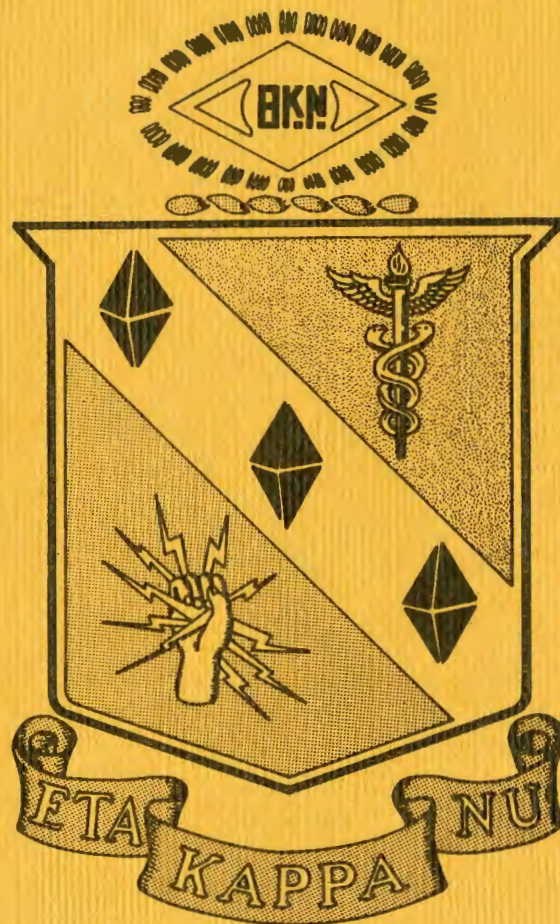


# History of ETA KAPPA NU

by Larry Dwon



Eta Kappa Nu Association  
National Electrical Engineering Honor Society  
Headquarters at University of Illinois  
Urbana, Illinois

HISTORY OF ETA KAPPA NU

# AMERICAN ELECTRIC POWER Service Corporation



2 Broadway, New York, N. Y. 10004

(212) 422-4800

W. S. WHITE, JR.  
Chairman of the Board  
and  
Chief Executive Officer

July 1st, 1976

Prof. Paul K. Hudson  
Eta Kappa Nu Association  
Office of the Executive Secretary  
Dept. of Electrical Engineering  
University of Illinois  
Urbana, Illinois 61801

Dear Professor Hudson:

It pleases me very much to know that the American Electric Power Company has so many active Eta Kappa Nu members among its employees. As a member myself -- Beta Lambda -- I am proud to know that a significant number of AEP employees continue to voluntarily contribute their talents and services so usefully in behalf of the organization.

To have the first industrial HKN Chapter in AEP is, of course, an extraordinary honor. To have had two of its employees as past national presidents of the Association, is very unique also. And now that one of my associates has written this first history of Eta Kappa Nu provides great satisfaction to many of us. This comprehensive manuscript should serve the Association well.

For all these and other reasons, it is my pleasure, on behalf of the American Electric Power Company System, to present 300 copies of this first historical publication to your chapters and officers. With it go my personal wishes for the continued success of Eta Kappa Nu.

Sincerely yours,

W.S. White, Jr.  
Chairman

WSW/hdj

# HISTORY OF ETA KAPPA NU



1975 - 1976  
Board of Directors

## Executive Council

Chalmers M. Butler, President, Electrical Engineering Dept., University of Mississippi, Oxford, Mississippi.

Earl D. Eyman, Vice-President, Electrical Engineering Department, University of Iowa, Iowa City, Iowa.

Paul K. Hudson, Executive Secretary, Department of Electrical Engineering, University of Illinois, Urbana, Illinois 61801.

## Directors

Robert W. Lucky, Bell Laboratories, Holmdel, New Jersey.

Marcus D. Dodson, 9302 Grindlay St., Cypress, California.

Gerald R. Kane, Electrical Engineering Department, University of Tulsa, Tulsa, Oklahoma.

Earl L. Steele, Electrical Engineering Department, University of Kentucky, Lexington, Kentucky.

C. H. Dunn, Electrical Engineering Department, Wichita State University, Wichita, Kansas 67208.

Quayne Golden Gennaro, 20 Bartle Ct., Highland Park, New Jersey 08904.

Albert Hauser, Electrical Utilities Industry, LaSalle, Illinois.

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## PREFACE

In April, 1975, the Board of Directors authorized the preparation of a history of this Association. Subsequently the author was assigned the responsibility for this important and much needed document. The task was a formidable one. Nevertheless, there were many members in the Association who offered encouragement and proved to be willing, knowledgeable and helpful in a variety of ways - making available old documents, recollecting missing background information, reviewing and critiquing the author's first draft of this manuscript. The latter was completed in December of 1975.

Originally it was planned to submit the first draft to all living past officers of Eta Kappa Nu and other informed members for initial review. Following that review it was contemplated to publish segments of the history in The Bridge as short articles for more pervasive review and comment. The latter procedure was later discarded in order to expedite this manuscript. However, the original intent to secure accuracy through widespread readership and comments before a final draft was prepared for general publication, has been achieved. The first draft was reviewed by the following members who have been active over a substantial period of Eta Kappa Nu's history:

H.L. Ablin	A.F. Gabrielle	E.S. Lee	B. Sheffield
N.L. Best	Q.G. Gennero	E. Lowenberg	M. Shepherd
W.O. Bonser	E.T.B. Gross	O.W. Loynes	H.H. Sheppard
F.E. Brooks	W.B. Groth	R.W. Lucky	H.H. Slocum
F.X. Burke	J.C. Hancock	J.A.M. Lyons	L.A. Spangler
W.T. Burnette	F.E. Harrell	W.K. MacAdam	E.A. Steele
C.M. Butler	A.O. Hauser	R.S. Macmillan	D. Thorn
H.S. Cocklin	N. Hibshman	M.S. Mason	D.E. Todd
J.H. Craig	G. Hoadley	B.E. Miller	J.A. Tucker
M.D. Dodson	A.A. Hofgren	C.W. Muckenhirn	S.R. Warren, Jr.
G.E. Dreifke	P.K. Hudson	W.E. Murray	F.C. Weimar
C.H. Dunn	G.E. Hutchinson	A. Naeter	M. Weiner
M.R.A. Erdey	G.R. Kane	H. Perlis	R.I. Wilkinson
C.T. Evans	W.A. Klos	W.H. Ackering	T.W. Williams
E.D. Eyman	C.T. Koerner	C. Rogers	L.W. Zelby
N.H. Farhat	R.J.W. Koopman	T.L. Rothwell	
J.E. Farley	E.B. Kurtz	J.D. Ryder	
C.A. Faust	J. Lagerstrom	F.E. Sanford	

Comments and contributions from the foregoing HKN stalwarts varied in degree. All of them were encouraging and useful. Special acknowledgement for services rendered go to W.T. Burnett, H.C. Cocklin, C.A. Faust, A.F. Gabrielle, F.E. Sanford, B. Sheffield, L.A. Spangler, S.R. Warren, Jr., and R.I. Wilkinson. To E.S. Lee goes my gratitude for his generous praise and contagious enthusiasm.

The author is indebted also to Mrs. A.B. Zerby for her attic-hunting adventures, after her husband -- Mr. Eta Kappa Nu --

passed to his just rewards. She found and entrusted to me some of Mr. E.B. Wheeler's old files. These letters from several founders and early officers simplified the task of the early history search and event correlation during a time when records were scarce and rather inadequate. The Association's sincere thank you, Mrs. Eta Kappa Nu, is hereby extended.

Professor P.K. Hudson, Executive Secretary of Eta Kappa Nu, and the 1974-1976 members of its Board of Directors deserve special recognition with thanks for having conceived this project and for authorizing its implementation.

Last but not least, my sincere thanks and that of Eta Kappa Nu to my secretary Mrs. Hedy Jablonski, the principal typist Mrs. Jean Schultz and other members of the American Electric Power Service Corporation who contributed various other skills in the preparation of this historical treatise. Eta Kappa Nu appreciates also the contribution which American Electric Power Service Corporation made towards the production of this original printing. I personally express my gratitude to Mrs. Mary Jean Dwon who has been so sincerely encouraging and patient while her husband pursued so many facets of his professional career.



LARRY DWON, P.E.  
 Manager Engineering Manpower  
 American Electric Power Service Corp.

PROFESSIONAL ACTIVITIES

Eta Kappa Nu

Kappa Chapter, 1934 and 1935  
 New York Alumni Chapter, 1935-1975  
 Bridge Correspondent, 1940-1942  
 Vice President, 1942-1943  
 President, 1943-1944  
 New York Advisory Council, Chairman, 1944  
 Associate Editor of Bridge, 1940-1948  
 Assistant Editor of Bridge, 1968-Present  
 Award Organization Committee, Chairman,  
 1945-1950; Member, 1942-Present  
 Award Jury, 1959 and 1960  
 National Advisory Board, 1955-1957  
 Board of Directors, 1957-1959  
 National Executive Council, Vice President  
 1957-1958; President, 1958-1959  
 55th Anniversary Convention, Chairman, 1959  
 Public Relations Committee, Chairman,  
 1961-1962  
 Visitation Committee, Chairman, 1969-Present  
 A.E.P. Eta Kappa Nu Chapter, Petitioning  
 and Charter Member, 1975  
 HKN Distinguished Service Award,  
 January 1976

Other

Cornell, 1935, E.E.  
 N.Y.U., 1954, M.B.A.  
 IEEE: Fellow, 1968; Chairman of Several  
 Committees, 1960-Present; Nine  
 Transactions papers; Seven Conference  
 papers.  
 ECPD: Chairman, Engineering Guidance  
 Committee, 1966-1971  
 JETS: Board of Directors, 1969-1971  
 EEI: Several Committees and Task Forces,  
 1961-Present  
 ASEE: Vice-Chairman, Mid-Eastern Region,  
 1961-1962; Member, Papers and Panels  
 APC: Member Education Committee,  
 1974-Present; Industry/Student/Faculty  
 Committee, 1970-Present  
 Advisory Committees at several Schools  
 EJC Engineer of Distinction  
 Fred Plummer Award of American Welding  
 Society

SIGNIFICANT HISTORICAL EVENTS

School Year	Convention Number	Magazine Volume	Historical Event
1904-1905			Eta Kappa Nu Founded
1905-1906	1	1	Electrical Field Published Annually
1907-1908			Eta Chapter at Purdue Established
1908-1909			First Alumni Chapter Formed in Pittsburgh
1910-1911			First Honorary Member
1911-1912	7	7	The Bridge Published Annually
1913-1914	9		First General Revision of Constitution
1920-1921	16	16	The Bridge Published Quarterly
1927-1928	23		Executive Secretary and National Advisory Board
1930-1931	27		Biennial Convention Authorized
1931-1932			Personal College Visitation Began
1932-1933	28	29	First and last Biennial Convention
1932-1933			Outstanding Chapter Activity Award
1936-1937			Recognition of Outstanding Young E.E.
1941-1942			M.L. Carr Died
1950-1951			Eminent Member Established
1950-1951			HKN Incorporated, August 6, 1951
1953-1954	29	50	50th Anniversary Convention
1954-1955			Guidance Film Produced
1958-1959	30	55	55th Anniversary Convention
1958-1959			NAB Replaced By Board of Directors
1961-1962	31	58	58th Anniversary Convention
1964-1965			Outstanding Senior Award
1971-1972			Distinguished Service Award
1972-1973			Outstanding Educator Award

THE BRIDGE

BACKGROUND

It is fitting to begin this historical review with a statement from founder, Maurice L. Carr: (1)\*

"Our first publication was a small four-page leaflet entitled "The Electrical Field," issued in the spring of 1906. It was devoted almost entirely to the subject of employment.... The leaflet was national in character, covering activities of both the Illinois and the Purdue Chapters and including a list of the graduates of each chapter for 1906. It was the beginning of what is now The Bridge. I recall feeling a bit of regret when the name of the Association's publication was changed from The Electrical Field to The Bridge."

Figure 1 is a partial reproduction of the first issue of The Electrical Field.

FIGURE - 1

THE ELECTRICAL FIELD

COMMENCEMENT 1906

VOLUME 1

NUMBER 1

ANNOUNCEMENT

The purpose of this publication is already known to those to whom it may properly come, and repetition will not be made. It is not to be expected that this issue will serve for very much more than as a concrete illustration of an idea, and as a suggestion for future efforts. The thanks of the editor are due to all who have assisted in getting out this issue.

OPPORTUNITIES WITH THE WESTERN ELECTRIC CO.

In dealing with the subject of opportunities with the Western Electric Co., I will describe briefly the course offered to students there, and endeavor to give an honest opinion of it as it appears after having spent nine months of that course with the company.

There are two propositions which the Company makes to college men, who desire to enter their employ, which are known as their one-year course, and their four-years' course.

The one-year course is offered to any college man, and, as intended originally, was to consist of a year in their shops and on switchboard installation work, after which time the employe was free to leave the Company, if he desired, or might be taken into their Engineering Department.

This course is as follows: Factory Cabling Department, 2 months; Switchboard Wiring, 4 months; Switchboard Installation, 6 months.

The pay for the first 6 months of the time was 20 cents an hour, and for the last 6 months 23 cents an hour.

The four-years' course is considered by the Company to be a somewhat better proposition, and is not offered to all college men, but only to those whom they think will be suitable men for the work they are eventually to take up. Students taking this course are required to sign a four-years' contract with the Company.

The first year of the course is in the shops and is as follows:

Insulating Department.....	2 weeks.	Drill room.....	1 week.
Key Assembly.....	2 weeks.	Punch room.....	3 weeks.
Jack Assembly.....	2 "	Screw Machine Dept.....	
Subscriber Set Assembly.....	2 "	Milling Machine Dept.....	
Subscriber Set Testing.....	1 week.		
Ringer & Generator Assembly.....	1 "		

\* Numbers in this chapter apply to references listed on pages 29 and 30.



From the start, the Founders of Eta Kappa Nu and those members who actively followed them, each recognized that the Association could be only as strong as its members voluntarily chose to make it. Over the years many dedicated individuals have contributed their services creatively and voluntarily -- some in short bursts of activity, others over many successive or sporadic years. However, dedication by itself isn't enough. To inspire the dedicated, albeit busy men, into extra-curricula action necessitated that:

1. The Association establishes links, among HKN's segments, by which to communicate, guide and help members recognize what action was needed, and
2. The Association demonstrated -- especially to the younger members -- how they could become dedicated members in the true spirit of the Founders' concept of Eta Kappa Nu.

From the beginning, Maurice L. Carr and his associates considered HKN to be more than a secret society that would simply award a badge of distinction to certain selected students on a pre-established basis. They insisted that service to the electrical engineering profession, school and fellow men, on the part of those men who were privileged to become HKN members, was equally as important as good scholarship and character. Each chapter and its individual members continue to share these obligations and are charged with the responsibility to see them fulfilled.

There are many links which hold Eta Kappa Nu together. They help it to be a living society. Among these links are:

1. The national officers and the Board of Directors.
2. The Chapters' opportunity to nominate and elect proper national officers and Board Members.
3. The Bridge.
4. Communication between chapters and headquarters.
5. Activities of national committees.
6. Awards.
7. Special HKN affairs at national technical meetings.
8. Faculty Advisers.
9. Alumni.

10. National Conventions.
11. Personal Visitations to chapters.
12. Regional Visitations to chapters.

In this first part of HKN's historical story, the Association's magazines will be presented. Subsequent parts will cover the remaining segments of the Association's historical evolution.

## ASSOCIATION'S MAGAZINES

### Evolution

In 1906, E.B. Wheeler -- second president of the Executive Council -- included the following observations in his letter to Beta Chapter: (2)

"The publishing of the 'Electrical Field' is important. I believe Brother Williams of Alpha Chapter was elected editor for the year."

Thus the importance of Eta Kappa Nu's first magazine was expressed by one of the founders. It continued as an annual publication with that name until 1909, volume 5. Its birthright came as a result of the following statute in the second National Convention of Eta Kappa Nu which was held in Urbana, Illinois, in 1906:

"Be it enacted by the National Convention of Eta Kappa Nu that there be established a semi-annual publication, entitled 'The Electrical Field,' devoted to the interests of Eta Kappa Nu. An editor shall be appointed by the National Convention and an assistant editor shall be elected by each chapter. The expense of the publication shall be met by a per capita assessment of the active members."

It is of interest also that at this same convention the following statute was passed:

"Be it enacted by the National Convention of Eta Kappa Nu that the office of Historian be and is hereby created for each local chapter for the purpose of keeping information concerning the past and present work of each graduate, and that he shall be ex-officio assistant editor of the official publication."

At the third Annual Convention, the first of the above enactments was changed to designate that the President of the Executive Committee shall appoint the editor and an assistant editor "shall be elected by each chapter." Also the expense of the publication "shall be met by subscription of 25 cents from members, both active and graduate."

At the fourth National Convention in 1908 the following statute was passed:

"Be it enacted by the National Convention of Eta Kappa Nu, that the expense of publishing 'The Electrical Field,' and the clerical expenditures connected therewith be born as follows:

a) "Each chapter to be assessed the sum of \$5.00 to be paid at the beginning of each school year, this sum to constitute a fund to assist in the preliminary work of publication.

b) "All additional expense, arising from the work of publication and distribution, be divided pro rata, among the chapters on the basis of the number of copies distributed by each particular chapter. Further, each chapter will remit this amount promptly to the Executive Council on the demand of the National Treasurer. Said amount to be supplied from the Chapter Funds."

In a letter from L.A. Harris to E.B. Wheeler, dated February 25, 1911, it is stated that the 5th National Convention "levied one dollar per member to help publish The Bridge" and it further states that the "6th National Convention levied each chapter Five Dollars," also to help publish The Bridge. (3)

A 1911 letter to E.B. Wheeler from L.H. Harris, Secretary to Executive Council, and R.H. Webb's report as editor to the 9th National Convention contained the following interesting facts: (4,5)

	1910	1911	1913
Publication Cost	\$74.13	\$61.28	
Amount Sold		87.20	
Price Per Copy	40¢	30¢	50¢

An editorial in 1919 stated that the Directory was in a hopeless condition; also that the subscription list of the previous year contained 600 names. Volume 19 (1923) reported 1,143 subscribers; however, in Volume 20 (1924) it was indicated that there were 375 and 550 subscribers, respectively, in 1923 and 1924. In 1925, subscriptions were reported at a little over 400. (6,7,8,9)

Another issue of Volume 20 reported the following statistics: (10)

Circulation as of June 30th for each Year

	1922	1923	1924
Alumni	719	789	1101
Active	363	444	476
Honorary	36	44	44
Associate	7	10	13
Exchanges	0	5	13
	1125	1292	1647
Total Membership	2051	2324	2600
Percent - Subscribers	54.8	55.3	63.3

It was also stated that 41.4% of the alumni, who were out of school more than two years, were among the subscribers in 1924. These contradictory statistics reflect the difficulties that volunteers, on a part time basis, encountered in keeping records and maintaining an active group of subscribers. These and other details demonstrate frustrating problems which were encountered early in Eta Kappa Nu history as well as the atmosphere of change that was necessary to meet the various contingencies.

The ninth Convention Minutes indicate that the estimated cost of publishing "The Bridge" was \$150. As a consequence, the following item was included: (11)

"Be it enacted by the National Convention of Eta Kappa Nu Association that there be established an official publication which shall be published annually between May 1 and May 23 and which shall be named "The Bridge." Be it further enacted that the staff of this publication be made up of an editor who shall be the Vice President of the NEC as provided in the Constitution, an associate editor from each chapter and a manager who shall be appointed by the President. Be it further provided that the price of The Bridge be 50¢ and that each chapter shall order at least the number equal to the enrollment of the chapter as declared in its report to the convention that year." (12)

Up to this time "The Bridge" had included no advertising. On May 3, 1917, H.S. Conklin wrote to C.C. Carr, cousin of the founder, that an attempt was being made to establish an advertising department. Space was offered at \$10 per page (6 x 9 inches) to the following companies: (13)

The Nungesser Carbon and Battery Works  
The McGraw Publishing Company  
The Westinghouse Electric & Manufacturing Company  
The General Electric Company  
The Cutler Hammer Manufacturing Company  
The National Lamp Works  
The Automatic Switch Company

Other letters indicate that these companies were contacted several more times.

Through all these trials and tribulations as well as others that continued to confront future editors of "The Bridge," the Association held steadfastly to the concept that its national magazine was a necessity which should be preserved and continually improved. It continued to be served by members as a high priority function -- regardless of whether the contributors were volunteers or among the paid staff.

#### Formative Era

The 1904 to 1919 period was undoubtedly the formative era for the Association's principal publication. As previously mentioned, 1906 is when "The Electrical Field" was authorized by the National Convention; but it is reasonable to surmise that thoughts about the publication crossed the minds of the founders prior to that time.

From 1910 through 1913 (Volume 6-9), the national publication was named "The Year Book" and it was issued annually. This was a 44-page booklet measuring 6 x 9 inches. With the name changed to "The Bridge," it continued as an annual publication in essentially the same form until 1916. The number of pages was increased to 160 and it remained about the same until October 1919, when the change to the long-desired quarterly was made.

An idea of how this publication was being received may be observed in the following letter written by F.J. Strassner:

"Your favor of the 19th instance and copy of The Bridge at hand. I thank you for sending it as I have not received one from the chapter at Purdue.

"The book is a credit to the organization and the Editors should feel proud of their work.

"One cannot read the book without realizing that HKN stands for something in the eyes of the members and in

the business and educational worlds as well, and that her standing is growing by leaps and bounds.

Fifty cents in silver is enclosed."

An editorial in the 1919 issue of The Bridge describes this era well:

"For several years there has been agitation for a change in the method of handling The Bridge publication..... The New York Alumni chapter proposed that an office manager be appointed to take charge of the records, publication and employment work of the Association, and that he be paid enough so that he could devote his entire time to the work....This cannot be accomplished until some means is devised to finance the plan....Until such a plan can be worked out, The Bridge must be handled as a side line."

And so it continued to be handled "as a side line" by dedicated members, for a considerable period. (14)

#### Growth Period (1919 - 1928)

Though the times were difficult, this is the period when "The Bridge" began to take on the look of a professional magazine. The quarterly was then 7 x 10 inches and it ran about 200 pages annually or an average of about 50 pages per issue. In 1923, The Bridge was said to be financially self-supporting. (15)

Beginning with the November 1923 issue, "The Bridge" appeared as a 9 x 12 inch standard engineering journal. However, it did not carry engineering articles. The aim was to carry human interest articles which the busy alumni would take time to read. The Bridge continued to be considered the main instrument of contact with the world-at-large and "by it we as a fraternity will be judged" wrote editor John W. Weigt. (16)

Significant progress was being made as the following editorials indicate: (17,18,19)

"That educators and engineers outside the fraternity have recognized its worth (Salary Surveys reported in The Bridge) is evidenced by the requests which have been received for permission to use the data. A few who have been given this permission are -- Commission on Education, Washington, D.C.; Society for Promotion of Engineering Education, and American Institute of Electrical Engineers."

"This issue was devoted to employment....and Eta Kappa Nu was asked to take part in a study on engineering education being conducted by W.E. Wickenden and H.P. Hammond," and

"This was the largest volume published (192 pages), the next greatest was 160 pages in the previous volume."

However, problems continued to plague the editors as expressed by the following editorial comment: (20)

"In order to maintain The Bridge at its present standard will require 800 alumni subscriptions this year. As we write this, we have only a few over 400....No one is employed to run The Bridge."

Perhaps, the latter terse statement brought on the following action.

The Association's magazine displayed an advertisement for an executive secretary as a result of action taken at the 23rd Annual Convention. The Convention proposed that a full-time executive secretary be employed who would take over the work of vice-presidents, secretary, assistant secretary, treasurer and Bridge Editor. (21)

Consequently, this era of The Bridge was concluded with the following farewell statement of the editorial staff: (22)

"After the war and beginning with college year 1919-20, Brother D.G. Evans saw the need for a magazine which, by coming out more frequently, would knit our growing organization more closely together. Brother Evans agreed to take the editorship and make it a quarterly.

"It was then suggested that the New York Alumni Chapter take over the publishing of our magazine for a time. J.B. Kelly consented to be the editor and F.E. Brooks the Business Manager, and so The Bridge moved to New York.

"The 1921 National Convention decided that since the new quarterly was on a paying basis, the editor should be paid an honorarium each year. J.W. Weigt was selected "for reasons unknown to him." -- his quotation.

"The Bridge continued essentially in the same form for two years, 1921-23. Beginning with November, 1923, certain radical changes were made. The size was increased to 9 x 12 inches, and the magazine was divided into two parts. The forward part (2 columns per page) were general interest articles, the rear part (3 columns per page) contained fraternity news. An editorial policy was adopted of eliminating strictly technical articles."

In 1921, Irwin and Shoop joined the staff. Hale and

Lamont came later. Brothers Evans, Kelly, Brooks, Weigt, Irwin, Shoop, Hale and Lamont were given deserving credit for their unselfish contributions in behalf of Eta Kappa Nu by J.A. Umhoefer, the incoming editor of The Bridge. His editorial entitled "True Service To The Fraternity" speaks for itself: (23)

"No reference to the past editors would be complete without specific reference to the past editor, J.W. Weigt, Kappa '18, who piloted the struggling infant magazine through its most trying period.

"He became editor in 1921, confronted with countless problems: The publication was far from self-supporting, it had scant help from alumni membership; the lack of systematic files made necessary an enormous amount of detail work. Such details had to be overcome by an editor working only in spare time. In 1928 these problems were overcome and The Bridge passed into new hands. This is a spirit of HKN which few men possess."

#### Mature Stage

The era beyond 1929 may be characterized as one during which an editor was paid for producing The Bridge and was employed by Eta Kappa Nu. Another section enumerates the various editors in this and other eras.

Notwithstanding this important change in editorship and management, substantial difficulties still were encountered in publishing The Bridge. Among the latter were the following:

1. The depression forced many discontinuities in employment among members, which in turn created problems in securing articles and maintaining a directory. At the same time, new opportunities arose for publishing timely articles regarding employment matters.
2. World War II raised havoc on college campuses and in industry as well. The burden of keeping such functions of the Association like The Bridge intact fell on the shoulders of a smaller number of volunteers.
3. Changes in editors around A.B. Zerby's retirement period produced problems of a different kind among staff personnel, officers and the new Executive Secretary.
4. Rising costs contributed towards all these general and specific difficulties.

Nevertheless, this era witnessed great strides in the character of The Bridge as will be discussed in the section

entitled "Characteristics". The respective editors each contributed their own ideas and creativity to change The Bridge in looks, style, readability and purpose. Judging from published letters of members, there were many satisfied readers. There were some dissatisfied readers as well which must be expected in a normally distributed universe of people.

Some selected comments will give the flavor of the favorable appraisals. In A.B. Zerby's period, Richard C. Price, A '50, wrote:

"I wish to take this opportunity to comment on the excellent articles that have been appearing in The Bridge. I thought your Fall 1954 issue especially good."

J.J. Raffone, an experienced editor, transformed The Bridge from its fraternal style of many years to one that took on the modern commercial look of the publishing world. S. Reid Warren, Jr., J.D. Ryder and C.T. Koerner -- three national HKN presidents -- had this to say about his efforts: (24)

"The Bridge contract with Raffone established an arrangement actively providing editorial breadth and progressiveness, and with promise of financial success in the long term. The news of its termination will provide disappointment to many."

C.H. MacDonald also wrote to the author:

"The recent issues of The Bridge have caused a number of favorable comments and I share your regret that Raffone's contract must be terminated." (25)

In P.K. Hudson's era, a new style emerged. A. Naeter wrote in the Fall, 1964, issue:

"I am really enjoying reading the latest issue of The Bridge. I, for one, like it best among the recent issues."

Everett S. Lee wrote in the August, 1971, issue:

"The February, 1971, Bridge has just arrived. Paul, it is wonderful, wonderful, wonderful! Our congratulations to you...."

