# A Century of Honoring Excellence in Electrical and Computer Engineering



Eta Kappa Nu 1904 - 2004



A Century of
Honoring Excellence
in Electrical and Computer
Engineering

## Eta Kappa Nu

**Electrical and Computer Engineering Honor Society** 

The Eta Kappa Nu Association was founded at the University of Illinois at Urbana in 1904 by Maurice L. Carr, to encourage excellence in education for the benefit of the public by: Marking in a fitting manner those who have conferred honor upon engineering education by distinguished scholarship, activities, leadership and exemplary character as students in electrical or computer engineering, or by their attainments in the field of electrical or computer engineering; Providing educational and financial support to said students; and Fostering educational excellence in engineering colleges.



1904 - 2004

# A Century of Honoring Excellence in Electrical and Computer Engineering

#### Contents

Preface	5
Brief History of HKN's Early Days	6
Maurice L. Carr	10
Historical Milestones	12
Chapter Directory	14
Tribute to HKN Past Presidents	19
Past Officers, Directors, and NAB members	38
Sample Bridge Covers	41
Executive Secretaries	42
Distinguished Service Award Recipients	44
Vladimir Karapetoff Awards	45
Eminent Members	46
Outstanding Young Electrical Engineers	48
Outstanding Teaching Award	50
Outstanding ECE Student Award	52
Outstanding Chapter Activities Award	54

A Century of Honoring Excellence in Electrical and Computer Engineering was prepared and published by the HKN headquarters staff as a token of respect for the electrical and computer engineering profession, as exemplified by the membership of the Eta Kappa Nu Association. Presidential historical research and compilation by JuttaWillmann. Editorial supervison and layout by Ron A. Spanke.

Copyright © 2004 by the Eta Kappa Nu Association. All rights reserved



Maurice L. Carr Founder of Eta Kappa Nu

Pelcome to this special tribute to the first 100 years of Eta Kappa Nu. A century of Honoring Excellence is dedicated to the Eta Kappa Nu. Association at the time of its centennial anniversary celebration at the University of Illinois. It is intended as a commemorative and historical record to which the many members and friends of Eta Kappa Nu can look with inspiration.

As we cross into our next century, Eta Kappa Nu must continue to adapt as we strive to make our society more meaningful to students and alumni in the twenty-first century. We will focus on continuing to expand chapters, strengthening the ideals of honor, scholarship, ethics, and academic integrity for all members, and striving to build a strong national organization to support our chapters and members and publish The Bridge magazine. I view my role as the HKN Executive Director and Editor of The Bridge with great excitement because the possibilities for growth and improvement of our society are indeed limitless.

As I look back, I am awed by the magnitude of continuous contributions from many of the HKN members that I have had the privilege to work with. Many of these individuals are profiled in this centennial remembrance. As I look forward, I continue to see great individuals, great achievements and a great future for HKN.

For now though, let's take a moment and reminisce. This special tribute is dedicated to where we have been. It follows our society, its leaders, and those it has recognized throughout the past century. It relates the history of our founding fathers and their goals for the society. It covers the growth of the society, and contains a tribute to its past presidents, board members, Eminent Members, and award programs. But most importantly, it follows Eta Kappa Nu itself and how the organization has changed and how the organization and its programs have adapted throughout the past century.

In the one hundred years since the first informal meetings were held on the Urbana campus, Eta Kappa Nu has achieved stature as the honor society for one of the world's most important professions. It is a common thread that binds together over two hundred thousand members that are dedicated to excellence in electrical and computer engineering.

From the Shade of a Cottonwood Tree

# A BRIEF HISTORY OF HKN'S EARLY DAYS Prepared by ALTON B. ZERBY

Prepared by ALTON B. ZERBY

HKN Executive Secretary 1954

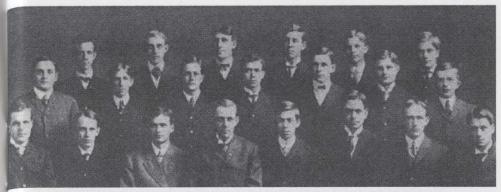
Adapted by RON A. SPANKE

HKN Executive Director, 2004

In mythological beliefs persisted today, there would be many claims that Eta Kappa Nu sprang full-grown out of the mind of its Founder-as the ancient Greeks claimed that Eros (Cupid) sprang out of the shoulder of Aphrodite. However, it is well known and fully accepted that worthy ideas as well as marvelous machines do not spring; they evolve through painstaking development. Furthermore, to have credited the founder of Eta Kappa Nu with having obtained his idea as a dream while sleeping would be a gross insult. True, Maurice L. Carr was a "dreamer," as are most men of vision, but his dreams were spirited daydreams and he had the mental and physical faculties and energy to carry them through, and the personality to interest nine others to use their brains and brawn in teamwork-as true researchers and inventors of today.

At the installation of Beta-Delta Chapter in 1937, "ML" said he did not recall definitely when the idea first occurred to him of forming a collegiate society of electrical engineering students, but he thought it occurred sometime during his sophomore year. He said, however, that he knew with certainty that while working for a utility at Springfield, Missouri, during the summer of 1904, he resolved to sound out his classmates on the subject in the fall.

He first approached a particular buddy called "Army"—Charles E. Armstrong. The idea immediately met with Armstrong's approval and the two decided to broach the subject to other classmates. "Army," who was born September 30, 1874, was almost three years "ML's" senior. As founder Edmund Wheeler has pointed out, "He and ML were considerably older than most of the rest of the group and both had had much practical experience prior to their senior year. Thus the young organization had



ETA KAPPA NU in 1905 (Alpha Chapter). Left to right, Frontrow: F. H. Winders, C. K. Brydges, F. E. Smith, M. L. Carr, E. B. Wheeler, M. K. Akers, C. E. Armstrong and H. S. Green. Middle Row: C.C. Carr, W. T. Burnett, W. H. Weaver, L. V. James, O. Wiemer, L. Moseman, and R. E. Bowser. In rear: L. F. Wooster, M. H. Brightman, H. D. Cornell, T. H. Armine, G.W. Saathoff, and H. A. Bergert.

the advantage of their counsel and advice in both class and fraternal affairs, which all of us were glad to accept."

Following their first formal meeting on Friday evening, September 23, 1904, young Carr and Armstrong effected a meeting with Milton K. Akers, Edmund B. Wheeler, and Ralph E. Bowser, who became sufficiently infected with enthusiasm to agree to a planning session. Sunday morning "ML" and "Army" spent several hours on the steps of the Astronomical Laboratory preparing written, tangible plans-they sought secrecy at this stage.

The five met as agreed in front of University Hall on Sunday afternoon, September 25, 1904, and wandered to a shady spot under a large cottonwood tree in the middle of an Agriculture Department field off the main campus. The tree has since become sentimentally emblematic of the early history of the organization, although it was but a chance choice and sheltered but a few subsequent meetings.

The following five weeks were extremely busy ones. A name and an emblem were chosen, policies of membership had to be defined, membership qualifications and an induction ritual were drafted. Early in this organization period Fred D. Smith, Frank R. Winders, and William T. Burnett joined the original five. Then, on October 28, 1904, at the home of Frank Winders, the first induction meeting was held. Carl K. Brydges and Hibbard S. Greene, both seniors, had by then consented to participate and it is fairly well established that Otto Wiemer became the first formal initiate.

Finally, the organization received recognition from the university administration and later meetings were held in a room in the EE building.

All early reports were that Carr's original idea was to make the chief purpose of the society one of employment-a professional union, we would call it today. But in those days such organizations were not thought of. The early publications quite plainly indicate this purpose. However, not many years passed and very few chapters were installed before it was decided that Eta Kappa Nu should be an EE honor society with scholarship as one of its chief qualifications.

Wheeler recalls that scholarship was an important consideration from the first, but not a deciding factor. As secretary of the pioneer chapter, he, along with Carr and others of the original ten, decided that invitation to membership should depend primarily upon a collective favorable judgement of individual candidates and as to the likelihood of their eventual success in the engineering field.

Thus it was concluded that some classmates would not be considered eligible regardless of their scholastic rating and the matter of scholarship qualification for membership was temporarily deferred. In short, the founders were looking for future leaders of the profession!

With those basic ideals the organization was launched. The seal and plate for membership certificates were made up early in 1905 and the certificates were delivered in time for commencement. While HKN was strictly a "local" when organized, the foundations of a "national" were so strong that when the chapter assembled a first convention prior to the 1905 graduating exercises a full list of "national" officers was elected from the departing class.

The formation of a "ghost national" on the part of the founding members was more than a sign of wishful thinking because groups of EE's in Midwestern schools heard of the society and petitioned for a charter. The first new chapter was installed at Purdue University in 1906. But that organization "went on the rocks" quite early. It appears that our early members, being young, did not fully understand the workings of college administrations and had not obtained prior approval of the Purdue officialdom. The President of Purdue required that the charter be withdrawn, which was done. But those already inducted were continued as members of Eta Chapter (a chapter-atlarge). In 1913, the Purdue EE administration requested a charter for a chapter on its campus and Beta was reinstated.

Gamma Chapter was installed at Ohio State University in 1907, two more, Delta at Armour Institute of Technology (now Illinois Institute of Technology) and Epsilon at Pennsylvania State College in 1909. Chapters at Case School of Applied Science (now Case Institute of Technology) and at University of Wisconsin were added in 1910. By then the national characteristics of Eta Kappa Nu were established. Still, growth was not phenomenal and continued at an average of but one chapter a year to 1916.

Scholastic standards observed soon after the founding of Eta Kappa Nu were memorialized in a mild statement written into the Constitution during the Convention of 1913. This set definite numerical limits to the proportion of each EE class that could be elected and required that the bylaws of each chapter must specify definite scholarship standards subject to approval by the National Executive Council. In general, these standards were specified in grade points. Then, during the latter part of

the 1930's, out national officers recommended that each college chapter set the upper fourth of the junior EE class and upper third of the senior EE class as eligible for membership. In 1947, The Association of College Honor Societies (ACHS) opened up membership to specialized or discipline-specific honor societies and Eta Kappa Nu joined the Association of College Honor Societies that year. ACHS recommended that the scholarship guidelines limiting membership to the upper third be written into our constitution, and the scholarship guidelines became mandatory.

From the first year of existence, the new organization began to publish a newsletter or magazine. From 1905 through 1908, the organization published a newsletter entitled *The Electric Field*. In 1909, *The Bridge* began publication to act as a vehicle of communication between students and alumni. In fact, it was the idea of the founders, carried through to this day, that Eta Kappa Nu should be more than a campus organization-a student is a member of a campus chapter at most for two years; but they are an alumnus for the remainder of their life!

During the early part of the organization, several alumni chapters were established to keep members involved in the organization after graduation. These alumni chapters have provided continuous support for the national organization and have helped create and administer many of our HKN award programs, in addition to supporting relations with their local college chapters.

To the ten founders, the adoption of a Constitution, the choosing of a name and insignia, and the formulation of a ritual was a serious undertaking. But little did those inspired young men then realize how seriously their lead would be followed-that they had given life and purpose to a society adding standards and prestige to an honored profession; that one hundred years later Eta Kappa Nu would have grown to a record of 211 college chapters and nearly 200,000 inducted members.

Founders Plaque and memorial boulder commemorating the founding of the Eta Kappa Nu Honor Society and its initial charter members was placed in front of the electrical engineering building on the University of Illinois campus, November 9, 1929.

#### **MAURICE LEROY CARR**

April 17, 1877 - July 13, 1942

"Until the last, he was intensely interested in the society which he founded. A dreamer who made his dreams come true, he even had dreams for the future of Eta Kappa Nu. His untimely passing challenges us to see that his dreams of the future of our society come true. A real friend, the memory of whom can never die." ALTON B. ZERBY

Two hundred and eleven college chapters all over the United States are today a living monument to the memory of Maurice L. Carr. Because of his dream one hundred years ago, some 200,000 electrical and computer engineers have known the rewards of association with other engineers mutually interested in the promotion of excellence in electrical and computer engineering education and high ideals and service within the profession.

"ML" Carr was born near Avon, Illinois, and was graduated from Avon High School in 1895. Early in life, he exhibited a desire to build things and after his graduation he helped his father connecting instruments and building short transmission lines for a small telephone company in which the elder Carr had an interest.

