28	66	
	Southern Alberta	-	-	23	-	40	2	65	
	Toronto	6	48	245	3	189	195	686	
	Vancouver	1	11	50	1	58	88	209	
	Winnipeg	2	4	47	-	30	31	114	
-	Buenos Aires	2	17	29	-	47	17	112	442
-	Egypt	-	2	11	-	9	-	22	
-	Israel	-	4	24	-	30	1	59	
-	Rio de Janeiro	1	3	19	1	20	1	45	
-	Tokyo	3	46	52	-	95	8	204	
Totals		653	7,337	25,059	336	15,673	13,301	62,359	62,359

Table X - Distribution of Foreign Members - 1956 and 1957

<u>1957</u>	<u>1956</u>		<u>1957</u>	<u>1956</u>	
1	1	Aden Colony	8	7	Ireland
8	5	Arabia	59	48	Israel
112	125	Argentina	96	59	Italy
0	1	Ascension Island	204	111	Japan
3	1	Austria	3	1	Korea
83	79	Australia	1	1	Kuwait
1	1	Bahama Islands	8	4	Lebanon
24	17	Belgium	1	0	Liberia
5	4	Bermuda	6	8	Malaya
1	1	Bolivia	1	1	Malta
118	84	Brazil	0	1	Marshall Islands
1	2	British Guiana	1	1	Mauritius
11	9	British West Indies	60	61	Mexico
18	11	Burma	5	4	Morocco
2588	2,085	Canada	35	32	Netherlands
4	4	Ceylon	9	12	New Zealand
9	7	Chile	2	1	Nicaragua
22	18	Colombia	23	17	Norway
4	5	Costa Rica	1	0	Okinawa
25	22	Cuba	23	25	Pakistan
5	3	Cyprus	3	2	Panama, Republic of
9	4	Czechoslovakia	8	7	Peru
76	52	Denmark	13	10	Philippine Islands
1	1	Dutch Guiana	5	0	Poland
1	1	E. Caroline Island	7	6	Portugal
5	3	Ecuador	2	0	Romania
22	24	Egypt	1	0	Saigon
1	2	El Salvador	14	11	Scotland
374	347	England	4	0	Singapore
1	1	Ethiopia	41	37	South Africa
3	1	Finland	14	12	Spain
3	3	Formosa	0	5	Strait Settlements
120	102	France	84	80	Sweden
60	46	Germany	71	71	Switzerland
25	18	Greece	0	2	Syria
2	2	Guatemala	1	1	Tasmania
12	10	Hong Kong	5	6	Thailand
0	1	Hungary	15	14	Turkey
1	4	Iceland	3	4	Uruguay
151	128	India	11	4	U.S.S.R.
3	2	Indonesia	40	32	Venezuela
2	1	Iran	3	2	Wales
5	4	Iraq	1	1	Yugoslavia

	<u>1957</u>	<u>1956</u>	<u>Net Gain</u>
Grand Total	4,812	3,943	869

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/57

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Aden Colony	-	-	-	1	-	-	-	-	-	1
Arabia	-	1	-	3	3	-	1	-	-	8
Argentina	2	13	4	16	13	-	15	32	17	112
Ascension Island	-	-	-	-	-	-	-	-	-	-
Austria	-	-	-	1	-	-	2	-	-	3
Australia	2	15	5	28	6	5	8	13	1	83
Bahama Islands	-	-	-	1	-	-	-	-	-	1
Belgium	-	1	-	5	9	1	2	5	1	24
Bermuda	-	1	-	2	1	-	-	1	-	5
Bolivia	-	-	-	1	-	-	-	-	-	1
Brazil	1	4	4	11	28	1	8	32	29	118
British Guiana	-	-	-	1	-	-	-	-	-	1
British West Indies	-	-	-	4	1	-	3	3	-	11
Burma	-	-	1	4	4	-	-	8	1	18
Canada	29	152	30	553	454	11	181	561	617	2,588
Ceylon	-	-	-	1	1	-	1	1	-	4
Chile	-	1	-	2	-	-	1	5	-	9
Colombia	-	1	1	5	9	-	2	4	-	22
Costa Rica	-	1	-	1	-	-	1	1	-	4
Cuba	1	3	-	5	2	-	2	9	3	25
Cyprus	-	-	-	2	-	-	1	2	-	5
Czechoslovakia	-	-	-	4	2	-	-	3	-	9

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/57

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Denmark	1	4	1	9	6	-	7	9	39	76
Dutch Guiana	-	-	-	-	1	-	-	-	-	1
E. Caroline Island	-	-	-	-	-	-	-	1	-	1
Ecuador	-	1	-	1	2	-	-	1	-	5
Egypt	-	2	-	9	2	-	1	8	-	22
El Salvador	-	-	-	1	-	-	-	-	-	1
England	18	82	8	117	73	4	23	42	7	374
Ethiopia	-	-	-	1	-	-	-	-	-	1
Finland	-	1	-	-	2	-	-	-	-	3
Formosa	-	-	-	1	-	-	1	1	-	3
France	6	25	7	23	19	1	12	26	1	120
Germany	4	12	17	6	9	-	-	10	2	60
Greece	-	-	2	4	2	-	3	14	-	25
Guatemala	-	-	-	1	-	-	1	-	-	2
Hong Kong	-	-	-	4	3	-	1	4	-	12
Hungary	-	-	-	-	-	-	-	-	-	-
Iceland	-	-	-	-	-	-	1	-	-	1
India	1	25	5	37	30	-	24	27	2	151
Indonesia	-	-	-	1	1	-	-	1	-	3
Iran	-	-	-	1	-	-	-	1	-	2
Iraq	-	-	-	1	2	-	-	2	-	5
Ireland	-	1	1	1	-	-	2	3	-	8

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/57

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Israel	-	4	-	16	8	-	4	26	1	59
Italy	-	6	3	13	8	-	12	43	11	96
Japan	3	20	26	11	41	-	13	82	8	204
Korea	-	-	-	1	1	-	-	1	-	3
Kuwait	-	-	-	-	-	-	-	1	-	1
Lebanon	-	-	-	3	2	-	1	2	-	8
Liberia	-	-	-	-	-	-	-	1	-	1
Malaya	-	-	1	3	2	-	-	-	-	6
Malta	-	-	-	1	-	-	-	-	-	1
Marshall Islands	-	-	-	-	-	-	-	-	-	-
Mauritius	-	-	-	-	1	-	-	-	-	1
Mexico	1	6	4	11	10	1	5	12	10	60
Morocco	-	1	-	2	1	-	-	1	-	5
Netherlands	3	7	6	7	4	-	1	7	-	35
New Zealand	-	1	-	2	-	1	2	3	-	9
Nicaragua	-	-	-	-	1	-	-	-	1	2
Norway	-	3	1	6	5	1	1	5	1	23
Okinawa	-	-	-	-	1	-	-	-	-	1
Pakistan	-	4	1	6	6	-	3	3	-	23
Panama, Rep. of	-	-	-	1	-	-	1	1	-	3
Peru	-	1	-	1	3	-	-	2	1	8
Philippine Islands	-	-	-	4	2	-	3	4	-	13

Continued

Table XI - Distribution of Foreign Members by Grade and Country as of 12/31/57

Country	F	SM		M		VA	A		S	Total
	\$15	\$15	\$10	\$15	\$10	\$15	\$15	\$10	\$5	
Poland	-	-	-	1	-	-	-	4	-	5
Portugal	-	-	1	2	1	-	-	3	-	7
Romania	-	-	1	1	-	-	-	-	-	2
Scotland	1	1	-	3	5	-	3	1	-	14
Saigon	-	-	-	1	-	-	-	-	-	1
Singapore	-	-	-	-	4	-	-	-	-	4
South Africa	-	6	-	15	7	-	6	7	-	41
Spain	-	2	-	7	-	-	-	5	-	14
Strait Settlements	-	-	-	-	-	-	-	-	-	-
Sweden	3	6	3	21	16	-	12	23	-	84
Switzerland	4	8	4	15	14	-	10	16	-	71
Syria	-	-	-	-	-	-	-	-	-	-
Tasmania	-	-	-	1	-	-	-	-	-	1
Thailand	-	1	-	1	-	-	-	3	-	5
Turkey	-	1	-	6	2	-	1	5	-	15
Uruguay	-	-	-	2	-	-	1	-	-	3
U.S.S.R.	-	-	-	-	1	-	-	10	-	11
Venezuela	-	4	1	8	12	-	5	9	1	40
Wales	-	-	-	2	-	-	1	-	-	3
Yugoslavia	-	-	-	-	1	-	-	-	-	1
Totals	80	428	138	1,043	844	26	389	1,110	754	4,812

Table XII - Geographical and Grade Breakdown - Canada, U. S. Possessions and Overseas Military Membership as of December 31, 1957

<u>Canadian</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>	
Bay of Quinte	1	8	4	17	12	1	4	20	19	86
Hamilton	-	14	4	41	27	1	13	32	39	171
London	1	6	1	19	14	-	10	25	31	107
Montreal	8	40	6	160	156	5	48	123	114	660
Newfoundland	-	-	-	9	12	-	-	21	-	42
No. Alberta	-	3	-	12	13	-	4	26	38	96
Ottawa	10	27	6	76	57	-	22	56	32	286
Regina	-	-	-	3	14	-	-	21	28	66
So. Alberta	-	-	-	9	14	-	2	38	2	65
Toronto	6	41	7	156	89	3	46	143	195	686
Vancouver	1	9	2	32	18	1	20	38	88	209
Winnipeg	2	4	-	19	28	-	12	18	31	114
Totals	29	152	30	553	454	11	181	561	617	2,588
<u>U. S. Possessions</u>										
Alaska	-	-	1	11	15	-	6	19	8	60
Canal Zone	-	-	-	-	-	-	1	4	-	5
Mariana Islands	-	-	-	-	-	-	1	1	-	2
Puerto Rico	-	1	1	7	5	-	5	5	4	28
Hawaii	-	5	1	29	14	1	25	10	5	90
Virgin Islands	-	-	-	1	-	-	-	-	-	1
Totals	-	6	3	48	34	1	38	39	17	186
<u>Overseas Military</u>										
P.O. San Francisco, Cal.	-	7	2	39	63	-	10	68	11	200
P.O. Seattle, Wash.	-	2	-	1	6	-	-	4	-	13
P.O. New York, N.Y.	2	12	4	44	66	1	14	63	7	213
Totals	2	21	6	84	135	1	24	135	18	426

Table XIII - Membership Change, by Grades, in 1957

<u>GAINS</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>S</u>	<u>Total</u>
Elections	-	625	2944	1420	7688	12,677
Reinstatements	2	103	939	416	96	1,556
Transfers to	75	672	4281	413	-	5,441
TOTAL GAIN	77	1400	8164	2249	7784	19,674

LOSSES

New Elections (Unpaid)	-	27	128	55	2	212
Transfers from	-	72	460	2552	2357	5,441
Voided Elections	-	-	5	41	-	46
Deaths	10	25	42	30	4	111
Resignations	2	21	164	328	187	702
Delinquents	-	56	360	1295	2172	3,883
TOTAL LOSS	12	201	1159	4301	4722	10,395
NET GAIN	65	1199	7005	-2052	3062	9,279

The net gain of 9,279 shown above compares with 8,106 for 1956.