In the same issue, Alfred N. Goldsmith, Eminent Member, wrote:

"...I was particularly impressed with some data given in the February, 1971, issue of The Bridge. And I should like to secure, and purchase, six copies of this issue."

And there were other letters in later issues similarly complimentary.

### Editors

No other function in Eta Kappa Nu demonstrates any more dedicated individual effort than that given voluntarily or with compensation by many members who functioned as editor, assistant editor, associate editor, circulation manager, advertising manager, biographical editor, photography editor, Bridge Correspondent and Bridge Policy Committee member. Each of the men filling these positions, over the years contributed directly to the success of the magazine and indirectly to strengthening Eta Kappa Nu.

The initial publication of "The Electrical Field" naturally became the responsibility of Alpha Chapter and the first editor was G.W. Williams. The subsequent national conventions -- reported in detail elsewhere -- provided for elected editors and associate editors in different ways and with varying degrees of responsibility. Table I lists the members who served in these capacities at the indicated times.

Starting with volume 10 in 1914, the editor of The Bridge automatically was Vice-President of the Executive Council. A.B. Zerby assumed this responsibility first followed by R.H. Webb, B.E. Miller, H.S. Cocklin, F.A. Coffin, D.G. Evans and J.B. Kelly.

In 1921, the editorship of The Bridge was assigned to John W. Weigt. It became the New York Alumni Chapter's responsibility where it remained until 1928. During this period a small honorarium was paid to John Weigt for his extra-ordinary "side-line" effort.

In 1928, the National Executive Council became responsible for The Bridge -- specifically the new office of Executive Secretary -- at which time the first Executive Secretary, J.A. Umhoefer became editor. The operation remained in New York. He was followed in 1931 by L.A. Spangler in Chicago and in 1934 by A.B. Zerby. The operation at this time was in Pittsburgh, Pa. A.B. Zerby served in this capacity for the next 23 years, earning the title of Mr. Eta Kappa Nu for this and other services. He operated first from Wilkinsburg, Pa., and later from Dillsburg, Pa.

A June 20, 1975, letter from L.A. Spangler provided some interesting details to the writer:

"In 1928, HKN hired a full time secretary and Bridge editor (J.A. Umhoefer) at \$300 a month for a three year period. In 1931, George H. Kelley, then Vice President, knowing that I had edited The Iowa Engineer in my senior year at Iowa State, contacted me with this proposition.

"The depression was affecting HKN financing, the

TABLE 1 - ETA KAPPA NU ASSOCIATION  
PUBLICATION RESPONSIBILITIES - ASSOCIATION'S MAGAZINES

VOLUME	YEAR	ISSUES	RESPONSIBLE OFFICE	EDITOR	ASSISTANT OR ASSOCIATE	CIRCULATION MANAGER	ADVERTISING MANAGER	BUSINESS MANAGER	OTHER EDITORS
1	1905	1	ALPHA CHAPTER						
2	06	1	"						
3	07	1	"						
4	08	1	"	G.W. WILLIAMS					
5	09	1	"	W.C. MADDOX					
6	1910	1	GAMMA	F.H. BAGLEY					
7	11	1	EPSILON	J.M. SPANGLER					
8	12	1	ZETA CHAPTER	C.C. STEPHENS	R.T. KAIGHIN				
9	13	1	PITTSBURGH ALUMNI	R.H. WEBB	A.H. HEITMANN				
10	14	1	V.P. OF N.E.C.	A.B. ZERBY				E. S. HAYMOND	
11	15	1	"	R.H. WEBB				P. MAGILVARY	
12	16	1	"	B.E. MILLER					
13	17	1	"	H.S. COCKLIN					
14	18	1	"	F.A. COFFIN	M. WASHBURN			H. HERSH	
15	19	1	"	D.G. EVANS				F.E. BROOKS	
16	1920	4	"	J.B. KELLY					
17	21	4	N.Y. ALUMNI CHAPTER	J.W. WEIGT					
18	22	4	"	"					
19	23	4	"	"	D.R. LAMONT	J.B. IRWIN	R.M. SHOOP		
20	24	4	"	"	D.R. LAMONT	J.B. IRWIN	R.M. SHOOP		
21	1924-25	4	"	"	"	"	"		R.I. WILKINSON ALSO ASSISTANT EDITOR
22	1925-26	4	"	"	"	"	"		R.I. WILKINSON " " " "
23	1926-27	4	"	"	"	"	"		R.I. WILKINSON ALSO ASSISTANT EDITOR,
24	1927-28	4	"	"	"	"	"		H.L. RUSCH ASS'T. ADV. MGR.
									H.L. RUSCH ALSO ASST. ADV. MGR.
									A. PAONE ALSO ASS'T. EDITOR,
									H.L. RUSCH ASS'T. ADV. MGR.
25	1928-29	4	N.E.C.	J.A. UMHOEFER					
26	1929-30	6	"	"	C.A. FAUST				
27	1930-31	5	"	"	"				
28	1931-32	5	"	L.A. SPANGLER					
29	1932-33	5	"	"					
30	1933-34	5	"	"					
31	1934-35	5	"	A.B. ZERBY					
32	1935-36	5	"	"					
33	1936-37	5	"	"					
34	1937-38	5	"	"					
35	1938-39	5	"	"					
36	1939-40	5	"	"					

AN ASSISTANT EDITOR SELECTED BY EACH CHAPTER. THIS SITUATION REMAINED IN EXISTENCE THROUGH VOLUME 24, 1927-28. AFTER THAT EACH CHAPTER ELECTED A BRIDGE CORRESPONDENT TO REPORT ITS ACTIVITIES.

R.I. WILKINSON ALSO ASSISTANT EDITOR  
R.I. WILKINSON " " " "  
R.I. WILKINSON ALSO ASSISTANT EDITOR,  
H.L. RUSCH ASS'T. ADV. MGR.  
H.L. RUSCH ALSO ASST. ADV. MGR.  
A. PAONE ALSO ASS'T. EDITOR,  
H.L. RUSCH ASS'T. ADV. MGR.

TABLE 1 - ETA KAPPA NU ASSOCIATION (CONTINUED)  
PUBLICATION RESPONSIBILITIES - ASSOCIATION'S MAGAZINES

VOLUME	YEAR	ISSUES	RESPONSIBLE OFFICE	EDITOR	ASSOCIATE EDITORS							
					CHICAGO	CLEVELAND	LOS ANGELES	NEW YORK	PITTSBURGH	SAN FRANCISCO	PHILADELPHIA	BIOGRAPHICAL
37	1940-41	5	N.E.C.	A.B. ZERBY	L.F. BERNHARD	M.S. SCHORVISNER	W.J. HERRMAN	V.L. DZWONCZYK	H.W. BRYAN	N.L. BEST	R.G. LOCKETT	A.R. FINLEY
38	1941-42	6	"	"	"	"	A.L. ROTH*	"	"	"	"	"
39	1942-43	6	"	"	"	"	"	"	"	"	"	"
40	1943-44	6	"	"	"	"	"	"	"	"	"	"
41	1944-45	6	"	"	"	"	"	"	"	"	"	"
42	1945-46	6	"	"	"	"	C.A. FAUST	"	"	"	"	"
43	1946-47	6	"	"	"	"	"	"	"	"	"	"
44	1947-48	6	"	"	"	"	"	"	"	"	"	"
45	1948-49	6	"	"	"	"	"	"	"	"	"	"
46	1949-50	6	"	"	"	"	S. WIRTH	E.E. GRAZDA	"	"	"	"
47	1950-51	5	"	"	"	"	"	"	"	"	"	"
48	1951-52	4	"	"	"	"	"	"	"	"	"	"
49	1952-53	4	"	"	"	"	"	"	"	"	"	"
50	1953-54	4	"	"	H.L. GARBARINO	"	"	"	"	"	"	"
51	1954-55	4	"	"	"	"	"	"	"	"	"	"
52	1955-56	4	"	"	"	"	W.C. KLING	"	"	"	"	"
53	1956-57	4	"	"	"	"	"	"	"	"	"	"
54	1957-58	4	"	J.J. RAFFONE	"	"	S.J. BARNETT	"	"	"	"	"
55	1958-59	4	"	"	"	"	"	"	"	"	"	"
56	1959-60	4	"	H.R. SPIES	"	"	"	"	"	"	"	"
57	1960-61	4	"	"	"	"	"	"	"	"	"	"
58	1961-62	4	"	"	"	"	"	"	"	"	"	"
59	1962-63	4	"	"	"	"	"	"	"	"	"	"
60	1963-64	4	"	P.K. HUDSON	"	"	"	"	"	"	"	"
61	1964-65	4	"	"	"	"	"	"	"	"	"	"
62	1965-66	4	"	"	"	"	"	"	"	"	"	"
63	1966-67	4	"	"	"	"	"	"	"	"	"	"
64	1967-68	4	"	"	"	"	"	"	"	"	"	"
65	1968-69	4	"	"	"	"	"	"	"	"	"	"
66	1969-70	4	"	"	"	"	"	"	"	"	"	"
67	1970-71	4	"	"	"	"	C. KOERNER	L. DWON	R. SLADE#	"	"	"
68	1971-72	4	"	"	"	"	"	"	"	"	"	"
69	1972-73	4	"	"	"	"	"	"	"	"	"	"
70	1973-74	4	"	"	"	"	"	"	"	"	"	"
71	1974-75	4	"	"	"	"	"	"	"	"	"	"
72											H. SHEPPARD	
73												
74												
75												

\* - DENVER  
# - NEW YORK

secretary could see no future in the job and would resign. Kelley was to leave his sales job with Crouse-Hinds to set up a partnership with a Mr. Burns. If I would take the secretary job at \$200 a month, take over editing and publishing The Bridge, which was then bi-monthly, (as a sideline to my sales job with Westinghouse) and split the \$200 and our office expense with him, he would handle all correspondence with the chapters, other officers, etc.

"Westinghouse had instigated two or three 10% pay cuts with Saturdays off, two days a month off, etc. so I agreed, after obtaining approval from our Regional Vice-President.

"We located some office space in the Otis Elevator Building (one block from the Union Station where we took our suburban trains to Hinsdale and Downers Grove) for I believe \$20.00 per month. I made a deal with the old farm journal, Prairie Farmer, to print The Bridge. The old HKN addressograph files were shipped from New York and Eta Kappa Nu headquarters functioned very well.

"Kelley took care of the correspondence during the day, doing his own typing. On several days of the month, while calling on railroad headquarters in Chicago and principal shops in three or four states, and doing my office work, I would leave the Westinghouse office in the Opera Building, eat a hurried meal in one of the Fred Harvey restaurants, get in two or three hours in the HKN office and take the 8:47 local to Downers Grove (55 minutes for reading) where my good wife would drive us the few blocks home in time to hear Amos and Andy on the radio at 10 PM. Approaching the mailing date sometimes meant four or five evenings a week and some Saturdays of work!

"By 1934 business conditions had improved. I had moved to Wilmette, and A.B. Zerby (Mr. Eta Kappa Nu) took over the job in Pittsburgh. We all know he really earned that title!"

This period includes the great depression with all of the vicissitudes that affected people, industry and schools. It also caused Eta Kappa Nu many hardships. On the other hand it seemed to have spawned several new national activities which had a decided effect on The Bridge.

The creation of a new subscription plan for The Bridge was one new activity which should be mentioned here. The others will be discussed in more appropriate sections. Many HKN members developed and promoted the plan. A.B. Zerby, Morris Buck and Clifford A. Faust were the prime movers.

The terms of the "Life Subscription Plan" to The Bridge were a single payment of \$25 or \$20 for members under and over 45 years of age, respectively. "By making a single payment, the cost of soliciting the subscription and the bookkeeping and incidental clerical work are eliminated," the plan stipulated. The amount received for life subscriptions would be invested with the funds of the organization and the income on the investment would be used to meet the expenses of publication in part. The rates were fixed at the lowest possible figure consistent with costs of publication. The Plan's principal purpose was to keep member interest in HKN for most of their lives. (26)

Names of the Life Subscribers were published in subsequent issues of The Bridge. The first eleven Life Subscribers are indicated below: (27)

LIFE-SUBSCRIBERS RECORDED NOVEMBER 1, 1935

<u>Name</u>	<u>Chapter</u>	<u>Year</u>	<u>Life-Subscriber No.</u>
Maurice L. Carr*	Alpha	1905	1
Edmund B. Wheeler+	Alpha	1905	2
Morris Buck	Alpha	Assoc.	3
Don G. Evans	Alpha	1917	4
Clifford A. Faust	Nu	1927	5
Hadley F. Freeman	Zeta	1914	6
Jacob H. Euston	Alpha	1918	7
Merle C. Hale	Theta	1914	8
Forrest E. Brooks	Zeta	1912	9
Ralph Wicke Fouse	Epsilon	1925	10
Roger I. Wilkinson	Nu	1924	11

\*Founder of Eta Kappa Nu.

+One of the "first ten" of Alpha Chapter.

It is of some interest that several of these men will be mentioned among the more active members.

With the Fall, 1957, issue of The Bridge, E.E. Grazda, Chairman of Bridge Policy Committee, introduced a new editor and business manager of The Bridge, John J. Raffone. What prompted this change? E.E. Grazda raised this question and proceeded to answer it thusly: (28)

"Basically, it is this: the continual growth of Eta Kappa Nu over the years -- about 1000 new members are inducted each year -- has proportionately increased the burden of administrative work upon Alton B. Zerby, your Executive Secretary. Among his many duties, Zerby has ably served as editor and business manager of The Bridge. Appointing another man to assume full responsibility for the magazine now releases him to devote more of his time

and experience to the functional affairs of Eta Kappa Nu.

"In keeping with the constitution of HKN, A.B. Zerby has assumed the title of publishing editor of The Bridge. Through him, the present editor and business manager will report to the National Executive Council, of which the Executive Secretary is a permanent member."

John Raffone was an experienced editor, having been associated with the General Electric Review under the tutelage of E.S. Lee, past president of HKN. Additionally, Raffone had served as managing editor of the Journal of Astronautics and on the editorial board of the Technical Writing Review. When J.J. Raffone took over the duties of The Bridge, the following statistics pertained: (29)

"There were 10,945 paid subscribers to The Bridge. Of these, 2,520 were students, 4,163 were out of school up to four years and 4,262 had graduated prior to 1953. Members of Eta Kappa Nu itself totaled more than 28,000, of whom about 25,000 were living. (Keeping up with the changes in address, incidentally, is quite a chore for the executive secretary's office)."

The Bridge Policy Committee envisioned readership doubling because the sources of knowledge which should and could be communicated by The Bridge was considered to be largely within the group of members constituting Eta Kappa Nu. "In other words; HKN contains the seeds of its own propagation," wrote E.E. Grazda. He continued on with the statement, "Its from this fountainhead of knowledge we expect to draw our editorial material and ideas, while continuing to cover student, alumni and HKN activities."

This was a noble experiment. It produced two volumes of very interesting "New Look" issues of The Bridge. The change was good and most welcome in one sense: but it was not acceptable in other respects.

This period was a very difficult transition phase for Eta Kappa Nu because A.B. Zerby retired and Professor P.K. Hudson, with very little experience in such matters, took over the reigns; the headquarters office was moved from Dillsburg, Pa. to Urbana, Ill.; The Bridge publishing office remained in Dillsburg; the new editor was located in New York; and serious financial problems confronted the organization. Officially, these problems were specifically documented in detail by the author who was successively national Vice-President and President of Eta Kappa Nu during John J. Raffone's period as editor.

Pertaining to The Bridge, the following statement was included in that report: (30)

"Bridge Publication - The Bridge of Eta Kappa Nu is a very important link among its members and chapters.

Over the years, The Bridge has been edited and published in a variety of ways, but during much of the period, mainly through the efforts of Alton B. Zerby, as part of his Executive Secretary's assignment.

"In the Fall of 1957, after a long thorough study by E.E. Grazda's Bridge Committee, the job of editing The Bridge was contracted by John J. Raffone by special agreement between Eta Kappa Nu and him. This was later modified (higher commission and fee) for the working period starting the Fall issue of 1958 and was cancelled as of May 20, 1959, for several reasons. Beginning the Summer issue of 1959, The Bridge is to be edited and published by H.R. Spies, who reports directly to the Executive Secretary.

"During the 1957-59 period, The Bridge underwent substantial change, much of which was suggested by The Bridge Committee and all of which was in line with a policy statement that was prepared by NEC and approved by the NAB in February 1957. While The Bridge underwent considerable face-lifting and improvement, some operating difficulties required a change in editorship."

In 1959, H.R. Spies, at the University of Illinois, became Bridge Editor under Professor Hudson's direction and in 1963 this responsibility was again taken over by the Executive Secretary where it remains today.

Table I shows how other HKN members contributed voluntary services to The Bridge. In the beginning, each college and alumni chapter elected an Associate Editor. Later, the chapters used the title Bridge Correspondent for these volunteers. The transition came with Volume 25 in 1928. At various times, assistant or associate editors were appointed.

With the 1957-58 issue of The Bridge, Volume 54, associate editors were discontinued and The Bridge Policy Committee began to work more actively with the editor. This committee continued to be chaired by E.E. Grazda. The members of the committee are listed elsewhere. Actually, this committee had been in existence since 1953; but it served in a less intimate way with The Bridge Editor. Its principal duty was to evaluate the magazine and suggest ways to improve it.

In 1966, Professor Hudson once again appointed associate editors.

#### Characteristics

The Association's magazine changed its characteristics with the changing times and as a consequence of creative ideas provided by people who became responsible for the publication. In this section these changes will be reviewed briefly.



Frequency and Size - The frequency of publication and physical characteristics of the Association's magazine are shown in Table II as a general overview. The reasons and events that caused these changes were described in previous sections.

Table II - The Association's Magazine: Selected Characteristics

Year	Vol. No.	Frequency	Page Per Volume	Dimensions Inches	Magazine Name
1905-1909	1-5	Annual	4	?	The Electrical Field
1910	6	Annual	44	6 x 9	The Electrical Field
1911-1919	7-15	Annual	160	6 x 9	The Bridge
1920-1923	16-19	Quarterly	200	7 x 10	The Bridge
1924-1951	20-47	4-6	103-182	9 x 12	The Bridge
1952-1975	48-71	Quarterly	106-188	8-1/4 x 11-1/4	The Bridge

Covers - A variety of covers were used over the years, as illustrated in Table III. Initially, a simple plain cover showing the year, name of the publication and of the Association, together with the symbol of the key, was used. The 1923 cover displayed the name and a colored hand drawing of a turbogenerator room in a power plant.

Starting with Volume 20, the principal design of the cover was the name and a table of contents of the issue. It was reproduced in red or blue and white with black type. Volumes 28 through 30 used portraits of prominent educators and occasional pictures in place of the table of contents. The characteristic red, blue and white combination was a constant feature. Beginning with Volume 54 and thereafter, the cover consisted of picture photographs and modernistic designs in many moods. They were colorful and distinctively different from prior issues.

Cover portraits which started with Volume 28, No. 1 are listed in Table IV. They mainly displayed prominent educators of the day who were made Honorary Members.

Contents - The historical profile of the contents in the respective volumes of the magazine are given in Table V and plotted on a percentage basis in Fig. 2. This figure shows the percent of the entire volume, regardless of how many issues were involved, which was devoted to advertising, editorials, college chapters, alumni chapters, personals and miscellaneous other items lumped together, as well as main feature and general interest articles also plotted as a group. In addition, this figure indicates the

TABLE III - ETA KAPPA NU ASSOCIATION  
MAGAZINE COVER STYLE

NUMBER OF ISSUES WITH INDICATED COVER					NUMBER OF ISSUES WITH INDICATED COVER						
YEAR	VOL.	PLAIN NAME	TABLE OF CONTENTS	PORTRAIT OF PERSON	PICTURE	YEAR	VOL.	PLAIN NAME	TABLE OF CONTENTS	PORTRAIT OF PERSON	PICTURE
1905	1					1942	38		6		
06	2					43	39		6		
07	3					44	40		6		
08	4					45	41		6		
09	5	1				46	42		6		
1910	6	1				47	43		6		
11	7	1				48	44		6		
12	8	1				49	45		6		
13	9	1*				1950	46		6		
14	10	1*				51	47		5		
15	11	1*				52	48		4		
16	12	1				53	49		4		
17	13	1*				54	50		4		
18	14	1				55	51		4		
19	15	1				56	52		3		
1920	16					57	53		4		1
21	17					58	54				4
22	18					59	55				4
23	19				1	1960	56				4
24	20		4			61	57				4
25	21		4			62	58				4
26	22		4			63	59				4
27	23		4			64	60				4
28	24		4			65	61				4
29	25		4			66	62				4
1930	26		6			67	63			1	3
31	27		5			68	64				4
32	28			5		69	65				4
33	29			4	1	1970	66				4
34	30			4	1	71	67				4
35	31		1	4		72	68				4
36	32		5			73	69			1	3
37	33		5			74	70			1	4
38	34		5			75	71				3
39	35		5			76					
1940	36		5			77					
41	37		5			78					

\* SKETCH OF GREEK COLUMNS SUPPORTING HKN KEY (COLORED)

Table IV - Eta Kappa Nu Association

Cover Pictures Used - Volumes 28-31

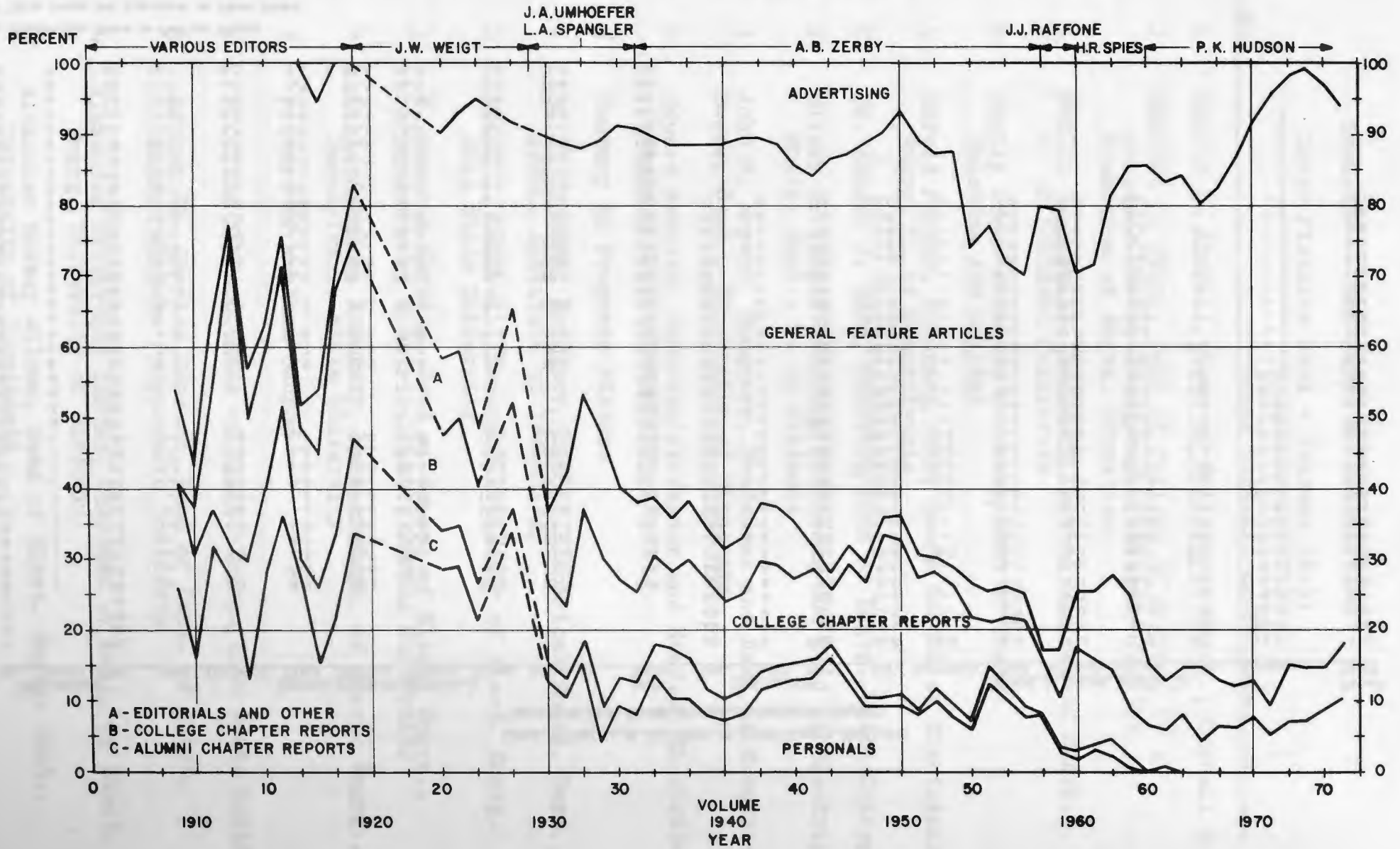
<u>Vol.</u>	<u>No.</u>	<u>Cover Portrait or Picture</u>
28	1	Dexter S. Kimball, Dean of College of Engrg., Cornell U.
28	2	Herbert S. Evans, Dean of College of Engrg., U. of Colorado State; President of Society for the Promotion of Engrg. Education.
28	3	Philip S. Biegler, Honorary, Dean of College of Engrg., U. of Southern California
28	4	Philip Stone Donnell, Honorary, Dean of Engrg. Oklahoma A&M College
28	5	Harold Pender, Honorary, Dean, Moore School of Electrical Engrg. U., of Pennsylvania
29	1	Dr. Ernest J. Berg, Honorary, Dean of Engrg., Union College
29	2	Ellery B. Paine, Honorary, Professor and Head of Electrical Engrg. Dept., U. of Illinois
29	3	John M. Bryant, Honorary, Professor and Head of Electrical Engrg. Dept., University of Minnesota
29	4	Edward Bennett, Honorary, Professor and Head of Electrical Engrg., U. of Wisconsin
29	5	Century of Progress Picture
30	1	E. H. Freeman, Honorary, Head of Electrical Engrg. Dept., Armour Institute of Technology
30	2	Frank C. Caldwell, Honorary, Professor of Elect. Engrg. Ohio State University
30	3	C. Francis Harding, Head of School of Elect. Engrg., Director of Electrical Lab., Purdue University
30	4	C. L. Kinsloe, Honorary, Head of Dept. of Elect. Engrg., Pennsylvania State University
30	5	Picture of Montana Canyon
31	1	F. Ellis Johnson, Head of Elect. Engrg., Iowa State College
31	3	Arthur St. Charles Dunstan, Head of Dept. of Elect. Engrg., Alabama Polytechnic Institute
31	4	Alexander Cartwright Lanier, Chairman of Dept. of Elect. Engrg., University of Missouri
31	5	Alexander Massey Wilson, Head of Elect. Engrg. Dept., University of Cincinnati

