

To the Board of Directors  
The Institute of Electrical  
and Electronic Engineers



**THE INSTITUTE OF  
ELECTRICAL AND  
ELECTRONICS  
ENGINEERS, INC.**

The membership vote...  
The Report of the Secretary...  
The Institute of Electrical and Electronics Engineers, Inc. is a non-profit organization...  
The Board of Directors has approved the amendments to the Bylaws...  
The Institute of Electrical and Electronics Engineers, Inc. is a non-profit organization...  
The Board of Directors has approved the amendments to the Bylaws...  
The Institute of Electrical and Electronics Engineers, Inc. is a non-profit organization...  
The Board of Directors has approved the amendments to the Bylaws...

345 EAST 47TH STREET, NEW YORK, N. Y. 10017

**REPORT OF THE SECRETARY - 1970**

The membership reached an all-time high of 169,059, an increase of 1.0% during the year. Membership in the United States increased 1.7%; membership in Canada also increased 1.7%. There was a 7.3% membership increase in Region 8, 9 and 10. A record number of new members were elected during the year: 13,540 men and 4,049 in other grades, for a total of 17,589.

Group membership increased 1.8% during the year. 48% of the student members and 50% of the membership in other grades participated in the Group program. Three of the Groups became Societies of the IEEE effective January 1, 1971: Computer, Control Systems, and Power Engineering.

Five new sections, two Subsections, and seventeen Student Branches were established in 1970.

Adverse economic conditions and rapidly rising costs in all phases of IEEE operations led to many economy measures, including curtailment in Headquarters staff personnel, reduction of the IEEE STUDENT JOURNAL, and the closing of the Information Services Department. Organizationally, the Headquarters management attempts to have achieved a realistic program of operations to cope with the economic situation.

Respectfully submitted,

Robert H. Tanner  
Secretary, 1970

To the Board of Directors  
The Institute of Electrical  
and Electronics Engineers

Gentlemen:

The Report of the Secretary for the year 1970 is presented herewith.

The membership voted favorably on amendments to the Constitution, as recommended by the Board of Directors. The purposes served by the amendments were (1) to recognize explicitly the office of Division Delegate-Director, (2) to permit the offices of Secretary and Treasurer to be combined, (3) to advance the date of the annual Assembly to permit all new Directors equal opportunity to make preparation before assuming office, (4) to specify in the Bylaws the requirements for submitting nominations by petition, with such rights extended for elective offices in all organizational units of the Institute, (5) to make changes recommended by legal counsel to conform to recently enacted New York State laws, and (6) to specify the transnational character of the Institute.

The membership reached an all-time high of 169,059, an increase of 1.6% during the year. Membership in the United States increased 1.3%; membership in Canada also increased 1.3%; there was a 7.3% membership increase in Regions 8, 9 and 10. A record number of new members were elected during the year: 13,540 Students, 4,049 in other grades, for a total of 17,589.

Group membership increased 1.8% during the year. 48% of the Student members and 56% of the membership in other grades participated in the Group program. Three of the Groups became Societies of the IEEE effective January 1, 1971: Computer, Control Systems, and Power Engineering.

Five new Sections, two Subsections, and seventeen Student Branches were established in 1970.

Adverse economic conditions and rapidly rising costs in all phases of IEEE operations led to many economy measures, including curtailment in Headquarters staff personnel, termination of the IEEE STUDENT JOURNAL, and the closing of the Information Services Department. Organizationally, the Headquarters management appears to have achieved a realistic program of operations to cope with the economic situation.

Respectfully submitted,

Robert H. Tanner  
Secretary, 1970

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| International Communications<br>Committee, A. L. van Dort   | Technical Activities Board, R. M. Emberson               |

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## SECTION A

Table 1 - IEEE Membership by Region, Grade, Percentage; as of December 31, 1970

	H	F	SM	M	A	Total Grades Other Than		Total Member- ship	Percentage
						Student	Student		
Region 1	2	937	5,821	25,713	3,831	36,304	5,057	41,361	24
Region 2		531	4,565	16,959	1,882	23,937	3,129	27,066	16
Region 3		282	2,320	9,058	836	12,496	2,264	14,760	9
Region 4		232	2,553	10,955	1,483	15,223	3,456	18,679	11
Region 5	1	176	2,009	8,628	839	11,653	3,175	14,828	9
Region 6		527	4,589	21,281	2,015	28,412	3,620	32,032	19
Region 7		65	796	4,631	1,067	6,559	1,926	8,485	5
Region 8		158	884	2,903	475	4,420	1,131	5,551	3
Region 9		12	212	1,459	268	1,951	548	2,499	2
Region 10	1	29	432	1,968	367	2,797	313	3,110	2
U.S. Possessions & Military Overseas		2	48	498	75	623	65	688	
	4	2,951	24,229	104,053	13,138	144,375	24,684	169,059	100

Table 2 - IEEE Membership by Grade, Percentage; 3-Year Comparison

Grade	December 31, 1970		December 31, 1969		December 31, 1968	
	Number	% of Total	Number	% of Total	Number	% of Total
Honorary (H)	4		4		4	
Fellow (F)	2,951	2	2,917	2	2,885	2
Senior Member (SM)	24,229	14	24,815	15	25,023	15
Member (M)	104,053	62	101,058	61	97,326	60
Associate (A)	13,138	8	13,235	8	13,200	8
Student (S)	24,684	14	24,319	14	23,930	15
	169,059	100	166,348	100	162,368	100

Table 3 - IEEE Membership by Region, Percentage; 3-Year Comparison

Region	December 31, 1970		December 31, 1969		December 31, 1968	
	Number	% of Total	Number	% of Total	Number	% of Total
Region 1	41,361	24	41,068	25	40,492	25
Region 2	27,066	16	26,353	16	25,957	16
Region 3	14,760	9	14,482	9	14,055	9
Region 4	18,679	11	18,772	11	18,794	11
Region 5	14,828	9	14,435	9	13,886	8
Region 6	32,032	19	31,670	19	30,851	19
Region 7	8,485	5	8,378	5	8,043	5
Region 8	5,551	3	5,065	3	4,810	3
Region 9	2,499	2	2,368	1	1,940	1
Region 10	3,110	2	2,967	2	2,684	2
U.S. Possessions & Military Overseas	688		790		856	1
	169,059	100	166,348	100	162,368	100

## SECTION A

TABLE 4 - IEEE LIFE MEMBERS BY GRADE; 3-YEAR COMPARISON

	<u>December 31, 1970</u>	<u>December 31, 1969</u>	<u>December 31, 1968</u>
Fellow	1,198	1,140	1,742
Senior Member	2,204	2,084	2,050
Member	1,056	1,038	1,046
Associate	35	32	29
	<u>4,493</u>	<u>4,294</u>	<u>4,867</u>

TABLE 5 - IEEE WOMEN MEMBERS BY GRADE; 2-YEAR COMPARISON

	<u>December 31, 1970</u>	<u>December 31, 1969</u>
Fellow	4	2
Senior Member	61	57
Member	351	316
Associate	85	95
Student	<u>226</u>	<u>168</u>
	<u>727</u>	<u>638</u>

TABLE 6 - IEEE MEMBERSHIP CHANGES,  
BY GRADE FOR THE YEAR ENDED DECEMBER 31, 1970

<u>GAINS</u>	<u>H</u>	<u>F</u>	<u>SM</u>	<u>M</u>	<u>A</u>	<u>Sub-Total</u>	<u>Student</u>	<u>Total</u>
Elections			231	2,908	910	4,049	13,540	17,589
Reinstatements		61	1,171	7,741	915	9,888	1,298	11,186
Transfers To		<u>121</u>	<u>402</u>	<u>11,085</u>	<u>2,189</u>	<u>13,797</u>	<u>3,304</u>	<u>17,101</u>
		<u>182</u>	<u>1,804</u>	<u>21,734</u>	<u>4,014</u>	<u>27,734</u>	<u>18,142</u>	<u>45,876</u>
<u>LOSSES</u>								
Transfers From			180	3,352	464	3,996	13,106	17,102
Deceased		61	151	213	20	445	8	453
Resignations		26	547	2,157	515	3,245	267	3,512
Dues Arrears		<u>61</u>	<u>1,512</u>	<u>13,017</u>	<u>3,112</u>	<u>17,702</u>	<u>4,396</u>	<u>22,098</u>
		<u>148</u>	<u>2,390</u>	<u>18,739</u>	<u>4,111</u>	<u>25,388</u>	<u>17,777</u>	<u>43,165</u>

TABLE 7 - IEEE MEMBERSHIP CHANGES; 3-YEAR COMPARISON

<u>GAINS</u>	<u>December 31, 1970</u>	<u>December 31, 1969</u>	<u>December 31, 1968</u>
Elections	17,589	16,084	17,497
Reinstatements	11,186	5,411	1,520
Transfers To	<u>17,101</u>	<u>14,772</u>	<u>20,794</u>
	<u>45,876</u>	<u>36,267</u>	<u>39,811</u>
<u>LOSSES</u>			
Transfers From	17,102	14,772	20,794
Deceased	453	753	465
Resignations	3,512	2,092	2,258
Dues Arrears	<u>22,098</u>	<u>14,668</u>	<u>12,143</u>
	<u>43,165</u>	<u>32,285</u>	<u>35,660</u>
Net Gain (Loss)	2,711	3,982	4,151

SECTION A

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade, December 31, 1970

REGION 1

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Berkshire		24	108	199	19	350	15		365
Binghamton			74	497	56	627	55		682
Boston	1	142	855	3,975	385	5,358	594	5,952	7,456
Lynn		10	69	258	23	360	29	389	
Merrimack Valley		8	107	818	83	1,016	99	1,115	
Buffalo		10	187	531	52	780	110		890
Connecticut		25	175	930	128	1,258	228	1,486	3,116
Fairfield County		28	211	803	114	1,156	74	1,230	
New London		6	34	254	22	316	84	400	
Elmira - Corning		2	25	98	16	141	9		150
Ithaca		6	18	71	6	101	64		165
Long Island		82	597	2,681	419	3,779	280		4,059
Maine		9	52	201	19	281	64		345
Mid-Hudson		9	75	697	65	846	29	875	1,152
Catskill			21	209	32	262	15	277	
Mohawk Valley		9	54	390	44	497	41	538	707
St. Lawrence Int'l.		1	12	66	12	91	78	169	
New Hampshire		9	100	529	61	699	115		814
New Jersey Coast		57	250	1,217	128	1,652	92		1,744
New York	1	77	586	2,769	931	4,364	1,275	5,639	7,139
Westchester		49	240	886	179	1,354	146	1,500	
North Jersey		162	848	3,546	530	5,086	573		5,659
Princeton		66	243	957	137	1,403	202		1,605
Providence		15	103	484	59	661	149		810
Rochester		6	143	767	101	1,017	77		1,094
Schenectady		68	279	495	44	886	207	1,093	1,258
Adirondack		8	36	83	14	141	24	165	
Springfield		4	38	148	26	216	121		337
Syracuse		37	184	676	62	959	71		1,030
Vermont		6	31	217	31	285	46		331
Worcester County		2	66	261	33	362	91		453
	2	937	5,821	25,713	3,831	36,304	5,057		41,361



Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade, December 31, 1970

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Akron		8	82	281	21	392	73		465
Allegheny Mountain		1	39	51	5	96	10		106
Baltimore		35	327	1,154	101	1,617	81	1,698	2,392
Annapolis		10	97	447	25	579	46	625	
Eastern Shore		2	14	46	4	66	3	69	
Canton		1	42	119	11	173	38		211
Central Pennsylvania		6	55	179	13	253	163		416
Cincinnati		12	101	460	51	624	60		684
Cleveland		36	364	1,040	114	1,554	175		1,729
Columbus		13	141	609	81	844	225	1,069	1,102
Zanesville			10	18	4	32	1	33	
Dayton		16	191	837	112	1,156	166		1,322
Delaware Bay		1	51	224	22	298	56		354
Erie		5	83	184	14	286	33		319
Johnstown		1	24	103	21	149	43		192
Lehigh Valley		24	169	627	163	983	292		1,275
Lima		3	43	81	5	132	41		173
North Central Ohio		2	30	87	12	131	15		146
Ohio Valley			7	53	8	68	9		77
Philadelphia		115	839	3,481	442	4,877	624		5,501
Pittsburgh		79	498	1,341	76	1,994	317	2,311	2,408
Upper Monongahela		3	10	48	3	64	33	97	
Sharon		7	69	139	17	232	75		307
Southern New Jersey		4	23	110	18	155	17		172
Susquehanna		6	72	265	49	392	62		454
Washington		141	1,159	4,833	473	6,606	419		7,025
West Virginia			25	142	17	184	52		236
		531	4,565	16,959	1,882	23,937	3,129		27,066

## SECTION A

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade,  
December 31, 1970

## REGION 3

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Alabama		8	129	421	16	574	149		723
Atlanta		18	175	610	58	861	186	1,047	1,149
Macon-Warner Robins			2	31	4	37	6	43	
Rome			17	32	6	55	4	59	
Baton Rouge		1	23	101	5	130	62		192
Canaveral		9	85	579	52	725	57		782
*Central North Carolina			32	234	18	284	29		313
Central Virginia		13	70	242	14	339	43		382
Charlotte		9	96	189	49	343	33		376
Chattanooga		10	63	161	12	246	24		270
Daytona		8	37	93	10	148	4		152
*Eastern North Carolina		15	71	416	33	535	224		759
East Tennessee		5	69	212	5	291	98	389	463
Upper East Tennessee		1	16	47	3	67	7	74	
Evansville-Owensboro		1	35	110	7	153	34	187	219
Paducah			2	23	4	29	3	32	
Florida West Coast		68	189	590	60	907	48		955
Fort Walton			13	107	7	127	10		137
Gainesville		4	20	106	7	137	140		277
Hampton Roads		3	49	357	25	434	60		494
Huntsville		2	81	529	35	647	12	659	706
Muscle Shoals			5	32	1	38	9	47	
Jacksonville			39	118	14	171	7		178
Lafayette		1	1	51	10	63	39		102
Lexington		2	25	119	2	148	40		188
Louisville		1	40	187	10	238	48		286
Memphis		2	56	158	21	237	138	375	434
Jackson		1	9	39	4	53	6	59	
Miami		33	169	461	101	764	47		811
Middle Tennessee			19	53	1	73	12		85
Mississippi			19	131	5	155	19	174	314
Northeast Mississippi		1	6	50		57	83	140	
Mobile			17	108	10	135	19		154
Nashville		4	43	166	10	223	154		377
New Orleans		8	106	392	43	549	86		635
Oak Ridge		2	41	82	4	129	3		132
Orlando		8	93	340	39	480	13		493
Palm Beach		19	59	217	29	324	11		335
Panama City			16	73	2	91	8		99
Pensacola		1	9	50	4	64	8		72
Richmond		4	49	209	20	282	14		296
Savannah			17	42	6	65	2		67
South Carolina			1			1		1	638
Central Savannah River			6	33	3	42	5	47	
Charleston			20	111	10	141	52	193	
Columbia		3	35	114	5	157	21	178	
Piedmont		1	26	124	7	158	61	219	
Virginia Mountain		5	58	168	22	253	115		368
*Western North Carolina		9	21	46	4	80	2		82
*Winston-Salem		2	41	194	19	256	9		265
		282	2,320	9,058	836	12,496	2,264		14,760

\* Affiliations of North Carolina

## SECTION A

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade,  
December 31, 1970

## REGION 4

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Arrowhead		1	15	77	12	105	6		111
Calumet		3	46	170	54	273	63		336
Cedar Rapids		9	68	260	26	363	46		409
Central Illinois		16	93	342	29	480	195		675
Central Indiana		15	142	595	115	867	229	1,096	1,187
Bloomington		2	13	63	8	86	5	91	
Central Iowa		7	47	142	11	207	78		285
Chicago		44	375	1,317	296	2,032	296	2,328	4,831
Fox Valley		10	172	749	84	1,015	46	1,061	
Northwest		12	217	901	149	1,279	163	1,442	
Fort Wayne		8	92	301	32	433	67		500
Illinois Valley			28	86	5	119	88		207
Iowa-Illinois		1	44	141	12	198	10	208	232
Burlington			4	17	2	23	1	24	
Maidson		5	33	179	9	226	241		467
Milwaukee			27	223	889	1,191	295	1,486	1,600
Racine - Kenosha		1	12	66	14	93	21	114	
Nebraska		3	80	282	83	448	278		726
Northeast Michigan		2	39	167	19	227	14		241
Northeastern Wisconsin		1	32	189	14	236	113		349
Rock River Valley			23	152	29	204	25		229
Siouxland			18	62	18	98	25		123
South Bend		1	39	194	65	299	212		511
Southeastern Michigan		42	371	1,660	209	2,282	487		2,769
Southern Minnesota			14	188	8	210	10		220
Toledo		1	79	221	23	324	58		382
Twin Cities		18	171	1,231	79	1,499	222	1,721	1,996
Red River Valley		1	11	130	6	148	127	275	
West Michigan		2	52	184	20	258	35		293
		232	2,553	10,955	1,483	15,223	3,456		18,679

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade,  
December 31, 1970

## REGION 5

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Arkansas		4	36	157	19	216	39		255
Beaumont		3	23	111	16	153	58	211	254
Lake Charles			4	32	3	39	4	43	
Central Texas		22	93	472	41	628	168		796
Corpus Christi		1	29	86	31	147	112	259	294
Victoria-Port-Lavaca			6	22	4	32	3	35	
Dallas	1	26	246	1,756	92	2,121	113		2,234
Denver		37	284	1,142	63	1,526	389	1,915	2,218
Black Hills			4	48	2	54	62	116	
Pikes Peak		1	30	126	12	169	18	187	
El Paso		1	33	261	16	311	143		454
Fort Worth		4	84	389	34	511	68		579
Houston		6	187	999	128	1,320	496	1,816	2,309
Clear Lake			44	338	25	407	34	441	
Freeport			8	38	1	47	5	52	
Kansas City		11	195	505	105	816	221		1,037
Oklahoma City		10	104	269	14	397	93		490
Ozark			21	71	4	96	164		260
Panhandle		1	27	53	14	95	3		98
Permian Basin			5	39	9	53	3		56
St. Louis		35	297	1,099	92	1,523	577		2,100
Shreveport		2	68	136	35	241	88	329	364
Monroe			3	24	2	29	6	35	
South Plains			16	55	9	80	115		195
Tulsa		8	102	230	54	394	130		524
West Central Texas		1	11	41	1	54	4		58
Wichita		3	49	129	13	194	59		253
	1	176	2,009	8,628	839	11,653	3,175		14,828

## SECTION A

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade  
December 31, 1970

## REGION 6

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Alamogordo-Holloman			10	60	10	80	4		84
Alaska			14	92	16	122	28		150
Albuquerque		9	96	413	37	555	96	651	767
Los Alamos-Santa Fe			27	81	4	112	4	116	
*Antelope Valley			9	58	1	68	4		72
Boise			30	34	1	65	9		74
*Buenaventura		6	45	409	33	493	13		506
*China Lake			9	109	8	126	7		133
*Foothill		10	152	702	77	941	113		1,054
Fort Huachuca			22	69	6	97	10		107
Hawaii		3	35	350	39	427	47		474
Idaho		1	8	66	3	78	7		85
Las Vegas			11	102	19	132	5		137
*Met. Los Angeles		15	181	779	134	1,109	180		1,289
Montana				7	1	8	1	9	253
Billings		1	2	29		32	9	41	
Butte			14	26	2	42	8	50	
Helena		1	7	65	1	74	79	153	
*Orange County		24	378	2,162	190	2,754	97		2,851
Phoenix		24	228	934	82	1,268	184		1,452
Portland		27	210	582	55	874	59	933	1,205
Eugene		2	24	89	12	127	145	272	
Richland		4	33	80	8	125	2	127	149
Walla Walla			1	20	1	22		22	
Sacramento		6	68	333	42	449	126	575	832
Reno		5	12	52	4	73	49	122	
San Joaquin		1	7	45	7	60	37	97	
Shasta			8	21	6	35	3	38	
San Diego		19	213	1,012	88	1,332	127		1,459
*San Fernando Valley		18	372	1,365	156	1,911	70		1,981
San Francisco		47	251	910	113	1,321	126	1,447	3,547
East Bay		37	196	931	91	1,255	274	1,529	
Golden Gate		15	117	415	93	640	127	767	
Santa Clara		103	583	3,473	235	4,394	410	4,804	
*San Gabriel Valley		21	176	619	70	886	70		956
*Santa Barbara		17	72	307	23	419	149		568
*Santa Monica Bay		49	293	1,114	94	1,550	121		1,671
Seattle		23	269	1,214	81	1,587	244		1,831
*South Bay Harbor		15	236	1,351	117	1,719	80		1,799
Spokane		7	33	119	11	170	98	268	288
Grand Coulee Dam			1	14	4	19	1	20	
Tucson		8	63	210	12	293	66		359
Utah		9	50	289	13	361	317		678
*Vandenberg			13	144	12	169	13		182
Wenatchee			10	25	3	38	1		39
		527	4,589	21,281	2,015	28,412	3,620		32,032

\* Los Angeles Council

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade,  
December 31, 1970

## REGION 7

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Central Canada Council									
Bay of Quinte		2	38	161	26	227	85	260	312
Hamilton		1	52	192	58	303	106	399	409
Kitchener-Waterloo			25	114	33	172	61	233	233
London			15	89	20	124	16	140	140
Niagara Int'l.			29	93	17	139	21	160	160
Toronto		21	165	989	304	1,479	248	1,727	1,727
Eastern Canada Council									
Canadian Atlantic			18	152	12	182	78	260	359
New Brunswick			7	60	14	81	18	99	99
Montreal		14	181	959	119	1,273	420	1,693	1,693
Ottawa		15	103	685	85	888	132	1,020	1,020
Quebec		1	11	95	53	160	41	201	201
St. Maurice			1	19	3	23	3	26	26
Western Canada Council									
Northern Alberta			5	175	70	250	142	392	392
Regina			6	97	14	117	40	157	157
Southern Alberta			5	112	45	162	156	318	318
Vancouver		8	99	424	132	663	213	876	876
Victoria		2	15	56	18	91	5	96	96
Winnipeg		1	21	159	44	225	141	366	366
		65	796	4,631	1,067	6,559	1,926	8,485	8,485

## SECTION A

Table 8 - IEEE Membership by Region, by Section and Subsection, by Grade,  
December 31, 1970

## REGION 8

Section	H	F	SM	M	A	Subtotal	Student	Subtotal	Section Total
Benelux		17	68	273	37	395	180		575
Denmark		3	11	128	20	162	68		230
Egypt		3	15	31	6	55	31		86
France		29	108	301	57	495	112		607
Germany (West)		11	72	155	33	271	7		278
Greece		1	9	46	4	60	3		63
Iran			5	64		69	2		71
Israel		4	27	145	25	201	20		221
Middle & South Italy		1	14	131	33	179	70		249
North Italy		3	27	163	53	246	235		481
Norway		4	23	51	4	82	1		83
Spain		1	16	121	13	151	89		240
Sweden		5	73	192	29	299	121		420
Switzerland		13	75	278	29	395	88		483
United Kingdom & Rep. of Ireland		59	289	627	82	1,057	59		1,116
Total Sections		154	832	2,706	425	4,117	1,086		5,203
Not Assigned to Sections (See Table 9)		4	52	197	50	303	45		348
Total Region		158	884	2,903	475	4,420	1,131		5,551

## REGION 9

Argentina		3	31	189	34	257	90		347
Central America			4	45	4	53	9		62
Chile			10	49	8	67	18		85
Colombia			7	98	45	150	85		235
Mexico		5	52	276	22	355	33	388	427
Monterrey			2	17	1	20	19	39	
Peru			7	48	2	57	5		62
Puerto Rico & Virgin Islands			25	177	24	226	69		295
Rio de Janeiro		2	16	121	21	160	86		246
Sao Paulo			11	145	36	192	46		238
Venezuela			15	162	21	198	31		229
Total Sections		10	180	1,327	218	1,735	491		2,226
Not Assigned to Sections (See Table 10)		2	32	132	50	216	57		273
Total Region		12	212	1,459	268	1,951	548		2,499

## REGION 10

India		2	93	318	33	446	17	463	560
Tamil Nadu		1	12	47	5	65	1	66	
Uttar Pradash			3	15		18	13	31	
New Zealand			9	45	16	70	11		81
Tokyo	1	22	148	715	109	995	168		1,163
West Pakistan			23	40	32	95	10		105
Total Sections	1	25	288	1,180	195	1,689	220		1,909
Not Assigned to Sections (See Table 11)		4	144	788	172	1,108	93		1,201
Total Region	1	29	432	1,968	367	2,797	313		3,110

Table 9 - IEEE Membership in Region 8, by Country, by Grade, December 31, 1970;  
3-Year Comparison