Table XIV - Analysis of Transfers, by Grades, 1957

<u>Transfers From</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>S</u>	<u>Total</u>
Transfers to F	72	2	1	-	75
Transfers to SM	-	458	214	-	672
Transfers to M	-	-	2337	1944	4,281
Transfers to A	-	-	-	413	413
TOTAL	72	460	2552	2357	5,441

Table XV - Analysis of Higher Grade Applications for 1957

	<u>Approved</u>	<u>Rejected</u>
Admission Applications		
Senior Member	625	67
Member	2,944	208
Transfer Applications		
Senior Member	672	63
Member	4,281	51

Table XVI - Life Members, by Grades, as of December 31, 1957

	<u>Domestic</u>	<u>Canadian</u>	<u>Foreign</u>	<u>Total</u>
Fellow	57	1	6	64
Senior Member	34	1	2	37
Member	12	-	2	14
Voting Associate	14	-	-	14
Associate	1	-	1	2
	<u>118</u>	<u>2</u>	<u>11</u>	<u>131</u>

Table XVII- Yearly Membership, 1912 - 1957

<u>Year</u>	<u>Higher Grade</u>	<u>Student</u>	<u>Yearly Increase</u> <u>(Decrease)</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	6,288	115	(-331)	(-4.9)	6,403
1933	5,074	125	(-1,284)	(-18.8)	5,199
1934	4,011	229	(-230)	(-18.4)	4,240
1935	4,180	239	(-380)	4.2	4,419
1936	4,896	299	686	17.6	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	2,333	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
1957	51,327	13,446	9,279	16.7	64,773

Table XVIII - Membership Growth, 1912 - 1957

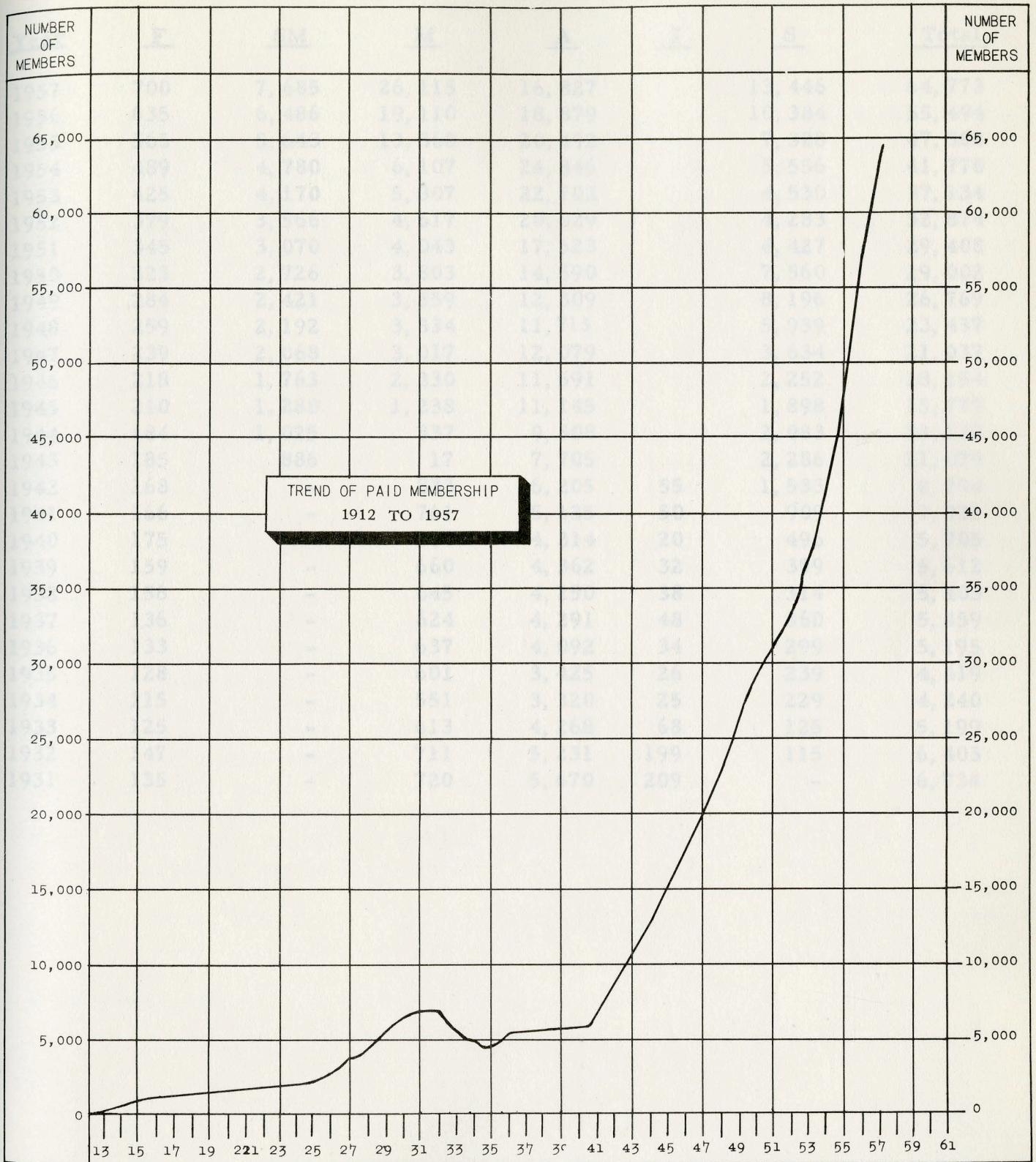


Table XVIII - Membership Grade Breakdown, 1931 - 1957

<u>Year</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>J</u>	<u>S</u>	<u>Total</u>
1957	700	7,685	26,115	16,827		13,446	64,773
1956	635	6,486	19,110	18,879		10,384	55,494
1955	565	5,643	13,360	20,492		7,328	47,388
1954	489	4,780	6,107	24,846		5,556	41,778
1953	425	4,170	5,307	22,702		4,530	37,134
1952	379	3,566	4,617	20,029		4,283	32,874
1951	345	3,070	4,043	17,523		4,427	29,408
1950	323	2,726	3,803	14,590		7,560	29,002
1949	284	2,421	3,559	12,309		8,196	26,769
1948	259	2,192	3,334	11,713		5,939	23,437
1947	239	2,068	3,017	12,079		3,634	21,037
1946	218	1,763	2,330	11,591		2,252	18,154
1945	210	1,288	1,238	11,145		1,898	15,779
1944	184	1,025	337	9,508		2,083	13,137
1943	185	886	17	7,705		2,286	11,079
1942	168	-	833	6,205	55	1,533	8,794
1941	166	-	761	5,135	50	909	7,021
1940	175	-	700	4,314	20	496	5,705
1939	159	-	660	4,362	32	399	5,612
1938	156	-	645	4,250	38	314	5,403
1937	136	-	624	4,291	48	360	5,459
1936	133	-	637	4,092	34	299	5,195
1935	128	-	601	3,425	26	239	4,419
1934	115	-	551	3,320	25	229	4,240
1933	125	-	613	4,268	68	125	5,199
1932	147	-	711	5,231	199	115	6,403
1931	135	-	720	5,670	209	-	6,734

Table XIX - Professional Group Membership, by Groups, 1956, 1957
(Paid Membership Only)

<u>Code</u>	<u>Group</u>	1957			1956	<u>Net Gain</u>
		<u>Student Discount</u>	<u>Other Paid</u>	<u>Total Paid</u>		
G-1	Audio	570	3,754	4,324	3,809	515
G-2	Broadcast Transmission Systems	33	1,219	1,252	1,119	133
G-3	Antennas & Propagation	408	2,406	2,814	2,362	452
G-4	Circuit Theory	970	4,986	5,956	4,510	1,446
G-5	Nuclear Science	211	1,413	1,624	1,381	243
G-6	Vehicular Communications	38	1,123	1,161	966	195
G-7	Reliability & Quality Control	28	1,341	1,369	1,021	348
G-8	Broadcast & Television Receivers	167	1,738	1,905	1,925	-20
G-9	Instrumentation	-	3,422	3,422	2,986	436
G-10	Telemetry & Remote Control	-	2,499	2,499	1,978	521
G-11	Aeronautical & Navigational	172	2,721	2,893	2,488	405
	<u>Electronics</u>					
G-12	Information Theory	74	2,647	2,721	2,345	376
G-13	Industrial Electronics	145	1,640	1,785	1,624	161
G-14	Engineering Management	1	4,201	4,202	3,327	875
G-15	Electron Devices	224	3,534	3,758	2,843	915
G-16	Electronic Computers	571	6,310	6,881	5,461	1,420
G-17	Microwave Theory & Techniques	201	3,406	3,607	3,091	516
G-18	Medical Electronics	113	1,548	1,661	1,435	226
G-19	Communications Systems	183	2,121	2,304	1,944	360
G-20	Ultrasonics Engineering	19	722	741	632	109
G-21	Component Parts	13	1,546	1,559	1,284	275
G-22	Production Techniques	13	808	821	640	181
G-23	Automatic Control	213	2,523	2,736	1,856	880
G-24	Military Electronics	61	3,160	3,221	1,988	1,233
G-25	Education	-	170	170	*	170
G-26	Engineering Writing & Speech	12	358	370	*	370
G-27	Radio Frequency Interference	-	10	10	*	10
G-28	Human Factors in Electronics	*	*	*	*	-
	Totals	4,440	61,326	65,766	53,015	12,751

* No fees levied

Table XX - Five-Year Analysis of Professional Group Membership, 1953 - 1957
(Paid Membership Only)