TABLE V PROFILE OF ETA KAPPA NU ASSOCIATION'S MAGAZINES  
PERCENT OF EACH VOLUME DEVOTED TO INDICATED SUBJECTS

PUBLICATION			PERCENT OF VOLUME DEVOTED TO							TOTAL*	PUBLICATION			PERCENT OF VOLUME DEVOTED TO							TOTAL*	
VOL.	ISSUES	YEAR	ADV.	EDITORIAL	OTHER ARTICLES	COLLEGE	ALUMNI	PERSONALS	PAGES	VOL.	ISSUES	YEAR	ADV.	EDITORIAL	OTHER ARTICLES	COLLEGE	ALUMNI	PERSONALS	PAGES			
1		1905								41	6	1945	15.8	0.9	2.6	52.2	12.9	2.5	13.1	114		
2		06								42	6	46	13.4	-	2.2	58.5	8.2	1.7	16.0	134		
3		07								43	6	47	12.7	-	2.8	55.3	15.1	1.8	12.3	169		
4		08								44	6	48	11.4	-	2.5	59.5	16.1	1.3	9.2	158		
5	1	09	-	4.3	8.7	46.3	-	14.8	25.9	46	45	6	49	9.9	-	2.7	54.1	22.8	1.4	9.1	162	
6	1	1910	-	-	6.3	56.6	7.0	14.5	15.6	64	46	6	1950	6.6	-	3.3	57.4	21.7	1.8	9.2	182	
7	1	11	-	3.9	4.5	36.7	18.1	5.0	31.8	44	47	5	51	10.9	0.7	2.7	58.5	18.6	0.6	8.0	147	
8	1	12	-	-	2.1	22.9	43.7	4.2	27.1	48	48	4	52	12.5	-	2.1	57.2	16.4	1.8	10.0	140	
9	1	13	-	1.9	4.9	43.2	20.1	17.3	12.6	103	x	49	4	53	12.4	-	2.7	58.8	16.6	2.0	7.5	148
10	1	14	-	1.4	1.4	36.8	20.4	12.2	27.8	72	50	4	54	25.8	-	5.3	47.3	14.5	1.3	5.8	154	
11	1	15	-	3.0	1.5	24.2	19.7	15.2	36.4	66	51	4	55	22.8	1.7	2.8	46.7	11.4	2.2	12.4	180	
12	1	16	-	2.5	0.6	48.4	18.5	3.2	26.8	157	52	4	56	27.9	2.1	2.1	41.0	15.2	1.9	9.8	188	
13	1	17	5.3	7.5	1.5	41.0	18.8	10.9	15.0	133	53	4	57	29.7	1.7	2.3	40.1	16.9	1.7	7.6	172	
14	1	18	-	1.3	1.3	29.4	34.6	6.5	26.9	153	54	4	58	20.1	2.2	4.3	57.9	7.3	0.3	7.9	176	
15	1	19	-	3.8	4.2	17.2	27.8	13.4	33.6	119	55	4	59	20.5	2.6	4.3	62.2	7.2	0.5	2.7	182	
16	4	1920								202	56	4	1960	29.6	-	7.8	44.9	14.8	1.1	1.8	128	
17	4	21								178	57	4	61	28.4	-	9.6	46.2	12.0	1.0	2.8	104	
18	4	22								194	58	4	62	18.4	-	8.3	53.8	15.3	1.9	2.3	108	
19	4	23								214	59	4	63	14.3	-	11.1	65.8	6.5	1.8	0.5	108	
20	4	24	9.9	3.3	5.8	33.9	13.2	5.4	28.5	173	60	4	64	14.4	-	8.8	70.3	6.5	-	-	108	
x	21	4	7.0	3.3	6.2	33.5	15.3	5.8	28.9	137	61	4	65	16.6	-	5.6	71.8	5.1	0.9	-	108	
22	4	26	4.9	2.0	5.4	47.5	13.7	5.4	21.1	194	62	4	66	15.6	-	6.4	69.7	8.3	-	-	109	
23	4	27								178	63	4	67	19.9	-	6.5	69.4	4.2	-	-	108	
24	4	28	8.0	2.9	10.3	26.3	15.4	3.5	33.6	154	64	4	68	17.6	-	6.5	69.4	6.5	-	-	108	
25	4	29								179	65	4	69	13.3	-	6.1	74.5	6.1	-	-	108	
x	26	6	1930	10.4	-	10.0	52.9	11.4	2.4	12.9	210	66	4	1970	7.7	-	5.3	79.3	7.7	-	-	116
27	5	31	11.2	6.6	11.9	46.9	10.1	2.8	10.5	143	67	4	71	4.3	-	3.9	86.4	5.4	-	-	140	
28	5	32	11.8	8.4	8.4	34.4	18.3	3.4	15.3	131	68	4	72	1.8	-	8.0	83.1	7.1	-	-	108	
x	29	5	33	10.7	9.7	7.8	41.7	20.9	5.3	3.9	128	69	4	73	0.9	-	7.4	84.3	7.4	-	-	108
30	5	34	8.1	6.2	7.2	51.5	13.9	4.0	9.1	132	70	4	74	2.8	-	6.0	82.4	8.8	-	-	108	
31	5	35	8.9	2.8	9.8	53.1	12.	4.7	8.0	132	71	4	75	6.0	-	7.8	76.0	10.2	-	-	100	
32	5	36	10.1	1.1	7.1	51.3	12.7	4.1	13.6	134												
33	5	37	11.1	3.2	4.2	53.3	10.2	7.6	10.4	135												
34	5	38	11.2	4.5	3.7	50.7	13.8	6.0	10.1	134												
35	5	39	11.1	3.7	3.7	54.8	15.2	3.7	7.8	135												
36	5	1940	11.1	3.7	3.7	57.5	13.6	3.3	7.1	135												
37	5	41	10.5	4.2	3.5	56.6	13.7	3.5	8.0	143												
38	6	42	10.5	4.3	3.7	51.9	15.6	2.6	11.4	162												
39	6	43	11.1	4.3	3.7	51.5	14.5	2.5	12.4	162												
40	6	44	14.3	5.5	2.4	50.4	12.3	3.2	11.9	126												

x PERCENTAGES BASED ON PARTIAL VOLUME  
\* TOTAL PAGES ARE EXCLUSIVE OF FRONT COVER

**FIGURE 2  
HISTORICAL PROFILE OF MAGAZINES  
ETA KAPPA NU ASSOCIATION**



periods when the respective editors were in charge of the publication.

These different categories of the magazine will be briefly discussed in the sections that follow:

Advertising - Early issues of the magazine contained no advertising. The first thoughts about this feature were mentioned in H.S. Cocklin's May 3, 1917 letter to C.C. Carr. The first advertising clients were: a business directory at one dollar per insert; New York Alumni Chapter (1 page); D.L. Auld & Co. (1 page); The Automatic Reclosing Circuit Breaker Co. (2 pages); Nungesser Carbon & Battery Works (1 page); National Lamp Works (1 page).

Fig. 2 dramatically shows that the percent of each volume which was devoted to advertising rose to approximately 30% in 1957 and 1960 during A.B. Zerby's and J.J. Raffone's or H.R. Spies' tenure as editors. It dropped to 1.8% in 1968. Table V gives the actual percentages for the intervening years. Other interesting data are included in the table.

General Articles - Fig. 2 also shows that the general or feature articles have increased steadily. However, among these feature articles there are included also stories which pertain to HKN matters as well. This category of the magazine rose from a low of 17.2% in volume 16 to a high of 86.4% in Volume 67.

Table VI shows the percent of space devoted to general and feature articles in categories of miscellaneous (non-HKN related), education, employment and salaries, awards given by and affairs of HKN and biographies of members--honorary, eminent, officers and other dignitaries. Fig. 3 plots these same data in two groups--non-HKN related articles and HKN related articles. These data are represented as a percent of the space devoted to general and feature articles using the total of such space in each volume as 100%.

In summary, Volume 21 devoted zero and Volume 19 devoted 100% of the general feature article space to HKN matters. Other interesting relationships are contained in Table VI and Fig. 3.

The foregoing facts lead to the conclusion that categories of education, employment, salaries and biographies have decreased among the general articles.

Other Categories - The remaining categories include college and alumni chapter reports, personals, editorials and miscellaneous (humor, puzzles, news items, book reviews, etc.).

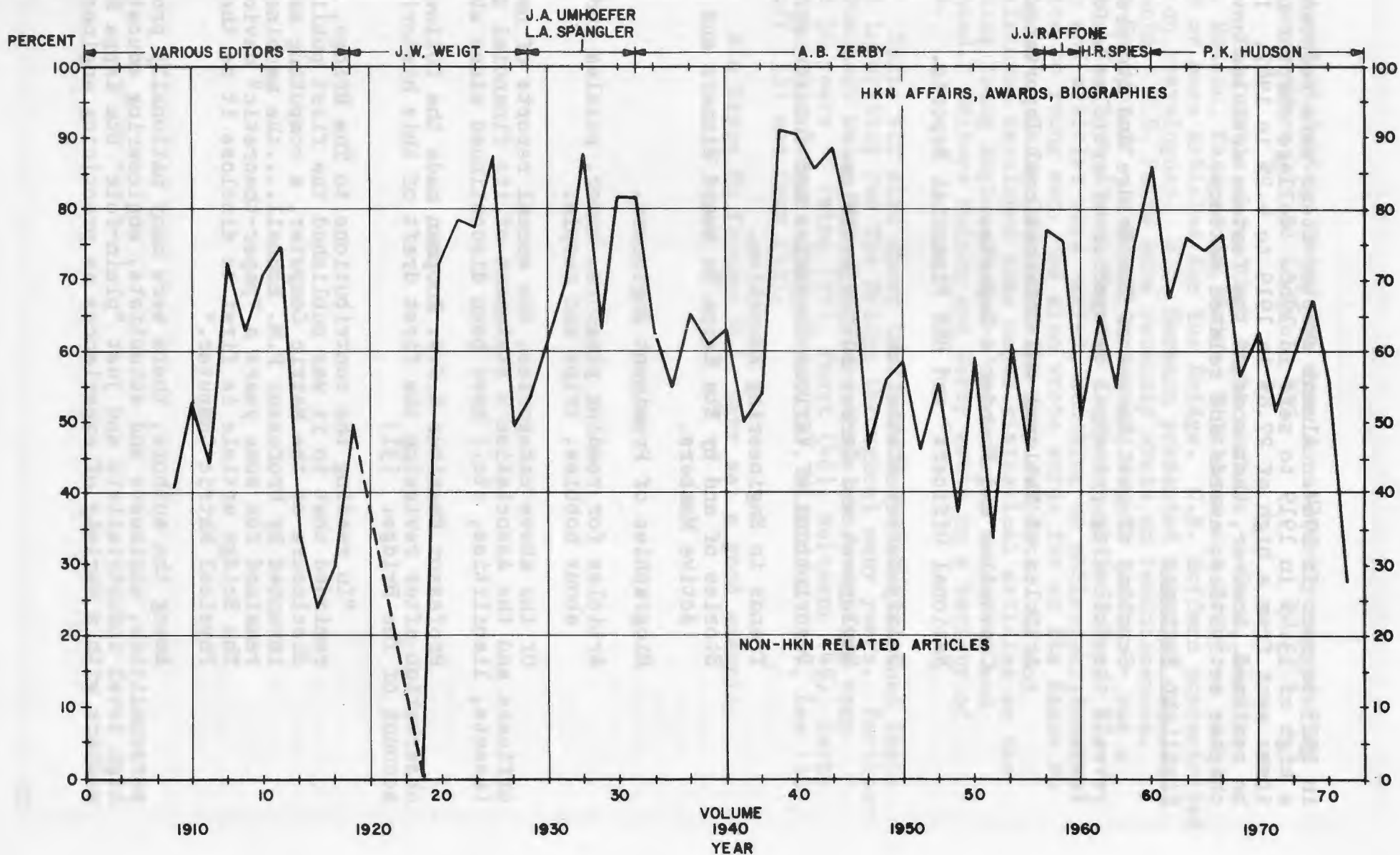
Fig. 2 shows a steady decrease in contents of the magazine which was devoted to a combination of these categories. The combined percentage dropped from approximately 60% in 1925 to a low of 4.2% in 1967. In this period personals dropped from 29%

TABLE VI PROFILE OF ETA KAPPA NU ASSOCIATION MAGAZINES  
PERCENT DISTRIBUTION AND TOTAL PAGES OF ARTICLES

Volume	Misc.	Education	Employment Salaries	Awards	HKN	Biography	Total Pages	Volume	Misc.	Education	Employment Salaries	Awards	HKN	Biography	Total Pages
1								38	44.1	-	10.3	11.2	17.6	16.8	84
2								39	86.3	0.6	4.5	1.3	6.4	0.9	84
3								40	70.5	17.1	3.1	-	5.4	3.9	64
4								41	76.2	7.9	1.8	-	11.0	3.1	60
5	40.8				59.2		21	42	59.8	-	27.9	-	7.7	4.6	78
6	52.2				47.8		36	43	62.4	8	6.6	5.6	9.6	7.8	79
7	44.1				55.9		16	44	33.5	13	-	41.6	3.8	8.1	94
8	72.7				27.3		11	45	40	15.4	0.8	16.3	26.3	1.2	88
9	62.9				37.1		45	46	36.1	18.7	3.8	16.8	21.4	3.2	105
10	70.6				29.4		27	47	24.2	6.4	15.7	27	20	6.7	86
11	75.0				25.0		16	48	35	11.3	9.6	24.8	16	3.3	80
12	33.6				66.4		76	49	33.3	-	4.1	36.1	15.7	10.8	67
13	24.0				76.0		55	50	52.4	6.9	-	23.7	12.2	4.8	71
14	29.6				70.4		45	51	39	-	5	27.2	18.1	10.7	84
15	34	-	16	-	50	-	25	52	61.3	-	-	22.4	9.2	7.1	77
16								53	36.6	-	8.7	17.2	33.6	3.9	69
17								54	48	22.8	6.6	14.3	3	5.3	107
18								55	61	8.2	6.5	10.4	7.1	6.8	111
19	-	-	-	-	100	-	4	56	45.1	5.1	-	21	22.5	6.3	58
x 20	54	-	18.9	-	8.1	19	41	57	41.7	14.8	8.5	19.7	6.3	9	48
x 21	4.3	4.3	70	-	-	21.4	41	58	54.8	-	-	17.2	16.8	11.2	58
22	27.3	28.5	21.8	-	11.6	10.8	97	59	74.7	-	-	8.9	6	10.4	71
23	58.8	-	29.4	-	11.8	-	17	60	86.5	-	-	9.5	4	-	76
24	5.3	8	36	-	42.7	8	41	61	67.4	-	-	12.9	10.4	9.3	78
25	14.6	9.8	29.3	-	24.3	22	21	62	74.8	1.3	-	15.2	2.3	6.4	76
x 26	42	19.6	-	-	38.4	-	89	63	72.8	1.5	-	13.4	6.3	6.0	75
27	29.8	10.5	29.8	-	28.1	1.8	67	64	76.4	-	-	9.5	10	4.1	75
28	31.7	25.6	30.5	-	12.2	-	45	65	56.8	-	-	12.7	23.6	6.9	79
x 29	58	-	5	-	25.9	11.1	43	66	62.8	-	-	15.8	15.9	5.5	92
30	48	21.6	12.8	-	17.6	-	67	67	51.8	-	-	30.9	14.7	2.6	121
31	68.7	4.3	8.6	-	14.1	4.3	69	68	59.7	-	-	8.4	30.7	1.2	90
32	37.5	10.2	14.7	7.3	23	7.3	69	69	67.3	-	-	10.1	11.3	11.3	91
33	48.2	4.5	4.9	30.5	10.7	1.2	72	70	56	-	1.2	16.8	19.4	6.6	89
34	33	4.6	27.6	16.1	16.1	2.6	68	71	32.9	-	-	20.8	30.2	16.1	76
35	52.7	-	8.4	15.3	17.7	5.9	74								
36	55.1	2.0	6	14.2	11.8	10.9	78								
37	24.2	-	26	15.3	27.2	7.3	81								

x - BASED ON PARTIAL VOLUME

FIGURE 3  
HISTORICAL PROFILE OF MAGAZINE'S GENERAL ARTICLES  
ETA KAPPA NU ASSOCIATION



in 1925 to zero in 1964. Alumni chapter items were reduced from a high of 13.4% in 1919 to zero in 1966. College chapter news items went from a high of 27.8% in 1919 to 4.2% in 1967. It must be realized, however, that some of the feature articles covered chapter activities, awards and related matters.

#### Highlight Features

Scrutiny of past issues of The Bridge and its predecessors reveals the following principal categories of articles which were featured:

Articles of National and International Importance.

Convention and Founder's Reports.

National Officers' and HKN Financial Reports.

Salary Survey Statistics.

Employment and Career Advice Articles.

Descriptions of Various Companies and Industries.

Trends in Engineering Education.

Stories of and by Eta Kappa Nu Award Winners and Active Members.

Biographies of Prominent Engineers.

Articles for reading pleasure, humor, puzzles and about hobbies, trips and people.

Of the above categories, the annual reports of national officers and the Association's statement of its financial situation (assets, liabilities, etc.) have been discontinued since about 1960.

Professor Emeritus R.J.W. Koopman made the following observation after reviewing the first draft of this historical account of The Bridge: (31)

"In reading the contributions to The Bridge, I was reminded that in it was published the first public disclosure of the Matric Computer, a computing machine invented by Professor P.M. Honnell...the machine remained for some years a "paper-theoretic" device. The Bridge article is first to disclose it as the Physical Matric Computer."

Among the authors, there were many nationally prominent personalities, engineers and scientists, engineering educators, high level industrialists and just "plain-folk" Eta Kappa Nu members with a variety of experiences as practicing engineers,

managers and students. Among the more consistently reappearing writers were those listed in Table VII.

This table shows that eight members -- Dwon, Hermann, Hoffman, Hudson, Karapetoff, Paine, Wilkinson and Zerby -- each wrote 20 or more articles for The Bridge. C.B. Hoffman concentrated largely on travelogues. W.J. Hermann presented a series on investments. E.B. Paine more recently wrote on reminiscences. Vladimir Karapetoff - a humanitarian and superb teacher - was a joy to the New York Alumni Chapter as an annual lecturer. His lectures and articles were varied, touching on philosophy, poetry and advice to young men. He also wrote words for an Eta Kappa Nu song (Fig. 4). Larry Dwon wrote on many subjects. He and Roger Wilkinson developed some major statistical articles on the Outstanding Young Engineers Award which Roger conceived and implemented. Editors Hudson and Zerby wrote on a variety of subjects.

Table VII also shows that some members maintained their interest in writing for The Bridge throughout many years. Particularly prominent among this group are those whose writing span exceeded 30 years -- Paine (55), Faust (46), Heitmann (45), Zerby (44), Kock (42), Summers (41), Dwon (37), Wilkinson (36), Lee (35), Karapetoff (33) and Carr (32).

Eta Kappa Nu founder M.L. Carr set a good example.



Table VII Prolific Writers For The Bridge

1909 - 1975

Authors	Number of Articles	Writing Span	
		Volumes	Years
L.Dwon (Also V.L. Dzwonczyk)*	44	35-72	37
A.B. Zerby#	34	9-53	44
P.K. Hudson#	29	56-69	13
C.B. Hoffman	27	37-49	12
E.B. Paine	26	13-68	55
V.Karapetoff	24	11-44	33
W.J.Hermann	21	30-36	6
R.I. Wilkinson	20	31-67	36
D.R. Lamont	15	20-24	4
F.E. Brooks	13	13-40	27
B. Sheffield	13	58-71	13
B.T. Anderson	12	5-24	19
C.A. Faust	12	25-71	46
J.W. Weigt#	11	18-33	15
J.E. Zollinger	11	17-32	15
C. Brunetti	10	65-67	2
D.G. Evans	10	12-20	8
A.R. Finley	10	37-38	1
J.B. Kelly	10	17-35	18
C.T. Koerner	10	52-76	24
E.S. Lee	10	16-51	35
L.O. Stewart	10	34-43	9
W.E. Kock	9	30-72	42
H.J. Perlis	9	57-71	14
M.L. Carr	8	5-37	32
M.S. Mason	8	15-33	18
L.W. Zelby	8	68-72	4
J.G. Adashko*	7	32-36	4
F.A. Coffin	7	14-17	3
R. Beach	7	32-51	19
R.F. Fouse	7	37-46	9
E.L. Anderson	6	38-39	1
L.H. Harris	6	5-12	7
A.H. Heitmann	6	6-51	45
E.B. Kurtz	6	49-54	5
F.E. Sanford	6	22-48	26
J.M. Spangler	6	7-18	11
L.A. Spangler#	6	29-37	8
H.J. Summers	6	30-71	41
J.A. Umhoefer#	6	25-27	2
H.S. Cocklin	5	14-22	8
E.E. Grazda	5	44-49	5
W.B. Groth	5	54-62	8
B.F. Lewis*	5	32-48	16
A. Lefkow	5	67-72	5
C.H. MacDonald	5	56-70	14
S.R. Warren, Jr.	5	51-54	3

Notes: \* Exclusive of anonymous humor articles--"Unbalances" and "Zero Sequence"--written by these members  
 # Including only articles and editorials which can be clearly identified with these authors  
 Volumes 49, No. 4 and 50, No. 3 were not researched

Try this on your banjo. It doesn't read very well, but get the tune and sing it.

Figure 4

## A PROPOSED ETA KAPPA NU SONG

(Tune: Lord Jeffery Amherst)

Words partly stolen from the original lines and partly borrowed from a dictionary, re-insulated and re-strung by

Vladimir Karapetoff

Charles P. Steinmetz was an enemy of the wicked Prussian king,  
 And he came from across the sea.  
 To the Frenchmen and the Indians he did not do a thing,  
 In the wilds of this wild country,  
 In the wilds of this wild country.  
 For the plus square root of minus one he fought with all his might,  
 For he was an engineer loyal and true.  
 And he conquered all equations that came within his sight,  
 And he looked around for more when he was through.

REFRAIN

Oh, Steinmetz, brave Steinmetz,  
 Famous name to Eta Kappa Nus of yore,  
 May it ever be glorious,  
 Till electric currents flow no more.

\* \* \*

Thomas A. Edison was a newsboy poor from O-hee-o,  
 And he never went across the sea.  
 To the Frenchmen and the Indians he did not do a thing,  
 In the wilds of this wild country,  
 In the wilds of this wild country.  
 For the telegraph and phonograph he fought with all his might,  
 For he was an engineer loyal and true.  
 And he burned up all the filaments that came within his sight,  
 And he looked around for more when he was through.

REFRAIN

Oh, Edison, brave Edison,  
 Famous name to Eta Kappa Nus of yore,  
 May it ever be glorious,  
 Till electric currents flow no more.

The editor has never heard a group of Eta Kappa Nu's who could sing, but we may have some soloists (page Leslie M. Gumm, songster member of the National Advisory Board). At any rate, some of the brothers believe we should have a song, perhaps several songs. It is thought the alumni chapters may want an excuse for meeting in a tavern. Any member who has a bent (not Tau Beta Pi) for song writing is invited and urged to submit his Eta Kappa Nu masterpiece to the editor.

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# THE BRIDGE

Over 40 Years of Editorial Service



ALTON B. ZERBY, EPSILON, 1910  
PRESIDENT, 1914-1915  
EXECUTIVE SECRETARY, 1934-1957  
EDITOR, 1914-1915, 1934-1957



JOHN W. WEIGT, KAPPA, 1918  
PRESIDENT, 1928-1929  
EDITOR, 1921-1928



PAUL K. HUDSON, ALPHA, 1950  
EXECUTIVE SECRETARY, 1958-  
EDITOR, 1963-

## Chapter II

### EVOLUTION and GROWTH

#### INTRODUCTION

Articles describing the founder's conception of a secret fraternity of electrical engineering students and practicing engineers, have appeared in several issues of the Association's magazines and as separate manuscripts created for special purposes. To write another version based on the same facts would constitute an exercise in redundancy. In the writer's opinion, M. L. Carr's following article serves well to unfold the "Founders Dream" and some of HKN's early history. Dallas R. Lamont's article on the Founders of Eta Kappa Nu supplements it appropriately. Other articles which touched on early history are listed among the references. (1-9)\*

Following these two articles is a description of the evolutionary growth of Eta Kappa Nu, in the more pertinent categories of problems that were encountered, membership, assets and activities. Special emphasis is given to demonstrate who did what voluntarily, or with modest compensation, so that the Association remained healthy and able to grow. It will be observed that some really extraordinary effort on the part of relatively few members helped to preserve and nourish M. L. Carr's great dream.

\*Numbers in this chapter apply to references listed on pages 94, 95 and 96.

The Bridge  
November, 1929

# As Dreams Come True

By M. L. CARR



M. L. Carr

**D**REAMS, dreams of building for the future are the motivating influences behind most movements and they are responsible for Eta Kappa Nu's existence today. The idea of such an organization came to me a year or more before I broached the subject to anyone, and after thinking it over for some time and dreaming of its possibilities, I resolved, during the summer of 1904, to make an initial attempt to interest others in the scheme when school opened in the fall.

Accordingly, as soon as registration was over, I discussed the subject with C. E. Armstrong. He was favorably inclined and we resolved to sound out others of our classmates, choosing E. B. Wheeler, R. E. Bowser and M. K. Akers as the first group. The five of us met after the first meeting of the Electrical Engineering Society on the steps of the Engineering Building where the E. E. Society meeting had been held. This was on the evening of Friday, September 23, 1904. The meeting resulted in a decision to get together again the following Sunday afternoon on the campus.

I recall distinctly sitting with Brother Armstrong on the steps of the astronomical observatory Sunday morning and the two of us working over a rough draft of a constitution for the proposed society. When the rest of the group had arrived we went ahead with our discussions and definitely decided to form the organization.

The campus and nearby fields provided the settings for a number of "open-air" meetings where we gradually solved our organization problems. The problems of selecting a name, adopting a constitution, deciding in what fields of activity the society should function and getting our group well organized kept everyone busy.

The selection of a name bothered us for some time but as we did not consider it a vital matter we put it off until a more propitious time when we adopted the name by which the Association is now known.

During this time we kept adding to our numbers, enlisting in addition to those already named, W. T. Burnett, F. R. Winders, H. S. Greene, C. K. Brydges and F. D. Smith, all of whom took as active an interest in the organization work as the rest of us.

Our very first plans contemplated an absolutely secret organization, no one but members even knowing who belonged. They also contemplated taking in all electrical engineering graduates, so as to form a virtual labor union. However, as the organization materialized, these ideas were given up for various reasons and wisely, too, I now think. It became necessary then to obtain the consent of the University authorities for forming the society and to get permission to hold meetings in the Electrical Engineering Building. I recall distinctly that none of the authorities consulted were enthusiastic about our project, but as none opposed it we finally attained the status of a recognized organization.

One of the motivating thoughts of the group was that the society should provide a means of helping young electrical engineering graduates to get jobs as well as of helping them in other ways. We were thinking, not of ourselves, but of future classes. We knew that the organization could do nothing for us, that our recompense was to be only that satisfaction which comes from realization that we had started a worthwhile movement. We visualized the fraternity as an aid or inspiration to the man in college, though not exactly in the way that it apparently does function in that respect now.

A national organization was our aim from the very beginning and to this end, when we seniors turned Alpha Chapter affairs over to the Junior members, we organized a National Executive Council among ourselves. The next year saw active steps taken to establish a chapter at Purdue University, which succeeded so far as interesting students, but failed because the faculty refused to sanction its establishment. The petitioners were initiated, however, under a provision in the early constitution for taking in members in schools where chapters did not exist.

One of our early fears was that the society might become a social fraternity because it was to be substantially without scholastic membership qualifications. Attempts were made to devise schemes for rating proposed members in various ways but since these rested ultimately upon judgment, they were little better than the simpler method of discussing a prospect's qualifications and then voting "yes" or "no" on inviting him to join. The experience of a quarter of a century seems to indicate that our fears were groundless.

Our first publication was a small four-page leaflet entitled *The Electrical Field*, issued in the spring of 1906. It was devoted almost entirely to the subject of employment, some of the articles being *Opportunities with the Western Electric Company*, *The Commercial Side of Electrical Engineering*, *Government Positions*, and *The Wagner Electric Manufacturing Company*. The leaflet was national in character, covering the activities of both the Illinois and the Purdue Chapters and including a list of the graduates of each chapter for 1906. It was the beginning of what is now *The Bridge*. I recall feeling a bit of regret when the name of the Association's publication was changed from *The Electrical Field* to *The Bridge*.



Alpha Chapter in 1905

First row (left to right)—F. R. Winders, C. K. Brydges, F. D. Smith, M. L. Carr, E. B. Wheeler, M. K. Akers, C. E. Armstrong.  
Second row:—C. C. Carr, W. T. Burnett, H. J. Weaver, L. V. James, O. Wiemer, L. Mosiman, R. E. Bowser.  
Third row:—L. F. Wooster, Barickman, H. D. Cornell, T. H. Amrine, G. W. Saathoff, H. A. Bergert.

I believe I can truthfully lay claim to suggesting the bridge as an emblem although my personal choice, which I suggested with the bridge and perhaps other electrical symbols, was the caduceus or wand of Mercury, the messenger of the gods. The boys outvoted me in favor of the bridge and I am now glad of it, for the caduceus is the emblem of other organizations, a fact I did not know at that time.