Country	H	F	SM	M	A	Subtotal	Student	12/31/70 Total	12/31/69 Total	12/31/68 Total
Albania									6	
Algeria				1	1	2		2	1	2
Austria		1	6	10	5	22		22	20	21
Bulgaria			1			1		1	1	1
Cyprus			3	12	3	18		18	21	19
Czechoslovakia			2	7	8	17	2	19	14	13
Denmark									2	
Finland			1	43	8	52	22	74	67	64
Germany, F.R. (Berlin)			1	5	1	7	2	9	10	9
Greece									48	43
Hungary			3	1		4		4	4	4
Iceland				4	1	5		5	6	6
Iraq			1	2	2	5		5	6	10
Jordan			1	3		4		4	3	5
Lebanon			2	21	1	24		24	28	31
Libya			2	14	2	18		18	24	23
Malta			1	4		5		5	5	5
Morocco				1		1		1		
Monaco				1		1		1	1	1
Poland		1	3	1	2	7		7	9	6
Portugal			3	12	1	16		16	14	14
Rumania			1	3		4	1	5	3	3
Syria				4		4		4	4	4
Tunisia				1	1	2		2		1
Turkey			2	36	3	41	18	59	70	46
U. S. S. R.		2	17	2	5	26		26	26	25
Yugoslavia			2	9	6	17		17	12	11
Total		4	52	197	50	303	45	348	405	367
Territory Assigned to IEEE Sections		154	832	2,706	425	4,117	1,086	5,203	4,660	4,443
Total		158	884	2,903	475	4,420	1,131	5,551	5,065	4,810



## SECTION A

Table 10 - IEEE Membership in Region 9, by Country, by Grade, December 31, 1970;  
3-Year Comparison

Country	H	F	SM	M	A	Subtotal	Student	12/31/70 Total	12/31/69 Total	12/31/68 Total
Argentina										1
Bolivia				6		6		6	9	10
Brazil		1	9	30		68	27	95	60	31
British Guiana			1	3		6		6	8	9
Costa Rica									12	10
Cuba			2	2		4		4	4	5
Dominican Republic				3		3	1	4	1	
El Salvador									9	11
Ecuador			2	13		17	27	44	17	12
Guatemala				1		1		1	6	17
Haiti							1	1		
Honduras									2	3
Netherland Antilles			1	8		9		9	7	6
Nicaragua									11	7
Panama			1	14		18		18	18	13
Panama Canal Zone				3		3		3	12	
Paraguay			1			1		1	1	1
Puerto Rico							1	1		
Surinam			1	2		3		3	4	5
Uruguay					2	2		2	2	3
Venezuela										1
West Indies		1	14	47		75		75	73	76
<b>Total</b>		<b>2</b>	<b>32</b>	<b>132</b>	<b>50</b>	<b>216</b>	<b>57</b>	<b>273</b>	<b>257</b>	<b>220</b>
Territory Assigned to IEEE Sections		<b>10</b>	<b>180</b>	<b>1,327</b>	<b>218</b>	<b>1,735</b>	<b>491</b>	<b>2,226</b>	<b>2,111</b>	<b>1,720</b>
<b>Total</b>		<b>12</b>	<b>212</b>	<b>1,459</b>	<b>268</b>	<b>1,951</b>	<b>548</b>	<b>2,499</b>	<b>2,368</b>	<b>1,940</b>

## SECTION A

Table 11 - IEEE Membership in Region 10, by Country, by Grade, December 31, 1970;  
3-Year Comparison

Country	H	F	SM	M	A	Subtotal	Student	12/31/70 Total	12/31/69 Total	12/31/68 Total
Afghanistan				4	6	10		10	10	9
Australia		1	47	282	27	357	50	407	355	341
Bahrein			1	1		2		2	1	2
Basutoland										1
Burma				3		3		3	4	6
Cambodia				4	1	5		5	6	5
Cameroon				3	1	4		4	3	1
Ceylon			7	3	4	14		14	13	11
China			4	27	2	33	16	49	31	28
Congo				2		2		2	4	2
Dahomey			1			1		1	1	1
Ethiopia				4	1	5		5		6
Fiji Islands										1
Ghana			1	2	1	4		4	6	7
Guam			2	3		5		5		
Hong Kong			6	117	35	158	6	164	131	124
India				1		1		1		522
Indonesia				6	5	11		11	10	8
Iran				1		1		1	55	52
Ivory Coast			1	2		3		3	2	1
Kenya			4	11	3	18		18	25	27
Kuwait			6	23	3	32		32	22	18
Liberia				1	2	3		3	3	4
Macao				1		1		1	1	1
Madagascar									1	3
Malawi				1		1		1	1	2
Malaysia			4	60	13	77	6	83	64	62
Mali				1		1		1	1	4
Mauritius				1	1	2		2	1	2
Mogadishui Somalia										1
Muscat				1		1		1	1	1
Nepal				1	1	2		2	3	4
New Guinea			1	1		2		2	2	1
Nigeria		1	7	33	11	52		52	37	38
Nukualofa Tonga										1
Pakistan (East)		1	1	12	1	15	1	16	26	18
Pakistan (West)				2		2		2	1	
Philippines			6	19	7	32	2	34	41	40
Qatar				1		1		1	3	1
Rhodesia			2	5	1	8		8	10	10
Ruanda				1	1	2		2	1	
Sabah				1		1		1	1	1
Sambia			5	9	3	17		17	11	9
Samoa			1			1		1		
Saudi Arabia		1	7	16	2	26	1	27	29	29
Sierra Leone			2	2		4		4	8	3
Solomon Islands					1	1		1	2	2
Somalia									1	
South Africa			15	42	11	68		68	67	71
South Korea			5	28	9	42	1	43	29	29
Sudan				3	1	4		4	6	
Swaziland				1		1		1		
Tanzania				3		5		5	6	4
Thailand			6	27	11	44	10	54	37	25
Togo					1	1		1	1	2
Tonga			1			1		1	1	
Trucial Oman				1		1		1	1	2
Uganda				5	1	6		6	4	3
Viet-Nam			1	10	3	14		14	9	7
Total		4	144	788	172	1,108	93	1,201	1,089	1,553
Territory Assigned to IEEE Sections	1	25	288	1,180	195	1,689	220	1,909	1,878	1,131
Total	1	29	432	1,968	367	2,797	313	3,110	2,967	2,684

Table 1 - IEEE Student Branches and Student Branch Membership, 1970

Seventeen Student Branches were established during 1970. The total number of Student Branches is now 359 operating as follows:

- 289 - IEEE Student Branches
- 68 - IEEE Student Associate Branches\*
- 1 - IEEE Student/Student Associate Branch
- 2 - IEEE Section Student Branches

<u>School</u>	<u>Section Location</u>	<u>Region</u>	<u>Membership***</u> <u>1970</u>
*Academy of Aeronautics	New York	1	49
Air Force Institute of Technology	Dayton	2	33
Akron, University of	Akron	2	90
Alabama, University of	Alabama	3	56
Alaska, University of	Anchorage	6	27
Alberta, University of	North Alberta	7	118
*Algonquin College of Applied Arts & Technology	Ottawa	7	1
Arizona State University	Phoenix	6	137
Arizona, University of	Tucson	6	64
Arkansas, University of	Arkansas	5	183
Auburn University	Alabama	3	83
**Bologna, University of	North Italy	8	24
Boston University	Boston	1	30
Bradley University	Illinois Valley	4	103
Bridgeport, University of	Connecticut	1	55
Brigham Young University	Utah	6	165
*British Columbia Institute of Technology	Vancouver	7	91
*British Columbia Vocational School	Vancouver	7	6
British Columbia, University of	Vancouver	7	112
*Bronx Community College (Day Division)	New York	1	42
*Bronx Community College (Evening Division)	New York	1	37
Brooklyn, Polytechnic Institute of (Day Division)	New York	1)	250
Brooklyn, Polytechnic Institute of (Evening Division)	New York	1)	
*Broome Technical Community College	Binghamton	1	33
Brown University	Providence	1	38
Bucknell University	Central Pennsylvania	2	20
Buenos Aires, Instituto Tecnológico de	Argentina	9	23
Buenos Aires, University of	Argentina	9	11
**Cairo, University of	Egypt	8	23
Calgary, University of	Southern Alberta	7	49
California State Polytechnic College (Kellogg-Voorhis Campus)	Foothill	6	141
California State Polytechnic College (San Luis Obispo)	Santa Barbara	6	131
California State College at Long Beach	South Bay Harbor	6	53
California State College at Los Angeles	Metropolitan Los Angeles	6	38
California, University of (Berkeley)	San Francisco	6	261
California, University of (Davis)	Sacramento	6	58
California, University of (Irvine)	Orange County	6	25
California, University of (Los Angeles)	Santa Monica Bay	6	148
California, University of (Santa Barbara)	Santa Barbara	6	59
California Western University	Santa Monica Bay	6	6
*Capitol Institute of Technology	Washington	2	44
Carabobo, Universidad de	Venezuelan	9	24
Carleton University	Ottawa	7	27
Carnegie Mellon University	Pittsburgh	2	108
Case Western Reserve University	Cleveland	2	81
Catholic University of America	Washington	2	22
Catholic University of Louvain	Benelux	8	64
*Central Technical Institute	Kansas City	5	25
Chalmers University of Technology	Sweden	8	61

<u>School</u>	<u>Section Location</u>	<u>Region</u>	<u>Membership***</u>
Christian Brothers College	Memphis	3	77
Cincinnati, University of	Cincinnati	2	66
Citadel, The	South Carolina	3	47
Clarkson College of Technology	Mohawk Valley	1	96
Clemson University	South Carolina	3	64
Cleveland State University	Cleveland	2	57
*Cogswell Polytechnical College	San Francisco	6	15
Colorado State University	Denver	5	55
Colorado, University of	Denver	5	197
Colorado, University of, Denver Center	Denver	5	26
Columbia University	New York	1	102
Concepcion, Universidad de	Chile	9	5
Connecticut, University of	Connecticut	1	79
Cooper Union	New York	1	40
Cornell University	Ithaca	1	86
Dayton, University of	Dayton	2	45
*Dayton, University of, Technical Institute	Dayton	2	19
** *Del Mar College	Corpus Christi	5	46
Delaware, University of	Delaware Bay	2	47
Denver, University of	Denver	5	26
Detroit Institute of Technology	Southeastern Michigan	4	20
Detroit, University of	Southeastern Michigan	4	44
*DeVry Institute of Technology (Illinois)	Chicago	4	147
*DeVry Institute of Technology (Canada)	Toronto	7	11
Drexel Institute of Technology (Day Division)	Philadelphia	2	125
Drexel Institute of Technology (Evening College)	Philadelphia	2	62
Duke University	North Carolina	3	35
Ecole Polytechnique	Montreal	7	188
Ecole Superieure d'Electricite	France	8	15
Ecole Superieure d'Ingenieurs d'Electrotechnique et d'Electronique	France	8	43
*Electronics Institute of Technology	Southeastern Michigan	4	16
Escola Politecnica Universidade de Sao Paulo	Sao Paulo	9	28
** *Escuela Politecnica Nacional		9	16
**Escuela Superior de Ingenieria Mecanica y Electrica	Mexico	9	3
Escuela Tecnica Superior de Ingenieros de Telecomunicacion	Spain	8	73
*Escuela de Tecnicos	Venezuelan	9	-
Evansville, University of	Evansville-Owensboro	3	26
Fairleigh Dickinson University (Day Division)	North Jersey	1	50
Fairleigh Dickinson University (Evening Division)	North Jersey	1	27
** *Fayetteville Technical Institute	Eastern North Carolina	3	37
Florida Institute of Technology	Canaveral	3	68
Florida, University of	Gainesville	3	157
*Franklin Institute of Boston	Boston	1	85
*Franklin University	Columbus	2	11
Fresno State College	San Francisco	6	48
Gannon College	Erie	2	27
*Gaston College	North Carolina	3	1
**General Motors Institute	Northeastern Michigan	4	21
**Genova, University of	North Italy	8	47
George Washington University	Washington	2	55
Georgia Institute of Technology	Atlanta	3	177
Gonzaga University	Spokane	6	15
Grove City College	Sharon	2	48
Hartford, University of	Connecticut	1	63
Hawaii, University of	Hawaii	6	37
*Heald Engineering College	San Francisco	6	77
Helsinki, Technical University of		8	21
Hofstra University	Long Island	1	13
Houston, University of (College of Engineering)	Houston	5	79
*Houston, University of (College of Technology)	Houston	5	124
Howard University	Washington	2	29
*Hudson Valley Community College	Schenectady	1	26

<u>School</u>	<u>Section Location</u>	<u>Region</u>	<u>Membership***</u>
Idaho University of	Spokane	6	42
Illinois Institute of Technology	Chicago	4	91
Illinois, University of (Chicago Circle)	Chicago	4	82
Illinois, University of (Urbana)	Central Illinois	4	195
Indiana Institute of Technology	Fort Wayne	4	46
*Istituto Radiotecnico A. Beltrami	Middle & South Italy	8	5
Instituto Superior de Electronica	Argentina	9	5
Iowa State University of Science & Technology	Central Iowa	4	76
Iowa, University of	Cedar Rapids	4	45
John Carroll University	Cleveland	2	10
Johns Hopkins University, The	Baltimore	2	52
Kansas State University of Agriculture & Applied Science	Kansas City	5	76
Kansas, University of	Kansas City	5	45
Kentucky, University of	Lexington	3	50
Lafayette College	Lehigh Valley	2	35
Lamar State College of Technology	Beaumont	5	58
La Plata, Universidad Nacional de	Argentina	9	13
LaSalle College	Philadelphia	2	70
Laval University	Quebec	7	17
Lawrence Institute of Technology	Southeastern Michigan	4	75
Lehigh University	Lehigh Valley	2	107
**Liege, University of	Benelux	8	73
*Los Angeles Pierce College	San Fernando Valley	6	2
*Los Angeles Trade-Technical College	Santa Monica	6	52
Louisiana Polytechnic Institute	Shreveport	5	53
Louisiana State University	Baton Rouge	3	34
Louisiana State University at New Orleans	New Orleans	3	22
Louisville, University of	Louisville	3	33
Lowell Technological Institute	Boston	1	76
Loyola University of Los Angeles	Santa Monica Bay	6	16
Lund Institute of Technology - Lund University	Sweden	8	20
McGill University	Montreal	7	140
McMaster University	Hamilton	7	57
Maine, University of	Maine	1	51
Manhattan College	New York	1	129
Manitoba, University of	Winnipeg	7	89
Marist College	Mid-Hudson	1	-
Marquette University	Milwaukee	4	117
Maryland, University of	Washington	2	201
Massachusetts Institute of Technology	Boston	1	265
Massachusetts, University of	Springfield	1	83
Memphis State University	Memphis	3	39
Merrimack College	Boston	1	32
Mexico, National Polytechnic Institute of	Mexico	9	5
Mexico, Universidad Nacional Autonoma de	Mexico	9	8
Miami, University of	Miami	3	37
Michigan State University	Southeastern Michigan	4	84
Michigan Technological University	Northeast Wisconsin	4	94
Michigan, University of	Southeastern Michigan	4	127
Milwaukee School of Engineering	Milwaukee	4	167
Minnesota, University of	Twin Cities	4	142
Mississippi State University	Mississippi	3	91
Mississippi, The University of	Memphis	3	30
Missouri, University of (Columbia)	St. Louis	5	107
Missouri, University of (Rolla)	St. Louis	5	370
*Mohawk College of Applied Arts and Technology	Hamilton	7	44
*Mohawk Valley Community College	Mohawk Valley	1	22
Monmouth College	New Jersey Coast	1	27
Montana State University	Montana	6	92
Monterrey, Instituto Tecnologico y de Estudios Superiores de	Mexico	9	27
Nebraska, University of (Lincoln)	Nebraska	4	174
*Nebraska, University of (Omaha)	Nebraska	4	27

<u>School</u>	<u>Section Location</u>	<u>Region</u>	<u>Membership***</u>
Nevada, University of	Sacramento	6	50
Newark College of Engineering (Day Division)	North Jersey	1	136
Newark College of Engineering (Evening Division)	North Jersey	1	65
New Brunswick, University of	Canadian Atlantic	7	36
New Hampshire, University of	New Hampshire	1	79
New Haven, University of	Connecticut	1	48
New Mexico Highlands University	Albuquerque	6	27
New Mexico State University	El Paso	5	91
New Mexico, University of	Albuquerque	6	55
New York, City College of the City University of	New York	1	185
*New York City Community College	New York	1	21
*New York Institute of Technology	New York	1	76
*New York, State University of (Alfred)	Buffalo	1	38
New York, State University of (Buffalo)	Buffalo	1	85
*New York, State University of, Agricultural & Technical Institute (Canton)	Mohawk Valley	1	33
** *New York, State University of, Agricultural & Technical College (Farmingdale)	Long Island	1	24
New York, State University of (Stony Brook)	Long Island	1	57
New York University (Day Division)	New York	1)	181
New York University (Evening Division)	New York	1)	
**North Carolina Agricultural and Technical State University	Central North Carolina	3	17
North Carolina State University	North Carolina	3	174
North Dakota State University	Twin Cities	4	78
North Dakota, University of	Twin Cities	4	42
Northeastern University	Boston	1	206
*Northern Alberta Institute of Technology	Northern Alberta	7	23
*Northern College of Applied Arts & Technology	Canadian Atlantic	7	19
Northrop Institute of Technology	Metropolitan Los Angeles	6	44
Northwestern State University of Louisiana	Shreveport	5	43
Northwestern University	Chicago	4	64
Norwich University	Vermont	1	19
Notre Dame, University of	South Bend	4	63
Nova Scotia Technical College	Canadian Atlantic	7	48
Oakland University	Southeastern Michigan	4	16
Ohio Northern University	Lima	2	39
Ohio State University	Columbus	2	146
*Ohio Technical College	Columbus	2	25
Ohio University	Columbus	2	64
*Oklahoma City University	Oklahoma City	5	1
Oklahoma State University	Tulsa	5	114
Oklahoma, University of	Oklahoma City	5	68
Old Dominion College	Hampton Roads	3	45
Oregon State University	Portland	6	119
*Oregon Technical Institute	Portland	6	44
Ottawa, University of	Ottawa	7	93
*Pacific States University	Metropolitan Los Angeles	6	6
Pacific, University of	Sacramento	6	32
Padova, Universita di	North Italy	8	91
Paris, Institut Supérieur d'Electronique de PMC Colleges	France	8	17
Pennsylvania State University	Philadelphia	2	32
Pennsylvania, University of	Central Pennsylvania	2	237
Pittsburgh, University of	Philadelphia	2	104
Politecnico di Milano	Pittsburgh	2	161
*Pontificia Universidad Javeriana	North Italy	8	33
*Port Arthur College	Colombia	9	29
Portland State College	Beaumont	5	2
Prairie View A & M College	Portland	6	21
Pratt Institute	Houston	5	114
Princeton University	New York	1	66
	Princeton	1	54

<u>School</u>	<u>Section Location</u>	<u>Region</u>	<u>Membership***</u>
Puerto Rico, University of	Puerto Rico & Virgin Islands	9	68
Purdue University	Central Indiana	4	211
**Quebec, University of, at Chicoutimi	Quebec	7	7
Queen's University	Bay of Quinte	7	60
*Queensborough Community College	New York	1	40
*RCA Institutes, Inc.	New York	1	236
*Radio College of Canada	Toronto	7	11
*Radio Engineering Institute	Nebraska	4	74
*Red River Community College	Winnipeg	7	47
Rensselaer Polytechnic Institute	Schenectady	1	136
Rhode Island, University of	Providence	1	38
Rice University	Houston	5	74
Richmond College of the City University of New York	New York	1	24
Rio de Janeiro, Universidad Federal do	Rio de Janeiro	9	44
Rochester Institute of Technology	Rochester	1	46
Rochester, University of	Rochester	1	37
Rome, University of	Middle and South Italy	8	52
Rose Polytechnic Institute	Central Indiana	4	23
Royal Institute of Technology	Sweden	8	18
Royal Military College of Canada	Bay of Quinte	7	13
Rutgers State University	Princeton	1	53
*Ryerson Polytechnical Institute	Toronto	7	13
Sacramento State College	Sacramento	6	63
*St. Clair College of Applied Arts and Technology	Southeastern Michigan	4	12
St. Joseph's College	Philadelphia	2	-
** *St. Lawrence College of Applied Arts and Technology	Bay of Quinte	7	22
St. Louis University	St. Louis	5	24
*San Diego College of Engineering	San Diego	6	18
San Diego State College	San Diego	6	48
San Francisco State College	San Francisco	6	29
San Jose State College	San Francisco	6	142
Santa Clara, University of	San Francisco	6	52
Santander, Universidad Industrial de	Colombia	9	10
Saskatchewan, University of	Regina	7	43
Seattle University	Seattle	6	45
**Sherbrooke, University of	Montreal	7	38
Shizuoka University, Graduate School	Tokyo	10	33
*Sinclair College	Dayton	2	7
Sir George Williams University	Montreal	7	51
South Alabama, University of	Alabama	3	15
South Carolina, University of	South Carolina	3	21
South Dakota School of Mines & Technology	Denver	5	66
South Dakota State University	Twin Cities	4	68
Southeastern Massachusetts University	Providence	1	61
*Southern Alberta Institute of Technology	Southern Alberta	7	111
Southern California, University of	Metropolitan Los Angeles	6	87
Southern Methodist University	Dallas	5	63
*Southern Technical Institute	Atlanta	3	8
Southern University	Baton Rouge	3	25
South Florida, University of (Section Student Unit)	Florida West Coast	3	38
*Southwest Missouri State College	Kansas City	5	24
Southwestern Louisiana, University of	Baton Rouge	3	39
*Spring Garden Institute	Philadelphia	2	18
Stanford University	San Francisco	6	177
Steubenville, College of	Canton	2	22
Stevens Institute of Technology	North Jersey	1	99
*Stout State University	Twin Cities	4	7
Swarthmore College	Philadelphia	2	8
Switzerland Section Student Branch	Switzerland	8	90

School	Section Location	Region	Membership***
Syracuse University	Syracuse	1	53
Technische Hogeschool Twente	Benelux	8	23
*Temple University, College of Engineering Technology	Philadelphia	2	61
Tennessee A & I State University	Nashville	3	27
Tennessee Technological University	Nashville	3	79
Tennessee, University of	East Tennessee	3	113
Texas A & I University	Corpus Christi	5	69
Texas A & M University	Houston	5	150
Texas Technological College	South Plains	5	123
Texas, University of, at Arlington	Central Texas	5	79
Texas, University of, at Austin	Central Texas	5	149
Texas, University of, at El Paso	El Paso	5	46
Toledo, University of	Toledo	4	52
Toronto, University of	Toronto	7	147
Trieste, Universita Degli Studi di	North Italy	8	25
Tri-State College	Fort Wayne	4	30
**Tucuman, Universidad Nacional de	Argentina	9	15
Tufts University	Boston	1	54
Tulane University	New Orleans	3	34
Tulsa, University of	Tulsa	5	30
Tuskegee Institute	Alabama	3	19
Union College	Schenectady	1	58
*Union County Technical Institute	North Jersey	1	24
*Union Technical Institute	North Jersey	1	46
United Kingdom & Republic of Ireland Section Student Branch	United Kingdom & Republic of Ireland	8	51
United States Air Force Academy	Denver	5	6
United States Coast Guard Academy	Connecticut	1	26
**United States Naval Academy	Washington	2	15
United States Naval Postgraduate School	San Francisco	6	61
Universidad de Cauca	Colombia	9	-
Universidad Distrital Francisco Jose de Caldas	Colombia	9	14
Universidad Nacional de Colombia	Colombia	9	8
Universidad Nacional de Ingenieria	Peru	9	3
Universidad Nacional del Sur	Argentina	9	8
Uppsala, University of	Sweden	8	13
Utah State University	Utah	6	60
Utah, University of	Salt Lake City	6	91
*Valparaiso Technical Institute	South Bend	4	145
Valparaiso University	South Bend	4	46
Vanderbilt University	Nashville	3	61
Venezuela, Universidad Central de	Venezuela	9	6
*Vermont Technical College	Vermont	1	16
Vermont, University of	Vermont	1	16
Villanova University	Philadelphia	2	48
Virginia Military Institute	Virginia Mountain	3	23
Virginia Polytechnic Institute	Virginia Mountain	3	136
Virginia, University of	Central Virginia	3	38
*Virginia Western Community College	Virginia Mountain	3	10
*Voorhees Technical Institute	New York	1	36
*Ward Technical Institute	Connecticut	1	32
Washington State University	Spokane	6	47
Washington University	St. Louis	5	63
Washington, University of	Seattle	6	164
Waterloo, University of	Kitchener-Waterloo	7	95
Wayne State University	Southeastern Michigan	4	74
*Wentworth Institute	Boston	1	2
Western Michigan University	West Michigan	4	33
Western New England College	Springfield	1	30
West Virginia Institute of Technology	West Virginia	2	53
West Virginia University	Pittsburgh	2	47
Wichita State University	Wichita	5	47
Windsor, University of	Southeastern Michigan	4	27