<u>Code</u>	<u>Group</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
G-1	Audio	2,147	2,510	2,996	3,809	4,324
G-2	Broadcast Transmission Systems	661	729	838	1,119	1,252
G-3	Antennas & Propagation	1,219	1,344	1,700	2,362	2,814
G-4	Circuit Theory	2,151	2,565	3,258	4,510	5,956
G-5	Nuclear Science	109	802	1,008	1,381	1,624
G-6	Vehicular Communications	584	669	741	966	1,161
G-7	Reliability & Quality Control	476	520	659	1,021	1,369
G-8	Broadcast & Television Receivers	1,106	1,349	1,532	1,925	1,905
G-9	Instrumentation	1,961	2,127	2,429	2,986	3,422
G-10	Telemetry & Remote Control	827	1,169	1,450	1,978	2,499
G-11	Aeronautical & Navigational Electronics	1,400	1,599	1,922	2,488	2,893
G-12	Information Theory	1,154	1,403	1,707	2,345	2,721
G-13	Industrial Electronics	839	1,064	1,361	1,624	1,785
G-14	Engineering Management	1,243	1,634	2,302	3,327	4,202
G-15	Electron Devices	1,086	1,359	1,871	2,843	3,758
G-16	Electronic Computers	2,267	2,896	3,916	5,461	6,881
G-17	Microwave Theory & Techniques	1,144	1,630	2,148	3,091	3,607
G-18	Medical Electronics	695	898	1,101	1,435	1,661
G-19	Communications Systems	721	966	1,340	1,944	2,304
G-20	Ultrasonics Engineering	7	325	456	632	741
G-21	Component Parts	*	600	800	1,284	1,559
G-22	Production Techniques	*	*	318	640	821
G-23	Automatic Control	*	*	709	1,856	2,736
G-24	Military Electronics	*	*	*	1,988	3,221
G-25	Education	*	*	*	*	170
G-26	Engineering Writing & Speech	*	*	*	*	370
G-27	Radio Frequency Interference	*	*	*	*	10
G-28	Human Factors in Electronics	*	*	*	*	*
Totals		<u>21,797</u>	<u>28,158</u>	<u>36,562</u>	<u>53,015</u>	<u>65,766</u>

*No fees levied

Table XXI - Deceased Members - 1957

It is with deep regret that this office records the death of the following members of the IRE during the year 1957.

FELLOWS

Cowan, Frank A. (M'30, SM'43, F'55)
Englund, Carl Robert (A'17, F'28, L'52)
Farrington, John F. (A'19, M'29, F'31)
Finch, James Leslie (A'19, M'28, SM'43, F'54)
Graf, Alois W. (A'26, M'44, SM'45, F'55)
Jensen, John C. (M'19, SM'43, F'56, L'54)
Pierce, George Washington (M'13, F'15, L'48)
Reisz, Eugen (F'54)
Tolson, William A. (M'28, SM'43, F'56)
Webb, Wilbur L. (A'35, SM'44, F'54)

SENIOR MEMBERS

Arnold, Prescott N. (A'29, SM'46)
Campbell, Robert L. (M'45, SM'47)
Emery, Ernest John (M'29, SM'43)
Franks, Christopher J. (M'38, SM'43)
Freeman, Edward E. (M'40, SM'43)
Gilbert, John J. (A'16, SM'50, L'52)
Gillson, Morley H. (SM'46)
Howard, George E. (SM'47)
Junken, Lawrence H. (A'25, SM'55)
King, Marion E. (SM'52)
LeLoup, Theodore E. (SM'56)
McKee, Douglas Allen (A'45, SM'57)
Metzger, Frederick W. (SM'57)
Mumtaz Ud Din, Sheikh (A'48, SM'52)
Oliver, George Edward (M'50, SM'51)
Overhold, Ralph Jr. (A'29, SM'51)
Ready, William A. (A'25, SM'45)
Siegmund, Humphreys O. (SM'53)
Southwell, John D. (A'47, M'48, SM'53)
Stark, Rawson E. (A'35, SM'55)
Stroebel, John C., Jr. (A'14, M'26, SM'43)
Tierney, Walter Louis (M'26, SM'43)
White, William (M'50, SM'55)
Wilcox, James Franklin (A'36, SM'47)
Zarky, Bert (M'45, SM'54)

MEMBERS

Balmer, David W. (A'46, M'52)
Bell, Richard A. (A'46, M'46)
Brennan, Daniel J. (S'54, M'56)

Table XXI - Deceased Members - 1957 - Continued

MEMBERS

Bruce, Kenneth C. (A'55, M'56)
Bueche, Harry S. (A'46, M'55)
Butler, Eugene R. (S'49, A'49, M'55)
Charlebois, Joseph C. (A'48, M'55)
Cotton, Thomas D. (M'54)
Dahse, Clem Alfred (S'48, A'49, M'54)
Dakin, Oron C. (A'45, M'49)
DeLong, Oscar A., Jr. (A'20, M'55)
Elliott, Clifford I. (A'45, M'55)
Fredine, Earle L. (A'41, M'45)
Frevert, Andrew W. (M'47)
Haas, Max L. (A'50, M'56)
Hedgecock, Edward B. (M'54)
Hiltner, Edward B. (S'42, A'45, M'55)
Hood, Chauncey R. (A'47, M'55)
Kelsey, Philip C. (M'53)
Korby, Irving (S'48, A'50, M'55)
Land, Barney E. (M'57)
Martin, Frank R. (M'56)
Nakamoto, Tatsuo (M'55)
Nordyke, Cutlar J. (S'54, M'56)
Nowick, Chester A. (M'53)
Owen, E. Robert (A'45, M'55)
Plusc, Igor (M'45)
Proud, Eric (M'49)
Ragni, Victor F. (A'49, M'55)
Read, James H. (S'54, M'56)
Reichert, Homer A. (A'47, M'55)
Reisman, Emil (A'46, M'55)
Richardson, Arthur W. (A'50, M'56)
Siegel, David T. (M'45)
Smith, Don C. (S'50, A'51, M'56)
Tarkoff, Philip B. (A'45, M'46)
Turnbull, John Mason, Jr. (M'56)
Whilldin, Frank W. (M'54)
Williams, John C. (A'51, M'56)
Winn, William F. (S'50, A'52, M'56)
Wood, Perry E. (A'51, M'56)
Wright, James W. (A'23, M'55)

VOTING ASSOCIATES

Curtis, Richard C. (A'30, VA'39)
Wallace, Gordon S. (A'17, VA'39, L'52)

Table XXI - Deceased Members - 1957 - Continued

ASSOCIATES

Date	Name	Total No. of Papers Presented	Location
	Afferton, Percy C. (A'55)		
	Browning, William I., Jr. (A'55)		
	Chiappinelli, Bruno A. (A'53)		
	Dexter, Lyman Henry (S'57, A'57)		
	Douglass, William A. (A'54)		
	Dunn, James F. (S'52, A'53)		
	Erickson, Charles G. (S'52, A'54)		
Jan. 18-19	Finke, Walter W. (A'52)	5	New York, N. Y.
Jan. 19-22	Giolitto, Amedeo P. (A'46)	5	New York, N. Y.
Jan. 2-11	Herder, Martin R. (A'55)	5	New York, N. Y.
May 13-15	Holt, Todd N. (A'53)	37	Washington, D. C.
Aug. 15-21	Hudson, Ivan (A'53)	25	Toronto, Canada
June 4-8	Ito, Yoji (A'54)	19	Chicago, Ill.
April 7-9	Kamys, Joseph E. (A'54)	23	Pittsburgh, Pa.
June 25-28	Kimons, Ellis (A'51)	24	Chicago, Ill.
May 26-30	Kruse, James E. (A'53)	32	Philadelphia, Pa.
July 1-3	Liewald, Vernon R. (A'53)	21	Detroit, Mich.
May 11-13	Masuch, Robert A. (S'50, A'51)	19	Cleveland, Ohio
May 10-12	Ollick, Edward (A'53)	30	New York, N. Y.
May 15-17	Orbell, Reginald J. (A'35)	49	New York, N. Y.
Sept. 20-23	Patrick, Anderson T. (A'54)	25	New York, N. Y.
June 27-29	Perna, Frank J. (A'51)	44	Boston, Mass.
Jan. 9-11	Pesca, Frank J. (A'53)	28	New York, N. Y.
(Winter)	Scheuer, Rudolph D. (A'53)		
June 23-25	Schiesel, Ervin E. (A'56)	31	Detroit, Mich.
(Summer)	Snyder, Reed E. (A'41)		
Jan. 12-14	Spearman, John C. (A'56)	25	New York, N. Y.
(Winter)	Wackid, Charles B. (A'53)		
June 29-30		0	Cleveland, Ohio
& July 1			

STUDENTS

Jan. 23	Banks, Richard Norman (S'56)	0	11	New York, N. Y.
Jan. 28-29	Freshwater, Philip L. (S'56)	0	22	New York, N. Y.
Jan. 24-27	Sommer, Roger M. (S'56)	*	43	New York, N. Y.
Jan. 23-26	Young, James A. (S'56)	13,200**	88	New York, N. Y.
Mar. 3-6		2,845	118	New York, N. Y.
Mar. 23-25		3,059	130	New York, N. Y.
Mar. 7-10		3,427	144	New York, N. Y.
Mar. 4-9		4,428	163	New York, N. Y.
Mar. 19-22		4,672	198	New York, N. Y.
Mar. 3-6		5,244	211	New York, N. Y.
Mar. 23-26		6,833	214	New York, N. Y.
Mar. 23-25		7,192	242	New York, N. Y.
Mar. 21-24		7,782	248	New York, N. Y.
Mar. 19-22		8,584	277	New York, N. Y.
Mar. 18-21		10,240	284	New York, N. Y.