Our early ritual reflected my membership in a prominent non-collegiate secret society just as the use of the bridge as a symbol seemed to me to be copying other honorary fraternities. However, Eta Kappa Nu is no more to be reproached for its lack of originality than any other Greek letter society, for all have copied Phi Beta Kappa and it in turn probably derived its inspiration from Masonry and other secret organizations.

Perhaps it will be of interest to know how some of us at least visualized the future of Eta Kappa Nu.

In the matter of geographical distribution of chapters, we were internationalists and in our dreams saw chapters in Canada, England, Continental Europe—in fact over the entire world. Such expansion was to come, of course, only after the organization had built up its strength in this country. Nor is such a dream entirely fantastic and beyond the realms of possibility in these days of world-wide communication and contacts. The Association may yet expand and be not merely national but international.

Another dream was of chapters living in their own houses with resident tutors or masters to supplement collegiate instruction through counsel, assistance and inspiration—an idea suggested by the college systems of Oxford and Cambridge. It is interesting to note that at least one eastern university has had a bequest looking toward the establishment of somewhat the same thing. However, the fact that many members belonged to social fraternities prevented the realization of this dream.

We were agreed at a very early date that the Association should have a national officer working full time on the affairs of the fraternity. We conceived his duties as being to visit chapters in order to keep up interest, uniformity of work and to inspire the undergraduates.

In addition, he was to be a missionary to establish new chapters. This one of our dreams has come true in part and it is hoped that in time it can be fully realized.

It would cost money to accomplish these things and we looked forward to an endowed Eta Kappa Nu. We were dreaming, not of twenty-five years hence, but of fifty, seventy-five, a hundred years, of days when we pioneers had long since been gathered to our fathers. Perhaps, as the years go by, there will be sons of Eta Kappa Nu sufficiently endowed with this world's goods to make gifts and bequests to the Association and thus bring to a realization another of our dreams.

The dreams of youth, you say? Yes, so they were, but it is one of the happy prerogatives of youth to dream. How can you plan if you do not dream? What is a blueprint but a dream? What is the electric light but a dream come true? The castles of our dreams are but the plans of the real castles that we build with our hands.

# The Founders of Eta Kappa Nu

By Dallas R. Lamont, T'20

It is appropriate that we turn our thoughts for a time to the founders of Eta Kappa Nu. To these men we owe the conception of the purpose, the work, the usefulness, the scope of service,—even the very existence,—of the organization. How well have we carried on the work which they began? Are we accomplishing the purpose and giving the service which our founders intended we should? Do the work and accomplishments of Eta Kappa Nu justify its existence? What is the duty which falls to us?

Maurice LeRoy Carr, A '05

Brother Carr, who is in business for himself as a consulting engineer in Avon, Illinois, says of Eta Kappa Nu:

"I most assuredly think the activities and work of Eta Kappa Nu justify its existence and I feel sure the organization is accomplishing something of value. While I am not in as close touch with what Eta Kappa Nu is doing as perhaps I should be, still I feel that the society is probably coming as near to its ideal as any human institution comes to doing so. The modus operandi may not be just what we founders pictured in our youthful hopes and enthusiasm, but few institutions that come into being as the result of a definite plan do follow the founders' plans exactly. Some deviate far from them. One of the things I have marveled at is the fact that Eta Kappa Nu has deviated so little. I will confess now that one of my early fears was that the society might evolve into a social fraternity because of the manner of choosing members. But nearly a quarter of a century of trial seems to indicate no such tendency.

"Baldly speaking, one of the reasons for the founding of Eta Kappa Nu was to get jobs for its members,—not for the founders but for our posterity. We all realized more or less clearly that we were building for the future. Some of us visualized the organization as an incentive for an inspiration to the individual. Read the early constitution. I believe the society has done more along this latter line than along the line of directly securing jobs for its members.

"In my opinion, the most important work the society

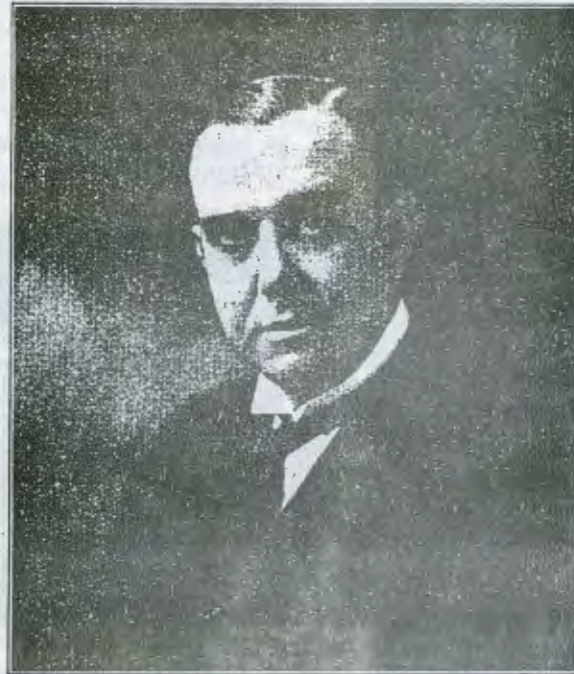
can do is so to conduct its affairs that membership will be more and more desired by the uninitiated from whose ranks members are drawn and that it may be a continuing source of inspiration, not only to those within it, but to all engineering students. If the society accomplishes the latter, little anxiety need be felt about the former.

"Realizing that some or all may have been offered before, I would suggest the following as a few things that might be done toward making Eta Kappa Nu a greater source of inspiration and help to its members and toward increasing the prestige of the society:

(a) Suggestions to the chapters from the national organization as to chapter activities. I have wondered what chapters do at their meetings besides elect officers and members. In my day, meetings were busy with organization problems, but these are disposed of now so far as chapter meetings are concerned.

(b) Letters to chapters from alumni, not necessarily upon technical subjects but preferably about life. How life in the world differs from life in college; what it costs to live; what the undergraduate should be sure to get out of college; how to get along with men; characteristics of employers, pitfalls to avoid, etc., etc.; almost endlessly. A letter from an alumnus in the field telling concretely just how important English is to an engineer who wishes to become more than a "hewer of wood and a bearer of water" would have more weight than twenty professors' assertions. Most engineers in my day thought English a waste of time.

(c) The institution of a yearly lecture by a competent person to the entire student body would do much to enhance the prestige of the society in schools where such lectures were given. I do not mean that the lecture should be on Eta Kappa Nu,—far from it,—but that it should be given under the auspices of Eta Kappa Nu,—the Eta Kappa Nu lecture. It should be given some time during the college year when



Brother Maurice L. Carr, A '05.

In Memorium  
Ralph Emmett Bowser  
Died 1913

freshmen, sophomores and juniors can be in attendance, and not at commencement time. The lecturer need not be a member nor should he be restricted to an engineering subject. His subject could be in economics, science, or some timely topic of national interest. The lecture could be utilized for announcing the result of some important research.

(d) The institution by the various chapters of the practice of awarding medals, say for the highest scholarship in engineering, to be awarded by the faculty, would be another way in which the society prestige could be enhanced. By making all engineers eligible the scheme is robbed of self-glorification which might be charged if only electrical engineers were eligible.

"I am of the firm opinion that the greatest aid to finding members jobs will be the prestige of the society, more than any employment department, particularly for members leaving college. In the long run, the prestige of the society rests upon the character of its members, and the national organization can do no more important work than in its suggestions to chapters regarding how to choose new members, or how to improve them after they are in the society. The chapter should not be just a collection of members, it should be made an instrumentality for improving them. The average engineering student gets too little of the so-called cultural subjects in his college course, but that does not mean that he should consider himself debarred from ever deriving any of their benefits. Systematic reading will do much to overcome this handicap in this respect, and the national organization can offer suggestions along this line and perhaps do other things to stimulate the following-out of the suggestions. That this subject is an important one for engineers who wish to be something is shown by the fact that the cultural studies seem to impart something that is necessary for leadership. It will be

found, I think, if the trouble is taken to look into the matter, that the great leaders who have college training usually have had good training in the cultural subjects."

Carl Kent Brydges, A '05

For twenty-one years Brother Brydges has been associated with the Illinois Bell Telephone Company, and at the present time holds the position of Division Traffic Engineer of North Division, Chicago. Brother Brydges' department is responsible for the field engineering of manual and dial system telephone equipment with all of the many ramifications and problems which are incident to such systems.

With respect to Eta Kappa Nu, Brother Brydges says: "At the time the organization was founded back in 1904 at the University of Illinois, as I remember, the great idea in our minds was to bind together those men who had a broad view of engineering and who had a sincere desire to be of benefit to the engineering profession.

"I think that the activities and work justify the existence of Eta Kappa Nu. If the organization did nothing more than to keep all its members in touch with each other it would be doing a great work.

"I think that Eta Kappa Nu, by the publication of THE BRIDGE can accomplish great things by keeping all the brothers in touch with each other and by the pooling of ideas in this quarterly can increase interest in our work and in our fraternity."



Brother Carl K. Brydges, A '05.

**Hibbard Spencer Greene, A '05**

Brother H. S. Green is Vice President of the Barber-Greene Company of Aurora, Illinois. He is in charge of sales and service and it is his job to see that business keeps coming the right way and keeps on increasing in



Brother William T. Burnett, A '05.

volume at a reasonable rate. The Barber-Greene Co. is engaged in the manufacture of portable belt conveyors, self-feeding bucket loaders, trenching machines for gas, water, oil, electric conduits, etc. The company is involved in research work which consists principally in the development of new mechanical devices for handling bulk materials, usually with the idea of devising or adapting equipment for use in a field not heretofore covered by this class of equipment.

Brother Green believes that the activities and work of Eta Kappa Nu are worthwhile and that the organization is accomplishing something of value. He says:

"The object of the organization was to form a close corporation or fraternity of electrical engineering students, picking out those who at that time showed special promise of later success in a practical way, not necessarily taking in the students sharks only; the thought being that these men had common interests and common problems and that the fraternity would serve as a meeting ground and vehicle through which various things could be accomplished.

"The most important thing the organization can now accomplish is to continue to carry out the original ideas most of which, I would say, have been reasonably successfully carried out up to now."

**William Thomas Burnett, A '05**

Brother Burnett is associated with the Sangamo Electric Company, in the engineering department of that company. The engineering department consists of six different divisions:—a model room, and laboratories for experimental, radio, chemical, routine and calibration work. The calibration laboratory handles the calibration of all laboratory standards

and a few of the higher class factory standards. The duties of the radio and chemical laboratory are, of course, well understood. The experimental department does the designing, experimenting and perfecting of new types or appliances. The model room is one in which first samples of all new products are built. The duties of the routine laboratory are the testing of special products of the factory, and the general upholding of the quality of all factory products.

"The work of Eta Kappa Nu surely should be carried on. It may not be apparent to us individually what good is accomplished but collectively a great work is being done.

"I am sure that when Carr, Bowser, Akers and Wheeler first talked of the establishment of such an organization, it was with thought of the student. I am sure that the first idea of all of us was to band the electrical engineering students together. In this way we hoped to broaden our ideas and become better acquainted one with another. I do not believe that the original idea had much to do with the men in business life.

"The organization can help maintain the high standards of the better class students. Our universities are every year turning out more men than there are positions. Therefore it behooves each man to be as well trained as possible, so that the other fellow and not he will lose out, as some one must. Therefore I say that Eta Kappa Nu can do a great service by training the students to grasp as much of the subject as possible while in school, that they may be better fitted to fight the battles and problems that will arise in business. Of course, a lot may be said of the good work and assistance that Eta Kappa Nu is rendering for the engi-

neers in the field, but this is so much appreciated by all of us that it needs no mention."

**Edmund Burke Wheeler, A '05**

Brother Wheeler is a member of the technical staff in the Apparatus Development and Physical Laboratory of the Bell Telephone Laboratories, formerly the Engineering Department of the Western Electric Company, having started in with the Western Electric Company in July,



Brother H. S. Greene, A '05.



Brother Edmund B. Wheeler, A '05.

1905, after graduation from Illinois. At present he has charge of certain development activities of the company relating to telephone lamps and dry cells, and the study of the effects of atmospheric humidity upon the telephone plant. He has been handling most of this work for the past eighteen years.

Reflecting on the subject of Eta Kappa Nu, Brother Wheeler says:

"While naturally, for some years past I have not had close contact with the undergraduate activities of Eta Kappa Nu, judging from the character of the membership output from the various chapters, which I have had some opportunity to appraise, there is no doubt but that the undergraduate organization is carrying out those objects and ideals which the founders visioned. This also is evidenced largely by the activity of the Alumni Chapters, which would not continue to exist except for the enthusiasm continually instilled by the incoming membership. However, it has been observed that apparently some periods of time and some chapters have been productive of a greater proportion of 'live wires' than others. This is a fact that should constantly be kept in mind by the chapters in choosing their members and in planning their activities in order to keep the growth of the organization healthy.

"When Eta Kappa Nu was founded there was seen

to be a need for some medium through which closer contact and better cooperation between student body and faculty could be secured. It was also intended to mark those students of outstanding ability and promise in the profession of Electrical Engineering and to inspire them with their duty to their Alma Mater, not only of maintaining their leadership after graduation, but also of assisting those who should follow them in making their start in the profession. That these early intentions of Eta Kappa Nu are being successfully realized is evidenced by the fact that membership in it is now generally accepted as the mark of good scholarship and promise as a successful engineer, by those who employ engineering graduates. This reacts to the benefit of the whole membership and should inspire those who are to carry on its work in years to come."

**Milton Kent Akers, A '05**

Brother Akers is sales engineer for the Hobart Manufacturing Company. The Hobart Manufacturing Company is the company which pioneered the electrical driven coffee mill and meat chopper and which company has built approximately three-fourths of all the electric food preparing machines of the type just noted that are at use in the United States. Some fifteen years ago this company started manufacturing mixing machines for use in bakeries, hotels, restaurants, kitchens, and the like. More recently food cutters and potato peelers have been added to the company's line of products, and about a year ago the company absorbed the largest manufacturer of commercial dish-washing machines. While Brother Akers is technically designated as sales engineer for the company, his work covers a wide variety of subjects including study of the field of application of the company's products, adapting the machines to new applications, improving the machines for their work in old applications and acting as a general contact between field and factory.

Of the work and purpose of Eta Kappa Nu, Brother Akers says:

"It seems to me that the best proof of the fact that its work and activity do justify its existence, is that it has existed for twenty-three years and has steadily grown in strength.

"I would say that the principal reason for the establishment of Eta Kappa Nu was that a group of young American boys felt the urge to organize. The justification for its organization was that some such organization seemed necessary to develop and support the old 'Electrical Club' and to cooperate with the department in the furtherance of some of its plans.

"I have a growing feeling that the colleges and universities of the United States teaching engineering have outgrown the need for the division of civil engineering, mechanical engineering, mining engineering, electrical

engineering, architectural engineering, aeronautical engineering, etc., almost without end, and if such is the case, Eta Kappa Nu must take on characteristics other than those for which it was founded. I believe that the most important thing that any such organization can do is to remain alert and willing and ready to change to meet the needs of the time."

**Fred D. Smith, A '05**

Brother Smith is associated with United Light and Power Engineering and Construction Company, Davenport, Iowa, in the capacity of engineer. His work is principally general engineering work covering most of the different phases of engineering which arise out of the activities of a company which operates in the light and power field.

Brother Smith believes that there is a legitimate place in university life and in the engineering profession for Eta Kappa Nu, and that Eta Kappa Nu, in its work and activity is justifying the fact of its existence. Respecting the original purpose of Eta Kappa Nu and its present day objects, Brother Smith says:

"At the time Eta Kappa Nu was founded, the purpose was to secure an organization that would bring together more men of certain qualifications so as to make possible the interchange of ideas and to promote cooperation.

"The most important service that the organization can give, I believe, is to keep the members in close touch with each other and to provide a means for interchange of ideas."

**Frank Rae Winders, A '05**

Brother Winders' position is that of Research Engineer for the Cleveland Electric Illuminating Company. In this company he is in charge of a research organization which is principally occupied with statistical work, work on rates, work on special projects which are contemplated and work having to do with negotiations with other utilities. The principal projects in which the company is doing some pioneer work which may be special interest to members of H.K. N. is the installation of a 66,000-volt underground cable system and work which is being done in connection with powdered fuel installations for power production and for central station heating.

As for choosing a permanent line of work. Brother Winders believes that circumstances probably have the major influence in deciding what the choice of

occupation will be. One thing in Brother Winders' own experience which is worthy of comment is that his present line of work, from which he has derived the most profit and enjoyment of any which he has followed, is one for which he would have initially considered himself to be particularly unfitted. It is one which he probably never would have adopted had he not been in a sense forced into it by circumstances resulting partly at least from having made several changes in occupation since his graduation from college. Brother Winders does not feel, however, that shifting of positions is essential for the engineering graduate in order that he may ultimately find himself in a work which he likes and in a work which offers satisfactory opportunity. It is oftentimes possible for the young engineer to locate permanently in an organization and work out a very satisfactory career without ever leaving that organization. Brother Winders states that from his experience he knows of many men who are still holding positions in the same organization with which they originally affiliated themselves and who are holding in those organizations positions of responsibility and importance.

Every now and then we come across some brother engineer who possess to an unusual extent a radiating personality and the ability to dispense good cheer to all with

whom he contacts. Such a man is Brother Winders. He is thoroughly human, and his engineering training and the practice of his profession have not veneered him with any impervious shell that makes him the less of a social asset. Quite the contrary is the case. He is possessed of a rare sense of humor and follows the happy doctrine that a smile will go a long way toward easing the ills of the world.

The remaining founder, Chas. E. Armstrong, we have not been able to establish communication with.



Brother F. R. Winders, A '05.

**OBJECTIVES OF HKN**

Articles in The Bridge and other references consisting of correspondence among the founders and early officers abound with stipulated or implied purposes for which Eta Kappa Nu was conceived, organized and continues to exist. Some of these statements are from M. L. Carr's early articles, some from other founders' articles and statements. Still others are implied extensions and variations of those ideas. All of them represent an interesting insight into the genesis, growth, and subtle changes of Eta Kappa Nu.

The Preamble to the Constitution of the Association withstood pressures that manifested themselves in the many revisions of that document until the 1958 edition. The original Preamble stated the following: (10)

"That those men in the profession of electrical engineering, who, by their attainments in college or in practice, have manifested a deep interest and marked ability in their chosen life work, may be brought into closer union whereby mutual benefit may be derived, we hereby ordain and establish the following Constitution.."

The 1958 version of the Preamble, which has not changed, states the following: (11)

"That those in the profession of Electrical Engineering, who, by their attainments in college or in practice, have manifested a deep interest and marked ability in their chosen life work, may be brought into closer union so as to foster a spirit of liberal culture in the engineering colleges and to mark in an outstanding manner those who, as students in electrical engineering, have conferred honor on their Alma Mater by distinguished scholarship, activities, leadership, and exemplary character and to aid these students to progress through association with alumni who have attained prominence, we do hereby ordain and establish the following Constitution:"

Simply interpreted - the original objective seems to imply that good men would be brought together in order to help each other. The purpose of this mutual help is not specifically stated; but ideally it should be to improve the profession of Electrical Engineering and society in the ultimate as the revised Preamble suggests.

M. L. Carr specifically wrote that the Association should provide a means of helping young electrical engineering graduates to get jobs as well as to help them in other ways. He also visualized HKN as an aid or inspiration to the man in college. He later wrote: (12)

"The reason for creating such an organization was Utopian, as college students' dreams very often are -- to improve the status of electrical engineers, particularly that of the young ones in their early years out of college."

He also observed in the same article that the above theory was an ambitious one and, to a certain extent, founded upon a wrong conception of human nature. The first objective was to band together congenial electrical engineering students at Illinois and other colleges who, in the estimation of their fellows, gave promise of rising in the profession -- a very ambitious undertaking in itself. The second objective, was to create an instrumentality whereby members out of college could help or, rather, would be duty bound to help young members coming from college to establish themselves -- an idealistic interpretation of human nature.

There was a fundamental error in the above philosophy, according to D. R. Lamont. He stated it thusly: (13)

"The fundamental error lay in the belief that it would be possible to make men out in the field feel obliged to help the fledgling. It was essentially a trade union idea in a disguised form."

He continued his discussion of the subject by writing:

"As a matter of fact one of the original conceptions was to take in every electrical engineering student and virtually to form a professional union. This was impractical because:

- 1) "Interest would be hard to maintain in a college organization to which every electrical engineering student belonged.
- 2) "College men, as a class, are too ambitious to make good union material.
- 3) "There could be no effective control of the number of recruits to the union."

It is conceivable also that the college authorities might not have approved such a society for this very reason as they originally did not approve Beta Chapter at Purdue University for other reasons.

An interesting observation was made to the writer by W. T. Burnett in his March 31, 1975 letter:

"We recognized the fact that there were no standards for electricity and someone should start to establish some. As proof of this statement let me say that Urbana had 60 cycles and Champaign had 133 cycles at the time. In the two cities there were five different types of light sockets in the different homes and buildings. Maybe this will give you our reasons for the founding of Eta Kappa Nu."

In 1912 A. H. Heitmann wrote: (14)

"If I understand the aims of the founders of Eta Kappa Nu rightly, the reason for the existence of our fraternity is twofold, Firstly, by cooperation of undergraduate chapter members with the faculty, the efficiency of our electrical engineering colleges is to be raised. This end has already been attained in all of our chapters to a greater or lesser degree; in some gloriously, from the very day of installation. Secondly, Alumni members are to assist the active members upon the stepping forth of the latter from college to positions more lucrative and more desirable than had generally been offered the electrical engineering graduates."

Possibly as a rebuttal of the above statement, Brother M. L. Carr was quoted by R. H. Webb in 1914, thusly: (15)

"I personally did not have the idea that the Association's sole purpose would be to benefit members, because membership was necessarily limited. I conceived Eta Kappa Nu as existing for a higher and nobler aim than simply getting positions for its members. I believe that most of the brothers believe so too, because not many have gotten employment through Eta Kappa Nu alone. I have now the opinion that the Association is simply one agency working for the betterment of the profession as a whole, and I believe that all the founders had this same conception although it was neither so clearly defined nor so much talked about as was the mutual benefit idea expressed in the Preamble of the Constitution."

So the loop is completed from the original Preamble of the HKN constitution through various interpretations by subsequent members to the foregoing clarifying quotation by the principal founder. Experience in many activities of Eta Kappa Nu demonstrates truly that its purpose is a noble one -- to improve the Electrical Engineering profession through the cooperative actions of its members so that society in the ultimate would be better served -- and to honor those who achieved in an outstanding manner.



It seems fitting to end this section with a couple of quotations from founder H. S. Greene's talk before the 12th Convention of Eta Kappa Nu: (16)

"You are if you are".... and ...."Noblesse Oblige -- nobility obligates our membership in this fraternity and demands our best efforts to rise up to its best ideals."

### PROBLEMS ENCOUNTERED

Every organization with a normal distribution of people has some problems, often prompting such amusing quotations as the following:

"This organization faces no problems just opportunities; however, some of our opportunities are insurmountable."

Usually the following quotation partly clarifies the situation and suggests the type of action that is probably needed:

"If you are not part of the solution then you are part of the problem."

Fortunately, throughout the years enough members have seen the opportunities to serve Eta Kappa Nu and as a result its seemingly insurmountable problems were solved eventually.

### Formative Period

Introduction - It is interesting to reflect on the challenge that an original enthusiastic though inexperienced group of ten electrical engineering students faced when they accepted the formidable job of implementing M. L. Carr's dream. The Association's history reveals that, in each succeeding era, some person or group of persons contributed similar enthusiasm to the solution of new problems which arose just as these founders had done to give Eta Kappa Nu its beginning impetus.

M. L. Carr's observations in 1939, on this point, were as follows: (17)

"It (HKN) grew because there have always been many members who have been 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 Eta Kappa Nu."

In 1971 the Distinguished Service Award was authorized by the Eta Kappa Nu Board of Directors and A. B. Zerby was the first recipient -- a most deserving person. The proposal and criteria for the Award were recommended by Larry Dwon in 1970.

Founders' Problems - A detailed glimpse of the initial problems faced by the founders and early officers is provided by E. B. Paine's Guest Editorial: (18)

"The record of the meetings of the ten founders of Eta Kappa Nu...is highly interesting. They had to settle such details as the design of the key, the colors, the hand grip, the code of signals, the by-laws, the membership certificates, and the fraternity seal. At the very first meeting the question of membership was brought up and was a chief topic for consideration during several weeks.

"One suggestion was that the entire senior class be admitted. It was voted....instead to select men in accordance with their ratings under seven following characteristics: interest in work, managerial ability, inventive ability, influence with others, social or business connections, scholarship; and highest weight being given to 'interest in work' and lowest to 'influence with others and on social connections.'

"On December 8, 1904 it was voted to appoint committees to investigate and report on each of the following subjects: Information Bureau, Establishment of Chapters in Other Schools, Advancement of Electrical Engineering Department, The Electrical Engineering Society and Social. Within three months definite action was taken....It is remarkable how much work was accomplished by this little group in a relatively brief period. The results, when viewed after more than 35 years, demonstrates clearly how well done was that work."

Ellery Paine amusingly observes that on January 12, 1905, the subject was the initiation of five men. It was voted to make arrangements for the new men to attend church the following Sunday, but whether this was intended as a touch of initiation hazing or to avoid breaking into the usual Sabbath habits of the men is not disclosed by the record.

The formula worked out by those early brothers is definite and simple: a group of enthusiasts anxious to do creative work; a meeting once a week, at 6:30 p.m.; important projects sufficient in number so that every single man had definite committee duties to perform.

In a 1909 account of HKN's early history, M. L. Carr stated that no records were kept of the founders' initial discussion meetings. In addition he wrote: (19)

"The preparation of the ritual was going on at the same time as the Constitution was being worked into shape. Two more seniors were chosen, H. S. Greene and C. K. Brydges. These men were given a sort of an initiation in that the ritual was read to them, but they are now numbered among the founders by the other members of the early organization.

"Otto Wiemer enjoys the unique distinction of being the first duly elected and initiated member of Eta Kappa Nu. The initiation consisted principally of a tramp to a nearby cemetery by a circuitous route, the candidate being blindfolded all the while."

It is of interest to note that pledges, at that time, were not decorated with colors; and they were bound to secrecy regarding their invitation to join the society. The adoption of an emblem, however, caused the existence of the organization to become known in the college community.

N.E.C. - Before bidding their Alma Mater goodbye, the founders created the National Executive Council by electing three of their number to the offices. The purpose was to have this organization be largely under the control of the graduate members and the parent chapter was given no more voice in the control of affairs than any other chapter.

M. L. Carr wrote as follows about the latter concept: (20)

"Personally, I consider this something of a mistake. Experience (as of May 1909) has shown that Alumni members seem to have less time for fraternity affairs than do brothers at school. (true also in 1975) The member just out in the world is busy adapting himself to new conditions and lacks the presence of an active chapter to bring fraternity affairs to his attention."

Association's Name - Actually a name for the organization gave the founders considerable trouble. Brother M. L. Carr also wrote of his lingering regret that the caduceus, or wand of Mercury, was not chosen the emblem of Eta Kappa Nu. The Bridge was selected by a majority of the founders. Membership qualifications and the initiation ritual were other knotty problems. The literature mentions many other problems that took years to surface and to be solved.

M. L. Carr's observations about problems in this early era are worthy of note: (21)

"As I look back upon those days now I appreciate that they were some of the happiest of my life. The fact that we were working in secret added zest to the undertaking. Unless one has had similar experiences, it is hard to realize that there was a great deal of work involved in perfecting the organization. It was also considerable of a drain upon us financially at a time when most of us had places for all the money we could obtain."

The first sentence of Carr's following 1917 observations has validity to the present day:

"Some medium through which the graduates' active support can be enlisted is greatly to be desired. A publication issued more than once a year to which graduates and undergraduates should be asked to contribute may be the desired medium. Or it may be an efficient employment bureau."