School	Section Location	Region	Membership***
*Wisconsin State University	Madison	4	27
Wisconsin, University of, at Madison	Madison	4	256
**Wisconsin, University of, at Milwaukee	Milwaukee	4	20
Worcester Polytechnic Institute	Worcester	1	99
Wyoming, University of	Denver	5	60
Yale University	Connecticut	1	20
Youngstown University	Sharon	2	26

\*IEEE Student Associate Branches  
 \*\*Established in 1970  
 \*\*\*Membership as of December 31, 1970

Group No.	Group Name	Students	Members	Total	1970	1969	1968	1967
1	Audio & Electroacoustics	257	4,415	4,672	2,075	2,000	4,210	4,484
2	Biomedical Engineering	151	7,876	8,027	2,182	1,000	2,000	4,181
3	Antennas & Propagation	688	4,328	5,016	1,022	1,000	2,000	4,022
4	Circuit Theory	2,118	7,025	9,143	10,212	10,212	10,212	10,212
5	Nuclear Science	306	2,118	2,424	2,118	2,118	2,118	2,118
6	Remote Sensing	227	2,278	2,505	2,278	2,278	2,278	2,278
7	Reliability	18	2,225	2,243	2,243	2,243	2,243	2,243
8	Robotics & Test Methods	199	2,230	2,429	2,230	2,230	2,230	2,230
9	Instrumentation & Measurements	437	4,280	4,717	4,717	4,717	4,717	4,717
10	Aerospace & Astronautics	784	7,261	8,045	8,045	8,045	8,045	8,045
11	Information Theory	1,123	4,800	5,923	5,923	5,923	5,923	5,923
12	Industrial Electronics	107	2,190	2,297	2,297	2,297	2,297	2,297
13	Industrial Control Systems	673	6,203	6,876	6,876	6,876	6,876	6,876
14	Engineering Mathematics	2,111	7,447	9,558	9,558	9,558	9,558	9,558
15	Electronic Packaging	1,318	14,313	15,631	15,631	15,631	15,631	15,631
16	Computer	300	2,887	3,187	3,187	3,187	3,187	3,187
17	Microvoltage Theory & Practice	1,209	4,122	5,331	5,331	5,331	5,331	5,331
18	Engineering in Health Care	1,273	8,239	9,512	9,512	9,512	9,512	9,512
19	Computerized Control Systems	110	1,212	1,322	1,322	1,322	1,322	1,322
20	Space & Astronautics	1,003	1,922	2,925	2,925	2,925	2,925	2,925
21	Energy, Materials & Packaging	1,822	2,313	4,135	4,135	4,135	4,135	4,135
22	Automatic Control	1,000	1,900	2,900	2,900	2,900	2,900	2,900
23	Education	221	1,974	2,195	2,195	2,195	2,195	2,195
24	Programming with the 8080	43	1,737	1,780	1,780	1,780	1,780	1,780
25	Engineering in Health Care	1,088	4,409	5,497	5,497	5,497	5,497	5,497
26	Systems, Man & Computers	226	1,237	1,463	1,463	1,463	1,463	1,463
27	Acoustic & Electroacoustics	1,170	13,009	14,179	14,179	14,179	14,179	14,179
28	Power	48	1,264	1,312	1,312	1,312	1,312	1,312
29	Electronics	161	2,122	2,283	2,283	2,283	2,283	2,283
30	Industry & Government	308	2,426	2,734	2,734	2,734	2,734	2,734
31	Systems, Man & Computers	-	-	-	-	-	-	-
		<u>22,222</u>	<u>136,208</u>	<u>160,283</u>	<u>127,204</u>	<u>142,289</u>	<u>138,208</u>	

## SECTION C

TABLE 1 - IEEE GROUP MEMBERSHIP, DECEMBER 31, 1970; 4-YEAR COMPARISON

Group No.	Group Name	Students	Members	1970 Total	1969 Total	1968 Total	1967 Total
1	Audio & Electroacoustics	887	4,412	5,299	5,075	4,572	4,488
2	Broadcasting	271	1,916	2,187	2,090	2,009	1,918
3	Antennas & Propagation	688	4,338	5,026	5,203	4,937	4,882
4	Circuit Theory	2,315	7,962	10,277	10,167	8,868	7,963
5	Nuclear Science	306	2,169	2,475	2,510	2,453	2,364
6	Vehicular Technology	227	2,278	2,505	2,359	2,192	2,088
7	Reliability	79	2,525	2,604	2,638	2,486	2,622
8	Broadcast & Television Receivers	299	2,230	2,529	2,430	2,299	2,238
9	Instrumentation & Measurements	457	4,280	4,737	4,848	4,732	4,848
10	Aerospace & Electronics Systems	764	7,681	8,445	9,092	9,150	9,762
12	Information Theory	1,063	4,800	5,863	5,209	4,558	4,465
13	Industrial Electronics & Control Instrumentation	337	3,190	3,527	3,473	3,293	3,474
14	Engineering Management	613	6,203	6,816	6,725	6,293	6,167
15	Electron Devices	2,141	7,447	9,588	9,959	9,175	8,160
16	Computer	3,318	14,313	17,631	16,862	14,982	13,240
17	Microwave Theory & Techniques	900	5,887	6,787	6,920	6,370	6,129
18	Engineering in Medicine & Biology	1,209	4,452	5,661	5,206	4,614	4,267
19	Communication Technology	1,273	8,569	9,842	9,631	8,972	8,377
20	Sonic & Ultrasonics	110	1,275	1,385	1,357	1,246	1,220
21	Parts, Materials & Packaging	41	1,962	2,003	2,108	2,176	2,401
23	Automatic Control	1,622	5,933	7,555	7,425	6,769	6,412
25	Education	190	1,984	2,174	1,966	1,880	1,837
26	Engineering Writing & Speech	221	1,944	2,165	2,202	2,103	2,157
27	Electromagnetic Compatibility	43	1,787	1,830	1,877	1,719	1,679
28	Systems, Man & Cybernetics	1,088	4,409	5,497	1,463	1,225	1,058
29	GeoScience Electronics	226	1,531	1,757	1,707	1,571	1,543
31	Power	1,170	13,809	14,979	13,873	12,897	12,161
32	Electrical Insulation	48	1,281	1,329	1,246	1,139	1,095
33	Magnetics	161	2,155	2,316	2,134	2,019	1,953
34	Industry & General Applications	308	5,486	5,794	5,287	4,713	4,151
35	Systems Science & Cybernetics	-	-	-	4,762	3,987	3,486
		<u>22,375</u>	<u>138,208</u>	<u>160,583</u>	<u>157,804</u>	<u>145,399</u>	<u>138,605</u>

Student Members With Group Membership

11,894

10,431

Grades Other Than Student With Group Membership

80,528

70,463

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

SECTION C																																
REGION 1																																
Section	Total Affiliates	Total Group Members	A&G G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I H G-9	AES G-10	IT G-12	IECI G-13	EM G-14	ED G-15	C G-16	MTT G-17	EMB G-18	Com Tech G-19	SU G-20	PMP G-21	AC G-23	E G-25	EMS G-26	EMC G-27	SMC G-28	GeoS G-29	P G-31	EI G-32	MAG G-33	IGA G-34
Berkshire	-	219	5	1	1	8	1	3	4	1	8	10	2	3	14	5	16	-	4	1	1	10	10	-	5	9	5	2	73	10	5	2
Binghamton	1	592	15	5	9	35	7	4	32	9	12	43	14	7	33	25	121	22	15	11	7	10	36	5	12	19	21	5	33	3	12	10
Boston	50	6,530	216	46	251	380	72	70	113	64	240	379	333	112	309	431	863	378	274	379	75	115	275	61	62	57	275	92	350	30	113	115
Lynn	2	358	7	-	7	25	6	3	8	2	17	23	9	15	15	29	43	16	8	16	3	6	17	3	8	5	11	3	27	6	4	16
Merrimack Valley	6	1,012	21	4	41	95	16	10	23	16	30	58	39	12	46	71	122	82	27	74	7	15	40	12	12	7	30	16	48	8	13	17
Buffalo	3	779	14	11	26	41	6	12	12	27	17	43	40	23	25	26	74	22	26	30	4	9	60	4	16	5	26	7	66	11	11	85
Connecticut	8	1,228	50	20	23	85	28	16	12	20	54	48	37	57	35	57	106	33	67	49	15	15	66	14	8	11	45	13	139	11	16	78
Fairfield County	6	1,005	42	21	16	72	15	12	23	23	32	49	26	19	50	58	129	44	36	75	18	26	20	7	12	14	27	14	55	10	26	34
New London	2	377	27	3	18	24	9	2	6	3	10	8	27	4	25	17	38	6	21	19	6	2	21	7	6	7	25	4	18	6	2	6
Elmira-Corning	-	130	2	5	1	6	2	2	3	3	4	2	2	3	8	18	11	3	3	2	1	6	6	1	2	1	4	1	8	3	8	9
Ithaca	4	255	10	2	8	29	2	1	2	1	4	4	24	4	6	31	32	18	11	9	1	-	14	5	-	1	19	2	8	1	2	4
Long Island	14	3,576	114	49	176	209	52	55	109	54	90	359	134	64	177	153	354	279	113	186	39	65	148	35	52	63	116	28	182	16	48	57
Maine	1	269	10	10	11	13	4	5	6	6	8	5	6	8	8	14	17	14	11	13	3	4	6	7	3	-	5	6	41	2	2	21
Mid-Hudson	6	752	15	6	3	72	4	6	18	5	17	14	21	14	41	128	216	11	10	22	4	8	17	14	5	-	21	2	32	3	18	5
Catskill	2	177	4	4	4	11	1	-	4	2	2	-	3	1	7	7	59	1	3	6	-	6	6	1	1	5	6	1	11	1	14	6
Mohawk Valley	2	435	8	3	18	19	2	3	25	3	7	54	16	-	29	25	73	20	6	37	-	3	14	3	5	28	16	7	7	1	-	3
St. Lawrence Int'l.	-	109	-	-	-	7	-	2	-	3	2	3	9	3	5	6	13	-	-	4	1	-	13	10	1	-	9	1	12	-	1	4
New Hampshire	1	664	27	6	35	57	5	12	9	8	20	41	19	9	30	29	74	50	22	42	4	4	18	10	9	6	18	10	58	9	11	12
New Jersey Coast	3	1,594	42	12	54	91	16	34	25	14	37	77	108	11	62	111	187	98	31	298	12	26	27	16	23	55	69	6	24	5	12	11
New York	46	5,001	204	98	106	355	71	54	73	116	128	214	215	91	207	247	597	169	300	396	39	42	198	58	96	38	214	40	409	40	38	148
Westchester	12	1,340	51	27	24	63	21	21	18	25	51	55	42	28	71	81	203	42	65	97	17	21	28	18	24	11	45	15	94	15	26	41
North Jersey	21	4,767	135	57	100	322	60	70	97	93	164	247	159	100	229	288	534	228	155	350	36	77	188	43	75	51	147	31	428	55	77	171
Princeton	7	1,460	45	22	27	95	26	19	22	35	37	49	52	25	50	200	196	70	60	76	13	18	56	15	26	11	50	13	75	6	43	28
Providence	2	723	40	6	17	42	5	6	13	7	24	38	44	28	27	40	65	15	29	34	14	12	41	15	9	5	24	26	56	17	8	16
Rochester	6	836	40	8	14	47	13	12	19	11	26	30	30	27	52	52	88	11	39	86	19	15	31	8	16	5	19	5	65	9	12	27
Schenectady	6	1,034	20	12	18	50	28	9	9	7	32	22	18	15	32	96	67	43	28	37	10	11	51	23	5	11	34	11	205	12	18	100
Adirondack	2	141	5	2	-	10	5	2	3	-	4	3	6	6	6	8	10	3	1	8	-	1	8	1	1	-	4	3	26	4	1	10
Springfield	1	252	11	7	15	13	3	-	1	9	4	5	12	4	7	15	27	17	8	6	3	1	14	12	2	1	10	2	30	7	1	5
Syracuse	2	1,055	33	16	63	90	8	10	16	36	24	85	70	11	39	102	93	66	19	34	7	19	30	13	13	13	33	1	56	5	5	45
Vermont	1	245	1	4	8	21	3	1	11	-	10	4	4	4	5	37	35	7	13	7	3	4	11	5	2	4	6	-	15	-	16	4
Worcester County	3	352	12	6	3	27	3	2	4	4	13	7	8	3	12	28	49	16	23	10	2	3	13	9	3	5	11	2	55	4	8	7
<b>TOTAL</b>	<b>220</b>	<b>37,267</b>	<b>1,226</b>	<b>473</b>	<b>1,097</b>	<b>2,414</b>	<b>494</b>	<b>458</b>	<b>720</b>	<b>607</b>	<b>1,128</b>	<b>1,979</b>	<b>1,529</b>	<b>711</b>	<b>1,662</b>	<b>2,435</b>	<b>4,512</b>	<b>1,784</b>	<b>1,428</b>	<b>2,414</b>	<b>364</b>	<b>554</b>	<b>1,483</b>	<b>435</b>	<b>514</b>	<b>448</b>	<b>1,345</b>	<b>369</b>	<b>2,706</b>	<b>310</b>	<b>571</b>	<b>1,097</b>

## SECTION C

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

Section	Total Affiliates	Total Group Members	A & E G-1	B G-2	AP G-3	CT G-4	NS G-5	VT G-6	R G-7	BTR G-8	IM G-9	AES G-10	IT G-12	IECI G-13	EM G-14	ED G-15	C G-16	MTT G-17	EMB G-18	COMM TECH G-19	SU G-20	PMP G-21	AC G-23	E G-25	GIS G-26	EMC G-27	SMC G-28	Geo S G-29	P G-31	EI G-32	MAG G-33	IGA G-34
Akron	1	351	10	4	16	17	2	7	1	3	11	8	2	15	7	13	31	15	6	10	1	3	20	4	4	1	6	5	74	3	-	52
Allegheny Mountain	1	59	1	2	-	4	-	-	2	4	2	-	-	3	3	6	3	1	-	3	2	7	-	1	1	-	-	-	5	-	5	4
Baltimore	6	1,579	41	17	51	83	23	16	43	9	42	148	85	20	77	124	91	52	100	10	21	51	12	17	20	38	15	169	8	18	101	
Annapolis	1	492	10	1	19	32	3	6	12	7	9	65	18	3	28	31	45	28	6	25	4	3	26	2	10	40	14	7	17	5	6	10
Eastern Shore	-	43	2	2	-	2	-	2	1	1	1	3	1	2	2	-	4	-	-	1	-	-	1	-	1	-	1	14	-	-	2	
Canton	2	144	4	3	4	14	2	4	3	3	3	3	2	7	4	9	8	3	4	5	1	-	2	1	-	2	1	-	40	1	-	11
Central Pennsylvania	2	351	14	6	16	31	8	4	6	8	4	18	23	3	10	29	40	24	8	13	8	3	16	8	1	2	14	1	23	1	3	6
Cincinnati	4	518	34	14	6	36	9	13	2	3	14	8	9	23	16	24	40	11	22	17	1	7	40	10	5	5	11	-	84	5	4	45
Cleveland	10	1,437	48	35	17	75	30	41	15	15	62	37	25	77	50	67	112	23	70	49	18	15	84	16	19	6	51	6	177	12	14	171
Columbus	5	1,123	19	2	67	72	15	23	10	7	34	48	46	34	42	72	131	50	38	90	8	9	84	16	12	5	46	7	87	4	19	26
Zanesville	-	16	-	-	-	1	-	-	-	-	-	-	-	-	1	-	1	-	1	1	-	-	1	-	-	1	-	-	6	-	-	3
Dayton	6	1,213	36	4	36	54	12	11	23	12	30	117	42	13	124	83	186	31	40	40	7	11	71	13	17	15	62	7	65	7	13	31
Delaware Bay	2	272	12	2	5	16	2	-	1	-	9	8	6	6	7	10	32	7	7	5	2	5	14	2	4	2	13	3	39	17	8	28
Erie	1	164	6	-	2	9	-	3	4	-	4	12	1	5	9	6	5	2	2	6	2	5	5	1	5	6	2	1	18	2	3	38
Johnstown	-	113	3	3	2	8	4	1	1	1	1	6	1	4	1	6	10	2	1	4	1	2	3	-	1	-	-	30	3	-	14	
Lehigh Valley	5	771	21	10	7	42	20	6	5	7	22	15	13	18	23	123	66	34	20	23	8	10	15	17	13	2	8	7	157	5	18	36
Lima	-	79	-	-	-	4	-	3	-	1	4	14	1	2	7	6	5	2	1	3	-	1	1	2	1	1	3	-	9	1	-	7
North Central Ohio	-	134	2	1	3	6	-	2	3	1	2	4	5	4	7	6	11	2	2	22	2	1	4	3	1	2	3	1	21	1	2	10
Ohio Valley	-	40	-	1	2	2	-	-	-	-	1	2	-	2	-	3	1	1	1	2	-	-	1	-	-	-	1	-	11	1	-	8
Philadelphia	43	4,950	165	90	115	254	40	73	109	83	138	344	186	99	232	210	611	167	222	321	35	117	188	74	73	63	188	39	395	33	88	198
Pittsburgh	10	1,979	38	25	11	95	50	30	16	15	56	33	34	71	79	128	173	20	67	46	21	7	89	24	28	10	89	18	413	42	46	205
Upper Monongahela	2	67	3	-	3	3	2	1	-	1	5	3	-	2	-	3	10	2	3	5	-	-	3	2	-	-	-	10	3	-	3	
Sharon	1	186	4	3	3	6	4	2	-	1	3	3	1	11	3	5	9	3	5	4	-	-	11	6	1	-	6	3	53	7	3	26
Southern New Jersey	-	106	5	1	6	4	-	2	4	1	4	14	-	2	6	7	11	2	5	6	-	-	4	1	1	-	5	-	12	1	-	2
Susquehanna	2	306	14	7	5	23	10	3	9	19	8	12	4	8	18	30	11	18	8	13	7	7	6	3	3	4	1	1	31	3	3	17
Washington	68	7,408	265	136	381	367	120	141	127	86	210	730	412	54	467	272	763	332	221	816	62	61	225	53	106	168	310	116	258	23	55	71
West Virginia	-	101	4	4	6	4	-	2	1	-	1	2	1	3	4	2	8	4	3	6	-	-	6	3	1	1	-	-	19	-	-	16
	172	24,002	761	373	783	1,264	356	396	398	288	680	1,657	918	491	1,227	1,228	2,451	875	815	1,636	200	295	971	274	325	356	872	238	2,237	188	308	1,141

## SECTION C

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

REGION 3 Section	Total Affiliates	Total Group Members	SECTION C																														
			A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-11	IECI G-12	E M G-13	E D G-14	C G-15	MTT G-16	EMB G-17	Comm Tech G-18	SU G-19	PMP G-20	AC G-21	E G-22	EWS G-23	EMC G-24	SMC G-25	GeoS G-26	P G-27	EI G-28	MAG G-29	IGA G-30	
Alabama	-	438	15	3	18	20	6	5	-	3	7	7	12	10	13	17	32	11	14	47	1	-	27	17	5	3	6	-	116	6	4	13	
Atlanta	3	959	39	25	47	62	8	20	3	13	24	55	34	13	24	29	71	45	27	112	4	3	45	14	11	23	30	5	112	9	6	46	
Macon-Warner-Robins	-	30	-	-	1	4	-	-	1	-	-	5	-	1	1	2	3	2	-	2	-	-	2	1	1	1	-	2	-	-	1		
Rome	-	31	1	-	-	1	1	-	-	-	-	-	-	-	1	1	1	-	-	1	-	-	-	-	-	1	-	-	14	6	1	2	
Baton Rouge	1	129	3	1	4	6	3	-	-	-	4	2	7	4	5	5	7	3	4	6	-	-	13	8	1	1	2	2	22	-	2	14	
Canaveral	1	527	14	5	24	27	5	4	21	1	18	85	27	-	54	33	58	16	16	46	2	-	13	-	8	7	7	4	29	-	1	2	
Central North Carolina	-	166	8	3	8	8	-	2	1	1	3	14	11	6	8	8	27	9	2	8	-	1	13	4	4	-	1	1	6	2	1	6	
Central Virginia	2	384	8	5	7	20	8	36	2	5	6	13	15	10	20	13	30	10	17	32	3	8	31	8	7	7	9	1	30	2	5	16	
Charlotte	1	257	10	7	3	8	3	1	2	-	8	4	3	6	5	9	11	3	2	31	-	1	5	2	3	-	2	2	93	8	1	24	
Chattanooga	1	190	3	2	3	1	3	3	2	1	1	1	1	3	4	2	5	4	-	22	1	2	4	1	1	-	1	-	109	1	-	9	
Dayton	-	109	3	-	1	3	-	-	5	-	4	7	2	-	7	2	29	2	2	7	-	1	6	1	1	2	7	2	13	1	-	1	
Eastern North Carolina	4	648	25	10	19	37	7	8	7	9	19	19	36	17	19	28	88	32	42	60	5	10	19	14	5	1	26	7	44	4	14	17	
East Tennessee	-	229	6	1	3	10	10	2	2	3	6	5	4	5	8	11	22	1	6	13	-	-	12	2	5	-	5	2	70	1	-	14	
Upper East Tennessee	-	48	1	1	2	3	-	2	1	3	1	2	1	2	1	2	6	1	-	1	-	-	1	-	-	-	2	-	9	-	-	6	
Evansville-Owensboro	-	130	5	3	2	9	3	2	3	6	5	2	3	5	7	15	6	6	4	4	-	2	5	2	3	1	1	-	14	-	2	10	
Paducah	1	14	1	-	1	1	-	-	-	-	-	-	-	3	-	-	3	-	-	-	-	-	1	-	-	-	-	-	2	1	-	1	
Florida West Coast	1	788	31	14	11	45	13	21	22	8	15	37	20	12	34	38	62	43	14	83	4	10	25	6	9	10	11	9	135	4	16	26	
Fort Walton	-	83	2	1	3	4	-	-	-	4	9	2	1	9	6	8	7	2	5	-	-	4	-	2	3	3	1	7	-	-	-	-	
Gainesville	1	279	13	-	8	30	1	1	3	-	6	7	15	1	7	38	37	8	19	12	-	1	19	8	1	1	15	4	19	-	2	3	
Hampton Roads	4	369	11	2	11	30	15	8	9	19	11	39	13	10	24	22	29	13	5	14	2	4	13	4	8	3	10	4	22	1	1	12	
Huntsville	5	502	8	1	27	19	8	4	20	1	19	82	16	7	39	13	66	25	11	21	2	5	61	6	4	7	16	3	5	-	2	4	
Muscle Shoals	-	22	1	1	-	1	-	-	-	-	-	-	-	-	3	1	2	-	1	5	-	1	-	-	2	-	-	1	1	-	-	2	
Jacksonville	-	97	-	3	-	2	1	5	1	2	1	2	1	1	4	-	6	-	3	18	-	-	2	1	-	-	1	-	31	2	-	10	
Lafayette	-	57	1	3	3	3	-	-	-	-	3	1	3	2	4	1	2	2	4	-	-	2	2	-	-	1	-	15	-	-	-	5	
Lexington	-	125	6	1	1	3	1	1	1	2	3	2	4	2	3	7	22	3	9	6	1	2	9	1	3	2	6	1	13	1	1	8	
Louisville	-	132	5	5	4	6	2	3	-	1	4	3	5	10	3	3	10	3	6	10	-	1	7	2	2	2	2	-	19	-	1	13	
Memphis	5	307	11	6	19	16	5	5	1	4	5	2	8	5	5	13	24	19	21	11	1	-	9	10	3	1	6	4	72	2	5	14	
Jackson	-	32	3	-	-	5	-	2	1	-	-	2	-	1	-	-	2	1	-	6	-	2	-	-	-	-	-	7	-	-	-	-	
Miami	3	630	34	14	14	30	7	16	13	10	21	33	13	11	30	20	58	12	27	28	7	7	12	5	13	6	11	136	4	8	19		
Middle Tennessee	-	63	-	-	-	1	-	-	-	-	4	13	-	1	2	3	3	1	4	1	1	-	-	-	-	-	-	-	10	-	-	9	
Mississippi	-	110	5	3	4	6	1	2	-	1	4	3	1	2	4	5	7	1	8	8	1	-	5	2	-	2	4	3	26	-	-	2	
Northeast Mississippi	3	117	2	2	7	10	-	1	-	3	1	2	2	1	1	11	22	6	5	6	-	-	12	3	6	1	2	-	9	-	1	1	
Mobile	-	83	2	1	-	5	2	1	-	1	5	3	1	8	2	1	6	3	1	6	1	-	8	2	2	-	-	13	-	-	9		
Nashville	-	240	10	14	7	18	2	2	2	2	5	3	4	8	7	14	22	10	10	14	1	2	23	6	2	1	8	-	29	1	1	12	
New Orleans	9	424	15	8	18	16	2	8	2	7	13	15	9	13	23	13	26	11	24	44	1	-	15	4	4	12	6	2	88	1	1	23	
Oak Ridge	1	80	1	-	-	3	3	-	-	-	4	1	1	3	1	4	6	1	6	-	-	-	1	-	2	-	-	1	12	-	1	1	
Orlando	2	373	13	5	12	14	7	10	4	5	7	42	10	8	16	15	43	25	8	40	6	2	25	5	4	13	7	2	13	1	4	7	
Palm Beach	-	237	5	2	5	17	3	-	3	3	7	8	3	4	17	24	50	6	8	8	2	4	7	5	2	5	7	6	20	-	3	3	
Panama City	-	63	1	1	1	2	1	1	-	-	-	5	3	1	7	5	7	1	2	3	2	-	4	1	2	1	6	1	5	-	-	-	
Pensacola	-	46	2	1	-	3	1	-	-	1	2	4	-	6	1	1	3	-	3	1	-	-	3	-	-	-	2	-	8	-	-	4	
Richmond	-	176	7	5	7	4	2	4	-	1	10	2	1	9	5	5	13	4	6	13	1	-	5	-	1	-	4	1	53	2	-	11	
Savannah	-	35	1	2	2	1	1	1	-	-	-	-	-	4	1	1	2	-	-	3	-	-	-	2	-	-	-	-	10	1	-	3	
South Carolina	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Central Savannah River	1	23	-	-	-	-	2	-	-	-	1	1	-	-	1	-	2	-	4	4	1	-	-	-	-	-	-	-	-	-	-	-	-
Charleston	-	64	5	1	-	3	-	-	-	1	2	5	3	-	4	1	7	1	4	3	-	1	5	1	-	1	2	1	12	-	-	4	
Columbia	-	102	2	6	3	5	7	4	1	2	1	2	1	-	6	7	6	1	2	5	-	4	5	4	3	-	5	-	14	-	1	5	
Piedmont	-	111	1	1	1	3	1	2	1	1	3	4	2	6	4	3	15	2	6	2	1	3	10	4	-	-	6	1	15	2	-	11	
Virginia Mountain	-	199	6	4	5	16	1	1	1	2	2	3	1	14	7	13	15	7	1	4	-	-	23	9	5	-	6	2	28	1	2	20	
Western North Carolina	-	33	1	2	2	-	1	3	-	1	2	2	-	-	1	-	-	-	1	1	-	2	1	1	-	-	-	6	1	-	5		
Winston-Salem	1	127	7	2	2	12	-	1	1	1	7	9	2	-	8	8	9	10	5	9	2	5	4	2	4	1	2	4	5	-	3	2	
TOTALS	50	10,408	364	177	320	553	175	192	136	124	275	569	298	237	458	476	990	371	364	790	53	82	518	170	139	119	248	88	1,546	65	90	431	