* Figures not available

** Estimated

*** Reduction in attendance due to average increase

Table XXII - IRE National Conventions

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. An exhibition of radio-electronic equipment became a part of the annual convention activities in 1930. The growth in Convention activities, from the first convention held in 1926 through 1957, is indicated in the comparison figures itemized below:

<u>Date</u>	<u>Year</u>	<u>Attend- ance</u>	<u>Exhibits</u>	<u>No. of Firms Repre- sented</u>	<u>Net Space Occupied</u>	<u>Total No. of Papers Presented</u>	<u>Location</u>
Jan. 18-19	1926	*	0	0	0	6	New York, N. Y.
Jan. 10-12	1927	425**	0	0	0	5	New York, N. Y.
Jan. 9-11	1928	800	0	0	0	9	New York, N. Y.
May 13-15	1929	555	0	0	0	37	Washington, D. C.
Aug. 18-21	1930	575	20**	*	*	23	Toronto, Canada
June 4-6	1931	400	50	*	*	19	Chicago, Ill.
April 7-9	1932	461	25**	*	*	23	Pittsburgh, Pa.
June 26-28	1933	487	35	*	*	24	Chicago, Ill.
May 28-30	1934	940	56	*	*	32	Philadelphia, Pa.
July 1-3	1935	586	34	*	*	21	Detroit, Mich.
May 11-13	1936	360	40	*	*	19	Cleveland, Ohio
May 10-12	1937	1,189	37	*	*	30	New York, N. Y.
May 15-17	1938	1,866	29	*	*	49	New York, N. Y.
Sept. 20-23	1939	1,668	34	*	*	26	New York, N. Y.
June 27-29	1940	1,071	35**	*	*	44	Boston, Mass.
Jan. 9-11	1941	1,310	30**	*	*	28	New York, N. Y.
(Winter)							
June 23-25	1941	353	0	0	0	33	Detroit, Mich.
(Summer)							
Jan. 12-14	1942	1,790	30**	*	*	25	New York, N. Y.
(Winter)							
June 29-30	1942	256	0	0	0	23	Cleveland, Ohio
& July 1							
(Summer)							
Jan. 28	1943	1,750	0	0	0	11	New York, N. Y.
Jan. 28-29	1944	1,704	0	0	0	22	New York, N. Y.
Jan. 24-27	1945	3,000	39	*	*	43	New York, N. Y.
Jan. 23-26	1946	7,200	135	1,571	13,200'**	88	New York, N. Y.
Mar. 3-6	1947	12,013	177	2,845	20,830'	118	New York, N. Y.
Mar. 22-25	1948	14,459	180	3,059	25,900'	130	New York, N. Y.
Mar. 7-10	1949	15,710	225	3,427	30,700'	144	New York, N. Y.
Mar. 6-9	1950	17,689	253	4,088	33,600'	163	New York, N. Y.
Mar. 19-22	1951	22,919	277	5,082	45,672'	198	New York, N. Y.
Mar. 3-6	1952	28,673	365	6,306	54,246'	211	New York, N. Y.
Mar. 23-26	1953	35,642	412	7,493	63,033'	214	New York, N. Y.
Mar. 22-25	1954	39,302	605	8,799	87,192'	242	New York, N. Y.
Mar. 21-24	1955	42,133	704	9,504	95,782'	248	New York, N. Y.
Mar. 19-22	1956	41,017***	716	8,851	98,684'	277	New York, N. Y.
Mar. 18-21	1957	53,811	840	11,757	105,240'	284	New York, N. Y.

* Figures not available

** Estimated

*** Reduction in attendance due to severe blizzard

Table XXIII - Summary of Income and Expense, 1957

INCOME

Advertising	\$ 1,280,580	
Member Dues and Convention	1,306,940	
Subscriptions	154,165	
Sales Items: Binders, Emblems, etc.	127,909	
Investment Income	34,707	
Miscellaneous Income	<u>1,469</u>	
Total Income		\$ 2,905,770

EXPENSE

Proceedings Editorial Pages	\$ 401,001	
Advertising Pages	668,543	
Directory	232,702	
Section Rebates	65,757	
Student Program	107,321	
Professional Group Expense	170,647	
Sales Items	119,340	
General Operations	498,929	
Convention Cost	<u>401,609</u>	
Total Expense		<u>2,665,849</u>
Reserve for Future Operations - Gross	\$ 239,921	
Depreciation		<u>20,033</u>
Reserve for Future Operations - Net		<u><u>\$ 219,888</u></u>

Table XXIV - Balance Sheet - December 31, 1957

ASSETS

Cash and Accounts Receivable	\$ 448,883	
Inventory	<u>40,463</u>	
Total Current Assets		\$ 489,346
Investments at Cost	1,405,446	
Building and Land at Cost	912,317	
Furniture and Fixtures at Cost	215,277	
Other Assets	<u>62,440</u>	
Total		<u>2,595,480</u>
Total Assets		<u>\$ 3,084,826</u>

LIABILITIES AND SURPLUS

Accounts Payable	\$ <u>83,343</u>	
Total Current Liabilities		\$ 83,343
Deferred Income	745,409	
Professional Group Funds on Deposit	<u>171,436</u>	<u>916,845</u>
Total Liabilities		1,000,188
Reserve for Depreciation		64,757
Surplus Donated	595,286	
Surplus	<u>1,424,595</u>	
Total Surplus		<u>2,019,881</u>
Total Liabilities and Surplus		<u>\$ 3,084,826</u>

Table I - Volume of PROCEEDINGS Pages

	1953	1954	1955	1956
Editorial	1858	1796	2060	1884
Advertising	3729	2890	2372	2072
Total	4587	4686	4432	3956

Table XXV - Editorial Department

PROCEEDINGS OF THE IRE

Several steps were taken to increase the value of the PROCEEDINGS to the general membership during 1957. The Editorial Board initiated a grass-roots survey of PROCEEDINGS and other publication policies, conducted by each IRE Section among its own members, to obtain the guidance of the membership with respect to present and future operations. In addition, the Correspondence section was expanded, with the result that 146 letters to the Editor were published in 1957 as compared with 83 the previous year. The tempo of publishing special review and historical papers also increased, with ten such papers appearing during the year.

The total PROCEEDINGS output, shown in Table 1 and Fig. 1, was lower than the previous year, due to the fact that none of the several special issues under preparation fell within the calendar year. Despite the lower PROCEEDINGS total, the over-all total for all IRE publications soared to a new high of 115 issues totaling 15,556 pages, a 20% increase over the previous year, due principally to the inauguration of a new publication, the IRE WESCON CONVENTION RECORD. It is interesting to note that over the past five years, as IRE membership doubled, publication volume has nearly tripled.

Table 1 - Volume of PROCEEDINGS Pages

	<u>1957</u>	<u>1956</u>	<u>1955</u>	<u>1954</u>
Editorial	1868	1996	2060	1884
Advertising	<u>2700</u>	<u>2800</u>	<u>2372</u>	<u>2072</u>
Total	4568	4796	4432	3956

Although no full-fledged special issues were published, parts of two issues were given over to special material related to radio communication in widely separated portions of the frequency spectrum, with 13 papers on very-low frequency propagation appearing in June and 12 papers on meteor burst communication included in the December issue.

The backlog and publication time of papers remained satisfactorily low. The backlog of extra material awaiting publication amounted to about one-half an issue, and the speed with which papers were published averaged five to six months.

The volume of material reviewed for PROCEEDINGS was slightly higher than the previous year. A total of 296 papers comprising 2,156 pages were considered. Of these, 32% were accepted, 40% were referred to the TRANSACTIONS for publication consideration, and 28% were rejected. These figures were identical in 1956. The number of papers published, 130, was less than the 1956 total of 164. Six IRE Standards also appeared during the year.

IRE TRANSACTIONS

The year 1957 saw the TRANSACTIONS output of the Professional Groups continue to increase somewhat, as shown in Fig. 1 and Table 2. The number of Groups employing letterpress printing increased from 13 to 18, and the proportion of pages printed by letterpress increased from 60% to 66%. Because of the space saved by letterpress printing, the page totals in Fig. 1 and Table 2 minimize somewhat the actual increase in material published during the year.

Table 2 - Professional Group TRANSACTIONS

<u>Group</u>	<u>Date Group Established</u>	<u>Total Issues Published</u>	<u>1957</u>		<u>1956</u>	
			<u>Issues</u>	<u>Pages</u>	<u>Issues</u>	<u>Pages</u>
Aeronautical & Navigational Electronics	1/9/51	25	4	256	4	188
Antennas & Propagation	2/1/49	22	4	432	4	702
Audio	6/2/48	40	6	192	6	196
Automatic Control	10/5/54	3	2	160	1	104
Broadcast & Television Receivers	8/9/49	17	2	116	3	100
Broadcast Transmission Systems	7/7/48	9	3	200	4	212
Circuit Theory	4/5/49	18	4	376	4	332
Communications Systems	4/8/52	11	3	232	3	380
Component Parts	3/27/53	11	4	160	3	144
Education	4/10/57	0				
Electron Devices	10/9/51	20	4	340	4	232
Electronic Computers	10/9/51	21	4	332	4	296
Engineering Management	6/12/51	10	4	156	3	100
Engineering Writing & Speech	5/14/57	0				
Human Factors in Electronics	12/11/57	0				
Industrial Electronics	5/8/51	4	1	108	1	116
Information Theory	5/8/51	15	4	280	4	404
Instrumentation	1/31/50	9	4	284	1	228
Medical Electronics	3/7/52	9	2	112	4	254
Microwave Theory & Techniques	3/7/52	19	4	292	4	292
Military Electronics	9/7/55	2	2	60	-	-
Nuclear Science	4/5/49	8	2	80	4	256
Production Techniques	4/13/54	2	1	152	1	64
Radio Frequency Interference	10/10/57	0				
Reliability & Quality Control	7/12/49	12	4	336	3	188
Telemetry & Remote Control	6/12/50	9	3	456	1	28
Ultrasonics Engineering	3/27/53	6	2	144	1	80
Vehicular Communications	4/5/49	9	2	116	2	148
TOTALS		311	75	5372	69	5044

IRE CONVENTION RECORDS

The practice of publishing a CONVENTION RECORD containing papers presented at the IRE National Convention, begun in 1953, was continued. The 1957 IRE NATIONAL CONVENTION RECORD, containing 254 papers and 19 abstracts totaling 1,924 pages, was issued in ten parts. Approximately 53,000 paid members of Professional Groups received free of charge a copy of that Part pertaining to the field of interest of their Group.

A new annual publication, covering the papers presented at the Western Electronic Show and Convention (WESCON), and modelled after the IRE NATIONAL CONVENTION RECORD, was inaugurated in 1957. The new publication, called the IRE WESCON CONVENTION RECORD, contained 209 papers and 24 abstracts totaling 1,796 pages, and was issued in ten Parts. As with the NATIONAL CONVENTION RECORD, paid members of Professional Groups received a free copy of the Part pertaining to the field of their group.

IRE STUDENT QUARTERLY

To insure continuity of operation and maintenance of quality of the STUDENT QUARTERLY in the future, Assistant Editor Paul Lucey was added to the Editorial Department staff to take over from the Editor most of the publication burdens. Four issues, totaling 208 pages, were sent free to all IRE Student members during the year.