After brief service during the Spanish-American War, Carr took his musteringout money and enrolled in the Engineering College of the University of Illinois. He ran out of money the next year and spent three years building more telephone lines, working in an electric meter factory, and even teaching at Avon High School. In 1902 he was able to return to college, where he helped in the Physics Laboratory and worked for a utility company during vacations to see him through.





At left, picture of Maurice L. Carr taken around the time of Eta Kappa Nu's founding in 1905. Ar right, HKN's founder shown later in life

"ML" was graduated in the spring of 1905 with honors and was elected to Tau Beta Pi and Sigma Xi. The next year he served as an assistant for the Department of Physics in the experiment station at Urbana, where he worked on the collapse of boiler flues under external pressure and high temperature. He also worked on high temperature measurements—a field then in its infancy—but left at the end of the year to assume charge of the electrical testing department of the Peoria Gas and Electric Company.

In 1907 Carr affiliated himself with the Underwriters' Laboratories in Chicago, where he was employed for 13 years. He pioneered in the fire testing of building materials and introduced quantitative methods to the field. He originated the timerating of fire protective devices as well as a method of testing safes. During this time he served as an instructor in the Lewis Institute Night School for four years.

In 1930 he joined the Pittsburgh Testing Laboratory in Pittsburgh, Pennsylvania, and from 1932 until his death ten years later he was Director of Research.

Maurice Carr was given the Professional EE degree by his alma mater in 1911. He was a member of the National Fire Protection Association, the American Society of Heating and Ventilating Engineers, and a Fellow of the American Association for the Advancement of Science.

### **HKN** Historical Milestones

of our first century

1904	First formal planning meeting on September 23, 1904
	Eta Kappa Nu chosen for name, taken from the first, fifth, and last letters of "HEΛΕΚΤΡΟΝ" the greek word for amber or electron.
	The Wheatstone Bridge chosen as the symbol of the society
	First Membership qualifications and criteria defined
	First Initiation Ritual written
	First Induction held on Oct. 28, 1904. Founding date of the Organization
1905	First Seal and plate of organization created
	First Membership Certificates produced
	First Publication "The Electric Field" Volume 1, published annually
	University of Illinois organization designated as Alpha Chapter of an envisioned national organization
	First 'national' convention and national officers elected
1906	First Expansion chapter ("Beta") installed at Purdue. Subsequently closed and reinstalled in 1913
1908	First Alumni chapter established at Purdue
1909	First issue of "The Bridge" magazine, published annually
1910	First Honorary Member
1913	First general revision of the constitution, which now includes scholastic gradepoint standards
1920	Bridge magazine published quarterly
1927	HKN Shield and coat-of-arms adopted
1928	National Advisory Board created.
	Executive Secretary position created as the first paid national officer
	J. A. Umhoefer elected as First Executive Secretary
1930	Biennial Convention Authorized
1931	Leland A. Spangler elected as second Executive Secretary
1932	College Visitation Program begins
	Outstanding Chapter Activities Award established
1934	Alton B. Zerby elected executive secretary and serves until 1957. HKN national HQ office moves to Dillsburg, PA.
1936	Outstanding Young Electrical Engineer Award program established. Administered by the NY alumni chapter
1942	M.L. Carr died
1947	HKN Admitted to the Association of College Honor Societies

1950	Eminent Member program established
1951	HKN incorporates in the state of Delaware as the Eta Kappa Nu Association
1954	National Convention and 50-year anniversary held at University of Illinois
1955	First HKN Sound Movie produced as a guidance film for potential engineers
1957	Paul Hudson elected as executive secretary, serves until 1988. HKN
1,2,37	headquarters office moves back to Urbana, IL
1957	
1337	HKN receives 501(c)7 non-profit tax exempt status from the IRS as a
1000	fraternal and social organization
1958	Organization structure changes to create a board of directors with a president,
182	VP and executive secretary and four directors. Replaces the National
18 3	Advisory Board (NAB).
	Amendment to Delaware articles of incorporation filed.
1965	Outstanding EE Student award program established. Administered by the
	LA alumni chapter. Later renamed the Zerby-Koerner Outstanding ECE Student award.
1970	Second HKN movie produced entitled "Engineering: The challenge of the
100	Future"
1971	Distinguished Service Award program established
1972	Distinguished Young EE Teacher Award established, Later renamed the C.
1997	Holmes MacDonald Outstanding Teacher Award
1984	Norman R. Carson Outstanding EE Junior Award program established.
1988	Bob Betten elected as the new executive secretary and serves until 1999.
1	HKN headquarters office moves to Rolla, Missouri
1998	Strategic Planning Meeting held to recast and revitalize HKN organization.
The second	Proposes sweeping changes in organization structure, leadership,
	constitution and finances.
2000	Ron Spanke named to replace Bob Betten as executive secretary. Headquar-
The use	ters office moves to Lisle, IL
C 52 C 63 E	Scope of organization officially expanded to include Electrical and Computer
35-18	Engineering
2001	Amended and Restated articles of incorporation are filed with the state of
138 E38	Delaware to emphasize the focus of the organization as promoting
-85 EB	excellence in electrical and computer engineering education and to add
- 67 75.00	language to enable future charitable organization status.
2002	New constitution passed to redefine organization. Board expanded to six
	directors. Executive Secretary position on the board is eliminated.
AN ALE	Executive Director position is defined as an employee reporting to the
110.00	board. Dr. Spanke assumes new executive director position. Executive
155	council now consists of President, Vice-President, and Past President
	First National Student Leadership Conference held
2004	HKN receives 501(c)3 non-profit status from the IRS as a charitable and
201757	educational organization enabling contributions to be tax-deductable
	Eta Kappa Nu Centennial banquet and centennial student leadership
	conference held at University of Illinois.
	conference held at Oniversity of Infinois.

### **Centennial Chapter Directory**

La Kappa Nu grew from an idea into a working chapter and has experienced a growth to 211 chapters throughout the past century. For such a society to become the vigerous organization that it is now requires that it be far more than a passing fad. That our founders had faith in their vision can clearly be seen today by the proliferation of Eta Kappa Nu and it's stature in all Universities and in the electrical and computer engineering profession.

	Chapter	University	Installed
1	Alpha	University of Illinois at Urbana-Champaign	10/28/1904
2	Beta	Purdue University	1906 & 1913
3	Gamma	Ohio State University	1907
4	Delta	Illinois Institute of Technology	1909
5	Epsilon	Pennsylvania State University	12/04/1909
6	Zeta	Case Western Reserve University	02/03/1910
7	Theta	University of Wisconsin	04/30/1910
8	lota	University of Missouri-Columbia	06/12/1911
9	Kappa	Cornell University	01/27/1912
10	Lambda	University of Pennsylvania	03/12/1913
11	Mu	University of California-Berkeley	12/18/1915
12	Nu	Iowa State University	05/13/1916
13	Xi	Auburn University	04/12/1920
14	Omicron	University of Minnesota	05/22/1920
15	Pi	Oregon State University	12/19/1921
16	Rho	University of Colorado	03/04/1922
17	Sigma	Carnegie-Mellon University	05/19/1923
18	Tau	University of Cincinnati	05/26/1923
19	Upsilon	University of Southern California	06/06/1925
20	Phi	Union College	02/20/1926
21	Chi	Lehigh University	05/22/1926
22	Psi	University of Texas-Austin	04/24/1928
23	Omega	Oklahoma State University	02/15/1930
24	Beta Alpha	Drexel University	05/01/1935
25	Beta Beta	Brooklyn Polytechnic Institute	05/01/1936
26	Beta Gamma	Michigan Technological University	06/06/1936
27	Beta Delta	University of Pittsburgh	05/14/1937
28	Beta Epsilon	University of Michigan	04/24/1937
29	Beta Zeta	New York University	05/01/1937
30	Beta Eta	North Carolina State University	05/28/1938

14

31	Beta Theta	Massachusetts Institute of Technology	04/15/1939
32	Beta lota	University of Iowa	05/05/1939
33	Beta Kappa	Kansas State University	05/06/1939
34	Beta Lambda	Virginia Tech	05/18/1940
35	Beta Mu	Georgia Institute of Technology	05/17/1941
36	Beta Nu	Rensselaer Polytechnic Inst.	05/11/1942
37	Beta Xi	University of Oklahoma	05/16/1942
38	Beta Omicron	Marquette University	01/21/1945
39	Beta Pi	City College of New York	02/16/1946
40	Beta Rho	West Virginia University	04/02/1947
41	Beta Sigma	University of Detroit	06/21/1947
42	Beta Tau	Northwestern University	01/24/1948
43	Beta Upsilon	University of Kentucky	04/24/1948
44	Beta Phi	University of Tennessee	12/11/1948
45	Beta Chi	South Dakota School of Mines & Tech.	05/11/1949
46	Beta Psi	University of Nebraska	05/14/1949
47	Beta Omega	University of Connecticut	05/21/1949
48	Gamma Alpha	Manhattan College	01/28/1950
49	Gamma Beta	Northeastern University	03/04/1950
50	Gamma Gamma	Clarkson College	04/29/1950
51	Gamma Delta	Worcester Polytechnic Institute	06/02/1950
52	Gamma Epsilon	Rutgers University	06/03/1950
53	Gamma Zeta	Michigan State University	03/13/1951
54	Gamma Eta	Syracuse University	04/14/1951
55	Gamma Theta	University of Missouri-Rolla	04/26/1952
56	Gamma Iota	University of Kansas	05/24/1952
57	Gamma Kappa	New Jersey Institute of Technology	05/23/1952
58	Gamma Lambda	Columbia University	07/01/1954
59	Gamma Mu	Texas A & M University	10/08/1955
60	Gamma Nu	Texas Tech University	04/21/1956
61	Gamma Xi	University of Maryland-College Park	05/25/1957
62	Gamma Omicron	Southern Methodist University	05/06/1957
63	Gamma Pi	University of Virginia	05/20/1957
64	Gamma Rho	South Dakota State University	11/16/1957
65	Gamma Sigma	University of Utah	01/16/1958
66	Gamma Tau	North Dakota State University	04/24/1958
67	Gamma Upsilon	Johns Hopkins University	05/09/1958
68	Gamma Phi	University of Arkansas	01/19/1959
69	Gamma Chi	New Mexico State University	05/09/1959
70	Gamma Psi	Lafayette College	05/16/1959
71	Gamma Omega	Mississippi State University	12/10/1959
72	Delta Alpha	Wayne State University	01/18/1960
73	Delta Beta	Lamar University-Beaumont	05/13/1960
74	Delta Gamma	Louisiana Technological University	05/13/1960
75	Delta Delta	University of Denver	05/21/1960
76	Delta Epsilon	Ohio University	05/21/1960
77	Delta Zeta	Washington University-St. Louis	05/19/1960
78	Delta Eta	University of Massachusetts	05/21/1960