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

SECTION C																																	
REGION 4		Total	Total	A&E	B	A P	C T	N S	V T	R	BTR	I M	AES	I T	IECI	E M	E D	C	MTT	EMB	Con	S U	PHP	A C	E	EMS	ENC	SMC	GeoS	P	E I	MAG	IGA
Section	Affiliates	Members	G - 1	G - 2	G - 3	G - 4	G - 5	G - 6	G - 7	G - 8	G - 9	G - 10	G - 12	G - 13	G - 14	G - 15	G - 16	G - 17	G - 18	G - 19	G - 20	G - 21	G - 23	G - 25	G - 26	G - 27	G - 28	G - 29	G - 31	G - 32	G - 33	G - 34	
Arrowhead	-	51	1	2	-	3	-	2	-	1	2	3	-	2	3	4	1	-	-	1	-	-	1	-	-	1	-	-	12	-	-	12	
Calumet	-	215	9	4	7	23	7	7	1	3	5	4	4	6	5	10	15	9	4	8	-	1	12	3	2	-	5	-	31	4	1	25	
Cedar Rapids	3	296	13	3	8	24	3	5	7	5	11	18	9	3	14	12	45	14	16	17	1	3	14	2	3	2	6	3	22	-	4	9	
Central Illinois	11	725	26	9	34	60	11	6	6	6	13	26	29	12	15	61	104	34	15	27	9	4	41	17	5	3	34	11	82	3	4	18	
Central Indiana	9	1,084	50	16	23	89	10	16	12	48	28	24	65	17	34	77	105	31	21	50	5	11	71	35	14	6	38	8	117	5	20	38	
Bloomington	3	71	3	3	1	4	2	1	1	6	1	3	-	-	4	5	4	1	2	3	-	1	2	-	-	1	-	18	3	-	2		
Central Iowa	4	265	5	2	12	18	5	2	1	2	3	11	6	2	5	11	31	15	10	9	2	2	19	16	2	-	11	2	41	1	9	10	
Chicago	21	2,329	104	28	53	159	46	47	35	84	53	50	66	72	137	110	220	68	95	154	23	33	96	28	37	22	60	12	273	22	31	111	
Fox Valley	2	865	32	6	8	52	31	22	9	27	19	16	14	20	51	30	160	17	19	85	4	10	17	6	13	9	18	3	110	10	9	38	
Northwest	6	1,426	79	19	22	77	16	52	27	97	46	39	19	42	110	68	109	37	50	83	19	26	27	7	24	25	27	10	142	16	31	80	
Fort Wayne	2	348	11	6	7	24	3	9	4	27	9	22	10	4	18	15	19	17	8	20	1	6	8	5	3	3	8	3	42	15	6	15	
Illinois Valley	1	109	1	1	4	9	2	2	2	2	2	3	2	7	11	6	10	2	1	4	-	-	5	3	4	-	2	1	11	2	-	10	
Iowa-Illinois	-	132	5	1	2	5	-	-	2	-	1	2	1	3	4	5	9	2	5	1	2	-	9	-	5	-	6	-	49	-	-	13	
Burlington	-	8	-	-	-	-	-	-	-	-	1	-	1	-	-	1	-	-	1	1	-	-	-	-	-	-	-	-	2	-	-	1	
Madison	3	566	19	7	16	44	8	4	3	10	20	13	9	12	18	46	78	21	33	26	3	1	42	22	6	-	27	9	55	1	5	8	
Milwaukee	7	1,337	36	20	9	77	14	20	18	19	40	32	10	49	58	63	105	23	57	50	8	18	96	13	18	12	36	10	199	21	36	170	
Racine-Kenosha	-	113	2	-	-	4	1	3	2	1	6	6	-	9	7	4	10	2	3	3	2	1	11	1	-	1	2	1	12	1	6	12	
Nebraska	-	509	15	10	7	52	7	11	3	12	16	13	9	13	10	31	37	6	26	30	6	2	22	8	10	6	14	9	110	1	-	13	
Northeast Michigan	-	180	2	-	2	8	8	5	3	2	11	5	3	8	5	11	12	2	3	7	4	3	7	2	2	5	4	2	25	8	4	17	
Northeastern Wisconsin	-	252	10	6	7	24	3	6	4	2	4	8	4	5	8	13	28	4	6	11	2	-	14	11	2	-	5	2	47	-	3	13	
Rock River Valley	-	223	11	3	1	19	3	2	5	2	9	8	2	20	12	15	20	4	4	13	2	2	9	4	3	3	4	1	20	3	2	17	
Siouxland	-	56	6	4	1	3	-	1	-	1	-	1	-	1	1	3	3	3	1	6	-	1	1	-	-	-	-	15	1	1	2		
South Bend	3	362	31	6	10	26	6	1	6	6	11	13	21	6	15	22	29	13	16	16	4	1	27	7	2	-	10	4	21	4	6	22	
Southeastern Michigan	15	2,641	79	30	85	154	26	99	19	26	67	90	100	80	73	153	308	93	95	111	11	20	137	48	26	15	115	18	370	10	38	145	
Southern Minnesota	1	178	7	3	2	9	4	7	4	4	5	3	3	4	8	9	48	-	15	6	1	3	6	1	2	6	9	1	4	-	1	3	
Toledo	2	321	17	1	6	22	1	9	2	4	9	3	4	21	6	20	27	8	14	5	7	5	29	9	1	2	16	2	36	3	4	28	
Twin Cities	23	1,844	64	15	14	122	16	16	38	8	45	68	62	31	76	101	397	27	82	91	9	24	102	21	30	14	70	8	158	14	81	40	
Red River Valley	-	191	6	5	7	12	3	2	3	5	2	8	10	1	11	5	13	4	7	11	1	1	8	5	4	2	6	4	37	2	1	5	
West Michigan	2	223	7	7	4	21	1	8	3	4	6	6	4	11	7	14	18	2	7	12	1	2	9	4	5	2	10	2	20	5	4	17	
	118	16,920	651	217	352	1,144	237	365	220	414	445	498	467	461	726	925	1,965	459	616	861	127	181	842	278	223	140	543	126	2,081	155	307	894	

Summary table with columns for various regions and sections, including totals for each category.

TABLE 2 - 1970 IEEG GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

Main data table with columns for Affiliates, Total Group Members, and 34 sections (A-E, G-1 to G-34). Rows list various regions like Arkansas, Beaumont, etc.

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SECTION 6

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP BY GROUP BY REGION BY SECTION

Region	Section	Total IEEE Members	A.P. 6-1	A.P. 6-2	A.P. 6-3	C.Y. 6-4	N.S. 6-5	V.T. 6-6	V.T. 6-7	B.T. 6-8	B.T. 6-9	W. 6-10	A.E.S. 6-11	IT 6-12	IEEE 6-13	E.M. 6-14	E.D. 6-15	C 6-16	MT 6-17	ENG Techs 6-18	S.U. 6-19	PPS 6-20	A.C 6-21	E 6-22	EWS 6-23	EMC 6-24	SNC 6-25	GenS 6-26	P 6-27	E.T 6-28	MAG 6-29	TOA 6-30		
Alamogordo-Holoman		61																																
Alaska		103																																
Albuquerque		4																																
Los Alamos-Santa Fe		83																																
Antelope Valley		43																																
Boise		55																																
Buenaventura		2																																
China Lake		135																																
Foothill		8																																
Fort Huachuca		2																																
Hawii		2																																
Idaho		1																																
Las Vegas		1																																
Met Los Angeles		11																																
Montana		6																																
Billings		15																																
Butte		22																																
Helena		60																																
Orange County		19																																
Phoenix		7																																
Portland		5																																
Eugene		1																																
Richland		1																																
Yolla Bolla		18																																
Sacramento		1																																
Reno		1																																
San Joaquin		59																																
Shasta		1																																
San Diego		15																																
San Fernando Valley		14																																
San Francisco		9																																
East Bay		18																																
Golden Gate		4																																
San Clara		35																																
San Gabriel Valley		5																																
San Barbara		3																																
Santa Monica Bay		22																																
Seattle		10																																
South Bay Harbor		12																																
Spokane		3																																
Grand Coulee Dam		13																																
Tucson		4																																
Utah		2																																
Vandalberry		134																																
Wenatchee		27																																
		223																																
		30,544																																

\*Los Angeles Council



TABLE 2 - 1970 IEEE MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

SECTION C

REGION 7																																			
Section	Total Affiliates	Total Group Members	A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-12	IECI G-13	E M G-14	E D G-15	C G-16	MTT G-17	EMB G-18	Comm Tech G-19	S U G-20	PMP G-21	A C G-23	E G-25	EMS G-26	ENC G-27	SMC G-28	GeoS G-29	P G-31	E T G-32	MAG G-33	IGA G-34			
Bay of Quinte	-	311	6	4	9	24	4	3	2	-	9	11	14	14	6	16	24	13	8	14	3	3	27	6	3	5	9	2	30	7	6	29			
Hamilton	2	301	10	1	3	16	1	1	1	11	5	5	9	10	9	21	34	7	10	11	2	3	21	1	6	-	7	2	57	6	3	28			
Kitchener-Waterloo	-	276	15	3	12	24	3	6	3	12	2	4	14	5	5	19	31	10	4	11	1	1	26	6	3	-	19	2	21	7	3	4			
London	-	162	13	3	1	9	1	1	-	1	5	2	3	9	12	3	14	-	6	8	3	1	6	2	4	1	5	2	28	2	3	14			
Niagra International	2	130	10	-	2	7	1	-	1	2	3	5	1	7	1	7	11	5	6	4	1	4	7	3	1	-	2	2	19	1	1	16			
Toronto	5	1,871	63	34	52	105	20	44	19	45	58	45	35	70	75	114	158	46	78	93	6	15	68	38	27	16	59	21	301	26	28	112			
Canadian Atlantic	1	192	12	3	7	15	1	2	-	3	5	4	3	6	3	10	14	6	7	18	1	-	10	10	1	-	2	4	35	-	1	9			
New Brunswick	-	85	2	1	2	6	-	1	-	2	-	3	-	7	4	3	2	3	2	5	-	6	4	-	-	1	-	22	1	1	7				
Montreal	4	1,682	54	24	42	95	25	30	24	18	55	50	47	42	67	55	148	73	84	155	10	13	91	28	25	11	69	16	215	21	8	87			
Ottawa	5	944	45	14	36	52	18	10	10	14	37	54	41	15	41	56	111	42	19	108	3	8	41	12	20	9	42	16	48	7	5	10			
Quebec	1	179	7	4	7	11	-	4	2	2	9	3	2	10	8	6	15	7	4	9	2	2	16	1	2	-	2	1	30	3	1	9			
St. Maurice	-	15	-	1	1	-	-	-	-	2	-	-	1	-	2	-	1	1	-	1	-	-	1	-	-	-	-	3	-	-	-	-			
Northern Alberta	3	358	18	5	8	23	6	8	3	4	9	7	6	10	9	33	22	20	21	31	3	-	31	4	10	1	13	7	27	2	3	14			
Regina	-	145	5	1	1	10	-	1	3	1	5	-	2	7	9	8	11	2	6	11	-	1	11	3	5	-	3	3	24	2	3	7			
Southern Alberta	-	210	15	6	1	15	4	4	-	6	3	6	4	9	3	8	24	8	9	15	1	-	19	2	4	-	7	3	24	1	-	9			
Vancouver	-	628	30	15	19	25	5	16	3	8	17	15	9	30	19	24	43	21	22	53	3	2	35	10	14	6	12	8	118	6	1	39			
Victoria	-	61	3	2	1	2	1	3	-	1	1	-	4	-	1	7	-	1	4	5	-	3	1	-	1	1	5	9	-	-	5				
Winnipeg	-	327	8	5	15	30	5	8	5	3	9	7	6	10	6	22	17	18	18	17	2	3	13	6	4	-	9	2	61	7	-	11			
	23	7,877	316	126	219	469	95	142	76	134	232	222	197	265	279	406	687	283	308	569	41	56	432	137	130	50	262	96	1,072	99	67	410			

REGION 8

REGION 8																																			
Section	Total Affiliates	Total Group Members	A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-12	IECI G-13	E M G-14	E D G-15	C G-16	MTT G-17	EMB G-18	Comm Tech G-19	S U G-20	PMP G-21	A C G-23	E G-25	EMS G-26	ENC G-27	SMC G-28	GeoS G-29	P G-31	E T G-32	MAG G-33	IGA G-34			
Benelux	6	1,267	47	17	41	96	27	21	27	18	55	50	71	39	26	87	132	54	37	64	24	23	69	24	9	18	52	13	52	14	27	33			
Denmark	-	410	19	1	25	39	5	13	11	11	25	13	12	9	16	28	36	28	23	21	6	8	18	5	2	5	13	-	9	4	1	4			
Egypt	-	187	3	3	9	13	3	3	2	10	6	5	9	6	3	13	23	8	4	8	2	2	12	2	3	2	2	14	4	3	8				
France	13	1,441	29	13	46	90	35	17	41	19	52	78	77	39	46	84	161	64	40	63	31	32	101	23	17	11	53	25	51	24	45	34			
Germany (West)	11	617	18	6	25	49	12	7	17	9	19	34	28	11	27	45	55	38	15	35	11	20	25	13	8	9	24	8	13	10	18	8			
Greece	-	79	6	1	2	6	-	1	1	3	1	4	4	4	3	2	8	4	2	5	-	-	5	1	1	1	-	12	-	-	2	-			
Iran	-	104	3	3	5	6	1	2	-	2	-	-	3	4	5	1	8	6	4	11	1	-	8	4	2	-	4	1	15	-	-	5			
Israel	4	535	20	6	20	40	11	15	19	12	21	28	31	17	15	23	50	18	22	28	8	11	35	6	9	7	25	5	7	13	8				
Middle & South Italy	1	580	17	5	22	49	6	7	15	10	18	32	39	13	12	41	67	31	12	32	8	10	45	11	9	7	33	4	11	3	6	5			
North Italy	4	1,176	35	14	32	83	21	15	24	19	43	26	49	49	22	82	159	50	51	60	17	22	104	11	11	10	63	7	43	17	14	23			
Norway	-	195	4	3	8	14	1	3	7	5	10	11	8	9	4	10	17	9	6	12	3	5	7	1	-	1	11	2	12	4	3	5			
Spain	2	426	11	5	16	32	7	3	8	10	17	10	14	17	6	33	44	19	7	34	3	4	24	9	4	2	16	3	39	6	6	17			
Sweden	7	1,163	42	8	41	85	19	33	32	24	61	61	47	28	34	84	81	65	53	60	13	29	50	20	19	18	47	8	45	15	16	25			
Switzerland	-	954	37	17	17	82	21	12	26	16	44	37	50	32	32	54	80	37	38	65	15	20	49	18	8	8	31	4	58	17	14	15			
U. Kingdom & Republic of Ireland	18	1,234	39	15	38	86	19	27	31	24	45	35	41	35	48	74	99	72	27	79	14	22	55	24	22	12	30	9	131	17	16	48			
Total Sections Not Assigned to Sections (See Table 9)	66	10,368	330	117	347	770	188	179	261	192	417	424	483	312	299	661	1,020	503	341	577	156	208	607	172	124	111	404	91	510	142	182	240			
Total Region	72	11,094	359	140	381	829	198	190	274	209	439	440	512	334	324	698	1,076	641	358	628	161	218	650	188	138	119	430	99	561	150	192	258			

TABLE 2 - 1970 IEEE GROUP MEMBERSHIP, BY GROUP, BY REGION, BY SECTION

SECTION C

REGION 9		Total Affiliates	Total Group Members	A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-12	IECI G-13	E M G-14	E D G-15	C G-16	MTT G-17	EMB G-18	Comm Tech G-19	S U G-20	PMP G-21	A C G-23	E G-25	EMS G-26	EMC G-27	SMC G-28	GeoS G-29	P G-31	E T G-32	MAG G-33	IGA G-34
Argentina	-	517	34	10	23	41	12	7	3	17	17	9	15	27	9	42	57	24	29	30	5	1	31	4	2	2	18	1	36	3	2	6	
Central America	-	73	-	1	1	4	2	1	-	1	1	-	3	3	1	3	1	1	4	-	2	2	1	-	1	-	24	1	-	15			
Chile	-	87	3	-	2	7	-	-	1	5	2	-	3	5	2	3	9	8	4	8	1	-	9	2	-	2	-	7	1	-	3		
Columbia	-	386	5	5	9	24	2	2	-	9	6	4	6	8	11	45	44	15	6	29	1	-	35	4	3	1	12	2	77	3	-	17	
Mexico	-	546	10	5	8	18	13	3	11	14	21	5	7	19	39	17	22	6	12	16	2	7	31	19	10	2	33	4	116	21	6	49	
Monterrey	-	60	1	-	1	5	-	-	2	1	3	1	1	3	1	3	7	1	2	2	-	1	7	-	-	-	1	-	12	1	-	4	
Peru	-	77	1	1	4	3	-	2	1	1	-	2	-	2	1	3	4	1	3	7	1	-	4	1	3	-	3	2	16	1	-	10	
Puerto Rico & Virgin Island	-	261	7	7	5	17	7	4	-	4	5	10	5	10	6	11	16	4	11	25	-	1	6	-	3	2	5	2	65	5	2	16	
Rio de Janeiro	-	357	4	6	16	10	2	2	4	6	9	2	10	8	13	13	18	15	9	30	1	1	19	3	3	2	18	1	98	7	4	23	
Sao Paulo	-	372	20	3	16	21	4	2	5	16	12	4	8	15	10	23	31	15	4	23	3	3	21	8	3	1	19	3	56	4	1	18	
Venezuelan	-	365	9	9	16	10	3	10	3	6	15	4	4	11	17	9	23	15	7	48	1	1	16	4	3	4	5	1	73	1	1	36	
Total Region	-	3,101	94	47	101	160	45	33	30	80	91	41	59	111	112	170	234	105	88	222	15	15	182	47	31	16	115	16	580	48	16	197	
Total Sections Not assigned to Sections (See Table 10)	-	293	12	15	7	12	2	5	-	6	8	-	2	8	10	5	13	5	9	20	-	2	24	5	1	-	3	2	89	7	2	19	
Total Region	-	3,394	106	62	108	172	47	38	30	86	99	41	61	119	122	175	247	110	97	242	15	17	206	52	32	16	118	18	669	55	18	216	

  

REGION 10		Total Affiliates	Total Group Members	A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-12	IECI G-13	E M G-14	E D G-15	C G-16	MTT G-17	EMB G-18	Comm Tech G-19	S U G-20	PMP G-21	A C G-23	E G-25	EMS G-26	EMC G-27	SMC G-28	GeoS G-29	P G-31	E T G-32	MAG G-33	IGA G-34
India	-	404	6	1	6	18	11	2	3	4	17	5	6	23	9	23	25	11	10	7	4	8	43	4	7	1	10	1	107	6	6	20	
Tamil Nadia	-	78	2	3	3	3	2	1	1	3	2	1	1	3	4	2	4	1	2	3	1	1	6	2	1	2	2	1	10	2	2	7	
New Zealand	-	91	5	3	9	8	-	4	1	1	2	1	3	8	2	4	5	5	2	2	2	-	3	1	1	-	4	-	8	-	-	7	
Tokyo	16	3,815	97	77	160	224	73	63	97	105	117	109	171	108	74	334	262	263	96	182	89	121	159	57	52	58	133	51	151	94	127	111	
West Pakistan	1	54	-	-	1	2	-	-	-	-	1	1	1	-	2	3	3	2	-	4	-	-	1	1	1	-	-	-	28	1	1	1	
Total Region	17	4,442	110	84	179	255	86	70	102	113	139	117	182	142	91	366	299	282	110	198	96	130	212	65	62	61	149	53	304	103	136	146	
Total Sections Not Assigned to Sections (See Table 11)	6	1,556	52	40	53	135	18	25	15	57	39	30	50	46	60	77	126	59	37	103	8	9	101	25	28	12	43	10	204	16	18	60	
Total Region	23	5,998	162	124	232	390	104	95	117	170	178	147	232	188	151	443	425	341	147	301	104	139	313	90	90	73	192	63	508	119	154	206	

  

U.S. Possessions & Military Overseas	Total Affiliates	Total Group Members	A&E G-1	B G-2	A P G-3	C T G-4	N S G-5	V T G-6	R G-7	BTR G-8	I M G-9	AES G-10	I T G-12	IECI G-13	E M G-14	E D G-15	C G-16	MTT G-17	EMB G-18	Comm Tech G-19	S U G-20	PMP G-21	A C G-23	E G-25	EMS G-26	EMC G-27	SMC G-28	GeoS G-29	P G-31	E T G-32	MAG G-33	IGA G-34
U.S. Possessions & Military Overseas	1	607	24	14	30	44	6	10	9	5	19	56	26	3	42	19	56	24	14	75	2	-	25	7	18	8	19	5	36	-	1	10

- G-1 Audio & Electroacoustics  
 G-2 Broadcasting  
 G-3 Antennas & Propagation  
 G-4 Circuit Theory  
 G-5 Nuclear Science  
 G-6 Vehicular Technology  
 G-7 Reliability  
 G-8 Broadcast & Television Receivers  
 G-9 Instrumentation & Measurements  
 G-10 Aerospace & Electronic Systems  
 G-12 Information Theory  
 G-13 Industrial Electronics & Control Instrumentation  
 G-14 Engineering Management  
 G-15 Electron Devices  
 G-16 Computer  
 G-17 Microwave Theory & Techniques  
 G-18 Engineering in Medicine & Biology  
 G-19 Communication Technology  
 G-20 Sonics & Ultrasonics  
 G-21 Parts, Materials & Packaging  
 G-23 Automatic Control  
 G-26 Engineering Writing & Speech  
 G-27 Electromagnetic Compatibility  
 G-28 Systems Man & Cybernetics  
 G-29 Geoscience Electronics  
 G-31 Power  
 G-32 Electrical Insulation  
 G-33 Magnetics  
 G-34 Industry & General Applications