The latter two suggestions may have been applicable at the time; but not so today. More to the point is how does one go about inspiring capable men to dedicate some part of themselves for the benefit of the whole without immediate compensation or recognition. The same conditions apply to many aspects of life.

Finances - From E. B. Wheeler's file of letters the real flavor of problems in the early days begins to unfold. The introduction to his volume of letters states in part: (22)

"....a perusal of these letters will indicate the troubles with which the organization had to contend during these years....As will be noted, the poor financial condition of the Association during the early years was a great handicap and the attempt to assess the Alumni Chapters for National Convention Expense practically kept them from functioning for the first few years until the matter was finally cleaned up by the N.E.C. in a National Convention at which the Alumni Chapter assessments were cancelled."

Certificates - A number of letters mention the lettering of membership certificates:

"....which I undertook to do, as a matter of economy to N.E.C. early in the existence of the Organization, and continued until December 1911, when the Council was able to make other arrangements. It is quite interesting now to look over these lists of names and to note the many who later became "high brass" in the E.E. profession or otherwise have added to the luster of Eta Kappa Nu. While the work involved was considerable of a chore at the time, it is a source of satisfaction now...."

E. B. Wheeler -- founder and second President of Eta Kappa Nu -- was an outstanding contributor. He was continually watchful of Eta Kappa Nu affairs. He served the New York Alumni Chapter for many years. For his work on lettering certificates and creating new certificate plates, A. B. Zerby wrote the following commendation: (23)

"Please allow me to extend to you in behalf of the Council our warmest thanks for carrying this account (certificates) as long as you have and for all you have done for the fraternity as a whole."

World War I - Henry S. Cocklin wrote two interesting letters to the writer on March 13, 1975, and March 21, 1975. In them the following excerpts stand out significantly as historical material:

"There were several letters of mine in The Bridge of 1917 and the resignation of Bro. Harris as Secretary. This caused me to write a letter to all the Chapters, including the Alumni Chapters, and other members of the Council, warning all that we might have to call upon former officers in case of wholesale induction into the Armed Forces."

H. S. Cocklin served successively in the offices of Treasurer, Vice President and President starting in 1915. When he was President, L. H. Harris resigned as secretary who sent to Bro. Cocklin "All the Earthly Possessions of our Society," he wrote. Bro. Cocklin also added:

"Now I had the duties of the Secretary as well as that of President. Probably both suffered as a result. I did alert the Fraternity that we might have to call upon some of the former members of the Council. But we never did. We muddled through as we were. Looking back upon it I suppose we did fairly well. In fact I always

thought that we could claim an "E" for not going into the red financially. I also had to give Bro. Harris credit for doing as well as he did in the foregoing years. He died before he could renew his duties as Secretary. One of the Chapters started a "round robin" letter suggesting that we defer meeting as a convention. It was a bitter blow personally. We did not even have a Council Meeting. Bro. Strait did have the first perfect year as Treasurer; all books balanced; all collections made. I never found out why he resigned from the Council the next year. So there was no 14th Convention in 1918, or at least while I was serving.

"Now I asked Bro. Zerby whether he would return to the Council as Ex. Secretary. He accepted! I'm not sure whether it was a legal succession to Bro. Harris or not. But it was to stick for many years; with greater responsibilities and finally some kind of a salary."

Emblem - At a Philadelphia Convention some years later Bro. Cocklin urged the adoption of a Coat-of-Arms. The Convention authorized him to design such an Emblem and it was adopted at the next Convention. The interim is an amusing interlude which Brother Cocklin describes as follows:

"I was struggling with a design when a neighbor dropped in to confer on civic affairs. He noted some things and suggested that he had a book on Heraldry. I found that I knew nothing about the subject; so I scrapped my first study. Then I drew up a design based on the science of Heraldry as depicted in that small book. I may have been given the authority to present the subject to our official jewelers; or I may have sent it to the Secretary. The jeweler scrapped that design and drew up a very nice design but it had no merit for our organization. So I drew up the one that was finally adopted by the next Convention. The Wheeler files show that the Council was using it as of Nov. 1927, but I cannot vouch as to whether that was the first use, or whether it was during the 1927 Convention that it was adopted. But that's the way we did things so far back.

"Another rather amusing thing happened while I was on the Council. We needed a Seal so I asked E. A. Wright to draw one up. When it came back it was a nine pole generator. I did know enough about that to reject it."

Ritual - Eta Kappa Nu's ritual -- another example of a difficult job done well -- is filled with the ideals of dedication. This ritual itself is the result of several dedicated men's thoughts and effort. Busy men, professional men, who voluntarily devoted their

time and energy, first, to its creation and later to several of the revisions which were necessitated by changing customs.

A few who participated in this work include M. L. Carr and E. B. Wheeler (1904); L. H. Harris (1913); Chicago Alumni Chapter (1917); C. A. Faust (1935); E. B. Kurtz (1945); J. E. Farley, J. H. Craig, C. T. Koerner and L. Dwon (1958); J. A. Tucker and W. B. Groth (1960); and L. Dwon (1971).

In his 1936-37 report of HKN activities, Clifford A. Faust wrote:

"During the preceding year, the HKN ritual and accompanying 'props' were modified to make the initiation ceremony more impressive and easier to memorize. With each of the five most recent chapter installations, further refinements were made, and all were approved by chapter and National officers, who used the latest version."

The next revision was made by Edwin B. Kurtz with the help of two of his students. He wrote to the writer on July 20, 1975 his recollections of some historic happenings. Among them was the following piece on the ritual:

"....the ritual in current use was prepared by myself with the help of two students in the early forties. It was offered to HKN as a replacement of the one then in use, which we believed unworthy of HKN for many reasons such as:

- a) Required kneeling of candidates.
- b) Wheatstone conducted entire basic ceremony.
- c) Very poor explanation for use of Wheatstone Bridge as symbol.
- d) Many others.

"After a year's trial by N.E.C. at new chapter installations it was adopted. Later on, ABZ and I made several minor deletions to make it non-secret so others could be present, etc.

"The part I am proud of is the explanation for the use of the Bridge as our symbol. I invented that myself. It ties everything together and almost makes the whole thing sound plausible."

In anticipation of the ritual becoming a discussion topic at the 1959 Convention, Larry Dwon appointed a committee to study the advantages and disadvantages of a secret ritual. This committee consisted of J. E. Farley, Chairman, J. H. Craig, C. T. Koerner and L. Dwon. It reported to the convention.

John A. Tucker, in 1960, became involved with this subject when he was on the Board of Directors. A special ritual for Eminent Member induction ceremonies was deemed desirable. He wrote such a revised ritual and submitted it to the Board on January 28, 1962. This ritual was used at NEREM ceremonies on November 2, 1967 and November 6, 1969.

In the 1959 convention, the question of secrecy and, other matters as well, came up regarding the ritual. Delegates voted to have it either way that a particular chapter chose. Because of continuing criticism, by a substantial number of chapters, L. Dwon circulated a questionnaire about the ritual, in 1971, to all chapters. The results were published in The Bridge and the ritual was revised accordingly by L. Dwon. In 1974, the revised version was officially issued. The following quotation from its preface describes the principal changes succinctly: (24, 25)

"It should be especially noted that flexibility has been introduced to satisfy the requests that were received. In planning your initiation, choose the version that suits your chapter's personality best from among the following approaches:

- a) Traditional with slightly revised wording
- b) Revised with the same wording
- c) Combination of "a" and "b" which suits your chapter

"Remember also that you have the privilege of performing the ceremony as a closed affair for members only; or as a function which may be witnessed by invited non-members also."

But equally important is the observation that the ritual has been described as an inspiring message by some of the foremost electrical engineers in practice and education who were exposed to it by virtue of their receiving honorary or eminent membership in HKN. Other awardees were similarly impressed.

An assortment of problems beset the young Association early, and some of them continued to trouble HKN periodically. What were some other problems? What motivated some HKN members to volunteer significant services to solve these problems and to help Eta Kappa Nu grow usefully? The word "dedication" comes as close to the answer as any. Dedication, according to Webster, means, "An act of devoting oneself to a service; a setting aside of oneself for a particular purpose." For the honor and privilege of having been initiated into HKN some men and women chose to repay it by serving its needs.

## Problems of Later Years

Not all problems were solved in that early formative period. Several problems of that era continued to be bothersome and many others came into prominence as the organization expanded and the world events constrained or forced activities on electrical engineering practice and education in general and on Eta Kappa Nu as well.

Finances - Money problems continued to restrict Eta Kappa Nu's expansion and operation even to the present day. L. H. Harris, then Vice-President of Pittsburgh Alumni Chapter wrote the following in 1909: (26)

"A chief difficulty in the way of activity in this direction (more college chapters) is a lack of working funds. Some provision should be made and it is the belief of some, and earnestly recommended, that a definite assessment of say one dollar per year be levied on all graduate members; this money to be set aside and known as the Extension Fund."

L. H. Harris wrote further about financial problems to E. B. Wheeler on October 7, 1911:

"Money is needed for a Charter Plate and for an Honorary Certificate as well as for extension work. The need is so urgent that our President (B. T. Anderson) has offered to subscribe \$20.00 toward the amount needed. This would not be necessary if all the Chapters would keep up their end as some do."

A revealing sample of the common situation of that day comes from A. H. Heitmann's letter to E. B. Wheeler dated 6/14/12:

"....

Bills Receivable from Chapters		618.27
Bills Payable to NEC Officers	160.39	
Bills Payable to 8th Con- vention Delegates	<u>230.41</u>	
	390.80	
Cash on Hand		63.72
Surplus	<u>291.19</u>	
	681.99	<u>681.99</u>

While our books show a surplus of \$291.19 we have only \$63.72 to pay \$390.80."

Periodically, throughout Eta Kappa Nu history, it faced financial crises. In 1932, such a crisis caused the annual convention to be abandoned. In 1958, financial problems in part caused a newly hired professional editor of The Bridge to be released. In 1962, conventions were again suspended for financial reasons. In 1975, the Regional Visitation Program was curtailed because it was felt

to be too expensive in relation to the benefits derived.

The Bridge - Partly affected by financial problems -- but for other reasons as well -- was the publication of The Bridge which initially comprised a volunteer editorship system. Publishing The Bridge responsibly with volunteers, who did it as a part time venture was a difficult experience. Resulting from this practice were overdue publication dates, varying frequency of publication, issues missed, high cost of production, difficulty in establishing a steady subscription directory and complaints. These problems are described in more detail in the history of The Bridge, Chapter I.

Conventions - They were held annually until 1932 followed by one biennial convention as a trial, with a Chapter Visitation Program running concurrently. The success of the latter and the intolerable financial burden of conventions in the great depression period caused them to be discontinued. Thereafter, business was carried out by mail along with Chapter visits by officers until the 50th Anniversary Convention was voted into being. Five years later another convention was held with the last one on record being held in 1962. Since then none have been held for the same reason -- too costly for the benefits that accrue.

Scholarship - The question of a scholarship requirement for membership in Eta Kappa Nu became a hot issue in the period around 1912-1914. R. H. Webb, Treasurer of NEC wrote: (27)

"The matter of scholastic standing of the pledges to Eta Kappa Nu has been a very lively topic for the last two years."

To this, Brother M. L. Carr commented:

"The idea, originally, was not to have a scholarship requirement alone. I think the ritual expresses the original intent very well. We did not purpose to ignore scholastic standing entirely, but we did not purpose to debar a good man because he was not a good student in all subjects. Again we would not have taken in a man who was failing in several engineering subjects. We attempted to formulate a system of rating prospective candidates on a scale of a hundred. In this system, all the different desirabilities of the prospect were given a certain value for maximum, all these values adding together to make a hundred. The factors other than scholarship were, however, so much a matter of judgement that the whole subject was dropped."

E. B. Wheeler had this to say on this important matter: (28)

"It is true that high scholarship was not considered the only measure of a candidate's fitness for membership in the society, as it was believed that men with average scholarship often attained the most marked success in

their chosen line of work. On the other hand, good scholarship was always considered desirable in a member. It is my opinion that it could not have been foreseen by the founders that the lack of a definite scholarship requirement such as set by other honorary societies would lead to such difficulties as have developed in the recent history of the Association, and which indicate that such a requirement is essential to the healthy future growth of Eta Kappa Nu. For this reason the establishment of a scholarship requirement would meet with my approval."

E. B. Wheeler precipitated this discussion by virtue of his undated letter -- a response to A. H. Heitmann's letter of December 14, 1912. In it he was really questioning the necessity of continually revising the constitution each time there was a convention held. He wrote among other things the following:

"....I do know, however, that about every National Convention which has been held, has decided that the Constitution should be revised or amended, although in my opinion the temporary character of the convention would prevent it from attaining anything more satisfactory in the eyes of future conventions than the present constitution seems to be. I do not consider that the Constitution is a subject for revisions except by amendment, as provided in Article VIII and as one of the founders of HKN I wish to place myself on record before the coming convention as being opposed to such a procedure."

E. B. Wheeler's letter sparked a response from A. H. Heitmann on January 27, 1913 which seems important enough to include, herein; because of its historical significance on a very important matter to HKN -- the scholarship question. It is reproduced as Fig. 5.

The preceding history of the scholarship issue is summarized and capped by A. B. Zerby's following paragraph taken from the "The Golden Years": (29)

"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, our national officers recommended that each college chapter set the upper fourth of the junior EE class and the upper third of the senior EE class as eligible for membership. This was not made mandatory until 1947, when the requirement of such rating was

Figure 5

NATIONAL EXECUTIVE COUNCIL  
ETA KAPPA NU

1679 Kenmore Place  
Brooklyn, N.Y.  
January 27, 1913

Mr. E. B. Wheeler  
Yonkers, N.Y.

Dear Brother Wheeler:-

I am very glad to have your letter. I am taking the liberty of forwarding it to Bro. Pres. L.H. Harris of the Univ. of Pittsburgh, who is chairman of the committee on the work of revision.

I fear very much that you will think your worst fears, in regard to cutting up the original constitution, are about to be realized when you read this letter. However we hope to have your support in taking a step which may seem very radical to some. I may state that I am not a member of the revision committee and beyond a few suggestions at Harris' request, have had nothing to do with any revision. These suggestions, and especially the one about which I am writing you, were made with the view of raising E.K.N.'s honorary standing. While I am sure that Harris favors this one particular suggestion, he is evidently hesitating largely because he feels, as I do, that you older men, the founders, will not regard the step with favor. I hesitated too, until recently. It is an old idea; I think Harris and I talked it over in Pittsburgh at one time or another. I know it was discussed very often by the honorary members of Gamma Chapter at Ohio State.

It is simply the adoption of a scholarship requirement as the basis of eligibility to membership. My reason for thinking that you older men will not like this is based on my remembrance of Bro. B.T. Anderson's report to Pittsburgh Chapter of his fight with the profs., at Penn State when he first went to State College to obtain their consent to a chapter. They, like almost every prof., immediately demanded the scholarship requirement; so many high marks and so few low marks. Anderson pulled the deal through but his arguments never did quite satisfy me and after my later experience at Ohio State I am thoroughly convinced that this requirement idea is all that will save us. I will give my reasons.

In the first place it may be well to state that my view of the situation has been obtained during a period of 6 years connection with the fraternity. I am a charter member of Gamma,

enjoyed the privileges of an active member during the year I stayed out of school between my Junior and Senior years; the year after graduation I was a member of the Pittsburgh Alumni Chapter; returned to Ohio State and taught for two years.

Now as regards the honorary feature, I would rate Gamma Chapter as having been on the average 70% honorary while from what I know of Sigma Xi, I should say she should have a grade of 95% honorary. 70% can hardly be called a passing grade. But this is not the worst of it. A few men, socially inclined, can very quickly demoralize an honorary chapter with our present eligibility scheme. This all but happened at Ohio State two years ago. Prof. Hunt and I almost withdrew from the fraternity. We had to be quite personal with our advice and even last year, it was hammer and tongs all the time. And I cannot believe that Gamma is the only chapter which has shown backsliding tendencies. Harris and I were very much taken aback at last year's convention by several pairs of delegates. If they were representative of their chapters, I wouldn't give the chapters 40% honorary rating.

In conclusion, my reason for losing my hesitation and waking up to the fact that something will have to be done and done quickly, is as follows: Just before Xmas, I received an excited letter from Gamma informing me that the non-frat members of the E.E. classes had presented a petition to Prof. Caldwell urging the abolishment of Gamma Chapter. The attack is being led by the very man against whom I raised such a howl, when two years ago some insisted upon his nomination to E.K.N., despite unanimous agreement that his engineering ability was nil. I see my mistake now; we should have either let him in or flunked him out of school as he well merited.

This man is allied with the anti-frat movement. The charges against Gamma are absurd in most respects, and would do Gamma more good than harm were it not for the fact that there is an anti-frat bill up before the Ohio Legislature. If this bill is passed Gamma will be lost, because she has not been a real honorary fraternity.

At the time I received Gamma's letter I did not know how strong the main anti-frat movement was. However Prof. Caldwell wrote me his view of the situation and strongly urged the scholarship eligibility basis, if for no other reason than to meet the coming events.

Prof. Caldwell therefore deserves the credit for bringing this plan before us. I believe in the honorary fraternity but do not believe in the social fraternity. Whatever may be your views, I am sure you founded E.K.N. to be an honorary fraternity.

I feel very strongly on this subject. As Harris recently wrote me: "What's the use of working when there may be nothing beyond."

In regard to other revisions, I agree with you that the more a Constitution is revised the less stable it becomes. I really know nothing of the proposed plans; it may be that Harris is not considering the above plan but I know he realizes our danger. It appears from the minutes of the last convention that as "the copies of the original constitution are exhausted, a reprint is necessary and when made, the constitution should be revised in line with the enactments subsequent thereto."

This appears innocent enough. But there are quite a few amendments and several new amendments are really needed. Nevertheless, I believe that the arrangement will be changed rather than the sense.

I shall ask Harris to write you. He wrote some time ago that Bro. M. L. Carr sent in a lengthy discussion of the proposed revisions.

As regards New York Chapter, I am very sorry to learn that she is no longer active. However, I can realize that conditions here are not nearly so favorable for a chapter as in Pittsburgh.

I shall be very glad to see you and discuss the fraternity matters. I am with the A.T.&T. Co., Phone: Cortland 12060.

Sincerely and fraternally yours,

/s/ A. H. Heitmann  
Secy. N.E.C.

(Please excuse haste).

Note: This is a typed copy of a long hand written letter.

written into the Constitution at the recommendation of the Association of College Honor Societies, of which HKN had become a member."

Other aspects of this scholarship matter appeared in the 1960's when colleges began to face some student and faculty unrest for a variety of reasons; but principally the Vietnam War. Open enrollments; pass-fail grading and grade inflation became fairly wide spread practices. A Wall Street Journal Article addresses itself to these problems in connection with Phi Beta Kappa. (30)

In that article some of the scholastic problems which affected Eta Kappa Nu were common to Phi Beta Kappa at some point in history.

Award Dinner - One of the more prestigious awards, which Eta Kappa Nu has implemented, is described in detail in another section. It is known as the Eta Kappa Nu Recognition of Outstanding Young Electrical Engineers. It was conceived almost simultaneously by two very active members, E. B. Wheeler and Roger I. Wilkinson. However, the latter is deservedly credited with having developed the details and procedures and also for implementing them as well as, helping others to do so. For his dedicated work in behalf of this Award, and many other activities, R. I. Wilkinson became the second recipient of The Distinguished Service Award.

This Award gained wide-spread national recognition for Eta Kappa Nu. Consequently, at the height of some discussions between the American Institute of Electrical Engineers (AIEE) and its off-shoot of long standing - Institute of Radio Engineers (IRE), there arose a temporary struggle as to which society should be given the privilege of having the Award Dinner at its national convention. This struggle surfaced in the late 50's and early 60's.

The Award had started with AIEE in 1936 and the Award Organization Committee with a substantial majority voted persistently that AIEE should continue to have the privilege because of its very good and helpful attitude towards the Award during its infancy. Besides, by this time it was a traditional event with AIEE so it rightly belonged there for all the reasons a traditional event may claim. The Award Organization Committee stubbornly resisted change but at the same time offered an alternative event for IRE.

However, some national officers of Eta Kappa Nu who, at the time, were also officers of IRE continued to insist that the latter organization should also have the privilege of the Award, if not completely, at least in alternate years. In place of this tradition shattering move the New York Alumni Chapter and AOC members proposed an HKN Distinguished Lecture for the IRE convention and actually held two, -- one in 1958 and another in 1959, with Dr. L. V. Berkner and Dr. Simon Ramo as Distinguished Lecturers, respectively. Larry Dwon organized both of them. These luncheon events entailed difficulties in arranging, but they were successful from the points of view of attendance and audience response.

The matter finally resolved itself when IRE and AIEE combined to form the Institute of Electrical and Electronic Engineers, Inc. (IEEE) - a happy solution to a sensitive problem for Eta Kappa Nu.

In 1976, the IEEE Convention was not held in New York. Plans were developed to hold it there subsequently but only in alternate years. Consequently, in the years when the convention would not be in New York, the Award Dinner was arranged to be held with the IEEE Power Engineering Society's Winter Power Meeting in New York. So again one of the alternatives suggested in the IRE-AIEE discussion came to fruition in a modified sort of way. Time healeth all hurts!

Student-Faculty Attitudes - Two principal sources of information account for the observations on this topic. Holmes C. MacDonald -- past Vice-President of HKN; active several times on its Board of Directors; a patron of the Philadelphia Alumni Chapter; fourth recipient of the Distinguished Service Award; and HKN's representative to the American College Honor Societies for a number of years -- corresponded and personally discussed, with the writer, his ACHS reports to the HKN Board of Directors. In addition, the Regional Visitation program which the writer organized and implemented also provided confirmation of and additional facts about the problems caused by attitude and priority changes among faculty and students.

For a variety of reasons -- Vietnam War, emphasis on research and the publish or perish doctrine, aerospace and related electronics employment lay-offs, environmental and ecology concerns, the energy crisis and national political malpractices -- some students and faculty reacted adversely to many campus traditions. Some of their reactions affected honor societies. Engineering honor societies were especially vulnerable by the drop in enrollments not only as a percentage of all entering freshman; but also numerically during the depression, World Wars I and II and as a consequence of significant layoffs of the 1960's.

When the environment changes, animals change with it or die. Whether man and their societies can or should adopt to change is one of the questions ACHS has discussed frequently, according to Holmes MacDonald.

In his report to the HKN Board Meeting on March 24, 1974 he stated:

"The unfortunate fact is that most Honor Societies are unable to adjust to the modern campus world. Chapters are phasing out by the dozen actually 347 inactive out of about 4,061....

"Headquarters' Officers and Directors bewail the less dedicated young faculty assigned by Deans to act as Advisors -- just another job and often far down on the Professor's priority list. Election of faculty advisors by the Chapter is heartily endorsed by all honor societies ....



"As a personal observation, based on the chapters at (3 were mentioned), I believe HKN is failing to initiate the best student leaders (this question came up early in HKN's history and several times since then). Too often our student Presidents are proficient in getting high marks; but they lack interest in planning or managing activities of the Chapter. This is especially true when things do not progress effortlessly."

Similar observations have been made by Larry Dwon in connection with HKN's Regional Visitation Program and as a result of many personal investigations of inactive chapters. Educators admit to this situation but they are at a loss of how to correct the problem. It might be some solace, or just additional cause to be concerned, that some IEEE Student Branches find it difficult to become viable because of poor student leadership and often because of ineffective faculty advisors. (31)

Coupling the foregoing with the financial problems of HKN makes it very important that national officers use long term rational in their solutions. For instance, if local forces are not conducive to an enthusiastic Eta Kappa Nu Chapter, then an external infusion of inspiration is needed by dedicated HKN alumni and officers or by HKN student peers from other schools -- conventions, regional visitations or personal visits by selected people. However, the cost vs benefit ratio must be acceptable to the Board of Directors of Eta Kappa Nu. The consequences of doing nothing must be factored also.

The Board of Directors is responsible to all HKN members for ensuring a healthy association which does useful things for the Electrical Engineering profession today, tomorrow and the days thereafter -- inactive chapters are dying limbs of Eta Kappa Nu -- just a step removed from a dying HKN. If student officers aren't providing good leadership -- the member selection system may be faulty--, if faculty advisors aren't performing well -- the advisor selection system and the chapter relations system may need revision--; if local chapters lack the spirit of the Founders -- someone who has it may be needed to show the way --; if conventions, regional visitations or personal visits are too costly -- some other unique solution is necessary. That is the job of national officers, the Board of Directors and all Eta Kappa Nu members -- a statement which has been made in a variety of ways often by several of HKN's most dedicated members, including the Founders.

Doers accomplish more than thinkers in situations where people are the problem. Perhaps, that is the basis on which the Founders chose not to place the selection of members "solely on scholarship."

There were other problems, to be sure, but the foregoing is enough to demonstrate the opportunities in Eta Kappa Nu.

## GROWTH OF ETA KAPPA NU

### Introduction

On the occasion of installing Beta Delta Chapter at the University of Pittsburgh in 1937, Maurice L. Carr presented his message about "Dreams That Have Come True and Dreams of Days Ahead." He included this statement: (32)

"While I know we had great hopes, I am not so sure that even the most optimistic of us would have predicted that by now the Association would have grown to our extent and would have the prestige that it holds in Electrical Engineering."

At this point in time there were 33 college chapters and ten alumni chapters. The association had over 7,000 members. Proof of continuing growth is evidenced by other data which follows.

Throughout the years, Eta Kappa Nu officers expounded on the progress and growth of the Association. Their measures for these situations weren't always the same; but invariably inferences were made about four major parameters -- chapters, members, assets and activities. The following sections will provide a few historical facts and some interesting observations about these topics.

### Growth of Chapters

Eta Kappa Nu originally had two classifications of chapters -- college chapters, which were often called active chapters, and alumni chapters. A unique form of college chapter was one known as "Eta" which will be described first, in some detail; because it has special historic significance. More recently (1975) Industrial Chapters were authorized by the Board of Directors.

Eta Chapter - The idea of an Eta Chapter for members not associated with a particular college chapter is almost as old as Eta Kappa Nu itself. The first amendment to the first Constitution was drawn and ratified to meet a need which developed in 1907. Beta Chapter was organized at Purdue shortly after the founding of Eta Kappa Nu. A. B. Zerby's article, "Eta Chapter - Then and Now," provides some very interesting historical facts and pleasant reading besides. Excerpts from that article will explain the need and purpose of an Eta Chapter. A. B. Zerby wrote: (33)

"Unless you graduated from the University of Illinois in 1905, 1906 or 1907, or from Purdue University in 1906, 1907 or 1908, it is quite probable that you did not know there was an Eta Chapter in the early years of our history -- and you may have wondered why "Eta" was omitted from the alphabetical listing of the first 22 college chapters."

The article continues to explain that the contagious enthusiasm of

the founders quickly spread to Purdue and James Ray Thomas, Beta '06 was infected. He proceeded to organize a chapter at Purdue. However, the installation of Beta Chapter preceded the formal approval by the University Administration. "When the latter heard of the clandestine action, the sparks began to fly," wrote A. B. Zerby.

M. L. Carr, President of N.E.C., made a trip to Purdue and faced the President of Purdue University, "on the carpet." It was demanded that the charter be withdrawn and the membership in Beta Chapter be revoked. M. L. Carr held his ground, first by acknowledging that the installation of Beta Chapter may have been premature and agreeing to withdraw the charter. "But," he said, "once a member, always a member - we will not revoke the membership." This established a policy for Eta Kappa Nu. The President of Purdue agreed to the compromise.

As a consequence of these events, the first Constitution was drawn and ratified to establish an Eta chapter specifically to include members listed in Fig. 6. In 1913, The Electrical Engineering Administration at Purdue, with permission of the President of the University, requested a chapter and Beta was re-established. Then, in the Constitutional Convention of 1913 (at which the first Constitution was revised considerably), the Eta amendment was dropped because it was thought to be "a dead letter."