15

79	Delta Theta	Pratt Inst	05/21/1960
80	Delta lota	Louisiana State University	04/16/1961
81	Delta Kappa	University of Maine	05/12/1961
82	Delta Lambda	Duke University	05/14/1961
83	Delta Mu	Villanova University	05/16/1961
84	Delta Nu	University of Alabama	04/14/1962
85	Delta Xi	Air Force Institute of Technology	02/02/1962
86	Delta Omicron	University of New Mexico	04/08/1962
87	Delta Pi	Colorado State University	05/18/1962
88	Delta Rho	University of North Dakota	05/11/1962
89	Delta Sigma	University of Notre Dame	04/14/1962
90	Delta Tau	University of Southwestern Louisiana	05/19/1962
91	Delta Upsilon	Bradley University	05/12/1962
92	Delta Phi	University of South Carolina	05/17/1962
93	Delta Chi	Cooper Union	12/19/1962
94	Delta Psi	St. Louis University	04/01/1963
95	Delta Omega	University of Hawaii at Manoa	04/09/1963
96	Epsilon Alpha	Cleveland State University	05/01/1963
97	Epsilon Beta	Arizona State University	05/04/1963
98	Epsilon Gamma	University of Toledo	04/11/1963
99	Epsilon Delta	Tufts University	01/11/1964
100	Epsilon Epsilon	University of Houston	05/15/1964
101	Epsilon Zeta	University of Massachusetts-Lowell	12/12/1964
102	Epsilon Eta	Rose-Hulman Institute of Tech.	10/27/1965
103	Epsilon Theta	California State UnivLong Beach	02/13/1965
104	Epsilon lota	San Jose State University	05/15/1965
105	Epsilon Kappa	University of Miami	12/04/1965
106	Epsilon Lambda	Vanderbilt University	04/22/1966
107	Epsilon Mu	University of Texas at Arlington	04/30/1966
108	Epsilon Nu	California State University-LA	05/14/1966
109	Epsilon Xi	Wichita State University	05/22/1966
110	Epsilon Omicron	University of Delaware	05/20/1966
III	Epsilon Pi	Princeton University	05/01/1967
112	Epsilon Rho	Tennessee Technological University	05/12/1967
113	Epsilon Sigma	University of Florida	12/01/1967
114	Epsilon Tau	University of California at Santa Barbara	05/29/1969
115	Epsilon Upsilon	Tuskegee University	11/26/1969
116	Epsilon Phi	California Polytechnic St. University	04/13/1971
117	Epsilon Chi	University of Louisville	04/24/1971
118	Epsilon Psi	University of Santa Clara	05/01/1971
119	Epsilon Omega	University of Mississippi	05/04/1971
120	Zeta Alpha	Monmouth College	05/05/1971 05/08/1971
121	Zeta Beta	Texas A & I University	
122	Zeta Gamma	University of Rhode Island	05/10/1971
123	Zeta Delta	University of Texas at El Paso	05/14/1971
124	Zeta Epsilon	Florida Institute of Technology	05/14/1971
125	Zeta Zeta	University of Akron	05/15/1971
126	Zeta Eta	Brigham Young University	05/26/1971

127	Zeta Theta	California State Polytechnic Univ.	06/03/1972
128	Zeta lota	Clemson University	10/08/1972
129	Zeta Kappa	Tennessee State University	02/01/1973
130	Zeta Lambda	University of Texas	04/03/1973
131	Zeta Mu	Northrup Institute of Technology	05/01/1973
132	Zeta Nu	University of Tulsa	05/18/1973
133	Zeta Xi	University of Massachusetts Dartmouth	02/04/1974
134	Zeta Omicron	West Virginia Institute of Tech.	03/29/1974
135	Zeta Pi	University of New York at Buffalo	04/05/1974
136	Zeta Rho	University of New Haven	12/07/1974
137	Zeta Sigma	Polytechnic Univ. of New York - Brooklyn	12/09/1974
138	Zeta Tau	San Diego State University	12/13/1974
139	Zeta Upsilon	Old Dominion University	11/21/1975
140	Zeta Phi	Tri-State University	12/01/1975
141	Zeta Chi	University of Central Florida	12/06/1975
142	Zeta Psi	Southern University A & M	01/13/1976
143	Zeta Omega	University of California-Irvine	02/21/1976
144	Theta Alpha	Tulane University	03/13/1976
145	Theta Beta	University of Portland	03/30/1977
146	Theta Gamma	Fairleigh-Dickinson University	04/22/1977
147	Theta Delta	Naval Postgraduate School	12/07/1977
148	Theta Epsilon	Kettering University	03/16/1978
149	Theta Zeta	University of Colorado-Denver	04/01/1978
	Theta Eta	University of Alabama-Huntsville	04/29/1978
150		Polytechnic Univ. of New York - Farmington	04/27/1979
151	Theta Theta		03/02/1979
152	Theta lota	George Washington University	
153	Theta Kappa	California State University-Fresno	05/04/1979
154	Theta Lambda	University of South Alabama	11/30/1979
155	Theta Mu	SUNY at Stony Brook	12/07/1979
156	Theta Nu	North Carolina Agr. & Tech. State Univ.	04/11/1980
157	Theta Xi	Norwich University	04/28/1980
158	Theta Omicron	Southern Illinois UnivEdwardsville	05/06/1980
159	Theta Pi	University of Missouri-Kansas City	05/10/1980
160	Theta Rho	Rice University	01/30/1981
161	Theta Sigma	University of Bridgeport	04/01/1981
162	Theta Tau	University of Michigan-Dearborn	04/18/1981
163	Theta Upsilon	Lawrence Institute of Technology	01/16/1982
164	Theta Phi	Virginia Military Institute	04/07/1982
165	Theta Chi	University of Colorado-Colorardo Springs	04/23/1982
166	Theta Psi	University of Nevada-Reno	04/15/1982
167	Theta Omega	University of the Pacific	11/12/1982
168	lota Alpha	University of Alabama at Birmingham	03/25/1983
169	lota Beta	Milwaukee School of Engineering	02/10/1984
170	lota Gamma	University of California-LA	03/29/1984
171	lota Delta	Stevens Institute of Technology	05/06/1984
172	lota Epsilon	University of Hartford	11/03/1984
173	lota Zeta	California St. University at Chico	02/22/1985
174	lota Eta	University of Dayton	12/07/1985

175	lota Theta	Portland State University	03/08/1986
176	lota lota	Rochester Institute of Technology	04/05/1986
177	lota Kappa	Montana State University	04/24/1986
178	lota Lambda	University of Illinois-Chicago	11/24/1986
179	lota Mu	George Mason University	04/04/1987
180	lota Nu	Gannon University	04/28/1987
181	lota Xi	University of Arizona	03/05/1988
182	Iota Omicron	St. Cloud State University	01/04/1988
183	lota Pi	California Institute of Technology	04/15/1989
184	lota Rho	Lakefront	04/22/1989
185	Iota Sigma	Temple University	05/12/1989
186	lota Tau	University of District of Columbia	05/04/1989
187	Iota Upsilon	University of Washington	05/25/1989
188	lota Phi	United States Military Academy	05/09/1991
189	Iota Chi	Oakland University	11/10/1990
190	lota Psi	New York Institute of Technology	05/01/1991
191	lota Omega	California State University, Fullerton	05/01/1991
192	Kappa Alpha	Northern Illinois University	05/01/1991
193	Kappa Beta	Wilkes University	12/06/1991
194	Kappa Gamma	University of Alaska Fairbanks	03/01/1991
195	Kappa Delta	Florida International University	04/03/1992
196	Kappa Epsilon	Binghamton University	11/20/1992
197	Kappa Zeta	New York Institute of Technology	12/11/1992
198	Kappa Eta	University of San Diego	12/11/1993
199	Kappa Theta	University of Wisconsin-Platteville	02/26/1994
200	Kappa lota	Embry-Riddle Aeronautical University	04/24/1994
201	Карра Карра	University of Texas at Dallas	11/17/1995
202	Kappa Lambda	University of Memphis	12/15/1995
203	Kappa Mu	Capitol College	05/02/1997
204	Kappa Nu	University of North Florida	05/17/1997
205	Kappa Xi	University of South Florida	04/25/1998
206	Kappa Omicron	State University of New York	10/12/1999
207	Kappa Pi	Boise State University	10/27/2001
208	Kappa Rho	Purdue School of Engr & Tech IUPUI	05/11/2002
209	Kappa Sigma	Boston University	03/21/2003
210	Kappa Tau	Baylor University	03/28/2003
211	Kappa Upsilon	University of Texas at San Antonio	11/19/2004

Eta Chapter is a chapter-at-large which provides membership for outstanding students in colleges which do not have sufficient enrollment to support an active chapter. Eta Chapter has no formal organization and has no vote in the convention. Many chapters start out as an eta chapter before becoming a full-fledged installed chapter.

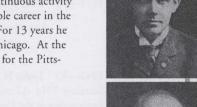
2l2 Eta-Merrimack Merrimack College (Eta)
2l3 Eta-Evansville University of Evansville (Eta)

# Centennial

#### to Past Presidents of HKN

his distinguished group of individuals have been instrumental in shaping
Eta Kappa Nu into the Honor Society as it exists today. They have all
given generously of their time and expertise and have given many years of
their lives to HKN serving as vice president, president, and past president in
addition to serving years as a national director or on the national advisory board.
In addition to their elected positions, many have contributed significantly to
HKN's award programs and committees far beyond their terms of office. We salute
you and thank you for your zeal, faithfulness, and lifelong dedication to HKN.

1905—06 Maurice L. Carr, Alpha '05 Founder of Eta Kappa Nu Association. In addition to his continuous activity within Eta Kappa Nu, he built himself a notable career in the field of testing materials and fire protection. For 13 years he was with the Underwriters' Laboratories in Chicago. At the time of his death he was Director of Research for the Pittsburgh Testing Laboratory.



1906—07 Edmund B. Wheeler, Alpha '05, one of the "ten" original members of Eta Kappa Nu. Wheeler retired in 1948 after 43 years with the Western Electric Company and Bell Telephone Laboratories. For more than 32 years he was in charge of laboratory developmental work on dry cells and batteries.



1907—08 Charles E. Armstrong, Alpha '05. Armstrong was the first man approached by M. L. Carr in organizing HKN. His prime interest was in the "mechanics of machines," an interest which served him well during almost 30 years as an engineer and consultant for the Holt Caterpillar Company.



1908—09 A.F. McKee, Beta '17 McKee was an engineer with the Jeffrey Manufacturing Company of Columbus, Ohio, and for several years was in their Mexico City office.



1909-10 Charles C. Carr, Alpha '06, was a cousin to HKN's founder. Carr was one of the juniors elected during the first year of Eta Kappa Nu, charged with the sacred trust of perpetuating the organization. For many years he was Head Equipment Engineer for the Antwerp (Belgium) Division of the Bell System.



1910—11 Clarence T. Evans, Gamma '08, one of Eta Kappa Nu's pioneer workers. Evans was Treasurer 1908 -09 and Utility Officer 1911 -12. He is presently Consulting Electrical Engineer in the Development Department of Cutler -Hammer, Inc., Milwaukee, Wisconsin.



1911—12 Burt T. Anderson, Alpha '07



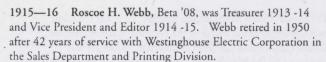
1912-13 Leslie H. Harris, Beta '07, was Treasurer 1909 -11 and Secretary 1911 -12 and 1913 -18. He was Professor of Electrical Engineering at the University of Pittsburgh before his service in the First World War. Harris passed away soon after return to civilian life in 1919.



1913—14 Albert H. Heitmann, Gamma '09, was Treasurer 1911 -12 and Secretary 12 -13 before succeeding to the presidency. Heitmann retired in 1949 after 15 years with the Bell Telephone Laboratories where his major contribution was in the field of loading coils.



1914—15 Alton B. Zerby, Epsilon '11, often is referred to as Mr. Eta Kappa Nu. He was a prime mover in HKN since his induction in 1910. His active service as Treasurer, Vice President, Editor, President, Secretary, and Executive Secretary spanned nearly 45 years. From 1911 to 1932 Zerby held positions with Westinghouse's publicity and printing departments.





1916—17 Bert E. Miller, Theta '11, was Treasurer 1914 -15 and Vice President and Editor 1916 -17. Miller retired in 1947 after a quarter of a century with the Wisconsin Power and Light Company where he was Secretary of the Corporation and a department head.



1917—18 Henry S. Cocklin, Epsilon '12, took part in the development of HKN's Coat of Arms. Cocklin was Procurement Officer for the U.S. Coast Guard, Anacostia, Washington, D.C. He spent 37 years in aeronautics—17 years in design and construction and 20 years in operating maintenance.



1918—19 Francis A. Coffin, Alpha '09 was Treasurer 1916 -17, Vice President and Editor 1917 -18. Coffin retired in 1953 after 40 years with the Wisconsin Electric Power Company where he was vice president in Charge of Sales.



1919 L. Paton MacGilvary, Theta '16, died in office and was succeeded by Burt T. Anderson, who finished the term. MacGilvary was Vice President of Eta Kappa Nu before succeeding to the presidency. He was a power specialist with the Curtiss Airplane Company of New England.

1920-21 Burt T. Anderson, Alpha '07 Anderson completed the term of L. Paton MacGilvary after MacGilvary died in office.



1921—22 John M. Spangler, Epsilon '11 , was President and Chairman of the Board of the National Carbon Division, Union Carbide and Carbon Corporation. Spangler was employed by the New York Central System and by Railroad Supply Company of Chicago before joining National Carbon.