## SECTION C

TABLE 3 - GROUP CHAPTER ACTIONS IN 1970

Region and Section	New Group Chapters	Merger of Existing Chapters	Chapters Dissolved
<u>REGION 1</u>			
Boston	G-20, G-25		
Connecticut			G-1/19
<u>REGION 2</u>			
Lehigh Valley	G-16/34		
Lima			G-10
Philadelphia			G-9, G-26
Pittsburgh	G-14		
<u>REGION 3</u>			
Atlanta	G-34		
Huntsville			G-7
Palm Beach	G-31		
New Orleans			G-3, G-27
South Carolina			G-10
<u>REGION 4</u>			
Central Illinois			G-4
Southeastern Michigan			G-25
Toledo	G-34		
Nebraska			G-1/2/8, G-4/12 G-10, G-15/21
<u>REGION 5</u>			
Dallas	G-4		
Fort Worth	G-3/17, G-16/23		
Houston	G-3/15/17/33		
Kansas City			G-3/17
Oklahoma City			G-10
St. Louis	G-4/12/19/23, G-18		
Wichita	G-31/34		
<u>REGION 6</u>			
Los Angeles Council			G-26
Seattle			G-18
Tucson	G-27		
Vandenberg	G-10		
<u>REGION 7</u>			
Hamilton	G-4/12/16/19/23		
Toronto		G-6/19	
<u>REGION 8</u>			
United Kingdom & Rep. of Ireland			G-16
<u>REGION 10</u>			
Tokyo	G-18		

## SECTION C

TABLE 4 - IEEE GROUP CHAPTERS  
as of December 31, 1970

Group Code	Name of Group	No. of Chapters	Section Locations		
G-10	Aerospace & Electronic Systems	35	Baltimore Binghamton Boston Buffalo Canaveral Chicago Cleveland Columbus Dayton Denver Fort Worth Houston	Huntsville Long Island Los Angeles Council Middle Tennessee Mohawk Valley New Jersey Coast NY/North Jersey Orlando Ottawa Philadelphia Providence	Rochester St. Louis San Diego San Francisco Seattle Southeastern Michigan Syracuse Tucson/Fort Huachuca Twin Cities Vancouver Vandenberg Washington
G-3	Antennas & Propagation	34	Atlanta Akron Baltimore Boston Buffalo Chicago Columbus Connecticut Dallas Dayton Denver Foothill	Fort Worth Houston Huntsville Long Island Los Angeles Council Montreal New Hampshire North Carolina Affiliation North Jersey Orange County Philadelphia	Phoenix St. Louis San Diego San Francisco Seattle Southeastern Michigan Syracuse Toronto Tucson Vancouver Washington
G-1	Audio & Electroacoustics	12	Chicago Cincinnati Cleveland Houston	Kitchener-Waterloo Ottawa Philadelphia San Diego	San Francisco Shreveport Twin Cities Washington
G-2	Broadcasting	7	Cleveland Florida West Coast Houston	Philadelphia Twin Cities	Washington Winston-Salem
G-8	Broadcast & TV Receivers	3	Central Indiana	Chicago	Philadelphia
G-4	Circuit Theory	14	Canton Chicago Cleveland Dallas Hamilton	Houston Los Angeles Council Philadelphia Portland	St. Louis San Francisco Syracuse Tucson United Kingdom & Republic of Ireland
G-19	Communication Technology	45	Alabama Atlanta Baltimore Boston Canaveral Canton Charlotte Chattanooga Chicago Columbus Dallas Denver East Tennessee Florida West Coast Fort Huachuca	Hamilton Houston Jacksonville Long Island Los Angeles Council Mohawk Valley Montreal Nebraska New Jersey Coast New Orleans New York North Jersey Orlando Ottawa Philadelphia	Pittsburgh Phoenix Rochester Sacramento St. Louis San Diego San Francisco Seattle Shreveport Southeastern Michigan Syracuse Toronto Twin Cities Vancouver Washington

Group Code	Name of Group	No. of Chapters	Section Locations		
G-16	Computer Society	43	Akron	Hamilton	Philadelphia
			Baltimore	Houston	Phoenix
			Binghamton	Huntsville	Pittsburgh
			Boston	Lehigh Valley	Portland
			Central Texas	Long Island	St. Louis
			Chicago	Los Angeles Council	San Diego
			Cleveland	Mohawk Valley	San Francisco
			Columbus	Nebraska	Schenectady
			Connecticut	New Jersey Coast	<b>Southeastern Michigan</b>
			Dallas	New York	Syracuse
			Dayton	North Jersey	Tokyo
			Daytona	Oklahoma City	Twin Cities
			Fort Huachuca	Orange County	Vancouver
			Fort Worth	Orlando	Washington
France					
G-23	Control Systems Society	29	Baltimore	Huntsville	St. Louis
			Buffalo	Long Island	San Diego
			Central Virginia	Los Angeles Council	San Francisco
			Chicago	Milwaukee	Schenectady
			Cleveland	New York	Seattle
			Dallas	North Jersey	<b>Southeastern Michigan</b>
			Dayton	Philadelphia	Toledo
			Fort Worth	Phoenix	Twin Cities
			Hamilton	Pittsburgh	Vancouver
			Houston		Washington
G-25	Education	4	Boston	Utah	United Kingdom & Republic of Ireland
G-32	Electrical Insulation	2	Chicago	Montreal/Ottawa	
G-27	Electromagnetic Compatibility	15	Atlanta	Houston	Philadelphia
			Boston	Los Angeles Council	San Francisco
			Canaveral	Mohawk Valley	Seattle
			Central Texas	New Jersey Coast	Tucson
			Chicago	NY/LI/North Jersey	Washington
G-15	Electron Devices	20	Albuquerque	NY/LI/North Jersey	San Francisco
			Boston	Philadelphia	Schenectady
			Dayton	Phoenix	<b>Southeastern Michigan</b>
			Houston	Pittsburgh	Syracuse
			Lehigh Valley	Portland	Tucson
			Los Angeles Council	St. Louis	Twin Cities
			Milwaukee		Washington
G-14	Engineering Management	29	Baltimore	Dayton	Philadelphia
			Binghamton	Denver	Pittsburgh
			Boston	Houston	Rochester
			Buenaventura	Huntsville	San Francisco
			Canaveral	Los Angeles Council	Seattle
			Central Indiana	Mohawk Valley	Syracuse
			Chicago	New Orleans	Toronto
			Cleveland	NY/LI/North Jersey	Vandenberg
			Connecticut	Orange County	Washington
			Dallas	Ottawa	
G-18	Engineering in Medicine & Biology	30	Baltimore	Miami	Portland
			Boston	Milwaukee	Rochester
			Central Texas (2)	Mississippi	St. Louis
			Chicago	Montreal	San Diego
			Cleveland	Nebraska	San Francisco
			Connecticut	New Jersey Coast	Tokyo
			Denver	New Orleans	Twin Cities
			Houston	NY/LI/NJ/Princeton	Utah
			Los Angeles Council	North Carolina Affil.	Washington
			Memphis	Philadelphia	

Group Code	Name of Group	No. of Chapters	Section Locations	Chapters	Name of Group	No. of Section Locations	Group Code
G-26	Engineering Writing & Speech	2	Buffalo	United Kingdom & Republic of Ireland			
G-29	Geoscience Electronics	5	Houston Los Angeles Council	Providence Tulsa	Washington		
G-13	Industrial Electronics & Control Instrumentation	7	Beaumont Boston Chicago	Cleveland Connecticut	San Francisco Vancouver		
G-34	Industry & General Applications	34	Akron Atlanta Baltimore Boston Buffalo Chicago Cincinnati Cleveland Connecticut Dayton Delaware Bay Houston	Illinois Valley Lehigh Valley Los Angeles Council Maine Middle Tennessee Milwaukee NY/LI Orlando Philadelphia Pittsburgh Rochester	Sacramento St. Louis San Francisco Schenectady Seattle Southeastern Michigan Syracuse Toledo Toronto Vancouver Wichita		
G-12	Information Theory	16	Baltimore Boston Buffalo Central N. C. / Eastern N. C. / Winston-Salem	Chicago/Central Ill. / Central Indiana / South Bend Hamilton Los Angeles Council NY/LI/North Jersey	Phoenix St. Louis San Francisco Southeastern Michigan Syracuse Washington		
G-9	Instrumentation & Measurement	10	Boston Chicago Los Angeles Council Montreal	NY/LI/North Jersey Ottawa Portland	San Francisco Shreveport Washington		
G-33	Magnetics	7	Boston Houston Los Angeles Council	Milwaukee Princeton	San Francisco Twin Cities		
G-28	Man Machine Systems	11	New Jersey Coast				
G-17	Microwave Theory & Techniques	37	Atlanta Baltimore Boston Buffalo Chicago Columbus Connecticut Dallas Denver Florida West Coast Foothill Fort Worth Houston	Long Island Los Angeles Council Milwaukee Montreal New Hampshire New York North Carolina Affiliation North Jersey Orange County Orlando Philadelphia Huntsville	St. Louis San Diego San Francisco Schenectady Seattle Southeastern Michigan Syracuse Tokyo Toronto Tucson Washington Phoenix		
G-5	Nuclear Science	6	Boston Chicago	Connecticut Los Angeles Council	San Francisco Washington		
G-21	Parts, Materials & Packaging	11	Baltimore Boston Chicago Dayton	Los Angeles Council New Jersey Coast NY/LI/No. Jersey	Philadelphia San Francisco Seattle Washington		

Group Code	Name of Group	No. of Chapters	Section Locations		
G-31	Power Engineering Society	82	Akron	East Tennessee	Palm Beach
			Alabama	Florida West Coast	Philadelphia
			Argentina	Foothill	Phoenix
			Arkansas	Fort Worth	Pittsburgh
			Atlanta	Houston	Portland
			Baltimore	Illinois Valley	Rochester
			Beaumont	Kansas City	Sacramento
			Berkshire	Las Vegas	St. Louis
			Binghamton	Lehigh Valley	San Diego
			Boston	Los Angeles Council	San Francisco
			Buffalo	Maine	Schenectady
			Canaveral	Memphis	Seattle
			Canton	Mexico	Sharon
			Central Illinois	Miami	Shreveport
			Central Indiana	Mid-Hudson	Southeastern Michigan
			Central Texas	Middle Tennessee	Spokane
			Charlotte	Milwaukee/Madison	Syracuse
			Chattanooga	Montreal	Tokyo
			Chicago	Nebraska	Toledo
			Cincinnati	New Hampshire	Toronto
			Cleveland	New Orleans	Tulsa
			Columbus	NY/LI	Twin Cities
			Connecticut	North Jersey	Utah
			Corpus Christi	Northeastern Wisc.	Vancouver
			Dallas	Oklahoma City	Washington
Dayton	Orlando	Wichita			
Delaware Bay	Ottawa	Worcester County			
Denver					
G-7	Reliability	18	Baltimore	Florida West Coast	North Jersey
			Binghamton	Los Angeles Council	Philadelphia
			Boston	Mohawk Valley	San Diego
			Canaveral/Daytona	Montreal	San Francisco
			Chicago	New Jersey Coast	Twin Cities
			Connecticut	NY/LI	Washington
G-20	Sonics & Ultrasonics	1	Boston		
G-35	Systems, Science & Cybernetics	12	Boston	Los Angeles Council	Pittsburgh
			Cleveland	Montreal	San Francisco
			Dallas	New Jersey Coast	Schenectady
			Long Island	Philadelphia	Washington
G-6	Vehicular Technology	19	Canton	Los Angeles Council	San Francisco
			Chicago	Montreal	Southeastern Michigan
			Cincinnati/Dayton	Nebraska	Toronto
			Cleveland	NY/LI/North Jersey	Twin Cities
			Columbus	Philadelphia	Vancouver
			Dallas	Pittsburgh	Washington
			Florida West Coast		
31				108	
Groups		590*		Sections	

\*Of this number, 84 Group Chapters are operated jointly by more than one Section or more than one Group. A total of 501 single or joint Group Chapters have been established as of 12/31/70.

SECTION D

TABLE 1 - IEEE GROUP AFFILIATES, DECEMBER 31, 1970; 5-YEAR COMPARISON

Group No.	Group Name	12/31/70	12/31/69	12/31/68	12/31/67	12/31/66
1	Audio & Electroacoustics	4	4	5	3	2
2	Broadcasting	-	-	-	-	-
3	Antennas & Propagation	-	-	3	3	3
4	Circuit Theory	2	1	1	1	-
5	Nuclear Science	144	150	141	138	99
6	Vehicular Technology	9	8	9	11	4
7	Reliability	18	18	19	21	20
8	Broadcast & Television Receivers	-	-	-	-	-
9	Instrumentation & Measurements	1	1	1	1	1
10	Aerospace & Electronic Systems	7	9	9	11	8
12	Information Theory	15	17	17	19	19
13	Industrial Electronics & Control Instrumentation	-	1	-	-	-
14	Engineering Management	56	58	49	46	37
15	Electron Devices	95	107	105	109	114
16	Computer	176	158	125	115	89
17	Microwave Theory & Techniques	12	13	14	11	6
18	Engineering in Medicine & Biology	181	176	141	129	120
19	Communication Technology	-	-	-	2	3
20	Sonics & Ultrasonics	11	13	11	8	10
21	Parts, Materials & Packagin	-	-	1	3	4
23	Automatic Control	7	7	8	2	2
25	Education	2	1	2	2	-
26	Engineering Writing & Speech	16	19	26	30	13
27	Electromagnetic Compatibility	2	4	2	3	1
28	Systems, Man & Cybernetics	61	12	12	12	9
29	GeoScience Electronics	18	-	-	-	1
31	Power	-	-	-	-	-
32	Electrical Insulation	17	15	11	11	13
33	Magnetic	107	103	107	114	114
34	Industry & General Applications	-	-	-	-	-
35	Systems Science & Cybernetics	-	43	26	26	27
		<u>961</u>	<u>938</u>	<u>845</u>	<u>831</u>	<u>719</u>



## SECTION E

## ORGANIZATIONAL UNITS OF IEEE BY REGION

Region Number	1	2	3	4	5	6	7	8	9	10	Other	Total
<u>1970</u>												
Membership	41,361	27,066	14,760	18,679	14,828	32,032	8,484	5,201	2,154	1,909	2,585	169,059
Sections	23	23	39	23	20	32	17	15	10	4		206
Subsections	8	4	11	6	7	13	1	-	1	2		53
Group Chapters	108	93	53	59	58	94	25	4	3	4		501*
Affiliations & Councils	-	-	1	-	-	1	3	-	1	-		6
Student Branches	71	44	38	42	38	47	32	22	24	1		359
<u>1969</u>												
Membership	41,068	26,353	14,482	18,772	14,435	31,670	8,378	5,065	2,368	2,174	1,583	166,348
Sections	23	23	38	22	20	32	17	13	9	4		201
Subsections	8	5	12	6	7	12	-	-	1	-		51
Group Chapters	107	94	55	64	53	95	24	5	3	3		503*
Affiliation & Councils	-	-	1	-	-	1	3	-	-	-		5
Student Branches	70	43	37	40	36	47	29	18	21	1		342
<u>1968</u>												
Membership	40,492	25,957	14,055	18,794	13,886	30,851	8,043	4,443	1,720	1,131	2,996	162,368
Sections	23	23	38	22	20	32	17	13	9	4		201
Subsections	9	5	12	6	7	11	1	-	-	-		51
Group Chapters	107	95	54	68	52	93	22	3	1	3		498*
Student Branches	67	43	35	40	34	47	27	12	13	1		319
<u>1967</u>												
Membership	39,534	25,881	13,889	18,442	13,309	30,375	7,568	3,486	1,579	880	3,274	158,217
Sections	23	23	38	22	20	32	17	11	9	2		197
Subsections	9	5	12	6	6	12	1	-	-	-		51
Group Chapters	108	90	51	65	49	93	19	2	1	3		481*
Student Branches	65	42	33	40	35	43	24	7	10	-		299

\* Joint Chapters of two or more Sections or two or more Groups are counted as one Chapter.

## SECTION F

Table 1 - IEEE Technical Publications Output - 1970

	Editorial Pages	Advertising Pages & Filler	Total Pages	Number of Papers	Number of Letters
<u>Regular Journals</u>					
IEEE SPECTRUM	1183	483	1666	78	96
PROCEEDINGS OF THE IEEE	2037	91	2128	134	368
Group TRANSACTIONS & JOURNALS	21,157	---	21,157	2325	972
IEEE STUDENT JOURNAL	276	---	276	48	3
Subtotals	24,653	574	25,227	2585	1439
<u>Other Publications</u>					
Conference Records*	1772	---	1772	404	----
Preprints	4782	---	4782	440	----
Standards	112	---	112	7	----
Subtotals	6666	---	6666	851	----
Totals	31,319	574	31,893	3,436	1439

\*Produced through IEEE Editorial Department

Table 2 - Group TRANSACTIONS and JOURNALS - 1970

	Number of Issues	Editorial Pages	Number of Papers	Number of Letters
AEROSPACE & ELECTRONIC SYSTEMS	6	932	91	32
ANTENNAS & PROPAGATION	6	928	74	112
AUDIO & ELECTROACOUSTICS	4	560	54	9
AUTOMATIC CONTROL	6	762	92	160
BIO-MEDICAL ENGINEERING	4	392	40	32
BROADCAST & TELEVISION RECEIVERS	4	398	36	2
BROADCASTING	4	124	16	---
CIRCUIT THEORY	4	708	65	92
COMMUNICATION TECHNOLOGY	6	888	109	9
COMPUTERS	12	1364	140	32
EDUCATION	4	232	49	19
ELECTRICAL INSULATION	4	156	18	--
ELECTROMAGNETIC COMPATIBILITY	4	200	20	3
ELECTRON DEVICES	12	1156	136	52
ENGINEERING MANAGEMENT	4	184	15	4
ENGINEERING WRITING & SPEECH	2	100	16	2
GEOSCIENCE ELECTRONICS	4	396	39	2
INDUSTRIAL ELECTRONICS & CONT. INSTR.	6	552	62	2
INDUSTRY & GENERAL APPLICATIONS	6	752*	97	1
INFORMATION THEORY	6	868	84	74
INSTRUMENTATION & MEASUREMENT	4	472	68	2
MAGNETICS	4	924	84	118
MAN-MACHINE SYSTEMS	4	240	25	6
MICROWAVE THEORY & TECHNIQUES	12	1248	124	101
NUCLEAR SCIENCE	6	1736	220	2
PARTS, MATERIALS & PACKAGING	4	170	17	1
POWER APPARATUS & SYSTEMS	8	2257	244	--
QUANTUM ELECTRONICS	12	888	108	53
RELIABILITY	4	232*	37	13
SOLID-STATE CIRCUITS	6	404	47	20
SONICS & ULTRASONICS	4	276	31	1
SYSTEMS SCIENCE & CYBERNETICS	4	388	41	10
VEHICULAR TECHNOLOGY	4	270*	26	6
TOTALS	184	21,157	2325	972

\*Estimated. Final issue not published at time of count.

TABLE 3 - GROUP NEWSLETTERS PUBLISHED IN 1970

	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A&E		X			X			X			X	
AES	X	X	X	X	X	X	X	X	X	X	X	X
AP		X			X			X			X	
AC	X			X			X			X		
BTR	Does not publish Newsletter											
B			X			X			X			X
CT			X					X				X
COMTECH			X			X			X			X
COMPUTER		X		X		X		X		X		X
EDUCATION					X			X		X		
EI			X			X			X			X
EMC		X		X			X			X		
ED	X			X				X		X		
EM		X		X		X		X		X		X
EMB	X			X			X			X		
EWS		X						X			X	
GE		X			X			X			X	
IECI		X		X		X		X		X		X
IGA		X		X		X		X		X		X
IT	X		X		X			X		X		
IM			X		X		X		X		X	X
MAG			X			X			X			X
MMS		X		X		X		X		X		X
MTT		X		X			X			X		
NS		X			X				X		X	
P		X	X	X	X	X	X	X	X	X	X	X
PMP	X	X			X							
REL	X			X			X			X		
SU		X						X				
SSC		X			X	X		X		X		X
VT	X		X			X			X			X
CADAR NEWS	X		X			X						
OCC									X			

## SECTION G

TABLE 1 - IEEE &amp; JOINTLY SPONSORED MAJOR TECHNICAL MEETINGS - 1970

<u>Name of Meeting</u>	<u>Sponsors</u>	<u>Place</u>	<u>Date</u>	<u>Paid Registration</u>	<u>Exhibits</u>	<u>Additional Exhibit Attendance</u>
Hawaii Int'l Conf. on System Sciences	G-AC, G-CT, G-IT, Univ. of Hawaii et al	Honolulu, Hawaii	Jan. 14-16	400	No	
Winter Power Meeting	G-P	New York, N. Y.	Jan. 25-30	2524	No	
Worcester Symp. on Industrial Drive Systems & Controls	Worcester Section	West Boylston, Mass.	Jan. 27	192	No	
Reliability Symposium	G-R, ASQC et al	Los Angeles, Calif.	Feb. 3-5	615	No	
Aerospace & Electronic Systems Winter Convention (WINCON)	G-AES, L. A. Council	Los Angeles, Calif.	Feb. 10-12	812	No	
Int'l Solid State Circuits Conference	SSC Council, Univ. of Penna., Phila. Section	Phila., Penna.	Feb. 18-20	1547	No	
Seminar on Digital Processing of Analog Signals	Switzerland Section, G-AE, VDE et al	Zurich, Switzerland	March 11-13	500	No	
Scintillation & Semiconductor Counter Symposium	G-NS, USAEC, NBS	Washington, D. C.	March 11-13	458	Yes	
Conference on Field Effect Transistors	German Section IEEE, NTG	Freiburg, F. R. Germany	March 17-19	600	No	
Symposium on Management & Economics in the Electronics Industry	IEE, IERE, IME, et al	Edinburgh, Scotland	March 17-20	347	No	
IEEE International Convention & Exhibition	IEEE	New York, N. Y.	March 23-26	50000	Yes	
Int'l Symposium on Sub-millimeter Waves	G-MTT, PIB et al	New York, N. Y.	March 31 - April 2	400	No	
Mining Industry Technical Conference	G-IGA, MEMMA	Greensburg, Penna.	April 1	328	No	
Cybernetics Congress	German Section of IEEE, DGK, NTG	Berlin, F. R. Germany	April 5-9	500	No	
Rubber and Plastics Industry Technical Conference	G-IGA, Akron Section	Akron, Ohio	April 6-7	309	No	
Joint Railroad Conference	G-IGA, ASME	Philadelphia, Penna.	April 7-8	406	No	
Reliability Physics Symposium	G-ED, G-R	Las Vegas, Nevada	April 7-9	460	No	
Computer Graphics Int'l Symposium	IEEE UKRI Section, IEE, IERE	Uxbridge, Middlesex, England	April 14-16	1092	Yes	
Conference on Automatic Test Systems	IERE, IEE, IEEE UKRI Section	Birmingham, Warwickshire, England	April 14-16	386	No	
Int'l Geoscience Electronics Symposium	G-GE	Washington, D. C.	April 14-17	253	No	

<u>Name of Meeting</u>	<u>Sponsors</u>	<u>Place</u>	<u>Date</u>	<u>Paid Registration</u>	<u>Exhibits</u>	<u>Additional Exhibit Attendance</u>
USNC/URSI-IEEE Spring Meeting	USNC/URSI, 6 cooperating groups	Washington, D. C.	April 16-19	480	No	
Aerospace Power Conditioning Specialists Conference	G-AES	Greenbelt, Maryland	April 20-21	83	No	
Int'l Conference on Magnetics (INTERMAG)	G-MAG	Washington, D. C.	April 21-24	881	Yes	
Off-Shore Technology Conference	TAB Oceanography Coordinating Comm.	Houston, Texas	April 22-24	1501	Yes	9188
Southwestern IEEE Conf. & Exhibition (SWIEEEO)	Region 5, Dallas Section	Dallas, Texas	April 22-24	2295	Yes	1149
Rural Electrification Conference	G-IGA	Columbus, Ohio	April 27-28	111	No	
National Telemetry Conf.	G-AES, G-Com Tech	Los Angeles, Calif.	April 27-30	348	Yes	
Transducer Conference	G-IECI, NBS	Gaithersburg, Maryland	May 4-6	135	No	
Ind. & Comm. Pwr. Sys. & Elec. Space Htg. & Air Cond. Jt. Tech. Conf.	G-IGA, San Francisco Section	San Francisco, Calif.	May 4-7	280	No	
Appliance Technical Conference	G-IGA, North Central Ohio Section	Mansfield, Ohio	May 5-6	425	No	
Spring Joint Computer Conference	G-C, AFIPS	Atlantic City, New Jersey	May 5-7	9001	Yes	14034
Midwest Symposium on Circuit Theory	G-CT, Univ. of Minnesota	Minneapolis, Minnesota	May 7-8	133	No	
Conference on Television Measuring Techniques	IERE, Royal Tele. Society, IEE, IEEE UKRI Section	London, England	May 11-13	380	No	
Cement Industry Technical Conference	G-IGA	Indianapolis, Indiana	May 11-14	458	No	
International Microwave Symposium	G-MTT	Newport Beach, Calif.	May 11-14	585	No	
Electronic Components Tech. Conference	G-PMP, EIA	Washington, D. C.	May 13-15	608	No	
Southeastern Textile Industry Technical Conference	G-IGA	Atlanta, Georgia	May 14-15	310	No	
Aerospace Electronic Conference (NAECON)	G-AES, Dayton Section	Dayton, Ohio	May 18-20	830	Yes	
Conf. on Signal Processing Methods for Radio Telephony	IEE, IERE, IEEE UKRI Section	London, England	May 19-21	400	Yes	
Packaging Industry Technical Conference	G-IGA	Cherry Hill, New Jersey	May 19-21	97	No	
6th Region Conference	Region 6, Seattle Section	Seattle, Washington	May 26-28	432	No	
Vehicular Communications Systems Symposium	G-VT	Los Angeles, Calif.	May 27	104	No	
Conf. on Precision Electromagnetic Measurements	G-IM, NBS, URSI	Boulder, Colorado	June 2-5	276	No	