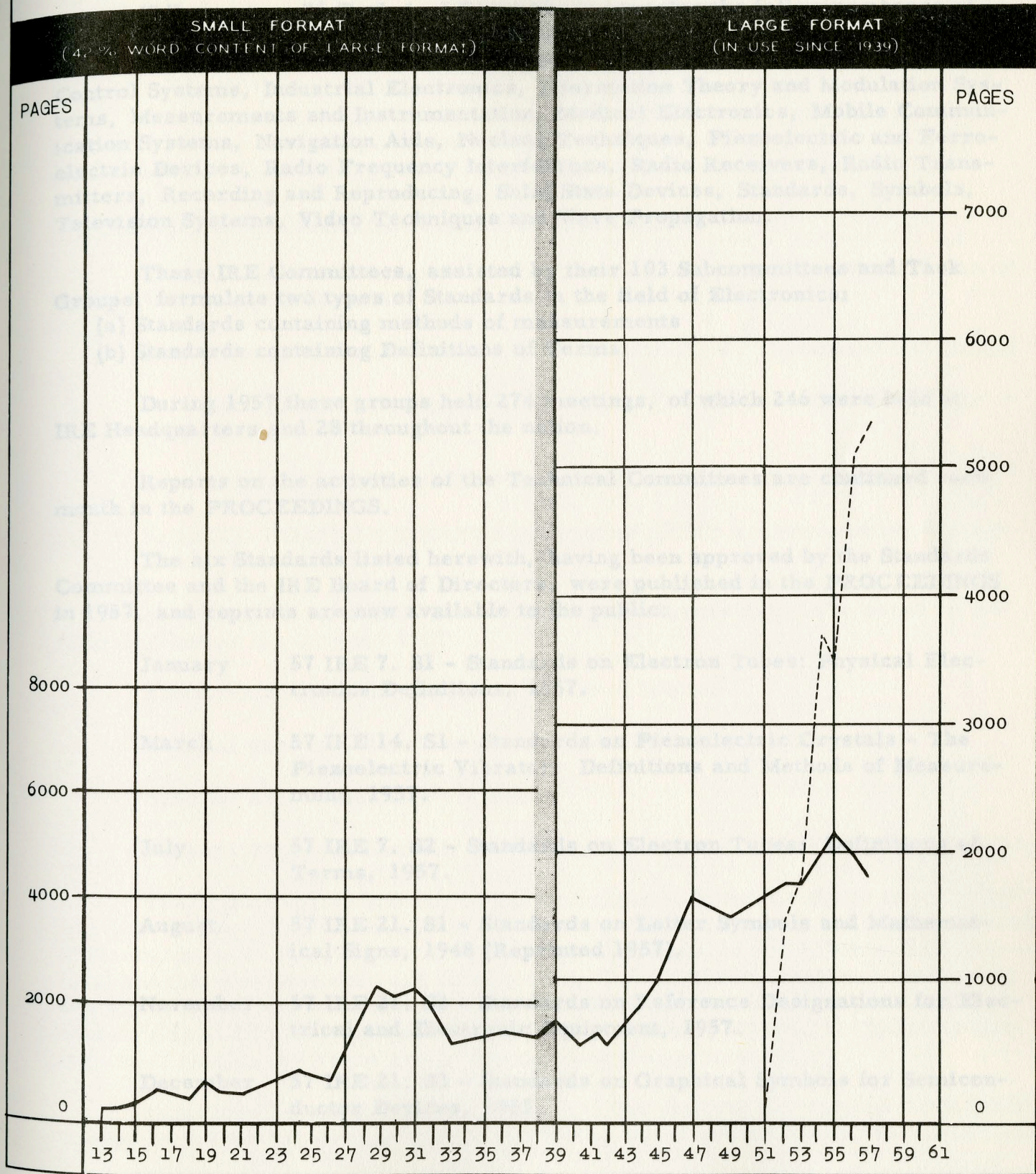
IRE DIRECTORY

The 1958 IRE DIRECTORY was published in October, containing 1,112 pages including covers, of which 465 were membership listings and information, and 647 were advertisements and listings of manufacturers and products.

CONFERENCE PUBLICATIONS

The Proceedings of the 1957 Western Joint Computer Conference, sponsored jointly by the IRE, AIEE and Association for Computing Machinery, was published by the IRE Editorial Department in June, 1957. The issue contained 244 pages. The IRE also published the 292-page Proceedings of the 1957 Electronic Components Symposium, sponsored by IRE, AIEE, Electronic Industries Association, and West Coast Electronic Manufacturers Association.

**VOLUME OF TECHNICAL AND EDITORIAL MATTER
PUBLISHED IN THE PROCEEDINGS AND THE TRANSACTIONS
1913 TO 1957**



- - - - - TRANSACTIONS
 _____ PROCEEDINGS

Table XXVI - Technical Activities - 1957

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 and Ferroelectric Devices, Radio Frequency Interference, Radio Receivers, Radio Transmitters, Recording and Reproducing, Solid State Devices, Standards, Symbols, Television Systems, Video Techniques and Wave Propagation.

These IRE Committees, assisted by their 103 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 1957 these groups held 274 meetings, of which 246 were held at IRE Headquarters and 28 throughout the nation.

Reports on the activities of the Technical Committees are continued each month in the PROCEEDINGS.

The six Standards listed herewith, having been approved by the Standards Committee and the IRE Board of Directors, were published in the PROCEEDINGS in 1957, and reprints are now available to the public:

- | | |
|----------|---|
| January | 57 IRE 7. S1 - Standards on Electron Tubes: Physical Electronics Definitions, 1957. |
| March | 57 IRE 14. S1 - Standards on Piezoelectric Crystals - The Piezoelectric Vibrator: Definitions and Methods of Measurement, 1957. |
| July | 57 IRE 7. S2 - Standards on Electron Tubes: Definitions of Terms, 1957. |
| August | 57 IRE 21. S1 - Standards on Letter Symbols and Mathematical Signs, 1948 (Reprinted 1957). |
| November | 57 IRE 21. S2 - Standards on Reference Designations for Electrical and Electronic Equipment, 1957. |
| December | 57 IRE 21. S3 - Standards on Graphical Symbols for Semiconductor Devices, 1957. |

IRE is directly represented on 33 Committees of the American Standards Association and sponsors three; the ASA Sectional Committee on Radio and Electronic Equipment, C16; the ASA Sectional Committee on Sound Recording, Z57; and the ASA Sectional Committee on Nuclear Instruments, N3. Three IRE Standards received approval of the American Standards Association as American Standards in 1957, and are now available overseas through the International Standards Organization.

IRE Technical Committees actively participated in international standardization in 1957 by reviewing and preparing comments on documents for the United States National Committee of the International Electrotechnical Commission.

APPOINTED IRE DELEGATES ON OTHER BODIES

The IRE appointed delegates to the following bodies for the one-year period - May 1, 1957 to April 30, 1958:

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

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

International Scientific Radio Union (URSI) Executive Committee.

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

In addition to the above, the IRE appointed representatives to serve on the following bodies for the year 1957:

American Association for Advancement of Science.

National Bureau of Standards, IRE Technical Advisory Committee.

National Electronics Conference.

National Research Council, Division of Engineering and Industrial Research.

The Annual Spring Meeting of the International Scientific Radio Union (URSI) was held on May 22, 23, 24, and 25, 1957 at the Willard Hotel 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, Information Theory and Microwave Theory and Techniques. The XIIIth General Assembly of URSI was held on August 22 through September 5, 1957 in Boulder, Colorado. Special meetings were held on the status of the International Geophysical Year.

Numerous responses to the questions under study by the various CCIR Study Groups have been received in IRE during 1957. Lists of all material received from

these organizations were distributed quarterly to the Chairmen of all Technical Committees, Professional Groups and Definitions and Measurement Subcommittees. During 1957 the Executive Committee of the U. S. Preparatory Committee of CCIR held 23 meetings and the 14 Study Groups held approximately 8 meetings.

THE JOINT TECHNICAL ADVISORY COMMITTEE

The Joint Technical Advisory Committee and its Subcommittees held a total of 10 meetings in addition to the annual dinner.

Volume XIV, the cumulative Annual Report of the JTAC PROCEEDINGS was published in 1957. This includes in Section I - official correspondence between the Federal Communications Commission and the Joint Technical Advisory Committee (IRE-EIA). Also included were other items of correspondence pertinent to the activities of the JTAC. Section II of the report contained approved Minutes of Meetings of the Joint Technical Advisory Committee for the period July 1, 1956 to June 30, 1957.

A new Subcommittee for cooperation with the Cooperative Interference Committees (57.1) was formed on January 24, 1957 to enlist the cooperation of the IRE Sections and Professional Groups in the publicizing of the "Cooperative Interference Committees" project of the JTAC.

The JTAC Subcommittee on Study of Forward Scatter Propagation (55.1) is still working on its final report.

The JTAC Subcommittee on Study of Interference From Arc Welders (54.2) disbanded, its major objectives having been achieved. The FCC complimented JTAC for their cooperation and assistance in endeavoring to solve the reduced cycle methods of operation and for their constructive services in investigating the feasibility of reducing interference from radio frequency stabilized arc welders.

The JTAC Subcommittee on Study of Single Sideband Transmission (56.1) reported that thirty papers had been submitted for publication in the December 1956 special issue of the IRE PROCEEDINGS. A similar study is being conducted by CCIR Study Group XIII on possible use of single sideband equipment in Aeronautical and Maritime Mobile Services which was adopted at the VIIIth Plenary Assembly in Warsaw. The Subcommittee is awaiting receipt of proposed rules and standards now being formulated by the FCC in connection with Further Proposed Rule-Making concerning single sideband utilization.

The JTAC Subcommittee on Study of Spurious Radio Emissions (52.2) presented a report on "The Principles Affecting the Probability of Serious Interference" which will be included in the next Annual Volume of the PROCEEDINGS OF JTAC. This study by the Subcommittee has been completed and the committee disbanded.

THE INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC)

The International Electrotechnical Commission held its annual meeting in Moscow July 2 - July 12, 1957. IRE did not actively participate in this meeting,

since there were no meetings of IEC Technical Committee 12 on Radio Communication, or Technical Subcommittee 12-1 on Measurements scheduled at the Moscow meeting.

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

PROFESSIONAL GROUP SYSTEM

GENERAL There are currently 28 Professional Groups operating actively within the IRE. Groups 25, 26, 27 and 28 were organized during this year and cover the specialized fields of Education, Engineering Writing and Speech, Radio Frequency Interference and Human Factors in Electronics.

Approximately 55% of all IRE members have taken advantage of the Professional Group System which now has a total membership of approximately 67,000. Included are 4,440 Student members of the IRE who have joined the Groups at the special Student member rate of \$1.00 annually. Under the newly instituted Affiliate Plan, 111 scientists and medical doctors, whose major interests lie in fields other than electronics, have affiliated with several of the Professional Groups.

All of the Groups except G-28 have levied publications fees and their members 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. 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 1957. 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 840 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 with the exception of the newly organized ones sponsored one or more technical meetings during this 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 43 meetings of national import in 1957 (see list attached).

PUBLICATIONS During the year, 24 Groups published 75 TRANSACTIONS containing 5,372 pages. Since publication began in 1951, 311 issues (20,704 pages) have appeared. Full details on Group TRANSACTIONS are included in the Report of the Editorial Department.