1922—23 Donald G. Evans, Alpha '17, was active in HKN 1919 -28, holding positions as Editor, Vice President, President, and Treasurer. Evans joined Wisconsin Natural Gas Company in 1919 as an electrical engineer and currently is Vice President of the firm.



1923—24 Joseph B. Kelly, Epsilon '17, was Editor and Vice President of HKN before becoming President. After 33 years of service Kelly retired from the Bell System in 1950. Most of his work and his personal interest centered around acoustics and electronic aids for deaf persons. During the war he worked on sound ranging of field guns and sound -guided missiles.



1924—25 George P. Sawyer, Alpha '11, was Vice President of Eta Kappa Nu 1922 -24. Sawyer was a Vice President and a Director of the Cerro de Pasco Corporation and Cerro de Pasco Railway Company. After retirement he remained a director of both organizations.



1925—26 Axel A. Hofgren, Delta '18, was active in HKN for two years before succeeding to the presidency. Hofgren switched from engineering to law and for many years he was a partner in the law firm, Schroeder, Hofgren, Brady & Wegner in Chicago.

1926—27 Forrest E. Brooks, Zeta '12, was Vice President 1924 -26 and member of NAB 1928 -29. Brooks was Vice President in charge of operating staff of the New York Telephone Company. From 1940 to 1950 he was Chief Engineer of the Company.



1927—28 Everett S. Lee, Alpha '13, has been with the General Electric Company for 35 years. Lee was Executive Engineer of General Electric's engineering laboratory from 1931 until 1951, when he was appointed Editor of the General Electric Review and was also Manager of Technical Public Relations Services. Everett Lee received the Eta Kappa Nu Distinguished Service Award in 1977 for lifetime contributions to HKN.



1928 -29 John W. Weigt, Kappa '18, served HKN actively for more than 10 years as Editor, Vice President, President, and on NAB. Weigt was with the Electric Storage Battery Company since 1920 and was Manager of the New York Branch.



1929 -30 Mayne S. Mason, Alpha '11, was Vice President 1928 -29 and served on NAB 1930 -32. Mason was Vice President, Design and Sales, with Graphite Metallizing Corporation of Yonkers, New York. He specialized in electrical brushes and contacts, seals, and self -lubricating bushings.



1930 -31 George H. Kelley, Delta '22, was Vice President 1929 -30 and NAB member 1931 -33. Kelley was a partner in the Kelburn Engineering Company of Chicago, engineering representative specializing in electric and electronic controls for industrial automation.





1931 -32 Edward F. Watson, Kappa '14, served as Vice President, President, and NAB member 1930 -34. Watson was been with the Bell System for 40 years and was Director of Telegraph Development.



1932 -33 John M. Newman, Omicron '22, served on NAB 1930 -31 and 1933 -35. Newman made his career with Cutler - Hammer, Inc., in Milwaukee, and was General Supervisor of Engineering. Newman gained wide recognition as a designer of motor controls and is the holder of many patents.



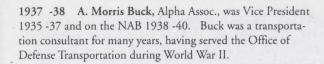
1933 -34 Roger I. Wilkinson, Nu '24, conceived of the Outstanding Young Electrical Engineer Award and implemented the program. He was Chairman of the Recognition Committee for many years and served as Vice President, President, and NAB member 1932 -37. Wilkinson was a member of the technical staff of Bell Telephone Laboratories in the field of theory of probability and statistics. He was consultant to the Air Force Operations Analysis Section and to the Civil Aeronautics Administration. Wilkinson was awarded the Eta Kappa Nu Distinguished Service Award in 1972.



1934 -35 Nelson L. Best, Mu '24, served as Vice President 1933 -34 and on the NAB 1935 -36, 1937 -38, and 1943 -44. Best was with Johns Manville Sales Corporation for 28 years and was Manager of the Public Utility and Oil Industry Department with offices in San Francisco. He previously was Pacific Coast Staff Manager of the Industrial Department.



1935 -37 Clifford A. Faust, Nu '27, served as Vice President 1934 -35 and on the NAB 1937 -39. Faust was Director of Merchandising, Advertising, and Promotion for Proto Tools, Los Angeles, and three subsidiary companies. In 1953 he won third place in the Putnam Awards Competition (advertising's most coveted distinction).





1938 -39 Leland A. Spangler, Nu '21, was Executive Secretary 1931 -34, Vice President 1937 -38, and served on NAB 1934 -37 and 1939 -41. Spangler was with Westinghouse more than 30 years, mostly in the Transportation Division. He was Chicago Area Sales Manager.



1939 -40 Benjamin F. Lewis, Kappa '21, was Vice President 1938 -39 and served on NAB 1940 -43. Lewis entered the service of the American Telephone and Telegraph Company after his graduation. He was on the technical staff of the Bell Telephone Laboratories, New York City, specializing in electronic switching systems.



1940 -42 Francis X. Burke, Beta '13, was a charter member of Beta Chapter and was on NAB 1942 -44. Burke was a private consulting industrial engineer. For many years he was a business systems specialist with Remington Rand. He was a pioneer in frozen foods research.



1942 -43 Fred E. Harrell, Beta '24, was Vice President 1940 -42 and served on NAB 1943 -45. Harrell was Manufacturing Vice President of Reliance Electric and Engineering Company of Cleveland. In 30 years with Reliance he has had 3 years in sales, 18 in engineering, and 9 in manufacturing.





1943 -44 Charles B. Hoffman, Tau Assoc., served on NAB 1938 -39 and 1944 -46. Hoffman retired in 1948, as President of Sperti, Inc., Florida Division. Previous to that he had been Chief Engineer and later Technical Director of Sperti and built and operated the first commercial orange concentrate plant at Orlando, Florida.



1944 -45 Winston E. Kock, Tau '32, won HKN's Outstanding Young Electrical Engineer award in 1938. Kock was Director of Acoustics Research at the Bell Telephone Laboratories, Murray Hill, New Jersey. His major contributions include the Baldwin electronic organ, metallic microwave lenses and acoustic lenses for audio applications, and several Navy radar antennas.



1945 -46 Owen H. Loynes, Theta '16 was Vice President 1944 -45 and served on NAB 1946 -48. Loynes retired after 37 years with the Bell System. His activities at the Bell Telephone Laboratories were concerned with microwave radio systems and mobile radiotelephones.



1946 -47 Ralph W. Fouse, Epsilon '25, was Vice President 1945 -46 and on NAB 1947 -49. Fouse was Vice President of the Brooklyn Borough Gas Company of Brooklyn, New York. Previously he was Assistant to the Vice President, Assistant Treasurer, and Assistant Vice President. During his presidency of HKN he was Assistant to Rate Engineer of Consolidated Edison Company of New York.



1947 -48 Nelson S. Hibshman, Epsilon '24, was Vice President 1946 -47 and served on NAB from 1944 -50. Hibshman was head of the Department of Electrical Engineering, at New York University 1942 -44; Dean of Engineering, Pratt Institute, 1944 -53; and became Secretary of the AIEE in May 1954. 1948 -49 Thomas W. Williams, Lambda '22, served as Vice President 1947 -48 and on NAB 1949 -51. Williams was Inventory and Costs Engineer on the Operations Department staff of the Bell Telephone Company of Pennsylvania. He was also head of the Electrical Engineering Department, Drexel Institute of Technology Evening College.



1949 -50 Robin Beach, Beta -Beta Assoc., was Vice President 1948 -49 and served on NAB 1943 -48 and 1950 -52. Beach has had a teaching career of 32 years at Norwich University and the Polytechnic Institute of Brooklyn. In 1944 he organized the consulting firm of Robin Beach Engineers Associated, specializing in industrial electrostatics and hazards created by static electricity.



1950 -51 Frank E. Sanford, Tau '26, was Vice President 1949 -50 and served on NAB 1947 -49 and 1951 -52. Sanford was Assistant Chief Electrical Engineer with Commonwealth Associates, Inc., of Jackson, Michigan. He formerly was a private consulting engineer, Western Editor of *Electrical World*, and Distribution Engineer of the Cincinnati Gas and Electric Company.



1951 -52 Ovid W. Eshbach, Chi Assoc., was Vice President 1950 -51 and has been a member of NAB. Eshbach was Dean of the Technological Institute, Northwestern University, during its formative years. Previously he was with the Bell Telephone Company of Pennsylvania, and American Telephone and Telegraph Company in New York for 16 years, concerned principally with employment and training of technical personnel.



1952 -53 Edwin B. Kurtz, Beta -Iota Assoc., was Vice President 1951 -52 and served on NAB 1951-52 and 1953-56. Kurtz is head of the Electrical Engineering Department at the State University of Iowa. Before that he held a similar position at Oklahoma A. & M. College and was acting Dean for one year.





1953 -54 Eric T. B. Gross, Kappa '45, was on the NAB from 1954-55. He also served on NAB 1949 -52. Gross was Professor of Power Systems Engineering at Illinois Institute of Technology and a consulting engineer. He formerly was Assistant Professor of Electrical Engineering at Cornell University. He held several patents concerning relaying in large high voltage systems.



1954-55 Jesse Hobson, Beta '32. A well-traveled, national figure in electrical engineering and research administration, Hobson was director of Armour Research Foundation in Chicago, IL. Later, Hobson directed the Stanford Research Institute in Menlo Park, CA for eight years followed by a chief executive post at United Fruit Co. of Boston and New York. A Ph.D. from California Institute of Technology, he won the '40 HKN Outstanding Young Electrical Engineer Award. He was an IRE and AIEE Fellow.



1955-56 S. Reid Warren, Jr., Lambda '28. Warren was Assistant Vice-President of Engineering Affairs at the University of Pennsylvania as well as an EE Professor at its Moore School, Professor of Radiologic Physics in its School of Medicine, and associate professor in the same at its Graduate School of Medicine. As a graduate student, Warren first analyzed the apparatus and techniques used for chest roentgenography in tuberculosis sanitoria. A Renaissance man, Warren found the recording of and reproduction of symphonic music fascinating.



1956-57 John D. Ryder, Gamma '27. After working for Westinghouse and General Electric, Ryder earned 24 patents at Bailey Meter Company. In '41 he turned to teaching, eventually becoming Dean of the College of Engineering at Michigan State University in '54. He never looked back, and said in teaching you can work hard and still have fun, whereas in industry, you frequently only work hard.



1957-58 Carl T. Koerner, Kappa '30. "Mr. HKN of the West", Koerner has served as officer, advisor and committee member for the San Francisco and L.A. Alumni chapters. He prepared an Alumni Chapter Handbook, analyzed chapter by-laws, and has chaired both the New Chapters Committee, and the Alumni Activities Committee. He represented the Western Region, visiting chapters, and has hosted numerous planning functions at his California home. He received the HKN Distinguished Service Award in 1975. Besides being a commercial radio operator, Koerner was staff engineer for The Pacific Telephone and Telegraph Company. After his death, a bequest from the Koerner estate funds the Outstanding Young ECE student award.

1958-59 Larry Dwon, Kappa, '35. Dwon has written over 100 articles (and counting) in HKN's BRIDGE Magazine. An involved member of HKN for 70 years, Dwon became an Eminent Member in '84, and in 2000 was awarded the Association of College Honor Societies recognition as one of the top five contributors to HKN. Dwon led HKN's New York Alumni Chapter, and worked as member and chair of the OYEE Committee. Currently he chairs the Distinguished Service Award Committee and sits on the Karapetoff and Bridge committees. He considers writing the History of the Eta Kappa Nu Association (1976) as his greatest contribution to HKN.



1959-60 and '60-61 Albrecht Naeter. Naeter taught for the Aviation Section of the Signal Corps in WWI and found a niche as an educator. He taught electrical engineering for 40 years, 30 of them at Oklahoma State University eventually becoming Department Head. While at OSU Naeter was faculty advisor for Omega Chapter and also sat on HKN's National Advisory Board. Naeter agreed to serve a second term as HKN President upon the sudden passing of Jack Tarboux, his friend of 40 years standing,



1961-62 John H. Craig, Beta Theta '39. Craig founded the Beta Theta chapter while studying at MIT and was its first President. Later he focused on the New York Alumni Chapter and chaired the Award Committee for HKN's Outstanding Undergraduate Chapter. On a national level, Craig served on the Award Organization, New Chapter and Alumni Activities committees. First employed by Bell Telephone Laboratories as Special Systems Engineer, he went on to AT&T as Private Line and TWX Engineer.