<u>Name of Meeting</u>	<u>Sponsors</u>	<u>Place</u>	<u>Date</u>	<u>Paid Registration</u>	<u>Exhibits</u>	<u>Additional Exhibit Attendance</u>
Eastern Electronics Packaging Conference	G-PMP, Boston Section	Cambridge, Mass.	June 8-9	149	No	
Chicago Spring Conf. on Broadcast & TV Receivers	G-BTR, Chicago Section	Chicago, Illinois	June 8-9	1552	Yes	
Int'l Conference on Communications	G-ComTech, San Francisco Section, G-IT	San Francisco, Calif.	June 8-10	14371	Yes	
Summer Computer Simulation Conference	G-C, G-SSC, ACM, SCI & SHARE	Denver, Colorado	June 10-12	362	No	
Solid State in Industry - The New Generation of Industrial Control	G-IGA, G-IECI, Cleveland Section, ISA	Cleveland, Ohio	June 15-16	230	No	
Int'l Symposium on Information Theory	G-IT, URSI	Noordwijk, The Netherlands	June 15-19	366	No	
Int'l Computer Technical Conference	G-C	Washington, D. C.	June 16-18	1050	Yes	1000
Pulp & Paper Industry Tech. Conference	G-IGA	Vancouver, British Columbia	June 17-19	167	No	
Solid State Sensors Symposium	G-ED, Twin Cities Section, ISA	Minneapolis, Minnesota	June 18-19	186	No	
Design Automation Workshop	G-C, ACM & SHARE	San Francisco, Calif.	June 21-25	206	Yes	
Case Studies in System Controls	G-AC	Atlanta, Georgia	June 23	18	No	
Joint Automatic Control Conference	G-AC, AICHE, ASME, AIAA, ISA, SCI	Atlanta, Georgia	June 24-26	501	No	
Conference on Optimisation Techniques in Circuit & Control Applications	IEE, IEEE UKRI Section	London, England	June 29-30	190	No	
Summer Power Meeting & EHV Conference	G-P	Los Angeles, Calif.	July 12-17	1223	No	
Int'l Electromagnetic Compatibility Symposium	G-EMC	Anaheim, Calif.	July 14-16	427	Yes	
Conf. on Dielectric Materials, Measurements & Applications	IEE, IEEE UKRI Section	Lancaster, England	July 20-24	214	No	
Conf. on Nuclear & Space Radiation Effects	G-NS	San Diego, Calif.	July 21-23	432	No	
Photovoltaic Specialists Conference	G-ED	Seattle, Washington	Aug. 4-6	110	No	
Int'l Conf. on Microelectronics, Circuit & Systems Theory	G-CT, G-ED, Univ. of New South Wales, IRE (Australia)	Kensington, Sydney, Australia	Aug. 18-21	340	No	
Anniversary Meeting of Mexican Society of Elec. & Mech. Eng.	Mexican Soc. of Elec. & Mech. Engrs., Mexico Section et al	Mexico City, Mexico	Aug. 24-27	446	Yes	2000
Western Electronic Show & Convention (WESCON)	Region 6, WEMA	Los Angeles, Calif.	Aug. 25-28	3850	Yes	32960
Seoul Int'l Conf. on Elec. & Elec. Engineering	Korean Inst. of Elec. Engrg., Korean Inst. of Elec. Eng., KIST IEE	Seoul, Korea	Sept. 2-4	600	Yes	

<u>Name of Meeting</u>	<u>Sponsors</u>	<u>Place</u>	<u>Date</u>	<u>Paid Registration</u>	<u>Exhibits</u>	<u>Additional Exhibit Attendance</u>
Int'l Conf. on Microwave and Optical Generation and Amplification (MOGA)	Netherlands Elec. & Radio Society, Benelux Section of IEEE et al	Amsterdam, Netherlands	Sept. 7-11	357	No	
Int'l Broadcasting Convention	IEEE UKRI Section, EEA, IEE, IERE, RTS, SMPTE	London, England	Sept. 7-11	955	Yes	
Petroleum & Chemical Ind. Tech. Conference	G-IGA	Tulsa, Oklahoma	Sept. 14-16	275	No	
G-AP Int'l Symp. & Fall USNC/URSI Meeting	G-AP, USNC/URSI	Columbus, Ohio	Sept. 14-17	453	No	
Conference on Gas Discharges	IEE, Inst. of Phys. & Phys. Soc., IEEE UKRI Section	London, England	Sept. 15-18	400	No	
Solid State Devices Conference	Inst. of Phys. & Phys. Soc., IEE, IEEE UKRI Section	Exeter, England	Sept. 15-18	243	No	
Intersociety Energy Conversion Engineering Conference	G-ED, G-AES, et al	Las Vegas, Nevada	Sept. 20-25	500	Yes	
Symp. on Nonlinear Estimation Theory and Its Applications	G-AC, AFOSR	La Jolla, Calif.	Sept. 21-23	117	No	
Int'l Conf. on Engineering in the Ocean Environment	TAB Oceanography Coord. Comm. et al	Panama City, Florida	Sept. 21-24	318	Yes	
Electron Device Techniques Conference	G-ED	New York, N. Y.	Sept. 23-24	145	No	
Fall Broadcast Technical Symposium	G-B	Washington, D. C.	Sept. 24-25	208	No	
Joint Power Generation Technical Conference	G-P, ASME	Pittsburgh, Penna.	Sept. 27 - Oct. 1	431	No	
Conference on Trunk Telecommunications by Guided Waves	IEE, IERE, IEEE UKRI Section	London, England	Sept. 29 - Oct. 2	367	No	
Conf. on Structure of Computer and Operating Systems	German Section of IEEE, NTG, ACM-DARA	Erlangen, F. R. Germany	Oct. 5-7	500	No	
Symp. on Feature Extraction & Selection in Pattern Recognition	G-C, Argonne Nat'l Lab.	Argonne, Illinois	Oct. 5-7	240	No	
IGA Group Annual Meeting	G-IGA	Chicago, Illinois	Oct. 5-8	724	No	
UMR-Mervin J. Kelly Communications Conference	G-IT, Univ. of Missouri, St. Louis Section cooperating	Rolla, Missouri	Oct. 5-7	150	Yes	
Electromagnetic Compatibility Regional Symposium	Central Texas Section & SWIEEECO, Texas G-EMC cooperating	San Antonio, Texas	Oct. 6-8	154	Yes	
Allerton Conf. on Circuit & Systems Theory	G-CT, G-AC, Univ. of Illinois	Monticello, Illinois	Oct. 7-9	90	No	
Conf. on Code Problems	German Section of IEEE, NTG	Braunschweig, F. R. Germany	Oct. 7-9	250	No	
Workshop in Micro-Programming	G-C, ACM/SIMICRO	Buffalo, N. Y.	Oct. 12-13	136	No	

<u>Name of Meeting</u>	<u>Sponsors</u>	<u>Place</u>	<u>Date</u>	<u>Paid Registration</u>	<u>Exhibits</u>	<u>Additional Exhibit Attendance</u>
Systems Science and Cybernetics Conference	G-SSC	Pittsburgh, Penna.	Oct. 14-16	134	No	
Symp. on Automatic Support Sys. for Advanced Maintainability	G-AES, St. Louis Section	St. Louis, Missouri	Oct. 19-21	184	No	
Ultrasonics Symposium	G-SU	San Francisco, Calif.	Oct. 21-23	308	No	
Electronic & Aerospace Sys. Convention (EASCON)	G-AES	Washington, D.C.	Oct. 26-28	500	Yes	
Thermionic Energy Conversion Specialists Conf.	G-ED	Miami Beach, Florida	Oct. 26-29	111	No	
Int'l Electron Devices Meeting	G-ED	Washington, D.C.	Oct. 28-30	1124	No	
Switching and Automata Theory Conference	G-C, Univ. of Calif.	Santa Monica, Calif.	Oct. 28-30	180	No	
Jt. Engineering Management Conference	G-EM, 8 other societies	Chicago, Illinois	Oct. 29-30	148	No	
Symp. of the Affiliation of North Carolina Sections	Affiliation of North Carolina Sections	Winston-Salem, N. Carolina	Nov. 4-5	635	Yes	
Nuclear Science Symposium	G-NS, NASA, AEC, NBS	New York, N. Y.	Nov. 4-6	462	Yes	
Northeast Electronics Research & Engineering Meeting (NEREM)	New England Sections	Boston, Mass.	Nov. 4-6	5100	Yes	16000
Canadian Symposium on Communications	Montreal Section, Canadian Region	Montreal, Quebec, Can.	Nov. 12-13	2500	Yes	
Symposium on Man-Machine Systems	G-MMS, G-Educ., Orlando Section	Winter Park, Florida	Nov. 12-13	80	No	
Engineering in Medicine & Biology Conference	G-EMB, AEMB	Washington, D.C.	Nov. 15-19	1187	Yes	214
Fall Joint Computer Conference	G-C, AFIPS	Houston, Texas	Nov. 17-19	5502	Yes	16338
Conf. on Magnetism and Magnetic Materials	G-MAG, AIP	Miami Beach, Florida	Nov. 17-20	542	Yes	
Conf. on Display Devices	G-ED	New York, N. Y.	Dec. 2-3	341	No	
Vehicular Technology Conf.	G-VT	Washington, D.C.	Dec. 2-4	399	Yes	
Nat'l Electronics Conf.	Region IV, Ill. Inst. of Tech. et al	Chicago, Ill.	Dec. 6-9	5800	Yes	8000
Symp. on Consumer Electronics	G-BTR, G-ED	Chicago, Ill.	Dec. 7-8	150	No	
Adaptive Process: Decision & Control Symposium	G-AC, G-IT, G-SSC, et al	Austin, Texas	Dec. 7-9	174	No	
Conf. on Applications of Simulation	G-C, G-SSC et al	New York, N. Y.	Dec. 9-11	450	No	
Int'l Symposium on Circuit Theory	G-CT	Atlanta, Georgia	Dec. 14-16	220	Yes	



## SECTION G

Table 2 - IEEE INTERNATIONAL CONVENTION STATISTICS

The Convention is internationally recognized as one of the largest Conventions of its kind in the world. An exhibition became part of the Annual Convention activities in 1930. Convention activities, from the first Convention held in 1926 through 1969, are indicated in the comparison figures listed below.

Date	Year	Attendance	Firms Represented	Exhibits	Sq. Ft. Occupied	Papers Presented	Location
January	18-19	1926	*	0	0	6	New York, N. Y.
January	10-12	1927	425**	0	0	5	New York, N. Y.
January	9-11	1928	800	0	0	9	New York, N. Y.
May	13-15	1929	555	0	0	37	Washington, D. C.
August	18-21	1930	575	*	20**	23	Toronto, Canada
June	4-6	1931	400	*	50	19	Chicago, Illinois
April	7-9	1932	461	*	25**	23	Pittsburgh, Pa.
June	26-28	1933	487	*	35	24	Chicago, Illinois
May	28-30	1934	940	*	56	32	Philadelphia, Pa.
July	1-3	1935	586	*	34	21	Detroit, Michigan
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.
September	20-23	1939	1,668	*	34	26	New York, N. Y.
June	27-29	1940	1,071	*	35**	44	Boston, Mass.
January	9-11	1941	1,310	*	30**	28	New York, N. Y.
June	23-25	1941	353	0	0	33	Detroit, Michigan
January	12-14	1942	1,790	*	30**	25	New York, N. Y.
June	(29-)	1942	256	0	0	23	Cleveland, Ohio
July	1)						
January	28	1943	1,750	0	0	11	New York, N. Y.
January	28-29	1944	1,704	0	0	22	New York, N. Y.
January	24-27	1945	3,000	*	39	43	New York, N. Y.
January	23-26	1946	7,200	1,571	135	13,220' **	New York, N. Y.
March	3-6	1947	12,013	2,845	177	20,830'	New York, N. Y.
March	22-25	1948	14,459	3,059	180	25,900'	New York, N. Y.
March	7-10	1949	15,710	3,427	225	30,700'	New York, N. Y.
March	6-9	1950	17,689	4,088	253	33,600'	New York, N. Y.
March	19-22	1951	22,919	5,082	277	45,672'	New York, N. Y.
March	3-6	1952	28,673	6,306	365	54,246'	New York, N. Y.
March	23-26	1953	35,642	7,493	412	63,033'	New York, N. Y.
March	22-25	1954	39,302	8,799	605	87,192'	New York, N. Y.
March	21-24	1955	42,133	9,504	704	95,782'	New York, N. Y.
March	19-22	1956	41,017***	8,851	716	98,684'	New York, N. Y.
March	18-21	1957	53,811	11,757	840	105,240'	New York, N. Y.
March	24-27	1958	55,811	12,555	950	110,828'	New York, N. Y.
March	23-26	1959	60,050	13,509	1,200	114,117'	New York, N. Y.
March	21-24	1960	69,760	15,889	1,200	113,597'	New York, N. Y.
March	20-23	1961	67,451	15,170	1,237	113,711'	New York, N. Y.
March	26-29	1962	74,734	16,246	1,307	116,412'	New York, N. Y.
March	25-28	1963	71,337	15,507	970	116,192'	New York, N. Y.
March	23-26	1964	66,541	14,967	966	122,336'	New York, N. Y.
March	22-26	1965	58,462	13,150	884	116,448'	New York, N. Y.
March	21-25	1966	63,650	14,270	731	115,410'	New York, N. Y.
March	20-23	1967	59,196	12,731	722	121,790	New York, N. Y.
March	18-21	1968	63,749	13,710	680	121,777'	New York, N. Y.
March	24-27	1969	60,543	13,020	618	115,208'	New York, N. Y.
March	23-26	1970	47,738	10,000	587	106,443	New York, N. Y.

\* Figures not available

\*\* Estimated

\*\*\* Reduction in attendance due to blizzard

## SECTION G

## TABLE 3 - SECTION, SUBSECTION, GROUP CHAPTER MEETINGS AND CONFERENCES\*

S - Section Meetings  
 SS - Subsection Meetings  
 G - Group Chapter Meetings  
 STC - Section Technical Conferences

Section and Subsection	Meetings				Section and Subsection	Meetings			
	S	SS	G	STC		S	SS	G	STC
<u>REGION 1</u>					<u>Region 2 - Cont'd</u>				
Berkshire	7		4		Ohio Valley	8			
Binghamton	1		16	1	Philadelphia	8		97	
Boston	1		111	1	Pittsburgh	9		38	
Lynn		6			Upper Monongahela		5		
Merrimack Valley		7			Sharon	7		2	
Buffalo	10		11		Southern New Jersey	8			
Connecticut	3		24		Susquehanna	9			
Fairfield County		5			Washington	6		82	
New London		8			West Virginia	9			
Elmira Corning	7			1		180	28	392	4
Ithaca	5				<u>REGION 3</u>				
Long Island	7		18	1	Alabama	9		17	
Maine	8				Atlanta	9		20	
Mid-Hudson	5		2		Macon-Warner Robins		3		
Catskill		2			Rome		9		
Mohawk Valley	6		13		Baton Rouge	10			
St. Lawrence Intn'l		3			(2) Lafayette		7		
New Hampshire	9		6		Canaveral	4		12	
New Jersey Coast	5		21		Central North Carolina	9			
New York	1		209		Central Virginia	8		4	
Westchester		5			Charlotte	7		16	1
North Jersey	10		23		Chattanooga	6		4	
Princeton	9		5		Daytona	4		4	
Providence	8			1	Eastern North Carolina	8		3	
Rochester	10		18		East Tennessee	9		6	
Schenectady	5		16		Upper East Tennessee		6		
Adirondack					Evansville-Owensboro	8			
Springfield	7				Paducah		2		
Syracuse	5		15		Florida West Coast	9		14	
Vermont	8				Fort Walton	9			
Worcester County	7		2	1	Gainesville	11			
	144	36	514	6	Hampton Roads	9			
<u>REGION 2</u>					Huntsville	10		15	
Akron	7		13		Muscle Shoals		7		
Allegheny Mountain	3				Jacksonville	9		3	
Baltimore	7		49		(2) Lafayette	1			
Annapolis		6			Lexington				
Eastern Shore		6			Louisville	8		1	
Canton	6		4		Memphis	5		14	
Central Pennsylvania	7				Jackson		8		
Cincinnati	11		13		Miami	6		4	
Cleveland	5		32	1	Middle Tennessee	7		4	
Columbus	6		25	1	Mississippi	8		2	
(1) Chillicothe					Northeast Mississippi		4		
Zanesville		11			Mobile	9			
Dayton	10		20	1	Nashville	9			
Delaware Bay	8		6		New Orleans	9		5	1
Erie	10				North Carolina Affiliation of Sections				1
Johnstown	9				Oak Ridge	8			
Lehigh Valley	13		11	1	Orlando	4		26	
Lima	8				Palm Beach	12			
North Central Ohio	6				Panama City				
					Pensacola	10			

Section and Subsection	Meetings			
	S	SS	G	STC
<u>Region 3 - Cont'd</u>				
Richmond	9			
Savannah	9			
South Carolina	1			1
Central Savannah River	10			
Charleston	10			
Columbia	8			
Piedmont	10			
Virginia Mountain	8			
Western North Carolina	9			
Winston-Salem	8			1
	<u>287</u>	<u>84</u>	<u>173</u>	<u>6</u>

REGION 4

Arrowhead	9			
(3) Calumet	4			
Cedar Rapids	6			
Central Illinois	9		6	
Central Indiana	9			
Bloomington	9			
Central Iowa	9			1
Chicago	4		46	1
(3) Calumet		3		
Fox Valley		7		
(4) Northwest		2		
Fort Wayne	10			
Illinois Valley	10		5	
Iowa-Illinois	7			
Burlington		1		
Madison	6			
Milwaukee	5		24	1
Racine-Kenosha		5		
Nebraska	9		13	1
Northeast Michigan	9			
Northeastern Wisconsin	10		2	
Rock River Valley	8			
Siouxland	10			
South Bend				
Southeastern Michigan	1		26	
Southern Minnesota	8			
Toledo	9		16	
Twin Cities	3		37	1
Red River Valley		9		
West Michigan	9			
	<u>164</u>	<u>36</u>	<u>175</u>	<u>5</u>

REGION 5

Arkansas	10		4	
Beaumont	10			
Lake Charles		7		
Central Texas	8		22	1
Corpus Christi	10			
Victoria-Pt. Lavaca		7		
Dallas	9		30	
Denver	8		21	
Black Hills		4		
Pikes Peak		7		
El Paso	12			
Fort Worth	6		7	
Houston	7		36	1
Clear Lake		6		
Freeport		5		
Kansas City	10		2	

Section and Subsection	Meetings			
	S	SS	G	STC
<u>Region 5 - Cont'd</u>				
Oklahoma City	8		5	
Ozark	9			
Panhandle	9			
Permian Basin	9			
St. Louis	3		21	
Shreveport	9		3	
Monroe		10		
South Plains	9			
Tulsa	8		3	
West Central Texas	4			
Wichita	7			
	<u>163</u>	<u>46</u>	<u>154</u>	<u>2</u>

REGION 6

Alamogordo-Holloman	5			
Alaska	10			
Albuquerque	6		4	1
Los Alamos-Santa Fe				
Antelope Valley	6			
Boise	10			
Buenaventura	10		9	
China Lake	7			
Foothill	9		8	
Fort Huachuca	9		1	
Hawaii	9			
Idaho	5			
Las Vegas	8			
Los Angeles Council	1		156	
Met. Los Angeles	6			
Montana	1			
Billings		2		
Butte		8		
Helena		9		
Orange County	8		17	
Phoenix	5		14	
Portland	8		25	
Eugene		4		
Richland				
Walla Walla				
Sacramento	12		14	
Reno		4		
San Joaquin		3		
Shasta		3		
San Diego	10		35	
San Fernando Valley	7			
San Francisco	2		154	
East Bay		6		
Golden Gate		7		
Santa Clara Valley		5		
San Gabriel Valley	6			
Santa Barbara	8			
Santa Monica Bay	7			
Seattle	6		33	
South Bay Harbor	6			
Spokane	6		3	
(5) Grand Coulee Dam		7		
Tucson	7		5	1
Utah	7		3	
Vandenberg	7		6	
Wenatchee	5			
	<u>219</u>	<u>58</u>	<u>487</u>	<u>2</u>

Section and Subsection	Meetings			
	S	SS	G	STC

REGION 7

Central Canada Council

Bay of Quinte	8			
Hamilton	11			
Kitchener-Waterloo	7		2	
London	7			
Niagara International	8			
Toronto	5		12	

Eastern Canada Council

Canadian Atlantic	8			1
(6) New Brunswick		1		
Montreal	12		33	
Ottawa	4		14	
Quebec				
St. Maurice	1			

Western Canada Council

Northern Alberta	12			
Regina	7			1
Southern Alberta	8			
Vancouver	8		17	1
Victoria	10			
Winnipeg	10			
	<u>126</u>	<u>1</u>	<u>78</u>	<u>3</u>

REGION 8

Benelux	4			1
Denmark	9			
Egypt				
France				
Germany (West)	2			
(7) Greece				
(8) Iran	7			
Israel	2			
Middle & South Italy				
North Italy	2			1
Norway	4			1
Spain				
Sweden	8			
Switzerland				
United Kingdom & Republic of Ireland	12		3	1
	<u>50</u>		<u>3</u>	<u>4</u>

REGION 9

Argentina	9			
(9) Central America	4			1
Chile	11			1
Colombia	11			
Mexico	8		2	1
Monterrey				
Peru	12			1
Puerto Rico & Virgin Islands	7			
Rio de Janeiro	5			
Sao Paulo	11			1
Venezuelan				
(10) Brazil Council				
	<u>78</u>		<u>2</u>	<u>5</u>

Section and Subsection	Meetings			
	S	SS	G	STC

REGION 10

India	18			
(11) Tamil Nadu				
(12) Uttar Pradesh				
New Zealand	8			1
Tokyo	8		27	
West Pakistan	7			
	<u>41</u>		<u>27</u>	<u>1</u>

TOTALS

Section	1,452
Subsection	289
Group Chapters	2,005
Section Technical Conf.	38
Student Branches	<u>918</u>
GRAND TOTAL	<u>4,702</u>

- (1) Subsection dissolved 2/24/70
- (2) Subsection elevated to full Section 11/11/70
- (3) Subsection elevated to full Section 3/13/70
- (4) Subsection established 6/16/70
- (5) Subsection established 3/5/70
- (6) Subsection established 9/2/70
- (7) Section established 3/17/70
- (8) Section established 2/12/70
- (9) Section established 3/23/70
- (10) Council approved 3/23/70
- (11) Subsection established 9/2/70
- (12) Subsection established 12/28/70

\*As reported to IEEE through 3/1/71

## SECTION G

TABLE 3 - SECTION, SUBSECTION, GROUP CHAPTER MEETINGS AND CONFERENCES

Region Number	<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>Total</u>
<u>1970</u>											
Sections	144	180	287	164	163	219	126	50	78	41	1,452 *
Subsections	36	28	84	36	46	58	1	0	0	0	289 *
Group Chapters	514	392	173	175	154	487	78	3	2	27	2,005 *
Section Technical Conf.	6	4	6	5	2	2	3	4	5	1	38 *
Student Branches	<u>175</u>	<u>108</u>	<u>104</u>	<u>155</u>	<u>108</u>	<u>139</u>	<u>89</u>	<u>26</u>	<u>10</u>	<u>4</u>	<u>918 *</u>
Total Meetings	875	712	654	535	473	905	297	83	95	73	4,702
<hr/>											
<u>1969</u>											
Sections	142	192	300	180	169	218	121	79	61	25	1,487
Subsections	48	29	90	42	47	68	-	-	3	-	327
Group Chapters	575	393	203	198	170	440	68	3	-	21	2,071
Section Technical Conf.	2	4	4	2	-	3	3	1	1	-	20
Student Branches	<u>139</u>	<u>111</u>	<u>132</u>	<u>162</u>	<u>127</u>	<u>148</u>	<u>71</u>	<u>15</u>	<u>12</u>	<u>2</u>	<u>919</u>
Total Meetings	906	729	729	584	513	877	263	98	77	48	4,824
<hr/>											
<u>1968</u>											
Sections	158	196	313	153	152	205	126	68	53	7	1,431
Subsections	46	35	80	41	35	56	1	-	-	-	294
Group Chapters	765	364	197	183	154	405	57	4	-	-	2,129
Section Technical Conf.	1	2	3	2	-	2	3	4	2	-	19
Student Branches	<u>103</u>	<u>85</u>	<u>55</u>	<u>88</u>	<u>58</u>	<u>53</u>	<u>35</u>	<u>6</u>	<u>-</u>	<u>3</u>	<u>486</u>
Total Meetings	1,073	682	648	467	399	721	222	82	55	10	4,359
<hr/>											
<u>1967</u>											
Sections	141	179	301	176	160	240	131	58	44	9	1,439
Subsections	61	29	91	47	43	65	6	-	-	-	342
Group Chapters	611	333	154	171	131	384	40	5	-	11	1,840
Section Technical Conf.	-	2	6	2	-	3	3	3	-	-	19
Student Branches	<u>346</u>	<u>210</u>	<u>197</u>	<u>210</u>	<u>212</u>	<u>261</u>	<u>85</u>	<u>5</u>	<u>7</u>	<u>-</u>	<u>1,533</u>
Total Meetings	1,159	753	749	606	546	953	265	71	51	20	5,173

\*As reported to Headquarters through March 1, 1971.