PROFESSIONAL GROUP CHAPTERS. 212 Professional Group Chapters have been organized by Group members in 48 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.

Professional Group Chapters
Established as of December 31, 1957

<u>Group Code No.</u>	<u>Name of Group</u>	<u>No. of Chapters</u>	<u>Section Location</u>
G-11	Aeronautical and Navigational Electronics	9	Akron Baltimore Boston Dayton Fla. West Coast Jt. N.Y., No. N. J. & L. I. Kansas City Philadelphia St. Louis
G-3	Antennas & Propagation	11	Akron Albuquerque ✓ Boston Chicago Denver Los Angeles ✓ Orange Belt (L.A.) ✓ Philadelphia San Diego ✓ Syracuse Washington, D. C.
G-1	Audio	17	Albuquerque ✓ Baltimore Boston Chicago Cincinnati Cleveland Dayton Hawaii ✓ Houston Milwaukee Philadelphia Phoenix ✓ San Antonio San Diego ✓ San Francisco ✓ Syracuse Washington, D. C.
G-23	Automatic Control	9	Akron Baltimore Boston Dallas Fla. West Coast Long Island ✓ Los Angeles ✓ Philadelphia Twin Cities
G-8	Broadcast and Television Receivers	2	Chicago Los Angeles
G-2	Broadcast Transmission Systems	11	Boston Chicago Cleveland Fla. West Coast Houston Omaha-Lincoln Pittsburgh ✓ San Francisco Twin Cities Vancouver Washington, D. C.
G-4	Circuit Theory	11	Albuquerque ✓ Boston Chicago China Lake ✓ Los Angeles ✓ Montreal Philadelphia San Antonio Seattle ✓ Syracuse Tucson

Professional Group Chapters
Established as of December 31, 1957
(Continued)

Group Code No.	Name of Group	No. of Chapters	Section Location	
G-19	Communications Systems	8	Chicago Fla. West Coast Hawaii ✓ Philadelphia	Rome-Utica ✓ San Francisco ✓ Syracuse ✓ Washington, D. C. ✓
G-21	Component Parts	8	Baltimore Buffalo-Niagara Chicago Dayton	Los Angeles ✓ Jt.N.Y., No.N.J. & L.I. Philadelphia Washington, D. C. ✓
G-15	Electron Devices	9	Boston Elmira-Corning Emporium, Pa. Los Angeles ✓ Jt. N.Y., No. N.J. & L.I.	Philadelphia ✓ San Francisco ✓ Schenectady ✓ Washington, D. C. ✓ Jt. N.Y., No. N.J. & L.I. ✓
G-16	Electronic Computers	16	Akron Baltimore Boston Chicago Dallas Dayton Detroit Houston	Los Angeles ✓ Montreal ✓ New York ✓ Philadelphia ✓ Pittsburgh ✓ San Francisco ✓ Twin Cities ✓ Washington, D. C. ✓
G-14	Engineering Management	10	Boston Chicago Dayton Los Angeles ✓ Jt. N.Y., No. N.J. & L.I.	Philadelphia ✓ Rome-Utica ✓ San Francisco ✓ Syracuse ✓ Washington, D. C. ✓
G-13	Industrial Electronics	2	Chicago	Schenectady
G-12	Information Theory	5	Albuquerque ✓ Boston Los Angeles ✓	Washington, D. C. ✓ White Sands Proving Grounds (El Paso) ✓
G-9	Instrumentation	6	Atlanta Chicago Fla. West Coast	Houston Long Island Washington, D. C. ✓
G-18	Medical Electronics	9	Boston Buffalo Chicago Los Angeles ✓ Montreal	Jt.N.Y., No. N.J., L.I., and Princeton ✓ Philadelphia ✓ San Francisco ✓ Washington, D. C. ✓

Professional Group Chapters
Established as of December 31, 1957
(Continued)

Group Code No.	Name of Group	No. of Chapters	Section	Location
G-17	Microwave Theory and Techniques	16	Albuquerque ✓ Baltimore Boston Buffalo Chicago Denver Long Island	Los Angeles ✓ Northern New Jersey New York Philadelphia San Diego ✓ San Francisco ✓ Schenectady Syracuse Washington, D. C.
G-24	Military Electronics	15	Boston Buffalo-Niagara Central Fla. Chicago Dayton Fort Wayne Long Island	Los Angeles ✓ No. West Florida Philadelphia San Diego ✓ San Francisco ✓ Syracuse Tucson ✓ Washington, D. C.
G-5	Nuclear Science	9	Albuquerque ✓ Boston Chicago Connecticut 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. & L.I.	San Francisco ✓ Washington, D. C.
G-7	Reliability & Quality Control	6	Chicago Fla. W. Coast Los Angeles ✓	Philadelphia ✓ San Francisco ✓ Washington, D. C.
G-10	Telemetry and Remote Control	8	Albuquerque ✓ Chicago Dayton Central Fla.	Los Angeles ✓ Philadelphia San Francisco ✓ Washington, D. C.
G-6	Vehicular Communications	10	Baltimore Chicago Dallas Detroit Fla. W. Coast Houston	Los Angeles ✓ Jt. N.Y., No. N.J. & L. I. Philadelphia Washington, D. C.
<hr/> 23		<hr/> 211	<hr/> 48	
Groups		Chapters	Sections	

National Technical Meetings, 1957

<u>Name of Meeting</u>	<u>Sponsoring Groups</u>	<u>Place</u>	<u>Date</u>
Symp. on Reliability & Quality Control in El.	PGRQC;ASQC;EIA; AIEE	Washington, D. C.	January 14-16
Symp. on Very Low Freq. Electromag. Waves	PGAP; NBS	Boulder, Colorado	January 23-25
Electronics in Aviation Day	PGANE;IAS;RTCA	New York, N. Y.	January 30-31
Symp. on Recording of Heart Sounds	PGME	Buffalo, N. Y.	February 14
Conf. on Transistor Circuits	PGCT; Phil. Sec.; AIEE	Philadelphia, Pa.	February 14-15
Western Joint Computer Conference	PGEC;AIEE;ACM	Los Angeles, Cal.	February 26-28
2nd Annual Nuclear Science & Engineering Congress	PGNS; EJC	Philadelphia, Pa.	March 11-14
IRE National Convention	All Professional Groups	New York, N. Y.	March 18-21
1st Annual Educ. Conference on Industrial Elec. in Industry	PGIE; Armour Research Foundation	Chicago, Illinois	April 9-10
National Simulation Conference	PGEC; Houston Section	Houston, Texas	April 11-13
Southwestern Reg. Conf. & Elec. Show	Region 6	Houston, Texas	April 11-13
Nat'l. Symp. on Telemetry	PGTRC	Philadelphia, Pa.	April 14-16
Sp. Tech. Conference on Solid State Dielec. & Mag. Devices	PGED; Comm. 28; AIEE; Catholic Univ.	Washington, D. C.	April 22-23
Symp. on Role of Solid State Devices in Electric Circuits	PGCT; PGED; PIB; Dept. of Defense	New York, N. Y.	April 23-25

National Technical Meetings, 1957
(Continued)

<u>Name of Meeting</u>	<u>Sponsoring Groups</u>	<u>Place</u>	<u>Date</u>
7th Region Technical Conf. & Trade Show	Region 7	San Diego, Calif.	April 24-26
11th Annual Spring TV Conference	Cinn. Sec.; PGBTR; PGBTS	Cincinnati, Ohio	April 26-27
Electronic Components Symposium	PGCP; AIEE; EIA WCEMA	Chicago, Illinois	May 1-3
Symp. on Microwave Ferrites & Related Devices & Applications	PGMTT	New York, N. Y.	May 9-10
Nat'l Aero. & Navigational Electronics Conf.	PGANE; Dayton Section	Dayton, Ohio	May 13-15
URSI Spring Meeting	URSI; IRE	Washington, D. C.	May 22-25
1st Annual Conference on Production Tech.	PGPT	Washington, D. C.	June 6-7
1st Nat'l Meeting of PGMIL	PGMIL	Washington, D. C.	June 17-19
Symp. on Automatic Control	PGAC; ASME; AIEE	San Francisco, California	August 19
WESCON	L.A. & S.F. Sections; WCEMA	San Francisco, Cal.	August 20-23
Symp. on Long Haul Communications	Hawaii Section	Honolulu, Hawaii	August 27-29
Spec. Technical Conf. on Magnetic Amplifiers	PGIE; AIEE	Pittsburgh, Pa.	September 4-6
Conf. on Industrial Electronics	PGIE; AIEE	Chicago, Ill.	September 24-25
7th Annual Fall Symp. PG on Broadcast Transmission Systems	PGBTS	Washington, D. C.	September 27-28
Computer Conference	ACM	Washington, D. C.	December 9-13

National Technical Meetings, 1957

(Continued)

<u>Name of Meeting</u>	<u>Sponsoring Groups</u>	<u>Place</u>	<u>Date</u>
National Electronics Conference	IRE; AIEE; EIA; SMPTE; et al	Chicago, Illinois	October 7-9
IRE Canadian Convention	Region 8	Toronto, Canada	October 16-18
Computers in Control Symp.	PGAC; AIEE; ASME	Atlantic City, N.J.	October 16-18
Conf. on Engineering Writing & Speech	PGEWS	New York, N. Y.	October 21-22
East Coast Aeronautical & Navigational Elec. Conf.	PGANE; Baltimore Section	Baltimore, Md.	October 28-30
1957 Electron Devices Meeting	PGED	Washington, D. C.	October 31 - November 1
4th Annual Meeting PGNS	PGNS	New York, N. Y.	October 31 - November 1
3rd Annual Symp. on Aeronautical Communications	PGCS; Rome-Utica Section	Utica, N. Y.	November 6-8
3rd Instrumentation Conf. & Exhibit	PGI; Atlanta Section	Atlanta, Ga.	November 11-13
Radio Fall Meeting	PGBTR; PGED; PGRQC; EIA	Toronto, Canada	November 11-13
Mid-America Electronic Convention	K. C. Section	Kansas City, Mo.	November 13-14
North East Research & Engineering Meeting	Region 1	Boston, Mass.	November 15-16
Conf. on Magnetism & Magnetic Materials	AIEE; APS; AIMME; IRE; ONR	Washington, D. C.	November 18-21
PGVC Annual Meeting	PGVC	Washington, D. C.	December 4-5
Eastern Joint Computer Conference	PGEC; AIEE; ACM	Washington, D. C.	December 9-13

Table XXVII - Section Activities

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

Central Pennsylvania (formerly Centre County Subsection)	January, 1957
Shreveport (former Subsection)	April, 1957
North Carolina (formerly Piedmont Subsection)	September, 1957
Virginia	September, 1957
Western Massachusetts (formerly Berkshire County Subsection)	November, 1957

The total number of Sections is now 94. Reference to Table XXVIII will show Section Membership statistics for the years 1956 and 1957, as well as meetings held in all Sections for the same period.