A little while later a similar misunderstanding occurred on another mid-west campus; but it had not progressed to the point of actually installing a chapter. Consequently the national officers resolved that forever after a petition must be approved in writing by the head of the EE department, dean of engineering, dean of men and President of the institution. In the 1951 revision of the Constitution, this provision was written into it, as Article III, Section 2, and Article IV, section 2. In the same revision Article IX section 9 was included.

These revisions provided for an Eta Chapter (actually a chapter-at-large) for outstanding students in colleges which do not have sufficient enrollment to support an active chapter. Branches of Eta would be established by the N.E.C. who would be considered the officers of Eta Chapter. No formal organization was established in the branches and no vote was given this chapter at a convention. Requirements for membership are the same as for other chapters except that membership nominations are to be from the senior class only.

In accordance with the above constitutional provisions, the first new chapter of Eta was established at Duke University on May 1, 1952. National President Ovid W. Eshbach authorized this chapter. North Carolina State's Beta-Eta Chapter initiated three seniors. The second branch of Eta Chapter was installed at Wayne University, Detroit, Michigan. Others followed at various times. Eta Chapters, in most instances, have flourished to eventually become full fledged active chapters.

Figure 6

INDUCTEES OF EARLY "ETA" CHAPTER

Class of 1906

Henry Edwin Borger  
 Carl Emil L. Dapprick  
 Constantine Luther Herbster  
 Marion Loop  
 George Frederick Peterson  
 William Arthur Rush  
 W. K. Stacy  
 Fred Lee Talcott  
 James Ray Thomas

Class of 1907

Francis Henry Bagley  
 Joseph Henderson Cannon  
 \*Clarence Rivers Collins  
 \*Everett Mathew Greeson  
 \*Leslie Huntington Harris. A past president and secretary of HKN.  
 \*Albert Jay Loeb  
 Albert Finley McKee  
 \*Charles Ruby Moore  
 \*Chester A. Scott  
 \*Roscoe Seybold  
 \*Frank Joseph Strassner  
 \*Harry Newton VanDeusen  
 \*Glenn Brubaker Walker  
 \*Arthur Wellesley Woodville

Class of 1908

Raymond Blaine Best  
 M. B. Bogarte  
 Paul L. Clark  
 Charles A. Jaqua  
 Walter Eugene Viol  
 Arthur B. Wagner  
 Roscoe H. Webb  
 Edward Bion Wintrobe

Our national records of membership of this period are scarce and somewhat indefinite. As the 1906 graduates must have been inducted before they graduated, it is apparent they became members the Spring of 1906. It is also apparent that some of the class of 1907 became members in the Spring of 1906. Those of the class of 1907 marked with an asterisk indicate induction April 27, 1907. Thus, these and the ones of Class of 1908 may have been inducted by the early Beta (Eta) chapter the Spring of 1907 and it was then that Brother Carr was called to West Lafayette, Indiana.

College Chapters - The first college chapter naturally was Alpha which was established at the University of Illinois on October 28, 1904 by the ten founders. It is sometimes referred to as the parent chapter. In the school year of 1905-06 a Chapter was organized at Purdue University through the efforts of Alpha and J. R. Thomas of Purdue. It became a significantly unique historical event. Beta Chapter existed only briefly and in concept only until March 15th, 1913, when it became a formally installed chapter. In the interim, an "Eta" chapter remained at Purdue briefly and then; became inactive.

In 1913, L. H. Harris, President of N.E.C. discussed the early growth of Eta Kappa Nu. He made the following observation: (34)

"The Parent Chapter continued active in the extension work and on January 25, 1907, installed Gamma Chapter at Ohio State University; Bros. Dodd and Williams officiating.

"Two years later, May 24, 1909 Alpha Chapter added a star to her banner by installing, through Bros. Hanson, Maddox and Carr, Delta Chapter at Armour Institute of Technology. In the meantime a vigorous Alumni Chapter had been organized in Pittsburgh, in the fall of 1908. As originally formed, it contained eight Purdue and one Illinois men....Through its activities, Epsilon was installed December 4th, 1909 at Pennsylvania State College. Bros. Anderson, Bagley, Corrington, Stoltz and Harris made the trip."

L. H. Harris continued his discussion of this early history revealing that Gamma Chapter helped to install Zeta Chapter at Case School of Applied Science, February 3, 1910, with Bros. Gillespie, Teegarten and Grossman representing Gamma. Theta was the direct result of two alumni -- C. T. Evans and C. W. Yerga -- in Milwaukee. It was installed April 30, 1910. The following spring Alpha interested University of Missouri and, on June 3, 1911, Bros. Sawyer and Palmquist represented Alpha at the installation of Iota Chapter. Kappa Chapter at Cornell was installed January 27, 1912 by Pittsburgh Alumni Chapter, which was represented by Bros. Bagley, Webb and Harris and assisted by Epsilon Chapter which was represented by Bros. Tobias and Cocklin. In 1913, Lambda Chapter, University of Pennsylvania, was installed on March 12th by Epsilon Chapter. All members of Epsilon were there as was A. H. Heitmann representing N.E.C.

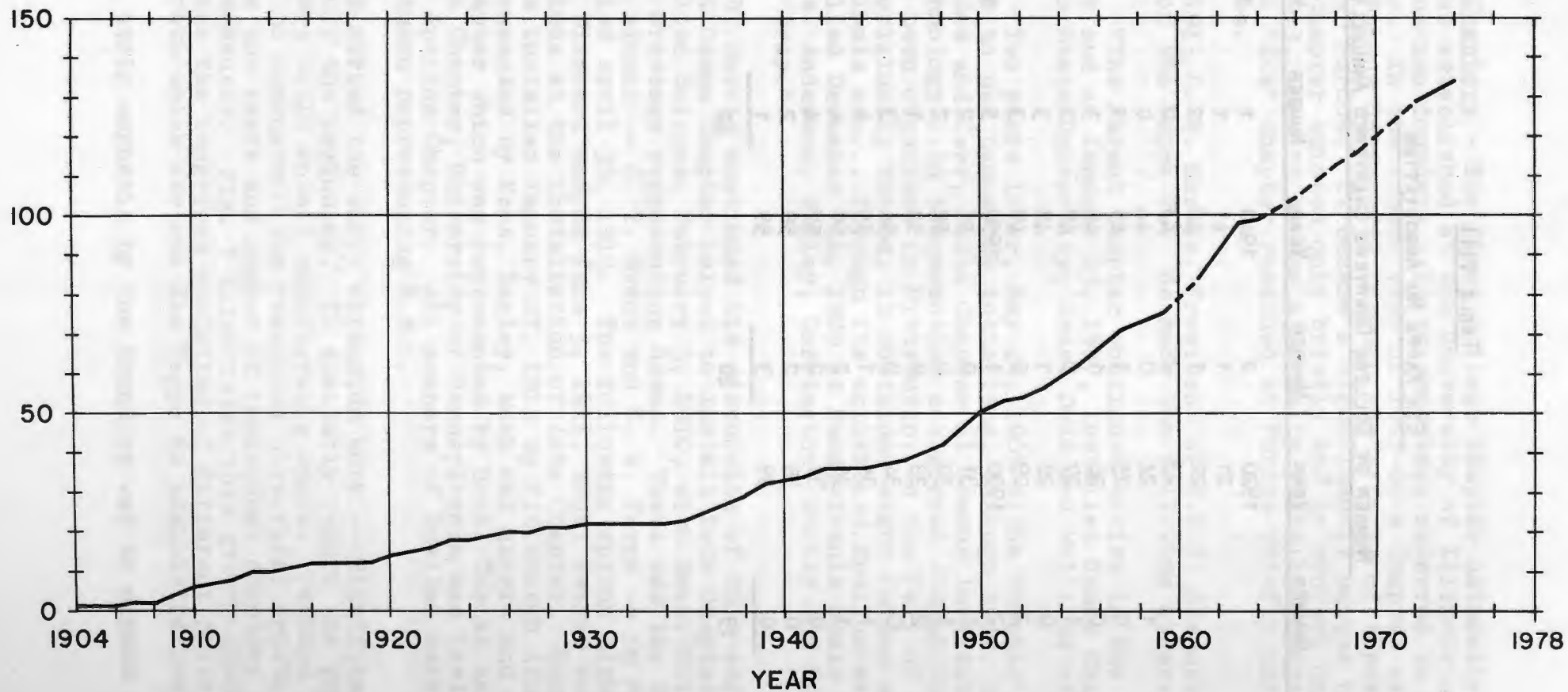
This marked the early extension work -- significant, inspiring but only the beginning. To similarly record the growth of all the chapters would entail considerable space. Perhaps Table VIII would suffice to demonstrate the remaining historical growth of Eta Kappa Nu using the years and number of individual chapters which were added as the measures. Fig. 7 illustrates this growth graphically and demonstrates the long-term evolution of different policies with respect to growth which various Eta Kappa Nu administrations injected.

The early emphasis by the founders was to expand the

TABLE VIII  
ETA KAPPA NU ASSOCIATION  
NUMBER OF COLLEGE CHAPTERS CHARTERED ANNUALLY

YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER	YEAR	NUMBER
		1920	2	1940	1	1960	5
		21	1	41	1	61	4
		22	1	42	2	62	7
		23	2	43	0	63	7
1904	1	24	0	44	0	64	1
5	0	25	1	45	1	65)	6
6	0	26	1	46	1	66)	6
7	1	27	0	47	2	67)	8
8	0	28	1	48	3	68)	8
9	2	29	0	49	3	69	3
1910	2	1930	1	1950	5	1970)	13
11	1	31	0	51	2	71)	2
12	1	32	0	52	2	72)	2
13	2	33	0	53	1	73	2
14	0	34	0	54	3	74	3
15	1	35	1	55	4	75	0
16	1	36	2	56	4		
17	0	37	2	57	4		
18	0	38	2	58	2		
19	0	39	3	59	1		
TOTAL	13		20		42		59

FIG. 7  
GROWTH OF COLLEGE CHAPTERS  
ETA KAPPA NU ASSOCIATION  
1904 - 1975



association at recognized electrical engineering schools as quickly as possible. Brother E. B. Wheeler, President of N.E.C., wrote to Beta Chapter at Purdue on October 1, 1906 as follows:

"This is the beginning of the third year of existence of the Executive Council. Alpha Chapter is proud of having been able to establish a chapter at Purdue....The future of the fraternity depends almost wholly upon the work of the active chapters.

"Though you are in reality a chapter, at the present, yet the Council is anxious to know the decision of your faculty regarding your recognition....

"We want chapters established at Wisconsin, Michigan, Minnesota, Ohio State, Case, Nebraska and at every school of recognized standing, for the sooner we have chapters at these schools the sooner will Eta Kappa Nu come to have an influential place in electrical circles...."

In 1913, L. H. Harris, President of N.E.C., wrote the following: (35)

"For a society to grow from an idea, merely, to a vigorous organization such as ours in nine years requires that it shall consist of something more than a fad. That the founders had faith in their vision is evidenced by the time, and energy, and thought, yes, and expense that they put into it...."

J. B. Kelly, President of N.E.C. in 1923, seemed to represent a more conservative philosophy about adding chapters when he wrote the following: (36)

"The growth (HKN) was gradual, controlled by judgement. The Association has grown with caution that every new limb should be a strong one. It would have been folly to have annexed to the association weak chapters which could not survive. Rather the policy has wisely been to take into the fold petitioning organizations only after a thorough investigation...."

J. A. Umhoefer confirmed the conservative approach in 1929 when he wrote: (37)

"Remarkable growth, carried on conservatively has characterized the development of Eta Kappa Nu in the quarter-century of its existence from a single chapter at the University of Illinois to a national fraternity with 22 chapters, located in nineteen states of the Union from the Atlantic to the Pacific."

This was the time when Eta Kappa Nu began making long-term plans for the future at its 25th and subsequent two conventions. After that, conventions were discontinued for a long time as another section will describe this historic event and its related factors.

In 1935, Nelson L. Best, President of HKN, described the plans that were developed for the Association by such men as Morris Buck, R. I. Wilkinson, L. A. Spangler, Clifford A. Faust, Edward F. Watson, and E. B. Wheeler with the help of other members on the National Advisory Board.

In his article, Nelson Best included the following observations: (38)

"During the first twenty-five or thirty years of our fraternity existence the principal objectives were the establishment of a strong group of active chapters in the leading electrical engineering colleges of the country and the building of a sound financial structure. Those were the important goals during the first period, and let there be no misunderstanding that present day officers discount these efforts, nor in any way detract from the splendid results that have been achieved, since we now have an enviable group of 23 active and 8 alumni chapters. There is probably some small room for the establishment of new chapters but we cannot consider that our major objective for the future."

In retrospect, that "small room" -- which could not have been envisioned accurately in the middle of the great depression -- turned out to be 135 chapters in 1975 or 5.9 times as many as in 1935.

What occurred obviously was not happenstance; but a change in policy on the part of new members who were subsequently elected as national officers of Eta Kappa Nu. Undoubtedly the changes in organization, which are covered elsewhere, had something to do with the results also. Many people were obviously involved; but one name stands out in this era very prominently -- Clifford A. Faust. His description of this change is included in a recent unpublished report to the writer of his second term of office in 1936-37. It was attached to his April 22, 1975 letter, an excerpt of which follows on this subject:

"During the previous two or three years, many plans were conceived and developed to help achieve the principal goal of making Eta Kappa Nu of greater value to a larger number of all members, especially the alumni. As indicated in the 1934-35 and 1935-36 President's reports, much progress was made in those years. All efforts in the 1936-37 year were directed toward continuing this progress by converting more plans and ideas into action and accomplishments. In terms of hard work by all officers and chapters, cooperation by everyone involved, and outstanding achievements, it was a notable year.

"Reversing the trend of previous years, three excellent college chapters were added in the two years of 1934-36. Continuing this highly desirable expansion, HKN installed chapters in two more outstanding schools in 1936-37 -- first at the University of Pittsburgh and then at the University of Michigan. Enthusiasm for HKN was unusually high among the faculty and upper classmen at both of those colleges, assuring the new chapters of healthy, active starts.

"It would be appropriate to mention here that HKN was reaping the benefits of two major policy changes. Until 1934, our National Executive Council did little to help or encourage any school to petition for a chapter and took no initiative in lining up or aiding prospects. Instead, a school was expected to hear about HKN, want a chapter, and then do the necessary in preparing a petition. At that point, the NEC decided whether or not to accept the new group. As a result of this policy, chapter additions were very few and far between, and in the four years 1931-34, the number of chapters remained the same. Under the new policies, we contacted desirable schools, told them all about HKN, and then encouraged them to petition.

"Change No. 2 in policy concerned the development of sound methods for judging which schools should be contacted, making detailed studies to obtain reliable data, and then getting the word to the best prospects. Two means were used primarily to inform faculty and students about HKN and help them reach a decision. First, they were contacted by letters, which were followed up diligently with all information requested. Second, Executive Secretary A. B. Zerby, other National Officers and local alumni visited the schools and then served in liaison capacity during the formative stages.

"These policies were upheld by all future regimes, which explains why HKN has continued to expand rapidly among the most desirable schools."

For these policies and procedures Clifford A. Faust deserves much of the credit, as well as, for his diligent implementation of the many programs that spawned during the depression period. They will be described elsewhere. This partly demonstrates why he was the third recipient of the Distinguished Service Award.

The growth of Eta Kappa Nu, as measured by the addition of chapters, has been amazing and commendable. Potential for continued growth in this direction remains substantial since there are approximately 200 electrical engineering curricula throughout the nation having accreditation by Engineers Council for Professional Development (ECPD). Further potential exists in foreign schools. Prof. A. D. Moore

was asked "to do some special missionary work on this matter," he wrote in 1970. He also indicated that he, "...already put a foot in the door to three excellent Canadian Universities. Dr. E. W. Boehne was also a proponent of international expansion of Eta Kappa Nu.

In summary, the story of Eta Kappa Nu's expansion program in college chapters is portrayed in Fig. 8. This map first appeared in Frank E. Sanford's article which was previously mentioned and also in the booklet "Golden Years". It has been periodically up-dated by A. F. Gabrielle.

Alumni Chapters - In an article entitled "Eta Kappa Nu in the East", L. H. Harris, Vice-President of Pittsburgh Chapter wrote the following: (39)

"Until the time comes when Eta Kappa Nu can stand on a foundation of a large body of loyal alumni, the most urgent need of our organization will be more chapters, in schools of established merit....

A chief difficulty in the way in this direction is a lack of working funds."

He continued on to recommend an assessment of one dollar per year on all graduate members for an "Extension Fund".

The foregoing assessment was enacted at the 5th Convention which was held in Columbus. At the 6th Convention held in Pittsburgh, another assessment was made for convention expense. Among E. B. Wheeler's letters, his July 27, 1950 summary of his file states the following:

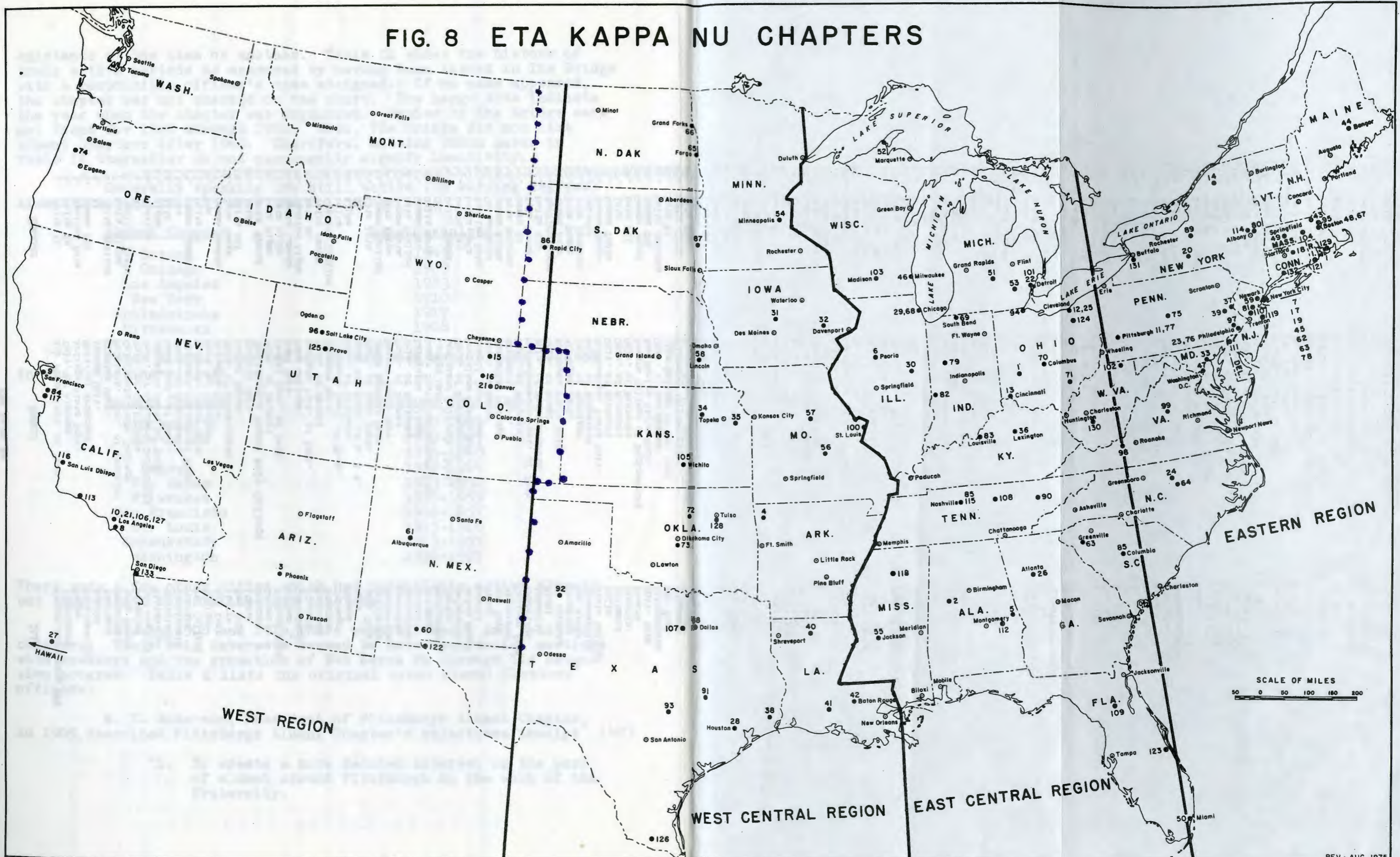
"As will be noted, the poor financial conditions of the Association during the early years was a great handicap and the attempt to assess the Alumni Chapters for National Convention Expense practically kept them from functioning for the first few years until the matter was finally cleared up by the NEC in a National Convention at which the Alumni assessments were cancelled."

So we have two former presidents of NEC each giving reasons why assessments of alumni should and should not have been made. The results are obvious.

Nevertheless, the growth of Alumni Chapters has not been as dramatic as it was with active college chapters. However, the conception, growth and present value of activities which were started and implemented by some alumni chapters has been phenomenal. In this section only the growth in numbers of Alumni Chapters will be treated. The activities resulting from their efforts will be described elsewhere.

There appear to have been fifteen Alumni Chapters in

# FIG. 8 ETA KAPPA NU CHAPTERS



SCALE OF MILES  
0 50 100 150 200



Eta Kappa Nu

Chapter	School	City
1. Delta Xi	Air Force Inst. of Tech.	Wright-Patterson AFB
2. Delta Nu	Univ. of Alabama	Tuscaloosa
3. Epsilon Beta	Arizona State Univ.	Tempe
4. Gamma Phi	Univ. of Arkansas	Fayetteville
5. Xi	Auburn Univ.	Auburn
6. Delta Upsilon	Bradley Univ.	Peoria
7. Zeta Sigma	Polytech. Inst. of Brooklyn	Brooklyn
8. Epsilon Theta	California State College	Long Beach
9. Mu	Univ. of California	Berkeley
10. Upsilon	Univ. of Southern California	Los Angeles
11. Sigma	Carnegie Inst. of Tech.	Pittsburgh
12. Zeta	Case Inst. of Tech.	Cleveland
13. Tau	Univ. of Cincinnati	Cincinnati
14. Gamma Gamma	Clarkson College of Tech.	Potsdam
15. Delta Pi	Colorado State Univ.	Ft. Collins
16. Rho	Univ. of Colorado	Boulder
17. Gamma Lambda	Columbia Univ.	New York
18. Beta Omega	Univ. of Connecticut	Storrs
19. Delta Chi	Cooper Union	New York
20. Kappa	Cornell Univ.	Ithaca
21. Zeta Theta	California State Poly College	Pomona
22. Beta Sigma	Univ. of Detroit	Detroit
23. Beta Alpha	Drexel Inst. of Tech.	Philadelphia
24. Delta Lambda	Duke Univ.	Durham
25. Epsilon Alpha	Fenn College	Cleveland
26. Beta Mu	Georgia Inst. of Tech.	Atlanta
27. Delta Omega	Univ. of Hawaii	Honolulu
28. Epsilon Epsilon	Houston Univ.	Houston
29. Delta	Illinois Inst. of Tech.	Chicago
30. Alpha	Univ. of Illinois	Urbana
31. Nu	Iowa St. Univ. of S. & T.	Ames
32. Beta Iota	Univ. of Iowa State	Iowa City
33. Gamma Upsilon	Johns Hopkins Univ.	Baltimore
34. Beta Kappa	Kansas State Univ.	Manhattan
35. Gamma Iota	Univ. of Kansas	Lawrence
36. Beta Upsilon	Univ. of Kentucky	Lexington
37. Gamma Psi	Lafayette College	Easton
38. Delta Beta	Lamar State College of Tech.	Beaumont
39. Chi	Lehigh Univ.	Bethlehem
40. Delta Gamma	Louisiana Polytech. Inst.	Ruston
41. Delta Tau	Univ. of Southwestern Louisiana	Lafayette
42. Delta Iota	Louisiana State Univ.	Baton Rouge
43. Epsilon Zeta	Lowell Tech. Inst.	Lowell
44. Delta Kappa	Univ. of Maine	Orono
45. Gamma Alpha	Manhattan College	New York
46. Beta Omicron	Marquette Univ.	Milwaukee
47. Gamma Xi	Univ. of Maryland	College Park
48. Beta Theta	Massachusetts Inst. of Tech.	Cambridge
49. Delta Eta	Univ. of Massachusetts	Amherst
50. Epsilon Kappa	Univ. of Miami	Miami
51. Gamma Zeta	Michigan State Univ.	E. Lansing
52. Beta Gamma	Michigan Tech.	Houghton
53. Beta Epsilon	Univ. of Michigan	Ann Arbor
54. Omicron	Univ. of Minnesota	Minneapolis
55. Gamma Omega	Mississippi State Univ.	State College
56. Gamma Theta	Univ. of Missouri	Rolla
57. Iota	Univ. of Missouri	Columbia
58. Beta Psi	Univ. of Nebraska	Lincoln
59. Gamma Kappa	Newark College of Engineering	Newark
60. Gamma Chi	New Mexico State Univ.	Univ. Park
61. Delta Omicron	Univ. of New Mexico	Albuquerque
62. Beta Pi	City College of New York	New York
63. Zeta Iota	Clemson University	Clemson
64. Beta Eta	North Carolina State College	Raleigh
65. Gamma Tau	North Dakota State Univ.	Fargo
66. Delta Rho	Univ. of North Dakota	Grand Forks
67. Gamma Beta	Northeastern Univ.	Boston
68. Beta Tau	Northwestern Tech. Inst.	Evanston
69. Delta Sigma	Univ. of Notre Dame	South Bend
70. Gamma	Ohio State Univ.	Columbus
71. Delta Epsilon	Ohio Univ.	Athens
72. Omega	Oklahoma State Univ.	Stillwater
73. Beta Xi	Oklahoma Univ.	Norman
74. Pi	Oregon State College	Corvallis
75. Epsilon	Pennsylvania State Univ.	University Park
76. Lambda	Univ. of Pennsylvania	Philadelphia
77. Beta Delta	Univ. of Pittsburgh	Pittsburgh
78. Delta Theta	Pratt Institute	Brooklyn
79. Beta	Purdue Univ.	W. Lafayette
80. Beta Nu	Rensselaer Polytech. Inst.	Troy
81. Gamma Epsilon	Rutgers	New Brunswick
82. Epsilon Eta	Rose Polytech. Inst.	Terre Haute
83. Epsilon Chi	Univ. of Louisville	Louisville
84. Epsilon Iota	San Jose State College	San Jose
85. Zeta Kappa	Tennessee State University	Nashville
86. Beta Chi	South Dakota Sch. of Mines	Rapid City
87. Gamma Rho	South Dakota State Univ.	Brookings
88. Gamma Omicron	Southern Methodist Univ.	Dallas
89. Gamma Eta	Syracuse Univ.	Syracuse
90. Beta Phi	Univ. of Tennessee	Knoxville
91. Gamma Mu	Texas A&M	College Station
92. Gamma Nu	Texas Tech. College	Lubbock
93. Psi	Univ. of Texas	Austin
94. Epsilon Gamma	Univ. of Toledo	Toledo
95. Epsilon Delta	Tufts Univ.	Medford
96. Gamma Sigma	Univ. of Utah	Salt Lake City
97. Delta Mu	Villanova Univ.	Villanova
98. Beta Lambda	Virginia Polytech. Inst.	Blacksburg
99. Gamma Pi	Univ. of Virginia	Charlottesville
100. Delta Zeta	Washington Univ.	St. Louis
101. Delta Alpha	Wayne State Univ.	Detroit
102. Beta Rho	West Virginia Univ.	Morgantown
103. Theta	Univ. of Wisconsin	Madison
104. Gamma Delta	Worcester Polytech. Inst.	Worcester
105. Epsilon-Xi	Wichita State Univ.	Wichita
106. Epsilon-Nu	California State College	Los Angeles
107. Epsilon-Mu	University of Texas	Arlington
108. Epsilon-Rho	Tennessee Technological Univ.	Cookeville
109. Epsilon-Sigma	University of Florida	Gainesville
110. Epsilon-Pi	Princeton University	Princeton
111. Epsilon-Omicron	University of Delaware	Newark
112. Epsilon-Upsilon	Tuskegee Institute	Tuskegee Institute
113. Epsilon-Tau	University of California	Santa Barbara
114. Phi	Union College	Schenectady
115. Epsilon Lambda	Vanderbilt University	Nashville
116. Epsilon Phi	State Polytechnic College	San Luis Obispo
117. Epsilon Psi	Univ. of Santa Clara	Santa Clara
118. Epsilon Omega	Univ. of Mississippi	University
119. Zeta Alpha	Monmouth College	Long Branch
120. Zeta Beta	Texas A. & I.	Kingsville
121. Zeta Gamma	Univ. of Rhode Island	Kingston
122. Zeta Delta	Univ. of Texas	El Paso
123. Zeta Epsilon	Florida Inst. of Tech.	Melbourne
124. Zeta Zeta	Univ. of Akron	Akron
125. Zeta Eta	Brigham Young Univ.	Provo
126. Zeta Lambda	Prairie View A&M College	Prairie View
127. Zeta Mu	Northrup Inst. of Tech.	Inglewood
128. Zeta Nu	University of Tulsa	Tulsa
129. Zeta Xi	S.E. Massachusetts	N. Dartmouth
130. Zeta Omicron	W. VA. Inst. of Tech.	Montgomery
131. Zeta Pi	S.U. of N.Y.-Buffalo	Buffalo
132. Zeta Rho	University of New Haven	New Haven
133. Zeta Tau	San Diego State University	San Diego

existence at one time or another. Table IX shows the history of their active periods as measured by having been listed in The Bridge with a responsible officer's name assigned. If no name appeared, the chapter was not checked on the chart. The large dots indicate the year when the chapter was organized. Copies of The Bridge were not found for 1920 through 1922. Also, The Bridge did not list Alumni Chapters after 1968. Therefore, missing check marks in Table IX thereafter do not necessarily signify inactivity.