1962-63 John A. M. Lyon, Beta Tau. Lyon received two BS degrees (EE and Engineering Mathematics), an MS and a Ph.D. in electrical engineering from the University of Michigan. He joined the US Naval reserve at the beginning of WWII, and was released as Lieutenant Commander. After serving as Professor and EE Chair at Northwestern, he joined the University of Michigan faculty as a professor and researcher on antennas and electromagnetic radiation.



1963-64 John E. Lagerstrom, Nu '43. Lagerstrom has been an educator, industry consultant, and helped initiate the Iowa State Technical Institute, a two-year program for the training of engineering technicians. He has served as Associate Dean of the College of Engineering at Iowa State University where he was responsible for orientation programs for new students. He spent considerable time operating a 10,000-cycle analyzer for use by Midwest utilities. Lagerstrom designed a 10,000-cycle wattmeter circuit adapted to monitoring the board generators and utilizing diode squaring circuits and d-c output meters.





1964-65 Richard J. Koopman, Beta Gamma, '36. Koopman's career includes teaching, administrative, and consulting responsibilities. Beginning as EE Instructor at Yale University in '31, by '49 Koopman was Chairman of the Electronics and Electrical Science Area at Washington University, St. Louis.



1965-66 Howard H. Sheppard, Lambda '31. Sheppard has chaired the Outstanding Young Electrical Engineer Award Committee and been President of the Philadelphia Alumni chapter besides his work on the national board. A graduate of the University of Pennsylvania, he worked first for Philco Corporation (during the depression at \$15/week), Johnson Foundation, McGraw-Hill Publishing, McCloud Laboratories, and Rumsey Electric as Vice<sub>5</sub>President of Sales and a Director.



1966-67 Clyde M. Hyde. Although the EE career of Hyde has straddled both the academic and the industry worlds, he first worked as an electronic technician for the US Navy. Later received his BSEE and MSEE from Michigan State University and his Ph.D. from Cornell. He first taught at the University of Nebraska, becoming EE Department Chair and faculty advisor for Beta Psi Chapter. In '64 he joined IBM Corporation as Advisory Engineer.



1967-68 William P. Smith, Omicron, '34. Smith has been Dean of the School of Engineering and Architecture and Director of the Engineering Sciences Division of The Center for Research at the University of Kansas in Lawrence. He was instrumental in forming the Gamma Iota chapter there and has served as faculty advisor. He has worked with General Motors and Boeing Company and served as consultant to the Office of Naval Research, where he holds the rank of Captain USNR.



1968-69 John E. Farley (Jack), Alpha, '47. Farley has enjoyed two extensive careers—one with Illinois Bell Telephone Company and one with HKN. In '79, at a ceremony marking HKN's 75<sup>th</sup> anniversary, Farley was presented with the Distinguished Service Award. In '54 he was president of the Chicago Alumni Chapter during HKN's 50<sup>th</sup> anniversary and served on the 50<sup>th</sup> Anniversary Project Committee. His responsibility was to oversee the production and distribution of the film, "Engineering, A Career For Tomorrow". In '69 it was updated into the film "Engineering—The Challenge of the Future". Farley is on the DSA Committee.

1969-70 John C. Hancock, Beta. After having received his BSEE, MSEE, and Ph.D. from Purdue University, Hancock became Head of the School of Electrical Engineering at Purdue. He also has acted as an industry consultant for the U.S. Naval Avionics Facility, and consultant to organizations such as Hughes Research Laboratories, Emerson Electric Company, ITT Kellogg Space Communication Laboratory, and Page Communications Systems.



1970-71 Anthony F. Gabrielle, Beta Theta. Gabrielle worked in the electric power industry since graduating from MIT with a BSEE and an MSEE as well as an MBA. He has served on the National Board as well as been President of the New York Alumni Chapter. For many years he has worked on the Outstanding Chapter Awards and the Outstanding Young Electrical Engineer Award committees, and has visited and installed many new chapters. He received the Distinguished Service Award for exceptional service to HKN in '85. Currently he is on the College Relations and DSA committees.



1971-72 Lloyd B. Cherry, Omega. Cherry earned a BA and MA in Physics from the University of Texas and then went on to achieve a BS in Electrical Engineering and the Professional Degree of Electrical Engineer from Oklahoma State University. He received the Western Electric Award for excellence in Engineering Teaching and the Piper Award for excellence in college teaching. Besides serving HKN, Cherry has served as an IEEE Director and is an IEEE Fellow.



1972-73 Frank Carlin Weimer, Gamma, '39. Weimer has been a member of the Electrical Engineering Faculty and held administrative positions at The Ohio State University since '41. He was active in reactivating Gamma Chapter after WWII and served as its Treasurer and Faculty Advisor. He has had consulting and industrial experience in engineering at Delco Products and A.C. Spark Plug Divisions of General Motors; research experience at MIT, the University of Illinois and The Ohio State University Research Foundation.



1973-74 William E. Murray, Mu '47. Murray has been active in the Los Angeles Alumni Chapter since '58, serving as President in '66. He has been chair of the Outstanding Electrical Engineering Student Awards Program, and currently sits on the OECES and Karapetoff committees. Murray has held supervisory positions with Douglas Aircraft Company, taught EE at the University of California in L.A.,





1974-75 William A. Klos, Epsilon Epsilon. After serving in the Air Force, Klos received his BSME with high honors from the University of Houston and then earned his Ph.D. there in electrical engineering. He worked for a division of Lockheed Electronics focusing on the RCS of the Orbital Space Lab configuration. He then accepted the position of Head of the Electrical Engineering Department at the University of Southwestern Louisiana in Lafayette.



1975-76 Chalmers M. Butler, Zeta Iota.Butler received his BS and MS in electrical engineering from Clemson University, and his Ph.D. from the University of Wisconsin. He has been on the EE faculty staff at Louisiana State University and, more recently, at the University of Mississippi. Butler's research especially deals with antenna structures comprising non-parallel elements and arrays of wire antennas. Industry experience includes work with Carolina Power and Light Company and Texas Instruments.



1976-77 Earl D. Eyman, Rho '65. Not only has Eyman ascended the Matterhorn and held sprinting records, but his career has also straddled industry and academia. After a lengthy career working for Westinghouse Atomic Power Division, and Caterpillar Tractor while teaching at Bradley University, Eyman joined the University of Iowa and became EE Department Chair. Areas of research have included power, optimal control, neurology, control theory, and the use of microprocessors in digital control.



1977-78 Marcus D. Dodson, Beta Upsilon '49. An active, integral part of the Los Angeles Alumni Chapter, Dodson has been an HKN volunteer for decades. Serving as an officer at both the LA chapter and the national level, Dodson continues as Chair of the Outstanding Electrical and Computer Engineering Student Award committee, and sits on the Karapetoff committee. Dodson was named an Eminent Member of HKN for his contributions to High Voltage DC transmission lines. Dodson recieved HKN's Distinguished Service Award in 1986 for his many HKN contributions.



1978-79 Albert Hauser, Delta. A native of Alsace, France, Hauser came to the U.S. and majored in mathematics and electrical engineering at the Armour Institute of Technology (now the Illinois Institute of Technology). A registered engineer in Illinois, Hauser founded the Electrical Utilities Company, a manufacturer of industrial capacities.

1979-80 Alan R. Stoudinger, Zeta Phi '75. Stoudinger has been a longtime faculty advisor for the Zeta Phi chapter at Tri-State University where he received his BSEE. He earned his MS from Colorado State University and his Ph.D. from Utah State University, finally returning to join the Tri-State faculty and where he served as Acting Chair of the EE Department. Interests focus on communication systems and information theory.



1980-81 Sidney R. Parker, Beta Pi '46. Co-author of "Principles of Control Systems Engineering", Parker has published extensively and been consultant to publishers. An active IEEE member, he has served on committees, and edited several IEEE publications. He was elected an IEEE Fellow for "contributions to circuit and systems theory". Parker has been on the faculty of a number of schools including his alma mater, City College of New York, Rutgers University, and the Naval Postgraduate School.



1981-82 Russell E. Lueg, Psi '55. Lueg received his BSEE from the University of Arkansas, and his MSEE and Ph.D. from the University of Texas-Austin. He joined the University of Alabama EE faculty and served as acting head. Lueg also served many years as Faculty Advisor to the university's Delta Nu chapter. He has written or co-authored numerous textbooks on electronics and electric circuits, and is an IEEE Senior member.



1982-83 J. Robert Betten, Nu '55. After completing his term as HKN president, Betten stepped in to take over the HKN executive secretary position after the death of Paul Hudson in 1988. Under Betten the HKN national office relocated from the University of Illinois to the University of Missouri-Rolla where Betten was an EE Professor. The "Betten era" maintained the status quo of the recently expanded HKN organization. Betten led HKN through increasingly difficult financial times during the 1990s due to decreasing numbers of student members until he was asked to resign in 1999.



1983-84 Paul B. Jacob, Jr., Beta Tau '48. Before he even joined the HKN National Board, Professor Jacob helped EE students at Mississippi State University establish the Gamma Omega chapter of HKN for which he served as faculty advisor. Driven by an interest in high voltage electric power systems, Jacob developed a High Voltage Lab for teaching and research purposes at Mississippi State in addition to serving as associate head of the EE department.





1984-85 Earl L. Steele, Gamma Sigma. A longtime EE Professor at the University of Kentucky, Steele also served as Chair of the department. An IEEE Fellow, he holds semiconductor device patents, and authored "Optical Lasers in Electronics". He has served HKN as its representative to the Association of College Honor Societies.



1985-86 Joanne L. Waite, Rho '67. First female president of HKN. Chosen as the outstanding pledge by Rho chapter, Waite served as vice-president beginning a long career of service to HKN. Besides serving on the national board, Waite has been Chair of the 501(c)3 Committee, and was instrumental in winning that status with the IRS. Beginning her career as a Programmer with Mutual of New York, she earned her MSEE after working in Australia. Waite has worked as a Senior Systems Analyst at the Computing Center of the University of Colorado—Boulder as a consultant and special projects manager.



1986-87 Alan Lefkow, Beta Pi '63. As President of his local chapter, Lefkow led Beta Pi to win the Outstanding Chapter Activities Award (OCAA) in '65. He joined the New York Alumni Chapter serving as vice-president and president. For the past 34 years Lefkow has been Chair of the OCAA committee. Besides holding national office and contributing to The BRIDGE Magazine over the years, Lefkow has been a juror on the OYEE, DSA, and the Outstanding ECE student award committees. He has installed five new chapters.



1987-88 Harold K. Knudsen, Mu '57. After working at the MIT Lincoln Laboratory, Knudsen joined the University of New Mexico as Associate Professor in electrical engineering. He served as Faculty Advisor for the Delta Omicron chapter. Primary professional interests included developing new methods for the description, analysis, and design of communicating digital processes, which included collaborating with Los Alamos National Laboratory.



1988-89 Virgil G. Ellerbruch, Gamma Rho, '68. Professional interests are in electronics and microcomputer systems, with a strong link to agriculture. His Ph.D. dissertation was with the microbiology department at the University of Wyoming. Industrial experience with missile systems was gained at Cheyenne, Wyoming, and Salt Lake City, Utah.

1989-90 Robert J. Kennerknecht, Mu '58. Starting as vicepresident of Mu chapter, Kennerknecht became an active member of the Los Angeles Alumni Chapter, including being President in '72. He has served on the OECES Award committee. With a specialty in Control System Design and Analysis and System modeling, Kennerknecht has worked for industry, including General Dynamics Corporation. He has taught undergraduate EE courses at California Polytechnic University in Pomona.



1990-91 Robert F. Arehart, Beta Alpha, '50. Arehart was presented with the Distinguished Service Award for 2003 for his service to HKN, and now sits on the DSA committee. He enjoyed an active role in the HKN Philadelphia Alumni chapter that included being President. While on the national board Arehart helped establish the Vladimir Karapetoff Award. He has resurrected the Outstanding Teaching Award and has served as committee chair ever since. Professionally Arehart worked at Philadelphia Electric Company.