## SECTION H

### I. PUBLICATIONS AND INFORMATION SERVICES

#### 1. TECHNICAL PUBLICATIONS

General. During 1970 the Editorial Department processed 3,436 papers and 1,439 correspondence items for printing in IEEE publications, excluding the translated journals, giving a total output of 31,319 editorial pages. Of these, 24,653 pages were published in regular journals of the Institute, a slight increase over the previous year's output of 24,075 pages.

The Executive Committee approved the creation of an IEEE Press to publish collections of reprints on timely subjects and to engage in such other publication activities as may later seem appropriate. The IEEE Press will begin operation in 1971.

The practice of offering IEEE publications in microfiche form as well as in regular printed editions, which was begun experimentally with three TRANSACTIONS in 1969, was successfully extended to all IEEE journals in 1970.

Four more publications adopted voluntary page charges during the year, bringing to 16 the total number of IEEE journals that follow this procedure. The page charge was raised from \$50 per page to \$60 per page to reflect mounting publication costs.

The Institute was greatly saddened by the death of Edward C. Day, whose 22 years of dedicated service included many years as Secretary of the Technical Program Committee and more recently Manager of Production for the forthcoming IEEE Dictionary.

IEEE Spectrum. An important event in the SPECTRUM year was the appointment of a new Editor, David DeWitt of International Business Machines. He succeeded J. J. G. McCue, who stepped down after 2-1/2 years of dedicated service to the profession in this capacity.

The Executive Committee authorized offering national societies abroad a reciprocal arrangement whereby their members can subscribe to SPECTRUM at \$7 per year plus their handling cost, starting with the IEE (London) and the VDE (Germany).

The improved format, the new departments, and the broadened editorial coverage - all changes introduced in 1969 - were continued and consolidated in 1970. It was decided to publish occasional special reports on areas of special applications interest to readers. The first of these, a staff written survey of minicomputers, was published in the August issue, and the preparation of several more of these reports for 1971 publication is under way.

A total of 78 articles and 96 letters were published during the year. Eight of the articles were written by members of the editorial staff. The total pages published numbered 1,666, of which 1,183 were devoted to technical and other editorial material and 483 to advertising and related matter.

Group Transactions and Journals. The majority of the pages published in IEEE journals appeared in the technical publications of the Groups. During the year 184 issues constituting 21,157 pages were published. This output represents a continuing increase over the 20,266 and 19,847 pages published respectively in 1969 and 1968. A total of 2,325 papers and 972 technical letters appeared in the TRANSACTIONS and JOURNALS in 1970.

Most publications followed normal production schedules, having recovered from perturbations introduced the previous two years by strikes at printers used by the Institute. This progress was made possible, in part, by acquiring the services of three additional composition and printing sources, two of which are outside of the United States.

Rising costs placed added emphasis on exploring alternative production methods. The IEEE TRANSACTIONS ON POWER APPARATUS AND SYSTEMS initiated an experiment in the use of high quality typewriter composition as an economical substitute for conventional typesetting. Also, a special committee was formed to look into the increased speed, flexibility, and economies that might be realized by using the latest electronic and optical printing techniques. The Aerospace and Electronic Systems Group made plans to conduct its own experiments in publishing techniques in 1971.

Proceedings of the IEEE. Five successful special issues, each devoted to a single area of major interest, were published during the year. The subjects covered were computers in industrial process control (January), air traffic control (March), detection theory and applications (May), cable television (July), and optical communications (October).

The program of inviting technical leaders to write tutorial-review papers in their areas of special technical competence was continued. Ten of these papers, on subjects ranging from sensory aids for the blind to nonlinear filtering, were published during the year.

Total pages published in 1970 numbered 2,128, of which 2,037 were editorial pages and 91 contained paid advertising and related material. The number of papers published was 134, and 100 of these appeared in special issues. The technical letter section contained 462 pages devoted to the publication of 368 letters.

IEEE Student Journal. Five issues of the STUDENT JOURNAL, each organized around a theme of special importance to students, were published in 1970. The subjects treated were opportunities in bioengineering, the engineering technician, careers in consumer electronics, computers, and employment expectations. Five guest editorials and 48 signed articles appeared in the 276 pages of SJ during the year.

Late in the year the IEEE Board of Directors regretfully concluded that a separate student publication could no longer be justified, and publication of the STUDENT JOURNAL was terminated with the November 1970 issue. The major factors leading to this decision were rapidly rising costs in all phases of IEEE operations and the fact that over 50% of the Student members had been electing to receive SPECTRUM rather than SJ. All Student members will now receive SPECTRUM, which will include editorial material of particular interest to them.

Translated Journals. The IEEE program of publishing translated journals with the aid of grants from the National Science Foundation yielded 2,508 English pages during the year, of which 2,216 pages were translated from Japanese and 292 from Ukrainian. This program was terminated when the translation of the 1969 issues of the source publications was completed. The 1970 issues will be continued by a commercial publisher.

Advertising. Adverse economic conditions in the electrical/electronics industry had serious effects on advertising throughout the industry in general, and within IEEE publications in particular. On an industry-wide basis, 3,000 fewer pages of advertising were run in 1970 as compared to 1969, a drop of nearly 28 per cent.

IEEE SPECTRUM carried 362 pages of advertising in 1970 as compared to 458 pages in 1969. SPECTRUM's losses were mainly in recruitment advertising, an area that it has dominated for several years. However, SPECTRUM nonetheless succeeded in increasing its share of the market slightly in product advertising, a trend that bodes well for the future.

The PROCEEDINGS OF THE IEEE carried 57 pages of advertising in 1970 as compared to 86 pages in 1969. It is expected that in the future, PROCEEDINGS advertising will be restricted by and large to its covers.

## 2. REGIONAL PUBLICATIONS

Two Regional publications, inaugurated in 1967, continued publication in 1970. Four issues of IEEE ELECTROLATINA were published and distributed to the members in Region 9 (Latin America). This technical magazine contains articles and other appropriate material in Spanish and Portuguese. The IEEE REGION 8 NEWSLETTER, serving members in Europe and adjoining areas, was issued four times during the year.

## 3. SECTION PUBLICATIONS

A major activity of many Sections is the publication of a monthly Bulletin for the announcement of local activities. Seventy IEEE Sections are now issuing monthly publications as listed below:

<u>Section</u>	<u>Publication</u>
Akron	Akron Section Bulletin
Atlanta	The Atlanta Circuit
Baltimore	Newsletter
Binghamton	Pulse
Boston	The Reflector
Canaveral	Impulse
Cedar Rapids	Corona
Central Indiana	The Reporter
Central Pennsylvania	Newsletter
Central Texas	The Analog
Chicago	IEEE Scanfax
Cincinnati	Cincinnati Section News
Cleveland	Cleveland Section News
Connecticut	The CONNector
Dallas	Direction
Dayton	Conductor
Delaware Bay	Newsletter
Evansville-	
Owensboro	The Transmitter
Florida West Coast	Suncoast Signal
Fort Walton	The Courier
Fort Wayne	The Announcer
Houston	The Scope
Kitchener-Waterloo	IEEE Newsletter
Las Vegas	Currents & Sparks
Lehigh Valley	Newsletter
Long Island	The Pulse
Los Angeles Council:	IEEE Bulletin
Antelope Valley	
Buenaventura	
China Lake	
Foothill	
Metropolitan Los	
Angeles	
Orange County	
San Fernando Valley	
San Gabriel Valley	
Santa Barbara	
Santa Monica Bay	
South Bay Harbor	
Vandenberg	
Mohawk Valley	Echoes
Montreal	Current PHASE Courante
New Jersey Coast	The Scanner
New Orleans	Section Bits - IE <sup>3</sup>
New York	The Monitor
North Carolina	IEEE Bulletin
Affiliation of	
Sections:	
Central North	
Carolina	
Charlotte	
Eastern North	
Carolina	
Western North	
Carolina	
Winston-Salem	

SECTION PUBLICATIONS (continued)

<u>Section</u>	<u>Publication</u>
North Jersey	IEEE Newsletter
Orlando	Orlando Section Notes
Ottawa	Ottawa Section Bulletin
Philadelphia	Almanack
Pittsburgh	IEEE Bulletin
Portland	The BEEEP
Princeton	The P.S.
St. Louis	The Might MHO
San Diego	San Diego Bulletin
San Francisco	The Grid
Schenectady	The Prism
Seattle	Data Link
South Bend	The Nucleus
South Carolina	Southern Corona
Southeastern	
Michigan	Wavelengths
Southern New Jersey	Newsletter
Syracuse	The Scanner
Tokyo	Denshi Tokyo
Tucson	The BEEET
Twin Cities	Radiator
Washington	The Washington Bulletin
Worcester County	Newsletter

4. ELECTRICAL ENGINEERING

This IEEE management newsletter of 6 to 8 pages plus inserts, first issued as such in 1964, notes completed and impending changes in the structure, Bylaws, policies, and operations of the Institute and evolution of its organization units. Its mission is to encourage an exchange of information among Boards, Committees, Divisions, Societies, Groups, Conferences, Regions, Councils, Sections, Subsections, Chapters, and Branches. Its bimonthly distribution includes about 4,000 officers of these units and the Headquarters staff. Its usefulness is increased by insertion of documents, forms, and offerings of operating aids. Its accuracy is enhanced by review of its editorial content by the General Manager's staff. In 1970, to 42 pages of text were added 46 supplemental pages as inserts.

Ownership of the title "Electrical Engineering" by the Institute as a registered trademark goes back to 1931.

REGIONAL PUBLICATIONS

The Regional Publications Committee in 1971 continued publication of IEEE TRANSLATIONS and IEEE TRANSLATIONS (Latin America). The technical programs contain articles and other appropriate material in Spanish and Portuguese. The IEEE REGION 8 NEWSLETTER, which is distributed in Europe and other areas, was issued four times during the year.



II. TECHNICAL ACTIVITIES1. TECHNICAL ACTIVITIES BOARD

1970 has been the first year of operations with a Divisional structure for the Technical Activities Board. The Divisional Directors served, essentially, through appointment, as has been the case in the past for the TAB OpCom members-at-large; three of the Divisional Directors were serving concurrent terms as IEEE Directors-at-large. Two of the Divisions (Nos. 3 and 4) completed a cycle of nominations and elections. Plans were initiated for two additional Divisions to hold elections in 1971; in this connection, it was desirable to switch the numerical designations for two Divisions (Nos. 2 and 5) in order to conform to the even-year, odd-year election pattern that applies to the IEEE Regions. Because of possible future reference value, the tabulation below is shown with the new designations. One must remember, however, that many of the reports, minutes, and other 1970 documentation were based on the original designations.

Division 1 - A. P. Stern, Director  
 Audio and Electroacoustics - J. L. Flanagan, Chairman  
 Automatic Control - J. Zaborszky, Chairman  
 Circuit Theory - B. J. Leon, Chairman  
 Information Theory - J. L. Massey, Chairman

Division 2 - J. K. Dillard, Director  
 Electrical Insulation - J. S. Hurley, Chairman  
 Industrial Electronics and Control Instrumentation - J. E. Casey, Chairman  
 Industry and General Applications - H. G. Frostick, Chairman  
 Instrumentation and Measurement - A. F. Dunn, Chairman  
 Nuclear Science - J. Forster, Chairman  
 Power - W. F. Fee, Chairman  
 Vehicular Technology - R. E. Bloor, Chairman

Division 3 - D. M. Hodgins, Director  
 Aerospace and Electronic Systems - R. D. Briskman, Chairman  
 Broadcasting - G. Klink, Jr., Chairman  
 Broadcast and Television Receivers - F. W. Edwards, Chairman  
 Communication Technology - R. C. Kirby, Chairman  
 Electromagnetic Compatibility - H. M. Schlicke, Chairman

Division 4 - W. W. Lang, Director  
 Antennas and Propagation - R. E. Hiatt, Chairman  
 Electron Devices - R. S. Engelbrecht, Chairman  
 Magnetics - J. J. Suozzi, Chairman  
 Microwave Theory and Techniques - J. H. Bryant, Chairman  
 Parts, Materials and Packaging - V. J. Kublin, Chairman  
 Sonics and Ultrasonics - W. J. Spencer, Chairman

Division 5 - S. Levine, Director  
 Computer - E. J. McCluskey, Chairman

Division 6 - G. A. Richardson, Director  
 Education - W. B. Boast, Chairman  
 Engineering in Medicine and Biology - D. G. Fleming, Chairman  
 Engineering Management - M. E. Brady, Chairman  
 Engineering Writing and Speech - L. M. Cole, Jr. Chairman  
 Geoscience Electronics - H. S. Field, Chairman  
 Man-Machine Systems - J. G. Wohl, Chairman  
 Reliability - H. E. Reese, Chairman  
 Systems Science and Cybernetics - D. B. Brick, Chairman

The appearance of Technical Divisions was accompanied later in 1970 by the transition of three Groups to become the first IEEE Societies:

Computer  
 Control Systems  
 Power Engineering

At year-end, the impact of these organizational changes was not yet fully understood and TAB was involved in a dialog on the roles and missions of the Divisions and Divisional Directors, Groups, and Societies.

Particular attention was given to new technical areas, including some of a complex interdisciplinary nature. Activities initiated in previous years were augmented or modified to meet a changing situation. At year-end, ad hoc or coordinating committees had been established in the following areas:

Cable Distribution Systems Coordinating Committee  
 Computer-Aided Design  
 Electrography  
 Environmental Quality (Pollution)  
 Optical and Electro-Optical Systems  
 Organizing Committee for Group on Manufacturing Technology  
 Oceanography Coordinating Committee  
 Organization, Evaluation and Recommendation Phase II Implementation  
 Superconductivity and Cryogenics  
 Technical Meetings for IEEE  
 Transportation  
 IEEE/ANSI Interrelationship  
 Membership Services  
 Application of Electro-Technology to Social Problems

Two Groups, Man-Machine Systems and Systems Science & Cybernetics, having reached basic agreement to merge, effective January 1, 1971, proceeded to make all necessary administrative and procedural arrangements. The merged Group - Systems, Man,

and Cybernetics - will continue to support the activities of the two former Groups. Other Groups have also entered into serious reviews of merger possibilities. In all such cases, the basic ingredients are overlapping memberships and technical interests. The Ad Hoc Committee on Manufacturing Technology was converted into an Organizing Committee. Petitions for the formation of a Manufacturing Technology Group have been circulated, with a good response, and it is planned for this new Group to become operational in 1971.

Several joint meetings were held by the Regional Activities Board and TAB OpCom, to facilitate joint efforts to improve IEEE activities and programs. Attention is being given to mutual problems related to Student members and Branches, and Chapters; also, TAB assistance is being mustered to help the Sections with arrangements for technical speakers. A joint RAB/TAB Technical Meetings Committee has been established to help with this important phase of IEEE's technical activities.

A reorganization of the IEEE Standards Committee, and all related programs and procedures, which was planned in 1969, has been put into effect. The Technical Committees of the IEEE Groups and Societies are an important part of the entire program and are now being given an opportunity to fulfill their potential roles with appropriate recognition. The procedures for publishing IEEE Standards are revised to include publication in the appropriate IEEE Transactions or Journals. All appropriate IEEE standards are being sent to the American National Standards Institute for consideration as an ANSI standard. Procedures for IEEE participation in ANSI affairs have been streamlined, with emphasis on genuine technical representation responsible to the appropriate Technical Committees.

The TAB Finance Committee made further progress in clarifying the relationships between IEEE finances and the budgets of the individual Groups and Societies. The computer programming for handling the annual budgets has been simplified and a similar program is being developed for financial statements. A program was also developed to give detailed information on all double memberships between the Groups and Societies. A workshop was held during WESCON to assist Treasurers and other officers in their responsibilities for budgeting and administration.

The TAB Publications Committee has continued to work closely with the IEEE Publications Board and Headquarters staff in facilitating the prompt publication of the periodicals; about 80% of all issues were on time by the end of 1970. Attention has also been given to special publications, sales promotion, and the establishment of an IEEE Press. The continual escalation of publication costs has intensified the search for alternate procedures. In mid-year, some of the papers for

Power Apparatus and Systems were published with cold-type composition. The Aerospace and Electronic Systems Group arranged an experiment, starting with the January 1971 issue, that would hopefully lead to a saving in both time and costs.

The tabulations in this report show a continued strength in the IEEE technical programs, primarily publications, technical meetings, and standards. Memberships in the IEEE Groups and Societies is a gross measure of these activities. At the end of the year, the total number of such memberships was slightly ahead of a year ago; also, the percentage of IEEE members belonging to one or more Groups continued the upward trend that has been evident in the past five years.

## 2. JOINT TECHNICAL ADVISORY COUNCIL (JTAC)

The JTAC, sponsored by the IEEE and the EIA (Electronic Industries Association), held six regular meetings during 1970. The Council held a briefing session in November 1970 for the Federal Communications Commission and the Director of Telecommunications Policy to discuss the many factors that influence progress in the field of spectrum engineering/utilization. The Council has had four committees active in various areas relating to the radio art.

JTAC Committee 63.1 - Electromagnetic Compatibility. Committee 63.1 has been concerned in following through on efforts made by government and private concerns regarding adoption of the recommendations made in the JTAC report SPECTRUM ENGINEERING - THE KEY TO PROGRESS.

The Committee prepared a comprehensive list of activities that have been initiated, scheduled/planned, and needed by the JTAC, the FCC and the OTP on each of the many recommendations made in the Report. Committee 63.1 will monitor action in this area and is being retained on a stand-by basis to be able to take on a study at short notice.

JTAC Committee 65.1 - Future Needs and Uses of the Spectrum. Activity on Committee 65.1 subsequent to the publication of its report FUTURE NEEDS AND USES OF THE SPECTRUM, included as part of the Proceedings of the Hearings before the Subcommittee on Activities of Regulatory Agencies of the House Select Committee on Small Business, has been curtailed. This has been mainly due to the inability of obtaining a meaningful evaluation of the needs and uses of the spectrum without the full knowledge of the Government needs. This Committee was disbanded in the course of 1970 but the area is being monitored by its Chairman.

JTAC Committee 66.2 - Testing Sharing of TV Channels by LMRS. The JTAC established this Committee to assist the FCC in tests being conducted by the Commission on the feasibility of the LMRS sharing TV channels. Subsequent to the Commission accepting the final report of its Committee, the JTAC disbanded Committee 66.2.

JTAC Committee 67.1 - Spectrum Utilization Aspects in the Use of Space Techniques. Established to study spectrum utilization aspects of space techniques, Committee 67.1 has submitted its report RADIO SPECTRUM UTILIZATION IN SPACE to the JTAC. Mr. H. Edward Wepler, the JTAC Chairman, will be a delegate at the Special Joint CCIR Meeting being held in February 1971 to prepare for the World Administrative Radio Conference - Space Telecommunications. He will present copies of this report on behalf of the Council and its sponsors, to the Head of each country's delegation and other key personnel attending the meeting.

III. EDUCATIONAL ACTIVITIES

Dr. John G. Truxal, Chairman of the Educational Activities Board, called five meetings during 1970 at which reports were submitted by the following standing committees: Accreditation, Pre-College Guidance, Student Activities. In the area of Continuing Education, the Board reviewed and initiated a number of new projects. The following summarizes the actions and activities of each of the above responsibilities.

Accreditation. The Accreditation Committee of the EAB continually reviews and evaluates the status of the profession and electrical engineering education and develops broad minimum acceptable criteria for the use of IEEE inspectors who have been selected by ECPD to visit a given institution and review its EE curricula. An ad hoc committee for engineering technology was established during 1970 to perform a similar function in that area. Specific functions performed were:

1. Solicited names of potential visitors from IEEE Sections and Groups, ensuring appropriate balance in terms of geography, background of individual, and past experience. The final list provided to ECPD for use of its EE & A Committee.
2. Developed and published Guidelines for use of IEEE/ECPD Visitors.
3. Conducted indoctrination workshops for Visitors.
4. Review of "Engineering Technology Education Study Preliminary Report," by the ad hoc committee for engineering technology.
5. Recommended to ECPD the establishment of procedures to accredit the Masters degree programs.

Pre-College Guidance. The Pre-College Guidance Committee under the chairmanship of Dr. Lindon E. Saline held three meetings during the year at which it evaluated existing programs in the guidance field and considered future roles and activities. The following summarizes actions taken by this committee:

1. Review of the report submitted by Dr. Donald Super on the career decision survey. Recommended acceptance of the preliminary report with reservations and dissemination of the report to all professional engineering societies and guidance counselors.
2. Recommended participation by IEEE in the International Science and Engineering Fair.
3. Recommended greater participation by IEEE Sections and Groups in guidance activities.

4. Reviewed and recommended that IEEE not establish a high school membership grade.
5. Reviewed existing guidance kits.
6. Reviewed and evaluated existing guidance films.
7. Continued promotion of the IEEE/EKN guidance film.
8. Responded to individual guidance inquiries.

Continuing Education. The EAB as a whole reviews, evaluates and conducts the IEEE continuing education programs. Current ongoing programs include:

1. Resources Handbook. Updated annually contains information on slide tape lectures, films, film sources, video tapes, study guides, etc.
2. Slide Tape Lectures. Recorded and packaged unedited material presented at various major meetings as program material for Sections and Branches.
3. Seminars. One- and two-day seminars presented periodically. This activity has been somewhat curtailed as a result of the present economic situation.
4. Cassette Colloquia. Technical information recorded at conferences, conventions and seminars, and not available in other format. Five titles are currently available. An expansion of this program will be undertaken in 1971.
5. Soundings. Cassette report service on the latest developments and state-of-the-art topics in electrical/electronics field available to members on an annual subscription basis or as individual cassettes. The first issue was released in October 1970.
6. DATE Service. Telephone information service provides members with brief basic information and bibliographies as an introduction to an area of engineering with which he may not be familiar. Introduced in the fall of 1970, the service is being test run locally in the Metropolitan New York area with a library of twenty-one titles. Expansion of the service is contemplated for 1971.
7. Self-Study Courses. Two self-study courses are being offered to the membership in Regions 1 through 7. Both courses are introductory in their approach - one covering financial management and the other electronic data processing.

Under development, for introduction in the first quarter of 1971, is a self-contained self-study course consisting of text, visual material, and audio cassette.

Future programs under consideration by the EAB include:

1. Study guides covering all major EE disciplines.
2. Development of a unified program of credit.
3. Development of a Newsletter on educational affairs.
4. Cooperation with universities in the development of retraining programs for the unemployed engineer.

Student Activities. Two meetings were held by the Student Activities Committee in 1970 with Dr. Richard B. Russ acting as chairman. As coordinator of the student program of the Institute, the following actions were considered and taken:

1. Recommended a restructuring of the student member grade to eliminate the "Student Associate" category and to have only one grade of Student Branch. Additionally recommended that the term "school of recognized standing" be redefined to include community colleges, junior colleges and technical institutes.
2. Recommended defining the role and scope of the Student Activities Committee to strengthen and delineate its responsibilities. Concurred in the EAB recommendation that coordination of student activities should come under the responsibilities of the Regional Activities Board.
3. Confirmed continuing sponsorship of Branch and Regional Prize Paper Contests, the annual Vincent Bendix Award and various Group awards.
4. Encouraged annual membership promotion drive.