Generally speaking the still active (in varying degrees) Alumni Chapters in 1975 were the following:

<u>Alumni Chapter</u>	<u>Date Organized</u>
Boston	1947
Chicago	1909
Los Angeles	1923
New York	1910
Philadelphia	1917
Pittsburgh	1908

Other Alumni Chapters which had been active were located in the following cities:

<u>Alumni Chapter</u>	<u>Dates of Activity</u>
Cincinnati	1927-1933
Cleveland	1920-1927
	1936-1948
Denver	1938-1964
Ft. Wayne	1923-1932
Milwaukee	1915-1959
San Francisco	1926-1957
St. Louis	1915-1916
Schenectady	1913-1957
Washington	1936-1957

There were a few other cities which had potentially active alumni; but they didn't materialize into chapters.

Between 1908 and 1919, there were between 1 and 6 active chapters. Their main interests seemed to have been social meetings with speakers and the promotion of Eta Kappa Nu through its extension program. Table X lists the original seven Alumni Chapters' officers.

B. T. Anderson, President of Pittsburgh Alumni Chapter, in 1909, described Pittsburgh Alumni Chapter's objectives thusly: (40)

- "1. To create a more decided interest on the part of alumni around Pittsburgh in the work of the Fraternity.

TABLE IX  
ETA KAPPA NU ASSOCIATION  
ALUMNI CHAPTERS REPORTED IN THE BRIDGE

Table with columns for Year and Alumni Chapter Cities (BOST., CHIC., CINC., CLEVE., DEN., FT.W., L.A., MILW., N.Y., PHIL., PITT., S.F., ST.L., SCHEN., WASH.). Rows list years from 1908 to 1946 and 1947 to 1975, with 'x' marks indicating presence in various cities.

NOTE: BRIDGE VOLUMES 20 - 22 NOT AVAILABLE.

TABLE X  
ETA KAPPA NU ASSOCIATION  
ORIGINAL SEVEN ALUMNI CHAPTERS' OFFICERS

Table with columns for years (1907-1908 to 1919-1920) and rows for cities (PITTSBURGH, CHICAGO, NEW YORK, SCHENECTADY, MILWAUKEE, ST. LOUIS, PHILADELPHIA) listing officers (P, VP, SECT, TREAS, C.S.) and their names.

- "2. That the best way for alumni to help was by lending support as an organized chapter rather than individually.
- "3. To show the members of Eta Kappa Nu that Pittsburgh Brothers were interested enough in the welfare of the Fraternity to form a chapter.
- "4. That, by forming a chapter here so near to recognized Eastern Technical Schools, other chapters could more readily be established."

The Pittsburgh Chapter held the first Banquet of any alumni chapter, at Fort Pitt Hotel, on February 27, 1909.

In 1923 J. B. Kelly, President of N.E.C. wrote the following:

(41)

"What does it benefit the Association, you may ask, to add an Alumni Chapter founded principally on social grounds. The answer is simple. The contact of a young man just out of college with a group of men of HKN calibre could not help but be a benefit to that man. It will afford him access to another man's viewpoint of the profession, will extend to him a helping hand to lift him over the bumps immediately following his graduation from college. Instinctively such a group of men would want to help younger men in matters of employment."

In May 1924, there appeared in The Bridge, an article entitled, "Ten Ways to Kill an Alumni Chapter" which said, in part, the following: (42)

1. Don't go to meetings.
2. If you do go, go late.
3. If the weather doesn't suit you, don't think of going.
4. If you do attend a meeting, find fault with the work of the officers and members.
5. Never accept office, as it is easier to criticize than to do things.
6. Get sore if you are not appointed on committees; but if you are, do not attend committee meetings.
7. If asked by the chairman to give your opinions on some matter, tell him you have nothing to say. After the meeting tell everyone how things should be done.
8. Do nothing more than absolutely necessary; but when members use their ability to help matters along, howl that the institution is run by a clique.
9. Hold back your dues, or don't pay at all.
10. Don't bother about getting subscriptions to The Bridge....Let George do it."

These are all recognizable deficiencies of some members of any society. The tenth observation suggests that the objective of the foregoing may have had two purposes, first to inspire better alumni chapter participation, and secondly to solicit subscriptions to The Bridge.

L. A. Spangler, Executive Secretary of NEC, at the time, and later President, wrote to E. B. Wheeler on November 21, 1932, the following:

"I note in your article that you bring out the fact, 'That the successful development of the organization would depend largely upon the interest taken in its affairs by its alumni members.' To my mind this is the biggest problem of the national officers at the present time. The active chapters serve a real need and are accomplishing results; but we never had, at least since my initiation into the fraternity, real active cooperation by a large proportion of the alumni members. If we could develop some worthwhile objective or some activity in which a large percentage of the alumni members could become actively interested, then I believe we could accomplish results which would be beyond the dreams of even the founders. It would seem that an organization with about 5000 intelligent, educated members, should be able to develop a plan which would attract and maintain the interest of a large portion of the membership; but apparently no one has yet hit upon such a plan."

Soon after, Eta Kappa Nu developed many worthwhile and prestigious activities which will be described elsewhere. However, after a couple of decades the very Alumni Chapters which made some of these accomplishments began to atrophy because of various reasons. A. F. Gabrielle, President of New York Alumni Chapter and also of national, wrote to P. K. Hudson on August 31, 1967 the following perceptive letter:

"In my association with the New York Alumni Chapter of HKN I notice that the original cohesive factors that sparked the early dynamic group of Dwon, Wilkinson, et.al., no longer exist. While there are numerous and valid reasons for this - the most significant of which is the competition for a man's time - the net results in terms of the NY Alumni Chapter are:

1. "The Chapter's activities - which include participation in the College Chapter Award, the Outstanding Young Electrical Engineer Award, and the Regional Visitation - are carried out by the same small group.
2. "The NY Alumni - which includes about 300 dues-paying members - contribute money primarily out of their sense of duty but do not participate in any trips, activities, lectures, etc."

"I believe that these problems are not unique to the NY Chapter but are experienced also by other Alumni Chapters. Thus, there is a need to define a meaningful purpose. Without such a purpose I believe that the existing activities could be handled by the method of appointing National Standing Committees as you have done for the Outstanding Young EE Award and the College Chapter Activities Award.

"However, before we abandon the Alumni Chapter concept, I believe we should search for a purpose that would put new vigor into each of the Alumni Chapters and would induce members to actively participate. One approach could be to capitalize on our one outstanding asset - talented engineers with a sense of responsibility.

"Thus, it might be possible to provide technical and problem-solving aid to underdeveloped nations by the mechanism of Government gathering such problems and forwarding them to HKN National for dissemination to the Alumni Chapters. This could even embody the concept of providing technical backup and depth to our Peace Corps field force or to the relatively few technical people in the underdeveloped countries.

"I am sure that there are other alternatives. I would appreciate it if you and the Board of Directors would give this some thought in order that we can intelligently decide what to do with the Alumni Chapters. The solution to this problem - in the long run - I believe will ultimately affect the viability of the College Chapters."

The individual Alumni Chapter histories will be written separately by qualified and well-informed members.

Industrial Chapters The September 1, 1973 Minutes of the Board Meeting indicates the creation of a committee to study the desirability of forming Industrial Chapters -- B. Sheffield, Chairman, W. H. Pickering, A. A. Chizmadia and R. S. MacMillan. Others who participated in meetings on this subject include: President W. E. Murray; Past-President C. T. Koerner; M. L. Fee, President, Los Angeles Alumni Chapter and R. J. Kennerknecht, Past-President, Los Angeles Alumni Chapter.

These men suggested that the creation of Industrial Chapters is expected to provide a means of achieving or promoting the following objectives:

a) To improve the professional image and to re-establish the identity of, and pride in, the profession of electrical engineering. To promote professional status and well being.

b) To provide for continuity of associations and activity

in Eta Kappa Nu following graduation from college. To provide an opportunity for individual development beyond that which is afforded by the typical two or three semester period of student membership....

c) To provide support and inspiration to College Chapters and their members; and, to provide a liaison with College Chapters which may result in attracting and placing particularly promising new graduates.

d) To contribute to and enhance the appeal of The Bridge.

e) To broaden the membership base of Eta Kappa Nu Association through the formations of new chapters and by the inductions of a proportionally larger number of outstanding practicing engineers as professional members.

This creation brings into being a new activity for Eta Kappa Nu with tremendous potential just as some alumni chapters are beginning to feel the crunch of inactivity for all the reasons given and others that could be mentioned.

Soon after the word was out about Industrial Chapters, active members of the New York Alumni Chapter, who were in effect carrying it in existence for a number of years, began to create the American Electric Power Alumni Chapter and successfully achieved company approval by early 1975. The petitioning members were George A. Mangiero, President, New York Alumni Chapter; M. R. Hajny; A. F. Gabrielle and Larry Dwon, Past-Presidents of HKN and of the New York Alumni Chapter.

By-laws were prepared and approved by NEC on December 31, 1974 and the following officers were elected soon thereafter:

G. A. Mangiero	-	President
M. R. Hajny	-	Vice-President
D. Sebesta	-	Secretary
J. S. Edmonds	-	Treasurer

In early 1975 D. Sebesta left AEP to join Electrical World and his office was filled by E. Blocker.

The AEP Industrial Chapter quickly organized itself into five committees as follows:

Social Activities	-	J. H. Provanzana
Communications	-	E. V. Cardelli
Tutoring and Career Guidance	-	H. M. Merrill
Promotion of Power Engineering	-	Larry Dwon
Awards	-	A. Fakheri

E. V. Cardelli relinquished his chairmanship to M. F. Rafferty due to work pressures.

Growth of Membership

Another measure of growth is the increase of members in Eta Kappa Nu. Such data isn't easily retrievable from the scattered early records. Data of recent years are more reliable.

Table XI gives the yearly addition of new members to the Association and the source from which the data were gathered. Early statistics are based on the count of members listed in various directories which were published periodically. Between 1930 and 1953, E. B. Kurtz's and Frank E. Sanford's data are used which were published in The Bridge. (43, 44)

After that period, the records were obtained from available Annual Reports and P. K. Hudson. Fig. 9 shows the cumulative growth of Eta Kappa Nu membership from 1904 through 1975. An August 14th letter from P. K. Hudson, Executive Secretary, contained information which is illustrated in Fig. 10 and 11. Some data came from other sources extending it to the years before 1960. These charts show new members added and new members per chapter.

A quotation from Frank E. Sanford's pamphlet will give the growth prognostications of that era:

"There are two distinct phases in the increases of the past few years. First is, of course, the increase in number of EE students. Second, and of greater importance in the long-term view of the Association affairs, is the increase in number of chapters and the resulting percentage of all EE students who will be eligible for membership.

"An average of 12 percent of total EE graduates were members in the period 1930-34. With an increase from 23 to 36 chapters, membership increased to 20 percent of the 1942 class. During the past three years, the ratio was 22%; and it appears it will remain about this level, or possibly go up to 25%, during the next few years."

What could be more fitting to end this chapter than an excerpt from P. K. Hudson's August 14, 1972 letter to the writer which was mentioned previously. It stated the following:

"Enclosed herewith are some data that I present to the Board this week. I am sending you copies for whatever use you may wish to make of it in the visitations.

TABLE XI  
ETA KAPPA NU ASSOCIATION  
HISTORY OF ANNUAL MEMBERS INITIATED  
1904 - 1975

YEAR	INITIATES	SOURCE OF DATA	YEAR	INITIATES	SOURCE OF DATA
1904-05	10		1943-44	300)	
5-06	23		44-45	300)	E. B. KURTZ
6-07	25		45-46	400)	AND
7-08	25		46-47	1000)	F. E. SANFORD
8-09	25		47-48	1750)	
9-10	25	VOL. 5 DIR. ( 133)	48-49	2300)	
1910-11	73	VOL. 6 " ( 206)	49-50	2203)	
11-12	64	VOL. 7 " ( 270)	1950-51	1684)	
12-13	144	VOL. 8 " ( 414)	51-52	1220)	
13-14	178	VOL. 9 " ( 592)	52-53	1000)	
14-15	248	VOL. 10 " ( 840)	53-54	1039)	
15-16	44	VOL. 11 " ( 884)	54-55	1350)	
16-17	147	VOL. 12 " (1031)	55-56	1653)	
17-18	142		56-57	1961)	
18-19	142		57-58	2257)	
19-20	156	VOL. L4 " (1315)	58-59	2220)	
1920-21	159		59-60	2370)	
21-22	159		1960-61	2400)	
22-23	159		61-62	2430)	
23-24	159		62-63	2450)	
24-25	159	VOL. 20 " (2266)	63-64	2475)	
25-26	276		64-65	2590)	
26-27	276		65-66	2420)	
27-28	276	VOL. 23 " (3094)	66-67	2720)	
28-29	239		67-68	2730)	
29-30	239	VOL. 25 " (3572)	68-69	2710)	
1930-31	1028)	(TOTAL = 4600)	69-70	2780)	
31-32	200)		1970-71	2890)	
32-33	200)		71-72	2830)	
33-34	210)	E. B. KURTZ	72-73	2800)	
34-35	250)	VOL. 50 No. 3	73-74	2690)	
35-36	250)	P. 16	74-75	2520)	
36-37	300)				
37-38	350)				
38-39	400)	F. E. SANFORD			
39-40	420)	VOL. 46 No. 6			
1940-41	420)	P. 1			
41-42	500)				
42-43	420)				

ANNUAL REPORTS  
A. B. ZERBY

P. K. HUDSON  
AUGUST, 1975

FIG. 9  
 ETA KAPPA NU ASSOCIATION  
 CUMULATIVE GROWTH OF MEMBERSHIP  
 1904 - 1975

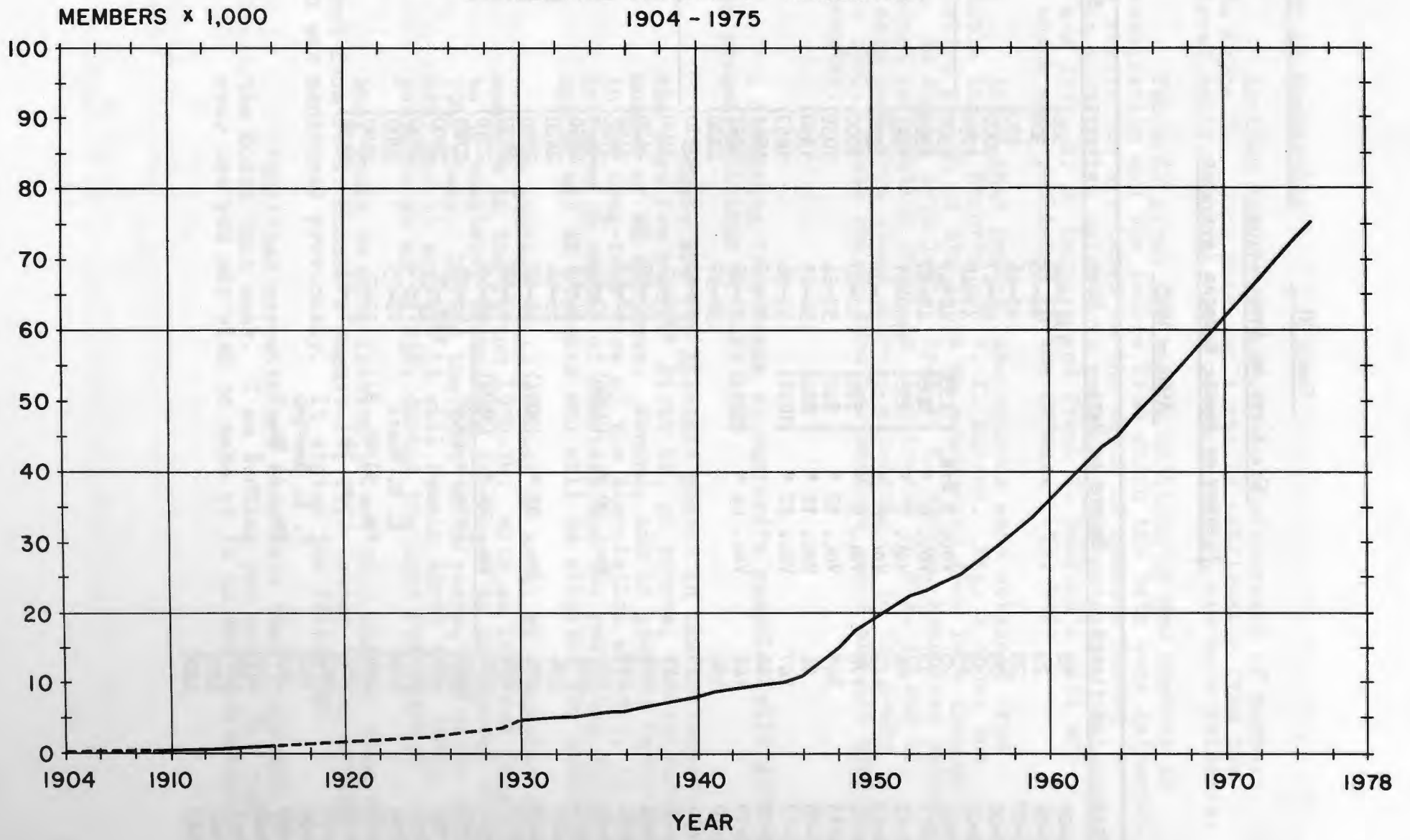


FIG. 10  
 ETA KAPPA NU ASSOCIATION  
 MEMBERS INITIATED ANNUALLY

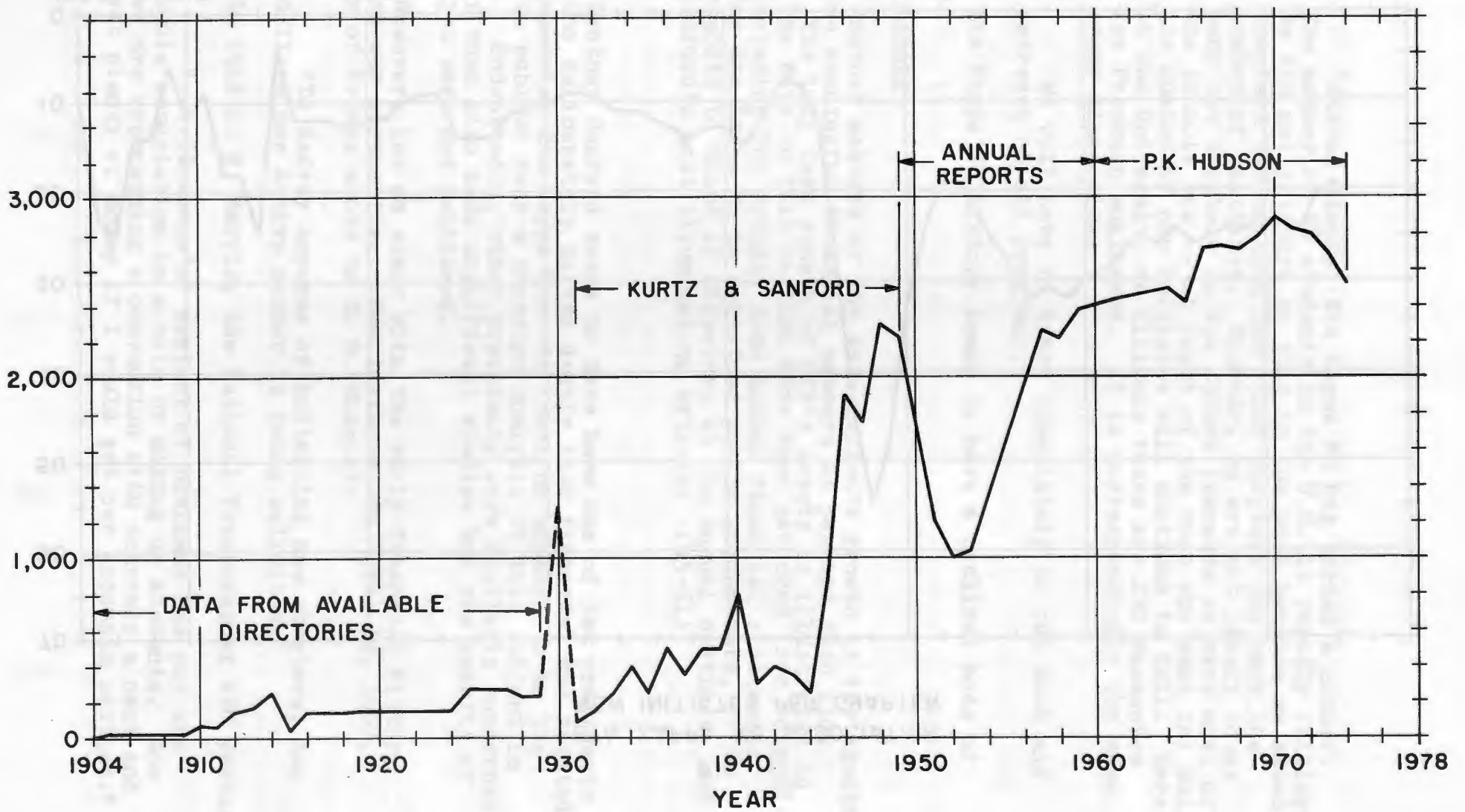
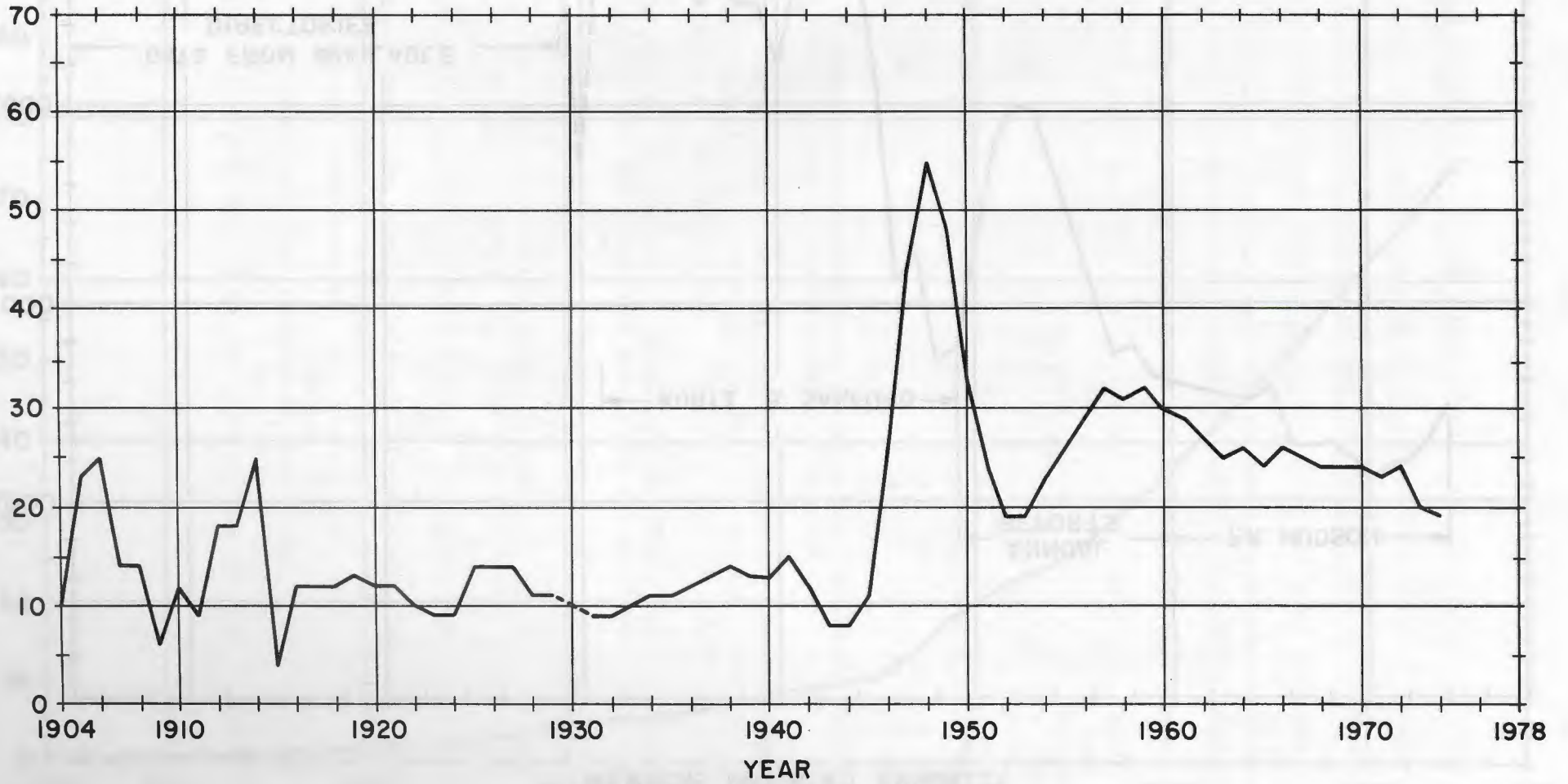


FIG. 11  
ETA KAPPA NU ASSOCIATION  
NEW INITIATES PER CHAPTER





"Stated simply, Eta Kappa Nu has turned a corner. The number of EE students in the U.S. is rapidly falling. We did not get hurt by this in the past because we added chapters faster than the other chapters cut back the number of initiates. However, we are not likely to get many new chapters in the future (because we have most of the schools now -- at least of the ones who want in) but the number of new initiates will continue to fall. Here at the University of Illinois there are 250 vacancies for Freshman engineers. It is correspondingly the same every place else.

"We will have to start immediately to cut back and retrench on all programs."

Eta Kappa Nu history seems to have a cyclical mode of operation.

### Growth of Assets

Another measure of the Association's growth is its Assets or some more meaningful financial measure as perhaps cash flow analysis. The long term growth of HKN's Assets is illustrated in Fig. 12. The data in this section have been garnered from several sources, including The Bridge, some annual financial statements prepared for Eta Kappa Nu by certified public accountants, P. K. Hudson's reports to Board of Directors at the annual meetings, and Frank E. Sanford's most illuminating article. (45-51)

Brother Sanford seems to have been one of few presidents of N.E.C. who deliberately delved deeply into financial and related matters concerning Eta Kappa Nu. At least, he appears to be the first one to publish such a thorough analysis of this subject in The Bridge. Undoubtedly, other presidents were similarly concerned and some of them also made significant studies but the results of their studies were not published.