1991-92 James A. D'Arcy, Delta Mu '63. D'Arcy has served on the OYEE Award committee. As the committee chair he helped expand the award's national prominence. For HKN's 50<sup>th</sup> anniversary he guided the creation of a book of all winners. As a national board member D'Arcy updated the HKN constitution and bylaws and sat on the OECES and OTA award committees. In 2000 D'Arcy received a special service award from the Association of Collage Honor Societies as one of the top five individuals who've been the greatest contributors to HKN. In May 2004 D'Arcy became Chair of the Vladimir Karapetoff Outstanding Technical Achievement Award committee.



1992-93 Laureen H. Parker, Psi '82. Parker graduated from the University of Texas—Austin with a BAEE and a MAEE. After graduation Parker founded the Lone Star Alumni chapter of HKN, serving as President. She has chaired the Norman R. Carson Outstanding Junior Award committee since its inception. Parker has researched ferroelectric materials at the University of Texas, and has worked for Motorola.



1993-94 David G. Meyer, Beta '77. Meyer joined Purdue's faculty as Associate Professor in EE and has served as faculty advisor of Beta Chapter. Meyer was HKN's '87 national recipient of the C. Holmes MacDonald Outstanding Teaching Award. Currently he participates on HKN's College Relations Committee. His concern about adapting coursework presentation to the students caused Meyer to push for the use of multimedia in education and to develop a Lecture-Workbook program.





1994-95 Bruce P. Johnson, Eta '81. Johnson earned a BA, MA, and Ph.D. in Physics and went to work in the Advanced Engineering Laboratory of General Electric's Medical System Division. When GE transferred office locations, Johnson joined the EE faculty at the University of Nevada—Reno as Associate Professor and later served as department chair. He helped found Theta Psi, the school's HKN chapter and served as its first faculty advisor. Research interests focus on high frequency electronics.



1995-96 Michael R. Hajny, Beta Epsilon '73. As a recent graduate armed with an MSEE from the University of Michigan—Ann Arbor, Hajny worked on the annual OYEE Awards banquets in New York. He remains a current member of the OYEE committee, and has represented HKN at the installation of a new chapter. Professionally Hajny has been a leader in the development and updating of metering standards.



1996-97 Robert I. Egbert, Gamma Theta '71. After graduation Egbert joined Black & Veatch Consulting Engineers as a Systems Engineer in the Power Division. Four years later he went to Wichita State University initially starting as Assistant Professor in the EE Department. In addition to his responsibilities as a teacher, an author, and a fundraiser for research, Egbert also served as faculty advisor to Epsilon Xi, the school's local HKN chapter. Currently Egbert is Chair of National's Awards Committee.



1997-98 John D. Wolf, Gamma Theta '66. Wolf studied EE at the University of Missouri—Rolla, Working first for McDonnell Douglas, Wolf then joined Teledesic Corporation as executive vice president. Active in technical societies and industry associations, Wolf has published a number of technical papers. He received the '93 Distinguished Engineering Achievement award from the Institute for the Advancement of Engineering.



1998-99; '99-2000 Richard J. Gowen, Gamma Epsilon '57. As national vice-president and president, Gowen guided HKN through a difficult transformation as the entire organization, operating structure and staff changed from Rolla, MO to Lilse, IL to meet a new century of new demands. The Board considered his leadership so crucial that Gowen was asked to take a second term. In 2002 Gowen was named an HKN Eminent Member for his contributions to education, engineering and the profession, culminating in his role as President of SDSMT from '87 until retirement in 2003. Currently, Gowen is Chair of HKN's Centennial Committee and is on the Eminent Member Selection Committee.

2000-01 Mohammad Shahidehpour, Iota. Dean of the Graduate College at Illinois Institute of Technology and a professor in the EE Department, Shahidehpour received HKN's C. Holmes MacDonald Outstanding Young EE Professor Award. As the faculty advisor for IIT's Delta chapter of HKN, Shahidehpour turned Delta into IIT's most successful student organization. He has published over 200 papers on power systems optimization and modeling, and is the education editor on The BRIDGE Magazine.



2001-02 James L. Melsa, Nu '60. In 2004 Melsa retired from the position of Dean of the College of Engineering and ECE Professor at Iowa State University. Melsa served on and has been chair of the HKN Constitution and Bylaws Committee since '98. In 2002, under Melsa's guidance, the Nu chapter hosted the first-ever HKN student leadership conference at Iowa State. An IEEE Fellow, Melsa has done research on speech encoding and digital signal processing, and authored (or co-authored) over 100 papers and ten books.



2002-03 Thomas L. Rothwell, Upsilon '53. In 2000, HKN and the association of College Honor Societies recognized Rothwell as one of the top five individuals making the greatest contributions to HKN. He was the recipient of HKN's '99 Distinguished Service Award. As an EE student, Rothwell attended HKN's 50th anniversary as President of Upsilon chapter, Subsequently he joined the Los Angeles Alumni chapter, serving in various officer positions and still serves as its 2004 president. As Alumni Chapter VP, Rothwell originated HKN's Outstanding EE (now ECE) Student Award Program. Rothwell serves on the national HKN Constitution and Bylaws, 501(c)3, OECES, and DSA committees,. Most recently he was Group Vice President and Division Manager at Hughes Aircraft Company until his retirement.



2003-04 Eric Herz, Zeta Sigma. An IEEE Fellow, Herz is Director Emeritus of IEEE, having retired after 14 years as General Manager and Executive Director. In recognition of his leadership and service, Herz has received numerous IEEE awards among others.



2004-05 Karl E. Martersteck, Eta. As centennial President for HKN, Martersteck ushers in a new era. Currently he is a telecommunications consultant, having retired as President and Chief Executive Officer of ArrayComm, Inc. of San Juan, CA. Prior to that he worked at Bell Laboratories and Bellcomm, Inc. An IEEE Fellow, Martersteck was the first recipient of the IEEE Medal for Engineering Excellence.



# Centennial

# to Past Officers, Directors and National Advisory Board

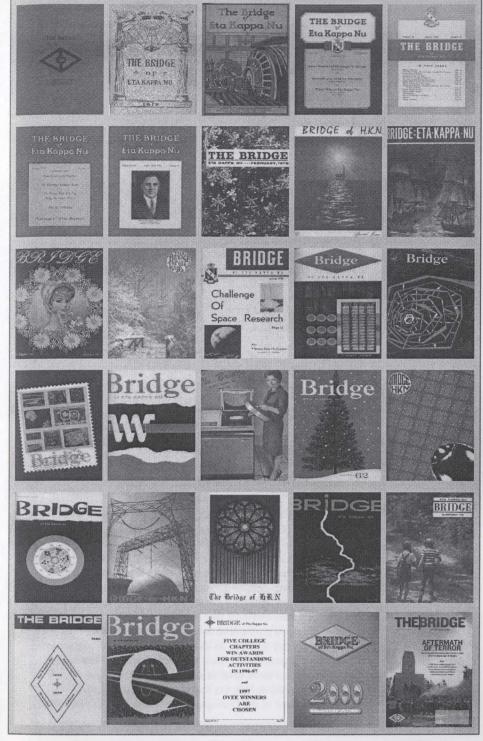
Prom 1905 when the first national office was established until 1928, the national officers consisted of a President, Vice-President, and Secretary, and occasionally a Treasurer, Bridge Editor, or other officer. From 1928 until 1957, the national office consisted of a President, Vice President, and Executive Secretary and a National Advisory Board of 3 to 5 members. From 1958 until the present, a national Board of Directors has been used that consists of the President, Vice President, Executive Secretary and four to six elected directors. Each individual who has served as a national officer, National Advisory Board member, or national director has contributed years of service to HKN. Many have held numerous positions and have remained active for decades. These individuals are listed below, next to the date of their first election to a national office.

1905	M. L. CARR	1922	G. P. SAWYER
1905	E. B. WHEELER	1922	L. F. SEYBOLD
1905	C. E. ARMSTRONG	1922	J. E. ZOLLINGER
1906	A. F. MCKEE	1923	A. A. HOFGREN
1907	C. C. CARR	1923	J. W. WEIGT
1908	C. T. EVANS	1924	F. E. BROOKS
1909	B. T. ANDERSON	1926	M. C. HALE
1909	L. H. HARRIS	1926	E. S. LEE
1909	A. R. KNIGHT	1928	C. H. REEDER
1911	A. H. HEITMAN	1930	J. S. BELTZ
1912	A. B. ZERBY	1931	C. S. GEORGE
1913	R. H. WEBB	1931	M. S. MASON
1914	B. F. MILLER	1932	G. H. KELLEY
1915	H. S. COCKLIN	1933	J. M. NEWMAN
1916	F. A. COFFIN	1933	E. F. WATSON
1917	J. M. STRAIT	1933	A. F. WEBER
1918	F. T. BANGS	1934	E. P. CARPENTER
1918	D. G. EVANS	1934	C. H. MACDONALD
1918	A. C. GRAYSON	1934	L. A. SPANGLER
1918	P. MACGILVARY	1934	R. I. WILKINSON
1919	J. B. KELLY	1935	N. L. BEST
1920	J. M. SPANGLER	1935	H. J. SUMMERS

1937	C. A. FAUST	1956	C. F. HILL
1937	W. J. HERRMAAN		C. M. HYDE
			R. E. NOLTE
	M. BUCK		M. B. REED
1938	L. A. DOGGETT	1957	J. D. RYDER
1938	C. B. HOFFMAN		J. H. CRAIG
1939	V. E. LOWDEN	1959	G. T. HARNESS
1939		1959	
	B. F. LEWIS	1959	F. W. NORRIS
	M. S. MCILROY		F. TATUM
		1959	J. D. TILLMAN
1941	J. J. CASSIDY	1959	J. A. TUCKER
1941	H. A. DAUBLY	1960	R. C. GORHAM
	C. C. DASH		P. B. JACOB
		1960	J. E. LAGERSTROM
1942	F. M. STARR		W. B. GROTH
	R. BEACH		R. J. KOOPMAN
1943	F. E. HARRELL		R. W. SCHLINDER
1944	N. S. HIBSHMAN	1962	A. K. HAWKES
1945	W. E. KOCK	1962	E. C. LOWENBERG
	P. C. CROMWELL	1962	H. H. SHEPPARD
1946	P. H. PUMPHREY	1963	G. B. HOADLEY
1947	R. W. FOUSE	1963	E. NOGES
	F. E. SANFORD	1963	T. L. ROTHWELL
1948	J. E. HOBSON	1964	O. M. SALATI
1948	W. J. LYMAN	1964	W. P. SMITH
	E. T. B. GROSS	1964	L. STAUDER
1949	E. B. KURTZ	1965	J. E. FARLEY
1949	T. W. WILLIAMS	1965	A. F. GABRIELLE
1951	F. J. HALLENBECK	1966	H. L. ABLEN
1951	C. B. HOLT	1966	W. D. BONSER
1951	J. M. MONSTREAM	1966	J. C. HANCOCK
1951	A. NAETER	1967	G. E. DREIFKE
1951	S. R. WARREN	1967	R. A. ERDEY
1952		1967	C. E. HUTCHINSON
1952	O. W. ESCHBACH	1968	L. B. CHERRY
1952	G. W. SWENSON	1968	W. K. MACADAM
1953	C. T. KOERNER	1968	
1954	E. E. GRAZDA	1969	E. C. GLOVER
1954		1969	M. S. SHEPPERD
1955	L. DWON		W. E. MURRAY
	J. W. RITTENHOUSE		H. C. SLOCUM
1955	L. W. ROBERTSON	1970	M. VANVALKENBURG

#### ETA KAPPA NU

1970	L. W. ZELBY	1985	E. L. MLECZKO
1971	N. H. FARHAT	1986	R. F. AREHART
1971	O. W. MUCHENHIRN	1986	J. L. DELCROIX
1971		1986	L. H. PARKER
1972	C. M. BUTLER	1987	S. MCCULLOUGH
1972	R. S. MACMILLEN	1987	J. MITCHELL
1972		1988	I. ENGLESON
1972	D. E. TODD	1988	D. S. STOICA
1973	E. D. EYMAN	1989	D. G. MEYER
	W. A. KLOS	1989	J. R. ROWLAND
1973	W. H. PICKERING	1990	B. P. JOHNSON
1974	M. D. DODSON	1990	J. H. SPARE
1974	G. R. KANE	1991	B. J. BALL
	R. W. LUCKY	1991	
1974	E. L. STELLE	1992	R. A. BARTOLINI
1975	C. H. DUNN	1992	D. W. LEITTERMAN
1975	Q. G. GENNARO	1993	R. I. EGBERT
1976	W. J. JOHNSON	1993	R. J. NIEDERJOHN
1976	W. V. T. RUSCH	1994	K. E. MARTERSTECK
1976	A. R. STOUDINGER	1994	J. D. WOLF
1977		1995	
1977	A. HAUSER	1995	R. J. GOWEN
1977	S. R. PARKER	1996	B. R. DEMAEYER
1977	R. L. PHILLIPS	1996	R. HOELZEMAN
1978		1997	
1978	R. LUEG	1997	R. A. SPANKE
1978	J. H. MULLIGAN	1998	W. E. HORD
1979		1998	
1979	A. LEFKOW	2000	
1979	J. L. WAITE	2000	
1980		2000	
1980	H. K. KNUDSEN	2000	
1981		2001	
1981		2001	
1982	D. CHRISTIANSEN	2002	
1982	P. HAGOUEL	2002	
1982		2002	74 75 77 10 10 10
1983	N. R. CARSON	2002	
1983	J. D'ARCY	2003	
1984		2003	
1984	A. J. ELISSON	2004	
	M. R. HAJNY	2004	
1985	A. L. ARNOLD	2004	S. E. WATKINS



### **Executive Secretary**

In the early days of the association there was no central operating office. Each officer did his part from his home or place of business. When the official position of Executive Secretary was established in 1928, a more permanent location began take hold. Later L. A. Spangler set up a temporary office in Chicago, Illinois, so the records were shipped to that location. Subsequently, A. B. Zerby established the first permanent headquarters in Winkinsburg PA, and later in Dillsburg, PA.