The Berkshire County, Centre County, Piedmont and Shreveport Subsections became full Sections in the year 1957. The North Carolina-Virginia Section and the Hampton Roads Subsection were dissolved, following the formation of the new North Carolina and Virginia Sections.

The Subsections of Sections now total 28, the following being formed in 1957:

Lehigh Valley (Philadelphia)	January, 1957
Kitchener-Waterloo (Hamilton)	March, 1957
Nashville (Huntsville)	February, 1957
Northern Vermont (Boston)	April, 1957
Santa Barbara (Los Angeles)	June, 1957
Eastern North Carolina (North Carolina)	June, 1957
Burlington (Cedar Rapids)	December, 1957

Table XXVIII- Section and Subsection Meetings and Membership - 1956, 1957

Reg.	Section	M E E T I N G S**						M E M B E R S H I P				
		1957			1956			1957		1956		
		Section	PG	Total	Section	PG	Total	Sub.- Section	Section	Sub.- Section	Section	
1	Binghamton	10	-	10	9	-	9			326		223
	Boston	4	36	51	4	39	45			4,210		3,479
	New Hampshire Sub.	3	-	-	2	-	-	183			140	
*	No. Vermont Sub.	8	-	-	-	-	-	43			-	
	Buffalo-Niagara	8	6	15	8	4	18			436		393
	Erie Sub.	1	-	-	6	-	-	67			51	
	Connecticut	5	3	8	7	9	16			924		1,082
	Elmira-Corning	10	-	10	7	-	7			140		127
	Ithaca	7	-	7	8	-	8			160		143
	Rochester	7	-	7	8	-	8			428		286
	Rome-Utica	6	4	10	7	7	14			409		384
	Schenectady	3	-	3	5	-	5			405		398
	Syracuse	8	15	23	9	16	25			819		722
*	Western Mass.	-	-	-	-	-	-			226		-
		80	64	144	80	75	155			8,483		7,237
2	Long Island	21	10	31	19	6	25			3,527		3,008
	New York	10	20	55	10	27	59			4,643		4,298
	Mid-Hudson Sub.	9	-	-	5	-	-	643			524	
	Monmouth Sub.	8	-	-	8	-	-	510			482	
	Westchester Sub.	8	-	-	9	-	-	596			528	
	Northern New Jersey	6	6	12	9	7	16			3,206		2,857
	Princeton	9	-	9	8	-	8			559		457
		71	36	107	68	40	108			11,935		10,620
3	Atlanta	9	-	19	8	-	11			760		686
	Charleston Sub.	10	-	-	3	-	-	132			93	
	Baltimore	10	9	19	10	4	14			1,198		1,135
	Central Florida	10	3	16	10	6	16			696		445
	Gainesville Sub.	3	-	-	-	-	-	177			147	
	Florida West Coast	10	8	18	1	-	1			242		85
	Huntsville	8	-	14	10	-	13			413		390
	Memphis Sub.	1	-	-	3	-	-	49			64	
*	Nashville Sub.	5	-	-	-	-	-	96			-	
	Miami	9	-	9	10	-	10			263		240
*	North Carolina	4	-	12	-	-	-			443		736
*	East.No.Carolina Sub.	3	-	-	-	-	-	153			-	
	W. No. Carolina Sub.	5	-	-	-	-	-	65			49	
	Northwest Florida	10	5	20	10	-	10			139		109
	Panama City Sub.	5	-	-	-	-	-	38			26	
	Philadelphia	20	53	87	18	31	56			3,479		3,109
	Lancaster Sub.	7	-	-	7	-	-	225			221	
*	Lehigh Valley Sub.	7	-	-	-	-	-	141			-	
*	Virginia	1	-	1	-	-	-			407		-
	Washington	9	69	78	10	47	57			2,743		2,363
		146	147	293	100	88	188			10,783		9,298

Table XXVIII - Section and Subsection Meetings and Membership - 1956, 1957
(Continued)

Reg.	Section	M E E T I N G S						M E M B E R S H I P			
		1957			1956			1957		1956	
		Section	PG	Total	Section	PG	Total	Sub.- Section	Total	Sub.- Section	Total
4	Akron	10	9	19	10	4	14		284		263
*	Central Penn.	7	-	7	-	-	-		215		-
	Cincinnati	5	2	7	10	4	14		393		358
	Cleveland	8	2	10	9	3	12		490		416
	Columbus	8	-	8	5	-	5		254		224
	Dayton	6	27	35	8	25	41		714		666
	USAFIT Sub.	2	-	-	8	-	-	58		62	
	Detroit	9	5	14	9	10	19		1,062		982
	Emporium	12	-	12	12	-	12		125		275
	Pittsburgh	6	4	10	10	5	15		664		616
	Toledo	11	-	11	11	-	11		165		143
	Williamsport	6	-	-	2	-	2		50		45
		84	49	133	94	51	145		4,416		3,988
5	Cedar Rapids	10	-	10	9	-	9		623		507
*	Burlington Sub.	-	-	-	-	-	-	25		-	
	Chicago	6	13	19	9	33	42		2,684		2,352
	Evansville-Owensboro	10	-	10	9	-	9		124		117
	Fort Wayne	8	5	13	9	4	13		236		252
	Indianapolis	3	-	3	7	-	7		440		433
	Louisville	4	-	4	2	-	2		159		131
	Milwaukee	7	4	11	10	-	10		713		552
	Omaha-Lincoln	9	2	11	4	-	4		212		135
	So. Bend-Mishawaka	9	-	9	2	-	2		199		169
	Twin Cities	10	1	11	6	-	6		871		728
		76	25	101	67	37	104		6,261		5,376
6	Beaumont-Pt. Arthur	10	-	10	9	-	9		109		98
	Dallas	10	-	10	11	-	11		690		579
	Denver	8	3	11	8	6	14		511		446
	El Paso	9	-	14	8	-	8		183		168
	Las Cruces- White Sands Sub.	5	-	-	-	-	-	79		84	
	Fort Worth	8	1	9	11	-	11		306		256
	Houston	10	6	16	11	6	17		517		451
	Kansas City	10	-	10	8	-	8		623		536
	Little Rock	10	-	10	9	-	9		127		122
	Lubbock	9	-	9	8	-	8		94		99
	New Orleans	3	-	3	6	-	6		237		174
	Oklahoma City	10	-	10	11	-	11		261		228
	St. Louis	10	-	10	10	-	10		627		472
	San Antonio	7	1	8	11	1	12		284		266
*	Shreveport	6	-	6	-	-	-		69		-
	Tulsa	7	-	7	9	-	9		263		239
	Wichita	8	-	8	2	-	2		128		100
		140	11	151	132	13	145		5,029		4,234

Table XXVIII - Section and Subsection Meetings and Membership - 1956, 1957
(Continued)

Reg.	Section	M E E T I N G S						M E M B E R S H I P			
		1957			1956			1957		1956	
		Section	PG	Total	Section	PG	Total	Sub.- Section	Section Total	Sub.- Section	Section Total
7	Alamogordo - Holloman	7	-	7	5	-	5		96		85
	Albuquerque-Los Alamos	11	26	37	11	38	49		543		418
	China Lake	5	-	5	10	2	12		95		79
	Fort Huachuca	11	-	11	8	-	8		84		59
	Hawaii	8	-	8	10	-	10		90		84
	Los Angeles	9	73	116	10	79	109		5,999		5,014
	Buenaventura Sub.	6	-	-	10	-	-	98		162	
	Orange Belt Sub.	5	6	-	6	-	-	448		332	
	Pasadena Sub.	5	-	-	2	-	-	566		507	
	SanFernando Sub.	9	-	-	2	-	-	817		711	
*	Santa Barbara Sub.	3	-	-	-	-	-	269		-	
	Phoenix	9	-	9	10	2	12		447		290
	Portland	15	-	15	9	-	9		294		259
	Sacramento	8	-	8	8	-	8		172		145
	Salt Lake	6	-	6	5	-	5		299		199
	San Diego	10	3	13	10	-	10		660		560
	San Francisco	8	29	44	4	30	46		2,763		2,255
	East Bay Sub.	5	-	-	8	-	-	524		488	
	Palo Alto Sub.	2	-	-	4	-	-	1,628		1,212	
	Seattle	10	5	20	9	2	18		790		700
	Richland Sub.	5	-	-	7	-	-	115		89	
	Tucson	8	1	9	9	-	9		90		159
		<u>165</u>	<u>143</u>	<u>308</u>	<u>157</u>	<u>153</u>	<u>310</u>		<u>12,422</u>		<u>10,306</u>
8	Bay of Quinte	7	-	7	7	-	7		86		74
	Hamilton	10	-	13	8	-	8		171		146
*	Kitchener-Waterloo Sub.	3	-	-	-	-	-	64		-	
	London	5	-	5	8	-	8		107		72
	Montreal	10	6	26	10	4	23		660		528
	Quebec Sub.	9	1	-	9	-	-	100		66	
	Newfoundland	7	-	7	6	-	6		42		43
	Northern Alberta	9	-	9	3	-	3		96		91
	Ottawa	8	-	8	9	-	9		286		231
	Regina	8	-	8	5	-	5		66		47
	Southern Alberta	4	-	4	7	-	7		65		58
	Toronto	12	-	12	10	-	10		686		522
	Vancouver	10	-	10	10	-	10		209		175
	Winnipeg	10	-	10	10	-	10		114		98
		<u>112</u>	<u>7</u>	<u>119</u>	<u>102</u>	<u>4</u>	<u>106</u>		<u>2,588</u>		<u>2,085</u>

Table XXVIII - Section and Subsection Meetings and Membership - 1956, 1957
(Continued)

Reg.	Section	M E E T I N G S						M E M B E R S H I P			
		1957			1956			1957		1956	
		Section	PG	Total	Section	PG	Total	Sub.- Section	Section Total	Sub.- Section	Section Total
	Buenos Aires	4	-	4	14	-	14		112		125
	Egypt	2	-	2	4	-	4		22		24
	Israel	4	-	4	10	-	10		59		48
	Rio de Janeiro	8	-	8	1	-	1		45		30
	Tokyo	10	-	10	7	-	7		204		111
		28		28	36		36		442		338
	Totals	902	482	1,383	836	461	1,297		62,359		53,482