IEEE Student and Student Associate Branches enjoyed a growth of 17 new Branches, making a total of 359 operating as follows:

<u>Region</u>	<u>Student Branches</u>	<u>Associate Branches</u>	<u>Total Branches</u>
1	51	20	71
2	37	7	44
3	34	4	38
4	34	8	42
5	32	6	38
6	<u>40</u>	<u>7</u>	<u>47</u>
	228	52	280
7	20	12	32
8	19	1	20
		Section	2
9	21	3	24
10	<u>1</u>	<u>0</u>	<u>1</u>
	289	68	359

IV. BOARD AND STANDING COMMITTEE ACTIVITIES

1. Admission and Advancement Committee. During the year a record number of applications for new members were processed, 13,540 Student members and 4,049 in other grades, a total of 17,589. The Admission and Advancement Committee met twelve times in 1970, when actions were taken as follows:

	Senior <u>Member</u>	<u>Member</u>
Admissions approved	240	466
Admissions rejected	58	57
Transfers approved	391	60
Transfers rejected	<u>42</u>	<u>9</u>
	731	592

2. Awards Board. This Board met three times in 1970 and all meetings were held at IEEE Headquarters in New York.

As well as recommending to the Board of Directors for approval candidates for the Medal of Honor, four Major Annual, eight Field, two Prize Paper and two Scholarship Awards, the Awards Board submitted recommendations for four external awards. These were the National Medal of Science (administered by the President of the U.S.A. through a special Committee), the Niels Bohr International Gold Medal (administered by the Danish Engineering Society), the Kelvin Gold Medal (administered by the Presidents of eight British Societies), and the Alfred Noble Prize (administered by the American Society of Civil Engineers for AIME, ASCE, IEEE, SAE and WSE). The Awards Board also approved recommendations for appointments to three Inter-society Boards of Awards to replace those IEEE Representatives whose terms expired during the year.

With regard to presentation of IEEE awards, the Medal of Honor, Major Annual and Prize Paper Awards were presented during the International Convention. Presentations of the Field Awards in 1970 took place during the following meetings, conferences, etc. both here and abroad: Winter Power Meeting, New York; International Solid-State Circuits Conference, Philadelphia; International Conference on Communications, San Francisco; International Symposium of Information Theory, Noordwijk, The Netherlands; Western Electronic Show and Convention, Los Angeles; International Electron Devices Meeting, Washington, D.C.; Northeast Electronics Research and Engineering Meeting, Boston; and National Electronics Conference, Chicago.

Other actions and recommendations of the Awards Board during 1970 included the discontinuance of the Institute Student Prize, the approval of the establishment of one Group Award and two Group Committee Awards. In addition, the Awards Board approved the recommendation for a

substantial increase in the stipend for the Charles LeGeyt Fortescue Fellowship from \$3,000 to \$4,000.

Several years ago the Awards Board recommended that the Edison Medal Deed of Gift be modified to permit the awarding of this medal to persons residing outside the U.S., its dependencies and Canada. After much negotiation and necessary legal action, authorization was finally given to the IEEE for the granting of the Edison Medal to residents of any country where the IEEE has members.

For the past two years the Awards Board has been conducting an extensive review of the IEEE awards structure. This study, undertaken in accordance with the Institute Bylaws, was completed by the Awards Board in 1970 and the Board of Directors took action on the recommendations submitted.

3. Educational Activities Board. (See Section H-III)

4. Fellow Committee. The Committee met twice in 1970. The first meeting in March was devoted to review and adoption of the scoring procedures to be used in evaluating the Fellow grade nominations this year, and agreement on new procedures to facilitate the heavy workload involved in the scoring process, including a new scoring card to be used by the judges.

351 nominations, completed by the April 30, 1970 deadline, were submitted for consideration by the Fellow Committee in 1970. (This compares with 395 submitted in 1969.) Committee members had the months of June and July in which to complete their scorings.

The computer facilities at the University of California (Berkeley) were used to develop the detailed scoring analyses which were reviewed by the Committee at the second meeting held in September, when final selection was made of those candidates being recommended for elevation to Fellow grade as of January 1, 1971. At the same meeting, the Committee prepared the citations for the selected candidates.

At the November 11, 1970 meeting the Board of Directors considered the report of the Fellow Committee, conferred the grade of Fellow to 123 members, and approved the accompanying citations.

Following notification to the members concerned, appropriate announcements of the Board action were released to the Press, organizational units of the Institute, the sponsors of all Fellow grade nominations, and the employers of the newly elected Fellows.

In the fall of 1969 the Board of Directors appointed an Ad Hoc Committee to examine the Fellow recognition in the broad context of IEEE's recognition activities, and the mechanisms employed in the conduct of the Fellow recognition function. The recommendations of the Ad Hoc Committee will be submitted for consideration by the Board of Directors in 1971.

5. Finance Committee. The Finance Committee held six meetings during 1970 and primarily concerned itself with reviewing investment results, comparing actual results of operations with budget, determining where expenses could be reduced, and preparing the 1972 budget.

The Committee accepted the Audit Report of Price Waterhouse for December 31, 1969 and recommended to the Board of Directors that it be published in SPECTRUM.

The Investment Committee Charter was prepared by the Finance Committee and forwarded to the Executive Committee for approval. On the Investment Committee's recommendation, half of the Equity Fund was transferred to Bonds. The investment of surplus cash of the Cowan Fund in AT&T 8-3/4% debentures was approved by the Finance Committee.

At all meetings, the results of operations to that date were compared with the "seasonalized" budget to show variations as they were occurring. This enabled the preparation of a forecast for the complete year to highlight expected variations and to pinpoint areas that were out of control and needed attention. Reductions in several departments were voted in mid-year to partially absorb the expected lower income.

The first draft budget for the fiscal year 1971 was reviewed five months before the beginning of that year on both a departmental and functional basis. This allowed sufficient time to make adjustments needed to balance the budget.

The Finance Committee was enlarged to include all of the members of the Executive Committee.

6. History Committee. A formal meeting of this Committee was held in March at the International Convention, but most of the Committee work was carried on by correspondence. The preparation of a history of the formation of the IEEE from the merger of the American Institute of Electrical Engineers and the Institute of Radio Engineers is an ongoing project of Nelson Hibshman, retired IEEE Executive Consultant, under the auspices of the History Committee. Preliminary steps were taken for assembling a limited collection of archival documents having special relevance to the Institute. An attractive locked display case, purchased with funds made available by the Life Member Fund Committee, was installed in the New York offices to house this collection.

7. Internal Communications Committee. The ICC held four meetings during 1970. The Committee operated as an advisory group and reviewed internal communication problems recommending ways to improve the interface between the Institute and the member.

As a result of the establishment of RAB, the Long Range Planning Committee, the Ad Hoc Public Relations Advisory Committee (PRAC) and certain ad hoc committees of TAB, ICC's duties under Bylaw 311.5 have been superseded. The Committee was disbanded as of December 31, 1970, subsequent to submitting a report to the Executive Committee recommending areas where the several programs it generated during its lifetime should be monitored.

ELECTRICAL ENGINEERING, the Institute's management newsletter on IEEE operations to encourage communication among all organizational entities and the staff, was published under the aegis of the ICC. Additional information on E. E. can be found in the publication section of this report.

8. Intersociety Relations Committee. During 1970 the ISRC reviewed IEEE's participation in 35 organizations throughout the world as reported by 99 volunteer representatives. A comprehensive grouping of digested reports from the IEEE representatives was sent to the Executive Committee for their review.

As an example of the type of activity continually under review by the Committee, IEEE's involvement with the newly created World Federation of Engineering Organizations (WFEO) was clarified and the Committee recommended continued support and active participation by IEEE.

The Committee studied the implications of the ECPD Constitutional changes relating to admissions and reaffirmed its long held position that voting membership in ECPD should rest with societies with primary curricular responsibility. The Executive Committee has so suggested to ECPD. ISRC also reviewed ECPD's guidance activities and agreed with the EAB that close monitoring over the short term is required to determine the degree to which IEEE would be willing to continue its present policy of reliance on ECPD for profession-wide coordination of local guidance activities, as against joining with other societies in developing a new program.

The ISRC reviewed the subject of IEEE representation and support in connection with national engineering societies in Regions 8-10 and decided that individual members or a unit of IEEE in another country could join national societies if they wish in order to participate in joint conferences or other activities of mutual benefit in specific technical areas, but that IEEE should not become involved as a society. Any support

in connection with such interaction should come through the normal Section or Group budgets but, if there should be special circumstances requiring additional support from IEEE, such situations should be considered on a case by case basis.

The Committee reviewed the subject of engineering registration within Regions 1-6 and the trend toward state laws tending to be more restrictive as to who may call himself an engineer and practice engineering. It was decided that IEEE should develop a channel of information to keep its membership advised on registration requirements and developments throughout the United States and in other countries. It was suggested that there should be at least a yearly report on the situation published in SPECTRUM and notification to the membership of any special developments which might be of immediate interest to them during the interim.

The ISRC Subcommittee on Scientific and Cultural Exchanges continued its efforts to enlarge the scope of the exchanges to include additional Eastern European countries. There was very positive response from Romania and Hungary and the latter sent one representative to the 1970 IEEE International Convention. Romania has a significant problem in obtaining funds to send their delegates but hopes to find some solution in the future.

As a result of negotiations started at the IEEE Convention, a number of U.S. companies, involved in solid-state technology, had considered sending a five-man subgroup with the regular IEEE delegation to the 1970 Popov Society Congress for an in-depth look at solid-state installations in the U.S.S.R. However, it was decided that it would be more feasible for this group to plan their activities separately since the work involved would most likely postpone any exchange to a much later date. Negotiations are still under way for an exchange in the spring of 1971. If this exchange can be agreed upon, it could provide a model for future IEEE exchanges which may be organized as sub-delegations of the Popov exchange but emphasizing a specific area of technology. As an effort in this direction, the Chairman of the Subcommittee wrote a memo to all the Group Chairmen to describe the IEEE/Popov exchange and request their assistance in expanding into special areas of technology. Several members of the Groups expressed interest in participating as delegates to the Congress.

Dr. Herbert Sherman of MIT Lincoln Laboratories has succeeded Dr. Paul E. Green, Jr. as Chairman of the Subcommittee.

The 1970 IEEE delegation to the Popov Society Congress visited Kiev for the first time and had very rewarding visits to installations in Leningrad, Novosibirsk and Moscow as well. The program continues to expand both in numbers of participants and quality of installations visited.

9. Life Member Fund Committee. One formal meeting of this Committee was held in March 1970 at which \$3,000 was appropriated towards student registration fees at the International Convention, on a one-time experimental basis only. As a result of this experiment, the Institute received approximately 1,600 new student applications during 1970 over 1969.

The Board of Directors appointed an ad hoc committee on Professional Concerns of Young Engineers to seek ways in which the IEEE can more vigorously serve the young professional. The LMFC appropriated \$6,000 to compensate members of this Committee for their travel expenses to attend authorized meetings during 1970.

The new Historic American Engineering Record is a government-professional program which will undertake the broad-scale identification and recording of significant examples of engineering history. The work will be carried out in cooperation with interested public and private groups on a donated fund basis. The LMFC voted to provide the seed money if the History Committee should express interest in IEEE's participation in the Historic American Engineering Record.

Following the Committee's recommendation, the Board of Directors approved a Bylaw which broadens the scope of the Life Member Fund Charter to include the interests of older members, whether or not they qualify as Life Members.

A newsletter was developed and mailed to all Life Members in October 1970, thanking them for their generous contributions to the Fund and outlining the worthy projects which the Fund has made possible. It is hoped that a similar newsletter will continue to be prepared and mailed to Life Members once a year.

10. Long Range Planning Committee. This Committee held four meetings during 1970, one of which was held with the Executive Committee. During all meetings, attention was focused on the economic problems and the socio-technical interface.

Regarding the economic betterment of the engineer, the Committee felt that the Institute can best serve its individual members through its continuing educational programs, its publications and through prognosis, by charting the future of the profession. It urged support of Portable Pensions for the long range well-being of the Institute. It recommended special ad hoc task forces to study areas related to environment.

The Public Relations Advisory Committee, at the joint Long Range Planning/Executive Committee meeting, recommended that the Institute concern itself with: (a) obtaining public and member support for IEEE activities; (b) obtaining public support for science and engineering in general,



and for electrical and electronics engineering in particular; and (c) developing a social consciousness among its members so they practice their profession in a way that deserves public support.

The RAB was asked by the LRPC to report on what action might be taken by the Sections to assist the educationally disadvantaged. The importance of keeping IEEE's perspective transnational was stressed by the LRPC, and non-U.S. Directors were asked to recommend specific things the Institute should be doing for its non-U.S. members.

Finally, the Committee felt that IEEE officers must make a continuing effort to set goals, both for the long range financial and operational structure of the Institute.

11. Membership and Transfers Committee. This Committee, composed of twenty-four members, met three times during 1970. Members of the Committee were designated "Area Representatives" and assigned to particular Sections with which they maintained regular communication in the matter of membership and transfer activities.

Support from Regional Directors. Regional Directors were requested to lend the support necessary to generate effective M & T programs at the Section level. To assist the Regional Directors in this effort, specific members of the Committee were designated "Regional Representatives" to maintain liaison with particular Area Representatives and to serve as the direct contact between the Regional Director and the M & T Committee. The Committee recommends that this liaison function, initiated in 1970, be strengthened in future years.

Membership Goal for 1970. At the first meeting in March, the Committee set a membership goal which called for each Section to realize a ten per cent net increase in membership during the calendar year. The M & T Committee solicited the cooperation of the Sections in this effort. Status reports were issued periodically to show the progress being made by each Section. The results of the 1970 M & T program were gratifying. IEEE membership reached an all-time high of 169,059, with forty IEEE Sections achieving a net increase of ten per cent or more during the year. Plans are under way to give appropriate recognition to the Sections achieving this goal.

Members in Dues Arrears. A large percentage of the membership fail to renew membership each year. A concentrated effort was made in 1970, with the cooperation of the Regional Directors, to reclaim these members through personal follow-up at the Section level. The subsequent substantial reduction in number of members in dues arrears can be traced to this direct communication with the members, which only the Section can provide. In 1971 a formal program will be initiated to encourage greater involvement by the Sections in the area of member retention.

Student Transfers to Higher Grade. Statistics prepared in 1970 show that the major input to the general IEEE membership comes from Students transferred to higher grade. It was determined that the Institute needs a concentrated program to get the graduating Students involved and interested in continuing membership in the IEEE, and that this activity should have priority attention in 1971 with active support at all levels of the Institute to retain as members a greater percentage of these graduating Students.

Members in Military Service. Upon the recommendation of the M & T Committee, the IEEE Bylaws were amended by the Board of Directors to permit members in any grade to continue IEEE membership at reduced rates for a specified period while in military service.

Nonmembers on Section Mailing Lists. Some Sections maintain the names of non-IEEE members on the mailing list to receive announcements of meetings and activities of the Section. While it is good practice to add the names of prospective members to the Section mailing list for a limited time, the Committee felt that the names should be dropped if the individuals cannot be persuaded to join the IEEE. Following the recommendation of the Committee, action was taken by the IEEE Executive Committee to adopt the following Statement of Policy:

"On the recommendation of the Section Chairman, the Chairman of the Section Membership and Transfers Committee (in those Sections in which one exists), or the Section officer assigned the responsibility for membership promotion, the name of a non-IEEE member may be added to the mailing list to receive notices of Section activities. The name shall be added initially for a period of six months with provision for one extension of an additional six months period of time. If the individual has not applied for membership by the end of this one year period, his name shall be removed from the mailing list with the provision that it not be added as a nonmember for the next three years.

"In addition to those non-IEEE members who receive Section notices in accordance with the foregoing paragraph, on the recommendation of the Section Chairman and the approval by the Regional Director, there may also be included individuals whose positions in the community make it desirable for them to be kept informed of IEEE activities. There shall be no time limit associated with continuation of names in this category on the mailing list, although it is suggested that for the greatest effectiveness the list be revised annually. The Section Chairman should report annually to the Regional Director concerning names on the Section mailing list which are in this category, and in the process of adding the name, as well as in the annual reporting, a brief statement should be provided justifying the inclusion of each name."

Brochure for Newly Elected Members. IEEE staff requested comments from the M & T Committee on a draft of a new brochure intended to be mailed with the notification of election to acquaint new members with the services available from IEEE. The recommendations from the M & T Committee will be incorporated in this new brochure to be printed in 1971.

Membership Brochure for Prospective Members. The M & T Committee reviewed the existing brochure provided to prospective members, recommending changes to be incorporated when the brochure is reprinted.

Slide Presentation "Why Membership and Transfers?" The Policy and Planning Committee of the Regional Activities Board prepared a special set of slides and accompanying commentary on the subject "Why M & T?" intended to motivate the Section Executive Committee in organizing and monitoring Section M & T programs. During 1970 this presentation was made at least once in each of Regions 1 through 6 and at a special meeting in November when incumbent and incoming Regional Directors were in attendance.

Member Services Desks at IEEE Conferences. During the year members of the IEEE staff operated Member Services Desks at twenty major Conferences sponsored or cosponsored by the IEEE. 575 IEEE applications and 656 applications for enrollment in the Groups and Societies were deposited. In addition 3,011 inquiries from members and prospective members were handled verbally or by letter after the Conferences.

Composition of 1971 M & T Committee. It was apparent to the M & T Committee that the success of any programs it generated required active participation by the organizational units of the Institute: the Regions, Groups and Societies, Sections, Group Chapters, and Student Branches. The composition of the 1971 M & T Committee is being changed to include a Chairman, a Vice Chairman, a representative from the Student Activities Committee, and one representative from each Region and each technical Division. The objective is to combine efforts in these major areas of IEEE activity to implement an effective and continuing M & T program.

12. Nominations and Appointments Committee. This Committee serves for the term April 1 - March 31. Six meetings, scheduled during that period, were required to complete the following Committee responsibilities:

- (a) Report to the Board of Directors, recommending candidates for President and Vice President for election by the voting members.
- (b) Report to the Board of Directors, recommending candidates to serve as Chairmen and members of the following Boards and Committees reporting to the Board of Directors:

Awards Board  
Conference Board  
Educational Activities Board  
Fellow Committee  
Intersociety Relations Committee  
Life Member Fund Committee  
Long Range Planning Committee  
Nominations and Appointments Committee  
Publications Board  
Regional Activities Board  
Technical Activities Board  
Tellers Committee

- (c) Report to the annual Assembly, recommending candidates for election by that body for:

Vice President - Publication Activities  
Vice President - Technical Activities  
Secretary  
Treasurer  
Director of Region 10  
Chairman of Awards Board  
Chairman of Educational Activities Board  
Vice Chairman, Technical Activities Board

- (d) Report to the Executive Committee, with recommended candidates to serve on the following Committees reporting to the Executive Committee:

Admission and Advancement Committee  
History Committee  
Membership and Transfers Committee

13. Publications Board. (See Section F and Section H-I)

14. Regional Activities Board. The Regional Activities Board held four regular and one special meeting during 1970. In addition, it participated in two dinner meetings with the Technical Division Directors and arranged a Regional Directors Orientation Session in November attended by the Regional Directors-Elect.

The objective of the Board as stated at the outset of the year was to formulate plans and take actions that would result in better communication with the members; to determine and try to meet the needs expressed by the members and to encourage the Sections to be more active in serving these needs.

To this end a number of subcommittees were appointed, each charged with the responsibility of developing plans to be put into action during 1970 in addition to working on projects that would continue through the following years. The emphasis, however, was on immediate action. The Regional Directors were charged with the responsibility of being Regional Executives who develop in the Sections a businesslike attitude by setting goals, allocating funds and establishing performance accountability.

All members of the Regional Activities Board were extremely active in discharging these

responsibilities. The RAB Chairman attended Regional Committee meetings in each of Regions 1 through 8 as well as many Section meetings all over the United States. The Regional Directors were more active than ever - more meetings with Sections, more committees established, better communication through personal visits, phone calls, Region Reports and newsletters.

The Regional Directors developed various means for stimulating additional Section activities, e. g. Region 2 held three Regional Committee meetings, two of which were combined with Section Workshops; Region 4 established a Regional Operating Committee to provide a means for taking care of Regional problems and to make possible more visits to Sections, Subsections and Branches; Region 7 used the Council structure; Region 8 focussed the activities of the Sections on EURO-CON 71. Region 3, which operated as a laboratory of the RAB Policy and Planning Committee of which the Region 3 Director is a member, used the Area Chairman concept. Six Area Chairmen were appointed by and reported to the Regional Director. Each Chairman was assigned approximately six Sections to work closely with during the year. Region 3 also established six Regional Subcommittees whose members worked with and supported the Area Chairmen. This effort resulted in establishing a new format for Regional Committee meetings with workshops that proved to be highly productive.

The RAB Policy and Planning Committee, which met nine times during the year, developed and tested in Region 3 training material for Section Officers and Committees. The projects covered: slide presentations; a Section Management Guide that included job descriptions, monthly operating schedules, and suggested measures of performance for each officer and committee member; and the development of a brochure inviting members to become more active in IEEE affairs which was mailed to Region 3 members. The results were presented to the Regional Activities Board and the tools made available for use by other Regional Directors.

The RAB Member Services Committee, comprised of two members from each Region, held two meetings during the year. Most of their efforts were concentrated on workshops. A total of eleven Section workshops were held in Regions 1-7, seven of which were arranged by the MSC. In addition, the MSC participated in workshops for Student Branch Chairmen and Student Counselors and in the RAB Orientation Session. It arranged the 1970 Section Editors Luncheon Meeting and plans to use the workshop format for this meeting next year.

The RAB Finance Committee. A small RAB development budget was approved early in the year, providing limited support to some of the above activities. For 1971 the RAB has obtained

funds for Regional Workshops, RAB Committee Operations and RAB Development Funds, as well as additional staff support in the form of a Staff Director for the new Member Services Department. The Regional Activities budget retains the present rebate formula for Sections. The RAB Finance Committee has proposed a new concept of Section and Region financing and a new rebate structure is currently being developed with the object of motivating Sections to be more active in meeting the needs of their members.

The Student Activities Committee will be transferred from the jurisdiction of the Educational Activities Board to the Regional Activities Board effective January 1, 1971. A major emphasis will be made to establish better communication and increased activities between the Sections and Student Branches in the coming year.

15. Technical Activities Board. (See Section H-II)
16. Tellers Committee. The Tellers Committee met once in 1970 for the purpose of supervising the count of votes on the ballot returns from the voting members in the annual IEEE election. This year members were asked to vote on amendments to the IEEE Constitution, and the ballot mailed to Group members in Technical Divisions 3 and 4 called for additional voting for a Divisional Director to represent them on the IEEE Board of Directors.

In accordance with IEEE Bylaws revised in 1970, the ballot included space in which the voter could write the name of any person he desired to elect for any of the offices appearing on the ballot.

The report of the Tellers Committee to the Board of Directors included full details on the results of the election.

SECTION H

V. IEEE GROUP INSURANCE PROGRAM

The Insurance Program approved by the Institute for its members showed another increase in participation during 1970. The following table indicates the number of certificates in force for each of the Plans in the Program for the policy years ending in 1970.

Certificates in Force	
Disability Income	3,944
Major Hospital-Nurse-Surgical	3,164
High-Limit Accidental Death and Dismemberment	4,426
Hospital Dollars	4,397
Life Insurance	19,860
	<u>35,791</u>

This amounted to a gain of about 7.4%.

Experience for the Life Insurance Plan continued to be very favorable. Members who were insured under the Plan during the policy year ending September 1, 1970 will receive a dividend credit equal to 60% of the amount paid for coverage during that policy year.

VI. HEADQUARTERS STAFF ACTIVITIES

As of December 31, 1970, there were 271 permanent employees on the IEEE Staff. Staff assignments for the years ending 1969 and 1970 are as follows:

	12/31/69		12/31/70	
	Budget	Actual	Budget	Actual
<b>Administrative Services</b>				
Accounting		19		21
EDP		28		25
Membership Services		26		20
Operations		<u>102</u>		<u>91</u>
Totals	178	175	186	157
<b>Editorial Services</b>				
Spectrum		8		8
Proceedings		4		5
Group Transactions		37		32
Student Journal		2		1
Other Publications		6		9
Art Department		4		3
Totals	68	61	69	58
<b>Educational Services</b>				
Awards		1		1
Student Branches		2		2
Public Relations		2		1
Support of Other Organizations		3		1
Career Guidance		1		1
Continuing Education		1		1
Totals	13	10	11	7
<b>Executive Office</b>	18	19	16	15
<b>Information Services</b>	10	8	16	1
<b>Publication Services</b>	5	4	5	5
<b>Technical Services</b>	21	21	23	22
<b>Convention Services</b>	0	0	0	6
Totals	313	298	326	271

In January 1970, William J. Hilty became director of the newly created Convention Services Department. J. Howard Schumacher, Jr., previously in Technical Services, was named Manager of Convention Services, and Joseph M. Doblmeier was named Manager of Exposition Services. Sava I. Sherr was named Manager of Standards Operations with headquarters in Newark, New Jersey. We regret to report the death of Edward C. Day, Manager of the Dictionary Project.