The responsibilities of the executive secretary are many and broad in scope. The executive secretary is in charge of all corporate matters and filings, all financial aspects including deposits of membership dues and payment of all expenses, all taxes and IRS reports, recording all membership data and issuing certificates, editing and publishing the Bridge Magazine, communication with all members, chapters and faculty advisors, and preparing for and facilitating national board meetings to name a few. They are the Chief Operating Officer for the organization. Carrying out these duties in the manner required for the good of the Association necessitates special skills and dedication of the kind A. B. Zerby and others gave mostly voluntarily to Eta Kappa Nu. The finances of the organization have only allowed a part-time compensation for their duties, with many additional hours being put in on a volunteer basis. With the new constitution in 2002, the Executive Secretary position was eliminated from the Board, and replaced with an Executive Director as an employee reporting to the Board of Directors.

1928-1931 J. A. Umhoefer

1931-1934 Leyland. A. Spangler



1934-1958 Alton B. Zerby, Epsilon 'IO After graduation, A.B. joined the Pennsylvania alumni chapter and immediately began working on national affairs. He was elected national treasurer in I9I2, national VP and Bridge editor in I9I3-I4, and national president in I9I4-I5. In I9I8, when Leslie Harris was called to active duty, A.B. took over as national secretary and held that position until I928. He served six years on the NAB and was then elected Executive secretary in I934. As Executive Secretary, he expanded the organization from II to 66 chapters, and conducted personal visits to all chapters. He became known nationally as "Mr. Eta Kappa Nu" and was the first recipient of the Distinguished Service Award in I97I.

#### 1958-1988 Paul Hudson Alpha '50

Paul was appointed faculty advisor to Alpha Chapter in 1952, a position he held until he was elected as national executive secretary in 1958. He served as Executive Secretary from 1958-1988 and as editor of *The Bridge* from 1963-1988. As executive secretary he expanded the organization to 180 chapters and implemented a regional visitation program and several award programs including the outstanding EE student, outstanding teacher award and Distinguished Service Award. He started the concept of the endowment funds which grew from zero to over \$200,000. Paul is remembered by many for his prolific writing and creative covers for *The Bridge*.



After completing his term as HKN president, Betten stepped in to take over the HKN executive secretary position after the death of Paul Hudson in 1988. Under Betten the HKN national office relocated from the University of Illinois to the University of Missouri-Rolla where Betten was an EE Professor. The number of total chapters expanded under Betten from 180 to 206, however, many other existing chapters became inactive and ceased to induct new members during this period, leaving only about 140 active chapters. Betten led HKN through increasingly difficult financial times during the 1990s due to decreasing numbers of student members until he was asked to resign in 1999.

2000-Ronald A. Spanke, Omega '82 Ron's involvement with national HKN began when he was named the Outstanding Young EE for 1988. Ron was elected as a national director from 1996-1999. By 1999 the general operating fund for the association had decreased to the point where it was negative. Spanke worked to enable new sources of funding from contributions and Bridge advertising. Under Spanke, major efforts were undertaken to amend our incorporation papers and ratify a new constitution to enable HKN to file for 501(c)3 tax status with the IRS allowing the organization to receive tax deductible contributions. The Bridge Magazine has a new look and feel and color cover. Five new chapters have been installed and over 30 inactive chapters have been revived.







#### The Eta Kappa Nu Distinguished Service Award

In recognition of dedicated service and long-term contributions to Eta Kappa Nu that have resulted in significant Benefits for all members

Eta Kappa Nu created the Distinguished Service Award in 1971 to recognize those individuals who have made significant contributions to the society throughout their life. The background for this important activity began in 1939 when Founder Maurice L. Carr wrote "Eta Kappa Nu grew because there have always been many members who were willing and eager to serve it loyally and unselfishly. I would like to see some form of recognition conferred upon members who have rendered such service to HKN." The board of directors approved the DSA recognition in 1971.

The DSA charter now limits this award to at most one individual per year. The DSA award committee is comprised of all living past recipients of the DSA award plus the HKN president.

#### **Distinguished Service Award Recipients**

Alton B. Zerby	1971
Roger I. Wilkinson	1972
Clifford A. Faust	1973
C. Holmes MacDonald	1974
Carl T. Koerner	1975
Larry Dwon	1976
Everitt S. Lee	1977
Leyland A. Spangler	1979
John E. Farley	1979
Paul K. Hudson	1979
W. T. Burnett	1979
Berthold Sheffield	1981
Tony Gabrielle	1985
Marcus Dodson	1986
Thomas L. Rothwell	1999
John A. Tucker	2000
Donald Christiansen	2001
Alan Lefkow	2002
Robert F. Arehart	2003
James A. D'Arcy	2004

# The Vladimir Karapetoff Outstanding Technical Achievement Award

This major Eta Kappa Nu award for career technical achievement is made annually to an electrical or computer engineering practitioner who has distinguished him/herself through an invention, a development, or a discovery in the field of electrotechnology which resulted in significant benefits to humankind. The award was established by the HKN Board of Directors in 1992 and named for the late Vladimir Karapetoff, a prominent member of Eta Kappa Nu. The fund to support the award was initiated through a bequest from Dr. Karapetoff's widow, Rosalie M. (Cobb) Karapetoff.

1992	Wilson Greatbatch, for the implantable pacemaker
1993	George H. Heilmeier, for liquid crystal displays
1994	Nick Holonyak, Jr, for solid state lasers and light emitters
1995	John Moll, for his work in solid state physics and his mathematical analysis of transistor amplification
1996	Harold A. Heeler, for the automatic volume control circuit and his pioneering work in radio and television
1997	Jerry M. Woodall, for GaAlAs inventions and developments
1998	Al Gross, for pioneering contributions to the engineering of personal wireless communications
1999	Jack St. Clair Kilby, for development of the integrated circuit
2000	Amos E. Joel, Jr, for pioneering developments and teaching in the field of telephone switching and electronic switching systems
2001	C. Gordon Bell, for developments in computer architecture
2002	Robert H. Dennard, for his invention of the one transistor DRAM memory cell
2003	Bernard C. Deloach, for technical contributions to the fields of microwaves and optics
2004	Yau Chau Ching, for development of the Synchronous Optical Network (SONET)

# Centennial TRIBUTE

#### to Eminent Members of HKN

Eta Kappa Nu established the rank of Eminent Member in 1950 as the society's highest membership classification, to be conferred upon those select few whose technical attainments and contributions to society through leadership in the field of electrical and computer engineering have resulted in significant benefits to all. These individuals display distinguished and inspirational profiles in engineering leadership

Vannevar Bush	1950	James B. Black	1954
Royal W. Sorensen	1950	Andrew A. Potter	1954
Vladimir K. Zworykin	1950	Ellery. B. Paine	1954
Frederick E. Terman	1951	Everett S. Lee	1954
Joseph Slepian	1951	Ernst F. W. Alexanderson	1955
Karl B. McEachron	1951	Alfred N. Goldsmith	1955
Soren. H. Mortenson	1951	Harold S. Osborne	1955
William H. Timbie	1951	Harry A. Winne	1955
Lee DeForest	1952	John B. Whitehead	1955
Edward C. Molina	1953	Harold H. Beverage	1955
Harold Pender	1953	Leslie Newman McClellen	1955
Charles A. Powel	1953	William D. Coolidge	1956
Philip Sporn	1953	Harry Nyquist	1956
Walter R.G. Baker	1954	Leon N. Brillouin	1956
Mervin J. Kelly	1954	John Howard Dellinger	1956
Reinhold Rudenberg	1954	William B. Kouwenhoven	1956

#### **EMINENT MEMBERS OF ETA KAPPA NU**

Donald A. Quarles	1958	Berthold Sheffield	1993
C. F. Hood	1958	Robert W. Lucky	1993
Philip L. Alger	1960	Nick Holonyak, Jr.	1998
Chauncey Starr	1960	Gene Amdahl	1999
Arthur D. Moore	1961	William Hewlett	1999
John L. Burns	1961	C. Lester Hogan	1999
James Hillier	1961	Jacob Rabinow	1999
Charles F. Wagner	1961	Robert A. Frosch	2000
John Bardeen	1962	Wilson Greatbatch	2000
Lloyd V. Berkner	1962	Leo L. Beranek	2000
Edward M. Purcell	1962	George H. Heilmeier	2000
Jerome B. Wiesner	1962	John R. Whinnery	2000
Ernst Weber	1962	Thelma Estrin	2000
Gordon S. Brown	1963	Ivan A. Getting	2000
William L. Everitt	1963	Charles H. Townes	2000
Lee A. Dubridge	1964	Norman R. Augustine	2001
Julius A. Stratton	1964	Charles Concordia	2001
Donald G. Fink	1965	Edward E. David, Jr.	2001
Simon Ramo	1966	Roland W. Schmitt	2001
Winston E. Kock	1966	Mischa Schwartz	2001
George H. Brown	1967	John Brooks Slaughter	2001
William H. Pickering	1968	James L. Flanagan	2001
Harold E. Edgerton	1968	Malcolm R. Currie	2001
Emanuel R. Piore	1969	Donald O. Pederson	2001
Patrick E. Haggerty	1969	John R. Pierce	2001
Walker Lee Cisler	1969	Amar G. Bose	2002
E. I. Kanouse	1970	J. Fred Bucy	2002
Edward C. Jordan	1974	Andrew Sage	2002
Eric T. B. Gross	1976	Richard J. Gowen	2002
Edward A. Erdelyi	1978	Eberhardt Rechtin	2002
Larry Dwon	1984	Donald R. Scifres	2003
Howard Sheppard	1984	Jerome J. Suran	2003
S. Reid Warren	1984	Irwin M. Jacobs	2003
Donald Christiansen	1985	Henry Bachman	2004
Marcus Dodson	1986	Arthur Stern	2004
William E. Murray	1987	Walter Jeremiah Sanders	2004

#### **OUTSTANDING YOUNG ELECTRICAL ENGINEERS**

A sevidenced by their past records and future promise, the OYEE recognition shall be given annually to young electrical and computer engineering graduates for meritorious service in the interest of their fellow men.

Started in 1936, the Eta Kappa Nu OYEE recognition was created to "emphasize among electrical engineers that their service to mankind is manifested not only by achievements in purely technical pursuits but in a variety of other ways. It holds that an education based upon the acquisition of technical knowledge and the development of the logical methods of thinking should fit the engineer to achieve substantial success in many lines of endeavor." Candidates must not be more than 36 years old at the time of the award. Beginning with the centennial year, the name of the award is changing to the Outstanding Young Electrical and Computer Engineer recognition.