* Established during 1957

** As reported to IRE Headquarters 1/20/58

RECAPITULATION

1957

Region	1	2	3	4	5	6	7	8	Foreign	Totals
Sections	11	4	11	11	10	16	14	12	5	94
Subsections	3	3	9	1	1	1	8	2	-	28
Membership	8,483	11,935	10,783	4,416	6,261	5,029	12,422	2,588	442	62,359
Section Meetings	80	71	146	84	76	140	165	112	28	902
PG Meetings	64	36	147	49	25	11	143	7	-	482
Total Meetings	144	107	293	133	101	151	308	119	28	1,383

1956

Region	1	2	3	4	5	6	7	8	Foreign	Totals
Sections	10	4	10	10	10	16	13	12	5	90
Subsections	3	3	8	2	-	2	7	1	-	26
Membership	7,237	10,620	9,298	3,988	5,376	4,234	10,306	2,085	338	53,482
Section Meetings	80	68	100	94	67	132	157	102	36	836
PG Meetings	75	40	88	51	37	13	153	4	-	461
Total Meetings	155	108	188	145	104	145	310	106	36	1,297

Table XXIX - Professional Group Chapter Meetings, by Section, by Group, 1956 - 1957*

SECTION		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	Total
Akron	1956																4													4
	1957			2								2					4							1						9
Alamogordo-	1956	7		4	4	8**					3		7						5											38
Holloman	1957	2		-	3	9**					4		4						4											26
Baltimore	1956																3	1												4
	1957	1															3					1		4						9
Boston	1956	5	2			4									4	5	6	7							5	2				40
	1957	6	3			3						2			3	5	4	3	2						3	2				36
Buffalo-	1956																			3							1			4
Niagara	1957																			2		3					1			6
Central	1956										6																			6
Florida	1957										3																			3
Chicago	1956	5		4	3	3	3	1	3	1	-			3	2		1	2			2									33
	1957	1		1	2	2	-	2	1	-	2			-	1		1	-			-									13
China Lake	1956				2																									2
	1957				-																									-
Cincinnati	1956	4																												4
	1957	2																												2
Cleveland	1956	3																												3
	1957	1	1																											2
Connecticut	1956					9																								9
	1957					3																								3
Dayton	1956	3				3					4	4			5		1					4					1			25
	1957	2				1					3	4			3		4					5					5			27
Denver	1956			6																										6
	1957			3																										3
Detroit	1956					4											6													10
	1957					5											-													5
Florida	1956																													-
West Coast	1957		1				1	1		1	1	1	1												2					8
Fort Wayne	1956																										4			4
	1957																										5			5

Continued

Table XXIX - Professional Group Chapter Meetings, by Section, by Group, 1956 - 1957

SECTION		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Total	
Fort Worth	1956																														-
	1957																1														1
Houston	1956	2	1				1			2																					6
	1957	-	-				2			2							2														6
Long Island	1956									3																					10
	1957									3																					77
Los Angeles	1956		1	7	5		4	5	5		9		5		3	4	10					5			6						79
	1957		-	11	4		6	4	6		7		5		5	2	9		4	6		5			3						-
Milwaukee	1956	-																													4
	1957	4																													4
Montreal	1956																4														4
	1957				4												3														7
New York	1956											6			5	3	2	2		5***			2	2							27
	1957						1					-			4	4	2	3	3			1	2								20
Northern	1956																	7													6
New Jersey	1957																	6													-
Northern	1956																														5
Florida	1957																														-
Omaha -	1956																														2
Lincoln	1957		2																												31
Philadelphia	1956	5		2	3		-	-			1	4			4		6	2			-		3								53
	1957	6		3	2		4	1			6	2			8		9	3			4		4								2
Phoenix	1956	2																													-
	1957	-																1													5
Pittsburgh	1956		2				2																								4
	1957		-				2																								7
Rome - Utica	1956														2						5										4
	1957														2						2										1
San Antonio	1956	1													-																1
	1957	-													1																1

Table XXX - Section and Subsection Publications, 1957

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.

Forty-five 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"
Buenaventura Subsection (Los Angeles)	"The Bulletin"
Cedar Rapids	"Meeting Notice"
Central Florida	"Indian River Engineer"
Central Pennsylvania	"Newsletter"
Chicago	"Scanfax"
Cincinnati	"Cincinnati Engineer and Scientist"
Cleveland	"Cleveland Section News"
Dallas	"Direction"
Dayton	"Wave Guide"
Denver	"The Denver Decibel"
Detroit	"Cross Talk"
El Paso	"El Paso Electronics"
Emporium	"Newsletter"
Evansville-Owensboro	"The Transitter"
Florida West Coast	"Bulletin"
Houston	"Scope"
Huntsville	"The Live Wire"
Kansas City	"The Local Oscillator"
Long Island	"The Pulse"
Los Angeles	"The Bulletin"
	"The Mid-Month Bulletin"
Miami	(No Name)
Monmouth Subsection (New York)	"The Scanner"
New York	"The Monitor"
Northern New Jersey	"IRE Newsletter"
Oklahoma City	"Sooner Satellite"
Omaha-Lincoln	"Om-Linc Coupling"
Ottawa	(No Name)
Philadelphia	"Almanack"
Phoenix	"Arizona Engineer and Scientist"

Table XXX - Section and Subsection Publications, 1957

(Continued)

The number of Student Branches formed during 1957 was 16. The total number of Student Branches is now 151, of which 11 operate as joint IRE-AIEE Branches, and 140 as Associate Branches.

Pittsburgh	"Bulletin"	
Princeton	"P. S."	
Rome-Utica	"IRE Echoes"	
St. Louis	"The Mighty Mho"	
San Antonio	"The Analog"	Formed 1957
San Diego	"Bulletin"	
San Francisco	"The Grid"	
Syracuse	"Scanner"	
Tucson	"The Wire"	
Washington	"Bulletin"	
Western Massachusetts	(No Name)	
Alabama, University of	IRE-AIEE	
Alabama Polytechnic Institute	IRE	
Alberta, University of	IRE-AIEE	
Arizona State College	IRE	5/14/57
Arizona, University of	IRE-AIEE	
Arkansas, University of	IRE-AIEE	
Bradley University	IRE	6/21/57
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	
Casa Institute of Technology	IRE-AIEE	
*Central Technical Institute	IRE	6/21/57

Table XXXI - STUDENT BRANCHES, 1957

The number of Student Branches formed during 1957 was 16. The total number of Student Branches is now 151, 113 of which operate as joint IRE-AIEE Branches, and 3 as Student Associate Branches.

Following is a list of the Student Branches:

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Agricultural and Mechanical College of Texas	IRE-AIEE	
Akron, University of	IRE-AIEE	
Alabama, University of	IRE-AIEE	
Alabama Polytechnic Institute	IRE	
Alberta, University of	IRE-AIEE	
Arizona State College	IRE	5/14/57
Arizona, University of	IRE-AIEE	
Arkansas, University of	IRE-AIEE	
Bradley University	IRE	6/21/57
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	11/19/57
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	11/19/57
Case Institute of Technology	IRE-AIEE	4/10/57
*Central Technical Institute	IRE	6/21/57

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Cincinnati, University of	IRE-AIEE	
Clarkson College of Technology	IRE-AIEE	
Clemson College	IRE-AIEE	
Colorado, University of	IRE-AIEE	
Colorado State University	IRE-AIEE	
Columbia University	IRE-AIEE	
Connecticut, University of	IRE-AIEE	
Cooper Union	IRE-AIEE	5/14/57
Cornell University	IRE-AIEE	
Dayton, University of	IRE-AIEE	
Delaware, University of	IRE-AIEE	4/10/57
Denver, University of	IRE-AIEE	
Detroit, University of	IRE-AIEE	
Drexel Institute of Technology	IRE-AIEE	
Fairleigh Dickinson University	IRE	11/19/57
Fenn College	IRE	
Florida, University of	IRE-AIEE	
George Washington University	IRE-AIEE	
Georgia Institute of Technology	IRE	
Hofstra College	IRE	11/19/57
Howard University	IRE-AIEE	4/10/57
Illinois Institute of Technology	IRE	
Illinois, University of	IRE-AIEE	

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Iowa, State University of	IRE	
Iowa State College	IRE-AIEE	
John Carroll University	IRE	
Johns Hopkins University	IRE-AIEE	
Kansas State College	IRE	
Kansas, University of	IRE-AIEE	
Kentucky, University of	IRE	
Lafayette College	IRE-AIEE	
Lamar State College	IRE	5/14/57
Laval University	IRE-AIEE	
Lehigh University	IRE-AIEE	
Louisiana Polytechnic Institute	IRE-AIEE	4/10/57
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	

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Michigan, University of	IRE-AIEE	6/21/57
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	
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	12/31/57
North Dakota, Agricultural College	IRE-AIEE	
Northeastern University	IRE-AIEE	
Northwestern University	IRE-AIEE	
Norwich University	IRE-AIEE	
Notre Dame, University of	IRE-AIEE	11/19/57

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Ohio Northern University	IRE-AIEE	6/21/57
Ohio State University	IRE-AIEE	
Ohio University	IRE-AIEE	
Oklahoma, University of	IRE-AIEE	
Oklahoma State University	IRE-AIEE	
Oregon State College	IRE	
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	
*Ryerson Institute of Technology	IRE	12/11/57
St. Louis University	IRE	
San Diego State College	IRE	
San Jose State College	IRE	
Santa Clara, University of	IRE-AIEE	
Saskatchewan, University of	IRE	11/19/57

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd)

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Seattle University	IRE	
South Carolina, University of	IRE-AIEE	
South Dakota School of Mines and Technology	IRE	
South Dakota State College	IRE-AIEE	
Southern California, University of	IRE-AIEE	
Southern Methodist University	IRE-AIEE	
Southwestern Louisiana Institute	IRE	4/10/57
Stanford University	IRE-AIEE	
Stevens Institute of Technology	IRE-AIEE	
Swathmore 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	
Union College (Schenectady)	IRE-AIEE	3/5/57
U. S. Naval Postgraduate School	IRE	
Utah State University	IRE	
Utah, University of	IRE-AIEE	

Table XXXI- STUDENT BRANCHES, 1957 (Cont'd).

<u>School</u>	<u>Branch</u>	<u>Formed 1957</u>
Valparaiso University	IRE	6/21/57
Vermont, University of	IRE-AIEE	
Vanderbilt University	IRE-AIEE	
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	
Wayne University	IRE-AIEE	
*Wentworth Institute	IRE	6/21/57
West Virginia University	IRE-AIEE	
Wichita, University of	IRE-AIEE	9/11/57
Wisconsin, University of	IRE-AIEE	
Worcester Polytechnic Institute	IRE-AIEE	
Wyoming, University of	IRE-AIEE	
Yale University	IRE-AIEE	

*Student Associate Branches