Since 1936, 67 young engineers have received the award and 141 engineers have received honorable mentions. The award is given on the basis not only of what success the young electrical engineers have had in their vocation, but also what they did to broaden themselves culturally and what they have done for others.

Many past recipients have gone on to make profound impacts on our society and many are some of Americas leading electrical engineering teachers and administrators. A review of what these engineers have accomplished since graduation is astonishing.

1936	F. M. Starr	1947	R. R. Hough
1937	C. G. Suits	1948	A. R. Zarem
1938	W. E. Kock	1949	R. C. Cheek
1939	L. A. Meacham	1950	D. P. Campbell
1940	J. R. Hobson	1951	L. G. Gitzendanner
1941	C. Brunetti	1952	J. B. N. Granger
1942	J. R. Pierce	1953	P. A. Abetti
1943	N. I. Hall	1954	R. F. Mettler
1944	R. W. Porter	1955	W. E. Chope
1945	J. M. Wallace	1956	J. J. Baruch
1946	E. M. Williams	1957	R. P. Crago

#### **OUTSTANDING YOUNG ELECTRICAL ENGINEERS**

1958	M. R. currie	1981	T. R. Gheewala
1959	E. A. Sack, Jr.	1982	C. R. Johnson, Jr.
1960	K. H. Olsen	1983	B. F. Fitzgerald
1961	C. J. Baldwin, Jr	1984	W. E. Moerner
1962	J. T. Duane	1985	M. G. Adamiak
1963	D. C. Forster	1986	M. Keith
1964	W. L. Shevel, Jr	1987	J. G. Frohlich
1965	E. M. Davis, Jr.	1988	R. A. Spanke
1966	M. H. Lewin	1989	S. M. Yuen
1967	R. R. Elfant	1990	C. Jankowski
1968	G. H. Heilmeier	1991	C. J. Chang-Hasnain
1969	R. E. Larson	1992	P. O. Nunally
1970	J. B. Farison	1993	W. W. Hwu
1971	E. R. Berlekamp	1994	K. E. Ismail
1972	G. P. Shuraym	1995	P. Cosentino
1973	J. T. La Macchia	1996	S. T. Acton
1974	H. J. Hovel	1997	F. M. Chiussi
1975	D. J. Melvold	1998	Y-Q Zhang
1976	C. S. Hartmann	1999	C. M. DeCusatis
1977	J. G. N. Henderson	2000	K. Ramaswamy
1978	R. E. Birney	2001	T. L. Olsen
1979	R. G. Cornell	2002	A. Emadi
1980	J. E. Russell, Sr.		

# C. HOLMES MACDONALD OUTSTANDING TEACHER AWARD

he Outstanding Teacher Award was established to recognize excellence in teaching of Electrical and Compter Engineering Students and to improve Faculty-Student-Alumni relations. Originally titled the Distinguished Young E.E. Teacher Award, the name of the award was later changed to recognize Dr. C. Holmes MacDonald after his death in 1975, for his many contributions to Eta Kappa Nu. The award recognizes the central and crucial role of college professors in educating and motivating future engineers and is presented annually to outstanding young electrical or Computer Engineering teachers under age 35 who have demonstrated, early in their careers, special dedication and creativity in their teachingresponsibilities, in addition to professional activities, service to the community, and culteral development

1972	Dr. Charles Vincent Smith	University of Texas at Arlington
1973	Dr. James Heinin	Marquette University
1974	Dr. Lloyd J. Griffiths	University of Colorado
1975	Dr. Bruce A. Eisenstein	Drexel University
1976	Dr. Stanley R. Liberty	Texas Tech University
1977	Dr. John E. Fagan	University of Oklahoma
1978	Dr. Russell J. Niederjohn	Marquette University
1979	Dr. Peter S. Maybeck	Air Force Institute of Technology
1980	NO AWARD GIVEN	
1981	Dr. Richard O. Claus	Virginia Poly. Institute
1982	Dr. C. Richard Johnson	Cornell University

#### **OUTSTANDING TEACHER AWARD**

1983	NO AWARD GIVEN	
1984	Dr. Andrew J. Blanchard	University of Texas at Arlington
1985	NO AWARD GIVEN	
1986	Dr. A. Richard Newton	Univ. of California at Berkeley
1987	Dr. David G. Meyer	Purdue University
1988	Dr. Clifford R. Pollock	Cornell University
1989	NO AWARD GIVEN	
1990	Dr. Mohammad Shahidehpour	Illinois Institute of Technology
1991	Dr. Moshe Kam	Drexel University
1992	Dr. Barry W. Johnson	University of Virginia
1993	Dr. Denice Dee Denton	Univ. of Wisconsin at Madison
1994	Dr. Bruce L. Walcott	University of Kentucky
1995	Dr. Jo Dale Carothers	University of Arizona
1996	Dr. John D. Cressler	Auburn University
1997	Dr. Wen-Mei Hwu	University of Illinois-Urbana
1998	Dr. Aleta M. Ricciardi	University of Texas at Austin
1999	Dr. Richard G. Baraniuk	Rice University
2000	Dr. Sheila S. Hemami	Cornell University
2001	Dr. Richard R. Shultz	University of North Dakota
2002	Dr. Noel N. Schulz	Mississippi State University
2003	Dr. Daryl G. Beetner	University of Missouri-Rolla

## ALTON B. ZERBY AND CARL T. KOERNER OUTSTANDING ECE STUDENT AWARD

The OECES award program recognizes selected students each year who typify the best balance of scholarship, service activity, leadership, and character. Inaugurated in 1965 as the Outstanding EE Student Award Program of HKN, its name was changed in 1975 to "The Alton B. Zerby Outstanding EE Student Award" to honor and perpetuate the memory of Mr. Zerby, a long-time leader and Executive Secretary of HKN. In 1993, the name was further changed to include Carl T. Koerner, to honor and perpetuate the memory of Mr. Koerner, who had a lifelong dedication to HKN, including serving as President and recipient of the HKN Distinguished Service Award. In 2003 the name of the award was expanded to include electrical and computer engineering.

The OECES award is administered by the Los Angeles Area HKN Alumni chapter. The award winner's travel and expenses are covered by financial support from the Alton B. Zerby Memorial Fund. An honorarium for the winner is made possible by the Carl T. Koerner Memorial Fund, established in 1978 by his widow Edie Koerner and friends.

1965	Carl Anthony Cooper	University of Southern California
1966	Thomas L. Thomas	Ohio State University
1967	Douglas F. Johnstone	Purdue University
1968	Donald Alan Hanson	University of Illinois-Urbana
1969	Thomas L. Niemeyer	Ohio State University
1970	Robert W. Alford	University of Texas - Arlington
1971	Alan M. Usas	Princeton University
1972	Noel H. Runyan	University of New Mexico
1973	John B. Gordon	University of Texas - Austin
1974	Steven R. Brammer	University of Texas - Arlington
1975	William P. Mumford, III	Oregon State University
1976	Allen D. Elster	Vanderbilt University
1977	David D. Welter	University of New Mexico
1978	Douglas R. Kraul	Georgia Institute of Technology

1979	Max W. Hauser	University of California-Berkeley
. 1501	AND Louise A. Veilleaux	University of Maine
1980	Mark David Vanstrum	Auburn University
1981	Gary L. Sonnier	University of Southwestern Louisiana
1982	Richard L. Goodson	University of Alabama
1983	Steve E. Watkins	University of Missouri-Rolla
1984	Michael J. Hargraves	Ohio University
1985	Yvonne M. Utzig	California State Poly-Pomona
1986	Charles A. Bier	Rice University
	AND Dick P. Welch	University of Illinois - Urbana
1987	Lonnie D. Chrisman	University of California - Berekely
	AND Penny M. Gilbertson	Montana State University
1988	Emy Tan	University of Illinois-Urbana
1989	Patrick S. Kennedy	Milwaukee School of Engineering
1990	Ashok Kumar	University of Washington
1991	Geoffrey W. Burr	State University of New York - Buffalo
1992	Paul D. Anderson	Tennessee Technological University
1993	Brad D. Marshall	Kansas State University
1994	Lillian Chiamin Ho	University of Texas - Austin
1995	Andrew L. Sears	University of Missouri - Rolla
1996	Jovan D. Milosavljevic	State University of NY - Stony Brook
1997	Louis R. Litwin, Jr.	Drexel University
1998	Jeffry T. Ross	Northeastern University
1999	Raymond Wang	University of California - Berkeley
2000	Wesley J. Bolsen	Rose Hulman Institute of Technology
2001	Kendall S. Ching	University of Hawaii-Manoa
	AND William F. Thies	Massachusetts Inst. of Technology
2002	Shadab N. Mozaffar	University of Kansas
2003	Aaron T. Ohta	University of Hawaii - Manoa
2004	Matthew Charles Rodrigue	University of Maine
	AND Matthew R. Behrend	University of Southern California

# OUTSTANDING CHAPTER ACTIVITIES AWARD

The Outstanding Chapter Activities Award is presented annually to the chapter having the best overall programming and activities. Most active chapters serve their fellow students, department, school, and community in many ways. For some chapters, their level of service to others is very significant.

1932-33	Gamma	Ohio State University
1933-34	Beta	Purdue University
1934-35	Pi	Oregon State University
1935-36	Карра	Cornell University
1936-37	Omega	Oklahoma State University
1937-38	Epsilon	Pennslyvania State University
1938-39	Sigma	Carnegie Mellon University
1939-40	Delta	Illinois Institute of Technology
1940-41	Beta Zeta	New York University
1941-42	Карра	Cornell University
1942-47	No Awards Made	(World War 2)
1947-48	Delta	Illinois Institute of Technology
1948-49	Delta	Illinois Institute of Technology
1949-50	Beta Pi	City College of N.Y.
1950-51	Beta	Purdue University
1951-52	Beta Alpha	Drexel University
1952-53	Beta Alpha	Drexel University
1953-54	Gamma Theta	University of Missouri-Rolia
1954-55	Gamma Theta	University of Missouri-Rolia
1955-56	Upsilon	University of Southern California
1956-57	Beta Nu	Rensselaer Polytechnic Institute
1957-58	Gamma Theta	University of Missouri-Rolia
1958-59	Gamma Theta	University of Missouri-Rolia
1959-60	Gamma Theta	University of Missouri-Rolia
1960-61	Beta Epsilon	University of Michigan
1961-62	Gamma Theta	University of Missouri-Rolia
1962-63	Beta Pi	City College of N.Y.

1000.04	N. N. d IMP	
1963-64	No National Winner	
1964-65	Rho	University of Colorado
1965-66	Beta Pi	City College of N.Y.
1966-67	Beta Pi	City College of N.Y.
1967-68	Gamma Xi	University of Maryland
1968-69	Beta Alpha	Drexel University
1969-70	Gamma Gamma	Clarkson College of Technology
1970-71	Gamma Xi	University of Maryland
1971-72	Gamma Xi	University of Maryland
1972-73	Omega	Oklahoma State University
1973-74	Gamma Chi	New Mexico State University
1974-75	Gamma Chi	New Mexico State University
1975-76	Gamma Chi	New Mexico State University
1976-77	Gamma Theta	University of Missouri-Rolia
1977-78	Beta	Purdue University
1978-79	Xi	Auburn University
1979-80	Xi	Auburn University
1980-81	Gamma Theta	University of Missouri-Rolia
1981-82	Beta	Purdue University
1982-83	Beta	Purdue University
1983-84	Beta	Purdue University
1984-85	Beta	Purdue University
1985-86	Beta	Purdue University
1986-87	Beta	Purdue University
1987-88	Beta	Purdue University
1988-89	Beta	Purdue University
1989-90	Beta	Purdue University
1990-91	Beta	Purdue University
1991-92	Beta	Purdue University
1992-93	Beta	Purdue University
1993-94	Beta	Purdue University
1994-95	Beta	Purdue University
1995-96	Alpha	Univ. of III. at Urbana-Champaign
1996-97	Beta	Purdue University
1997-98	Beta	Purdue University
1998-99	Beta	Purdue University
1999-00	Beta	Purdue University
2000-01	Beta	Purdue University
2001-02	Mu	University of California - Berkeley
2002-03	Mu	University of California - Berkeley



Honoring Excellence in Electrical and Computer Engineering Recognizing Leaders of Today and Tomorrow