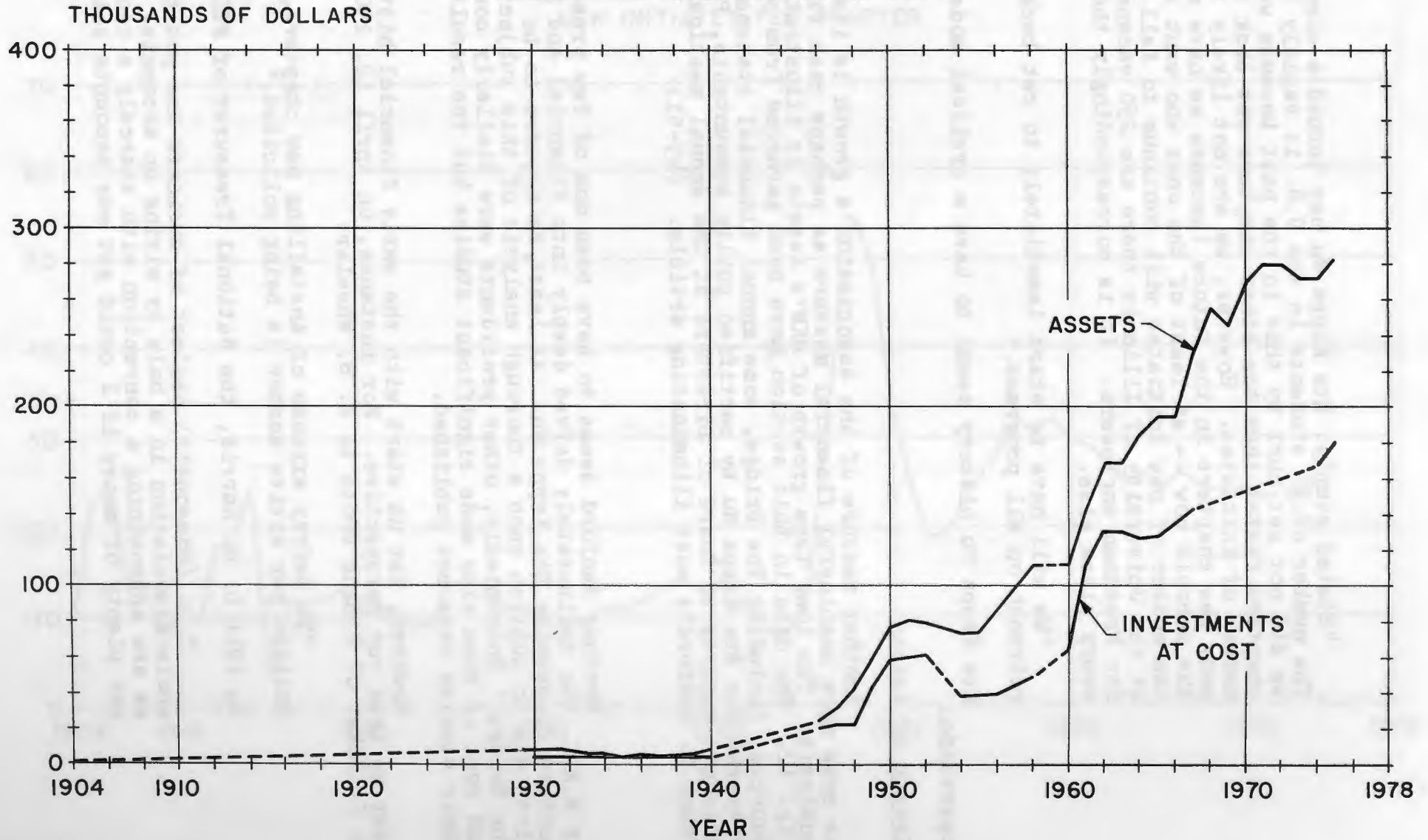
However, let us start with the early financial history lest we lose our perspective. For instance, on April 12, 1907, D. C. Faber of Urbana wrote to E. B. Wheeler:

"To defray expense of installing new chapters, two dollars per active member is being solicited."

In 1911 L. H. Harris, the National Treasurer of NEC wrote:

"....(Someone's) neglect of business has put the whole association in a hole by mixing up accounts. Now we are approaching a convention with scarcely a cent and yet plenty of money if I could get our accounts settled."

FIG. 12  
ETA KAPPA NU ASSOCIATION  
ASSETS AND INVESTMENTS AT COST



On January 9, 1912, A. H. Heitmann, Treasurer of N.E.C. wrote:

"The Cornell installation is at hand and our indebtedness as per 'Bills Payable' should be none. Our long suffering past presidents will be highly appreciative."

J. M. Strait in 1918 then wrote an amusing "Message From The Treasurer": (52)

"There is one chapter in particular that started out this year by paying off a big national deficit, then proceeded to initiate a bunch of live wires in the fall and another in the spring, all the time keeping ahead of the game by paying their dues before the treasurer had time to send a bill."

The young Association definitely had plenty of financial problems. With this background in mind, the transition to the depression decade is less of a change. Financial problems still prevailed only the numbers were larger.

Fig. 12 clearly demonstrates that the 1932-36 period was a shaky one financially speaking; but as other parts of this history show, it was most prolific in generating new ideas which constitute activities that have made HKN outstanding as an honor society. The turning point came in 1936. The main force was a group of unusually dedicated doers on the NEC and NAB who were led by Clifford A. Faust. He served as National President for two terms. His second term was in 1936-37 and he recently wrote -- previously unreported -- some highlights about it as follows:

"Number of Initiates and Revenue Rise - Addition of two more chapters (plus three in preceding two years) caused an appreciable upturn in the number of initiates and total revenue per year. Along with cost reductions, resulting from an intensive economy drive, and higher yielding investments, HKN experienced a much-needed improvement in finances. During the years when enrollments dropped sharply, our balance almost disappeared, so the modest increase was greatly appreciated. Students, too, liked the cuts in initiation fees and prices of jewelry.

"Life Subscriber Plan Grows in Popularity - Although The Bridge Life Subscriber Plan for Alumni was developed largely by this year's National Vice President, Morris Buck, and started two years ago, active promotion was begun this year and the results were better than expected. Now we are working on a life plan for student Bridge subscribers."

Definitely these were very substantial reasons for the upsurge in HKN's Assets, starting in 1936.

Incidentally, Fig. 12 also shows the rise in investments which are largely the deferred credits for student Bridge Subscribers and for Life Subscriptions of Alumni members, as well as, surplus reserves which at various times include movie, visitation, convention, employment survey, retirement, awards, emergency, pension and the A. B. Zerby death benefit. These reserves are all the responsibility of N.E.C. and the Board of Directors.

Another example of a concerned national officer who spent many hours analyzing the Association's financial situation was Larry Dwon. In 1958-59, he had an unusual challenge as President of NEC. While one reason for making the two major studies was a desire to become better informed about HKN matters, there was a strong compelling force that made this almost mandatory. The auditor's 1958 report revealed a 27% decrease in net worth of \$4691. Naturally all members of the N.E.C. Board were concerned.

This was a very difficult transition period -- A. B. Zerby retired, P. K. Hudson was a neophyte in the executive secretary position, and several concurrent transient situations occurred which are fairly completely described in Larry Dwon's annual report to the Board of Directors. (53)

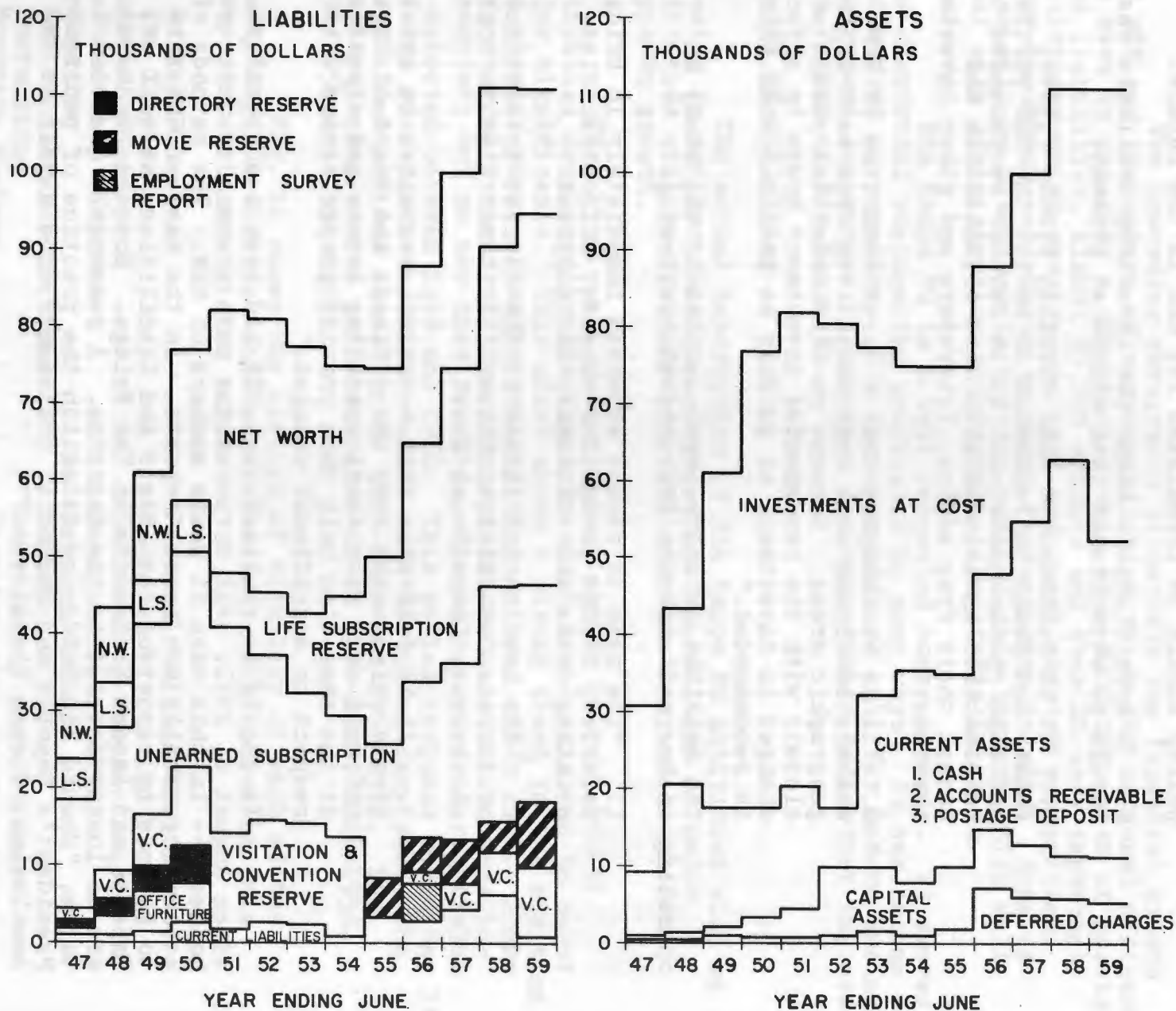
Two comprehensive reports were prepared by the President for discussion purposes at NEC and NAB meetings on February 2 and 3, 1958. Their titles were "Analysis of Cash and Investments" and "Analysis of Operating Income and Expenses", each covering a ten year period 1947-1957.

There were 20 separate charts plotting the various financial and related parameters over the ten year period so as to establish trends of the complete financial system. Fig. 13 illustrates one of these charts -- Assets and Liabilities: 1947-59. It unfolds the many aspects of the Association's financial structure.

The conclusions and recommendations of the first study included the following:

1. "Stock investments have been sound, yielding a reasonably good dividend return and could have resulted in a good appreciation if they were sold at the proper time. They still could yield a good appreciation, should be sold and other stocks purchased.
2. "Not enough HKN money has been invested in stock that would yield a greater return than the present 2-1/2 to 2-3/4 percent bank interest or the 2-1/2 to 5 percent bond interest rates.
3. "Too much of HKN's cash is in non-interest paying demand deposits.

**FIG. 13**  
**ETA KAPPA NU ASSOCIATION**  
**ASSETS AND LIABILITIES 1947 - 1959**



4. "Too much HKN cash is in low interest savings accounts or frozen in low interest government savings bonds and U.S. Treasury bonds.
5. "A less conservative and a more flexible investment policy should be formulated for HKN in the future.
6. "A more flexible means for investing available cash should be established than exists at present.
7. "It is recommended that Merrill, Lynch, Pierce, Fenner and Beane be requested to review the HKN portfolio and make recommendations. It is further recommended that we establish an account with this organization and accept their free advice, literature and other investment services.
8. "It is recommended that a large committee of HKN members be formed with representatives from each of the geographic areas. Someone on this committee should work closely with the recommended investment house to effect changes in investment as quickly as possible when this is recommended."

The conclusions and recommendations of the study on operating income and expenses included the following:

1. "The need to reduce expenses immediately in Bridge salaries, Bridge production expense, office salaries, printing costs and stationery and supplies.
2. "The need to add income if HKN desires to continue or increase useful activities. Is it not time to consider an increase in national dues?
3. "It is desirable that a control mechanism be established which would keep the officers and Board of Directors informed each year about operating income and expenses and at the same time help them provide proper action with respect to significant changes."

It should be realized that HKN had been a corporation since August 6, 1951. All corporations must account to their stockholders -- in this case it means members of HKN. The methods of accounting usually are annual reports. In the case of HKN this used to be done by reporting the Assets and Liabilities, as well as, the Expense and Income Statements in The Bridge. However, such reports are no longer carried in the magazine. A reasonable question seems to be, "Should The Bridge re-establish the practice of publishing President's Reports and Financial Statements once a year at the conclusion of each fiscal year?"

In 1971, A. F. Gabrielle suggested a form of Financial Analysis which shows how income flows to various expenses, deferred charges cash accounts and reserves. Fig. 14 is both interesting and very informative. It is, therefore, included as a historic suggestion by a still active past national president.

The preceding paragraphs illustrate the financial growth of HKN and the nature of responsibilities which HKN national officers do have in managing a corporation with over \$300,000 worth of assets and liabilities, almost 75,000 members and over 20 very important activities which receive national and local chapter recognition. Many questions pertaining to these factors come to mind. Some of them will be discussed in another part of this history which will deal with Administration and Organization of Eta Kappa Nu.

Eta Kappa Nu is a well respected honor society. It serves the electrical engineering profession in many ways. It has become a fair sized corporation. Its business affairs call for modern business management techniques. This is a new opportunity to further improve the future of Eta Kappa Nu.

#### Growth of Activities

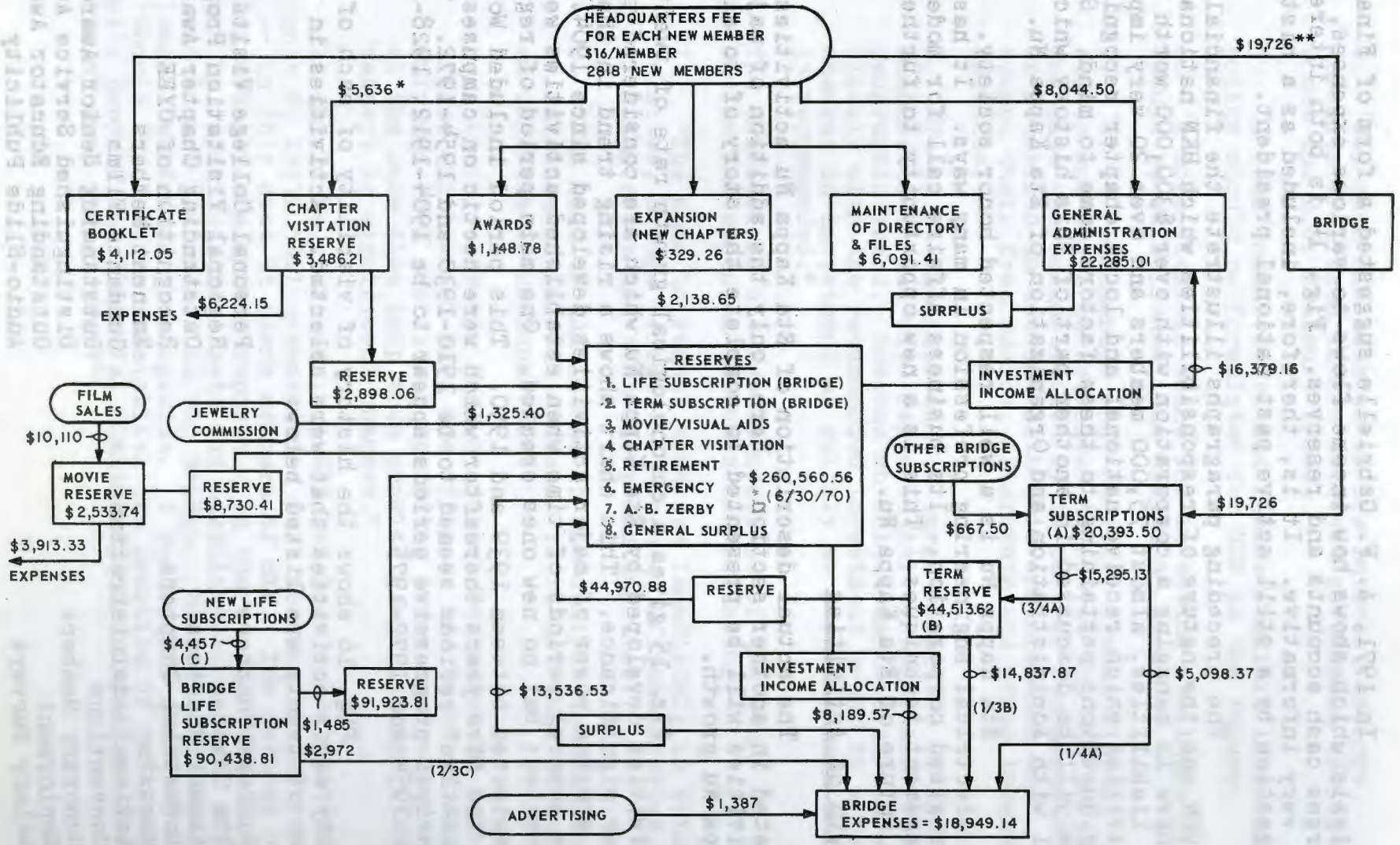
The actual description of Eta Kappa Nu activities will be treated in another section. Here, only the addition of major activities will be presented to complete the story of total Eta Kappa Nu growth.

Fig. 15 gives a chronological growth rate of twenty activities developed by Eta Kappa Nu which are considered to be of major significance. This chart shows a rising trend in the addition and staying power of major activities developed since 1904. There were several periods of time when established activities were implemented; but no new ones created. One main period of regression is detected between 1939 and 1950. This period included World War II and the five years thereafter which were hectic on campuses. The "mark-time" periods seemed to be 1910-1930 and 1954-1972. The principal progressive periods appear to be 1904-1912, 1928-1938, 1950-1954 and 1972-1975.

Fig. 16 shows the history of viability of each of the twenty major activities that were selected. Activities in this group of twenty are listed below:

College Chapters	Personal College Visits
Eta Chapter	Regional Visitation Program
Alumni Chapters	Outstanding Chapter Award
Industrial Chapters	Recognition of OYEE
Magazine	Eminent Members
National Administration	Guidance Films
Conventions	Outstanding Senior Award
Honorary Members	Distinguished Service Award
Employment	Outstanding Educator Award
Salary Surveys	Audio-Slide Publicity

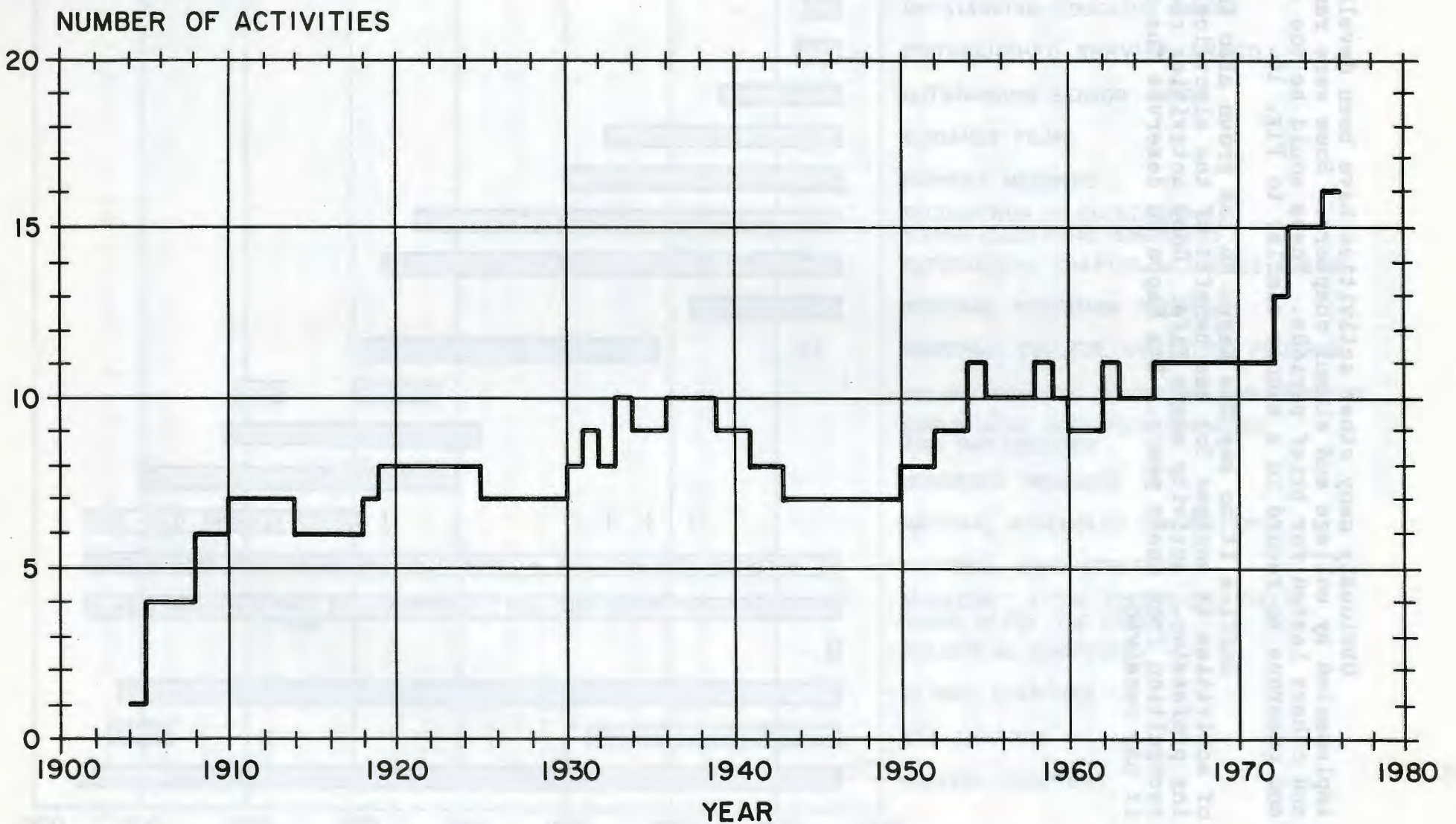
FIGURE 14  
FINANCIAL ANALYSIS OF ETA KAPPA NU  
FISCAL YEAR ENDED 6/30/70



\* FIXED BY CONSTITUTION @ \$2/MEMBER  
\*\* FIXED BY CONSTITUTION @ \$7/MEMBER

A F Gabrielle

FIG. 15  
ETA KAPPA NU ASSOCIATION  
NUMBER OF MAJOR ACTIVITIES

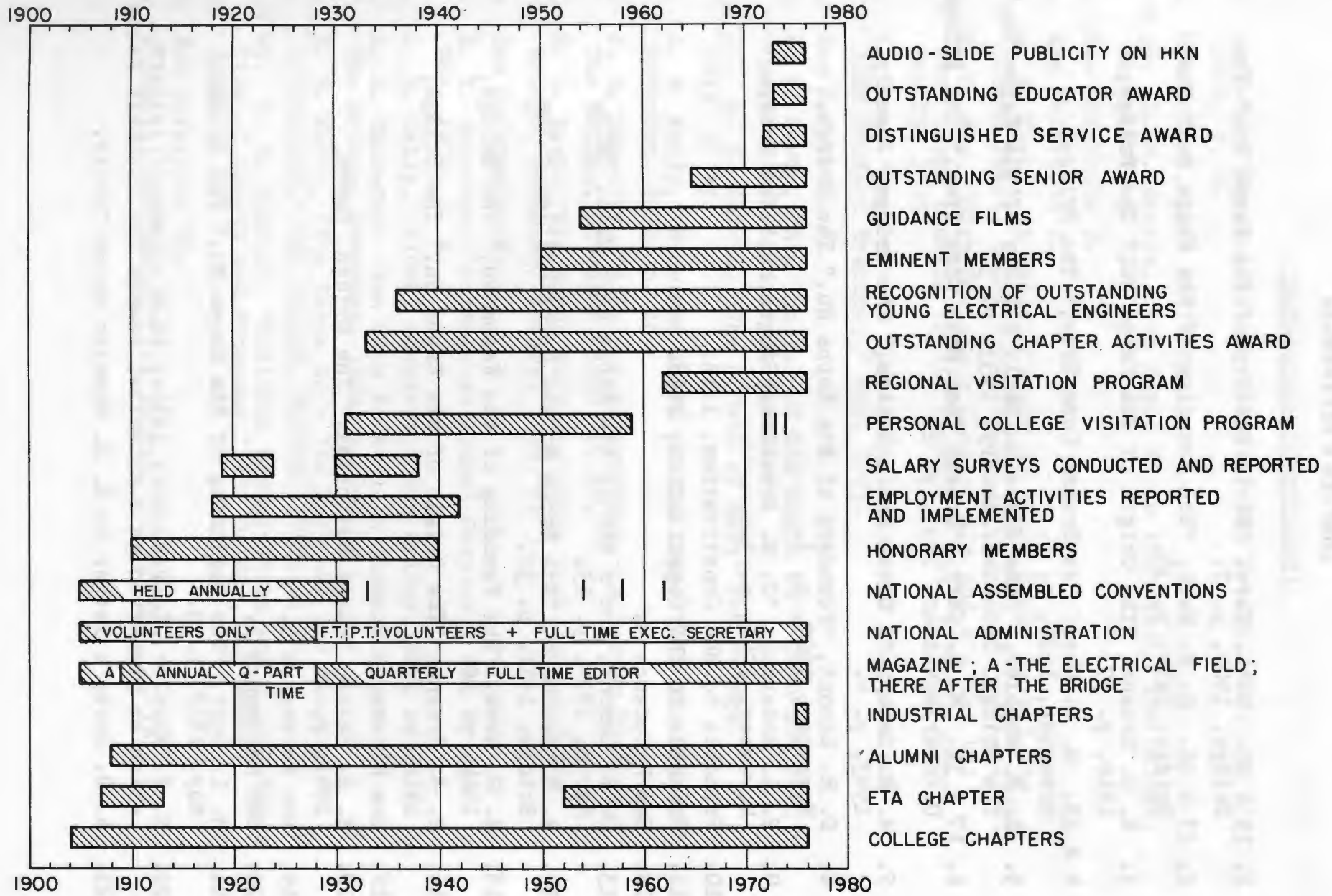


Obviously many other activities have been developed and implemented by college and alumni chapters. Some were random spurts and others lasted for brief periods. These would be too complicated and numerous to record in a manner similar to Fig. 16.

Suffice it to say Eta Kappa Nu has grown also in the kinds of activities it engages for the benefit of the electrical engineering profession. Activity means life. Good activities receive recognition from one's peers. Eta Kappa Nu deserves the recognition it has received.



FIG. 16  
ETA KAPPA NU ASSOCIATION'S ACTIVITIES



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Chapter III  
CONVENTIONS  
PRESIDENTS' REPORTS  
and  
CONSTITUTION

CONVENTIONS and PRESIDENTS' REPORTS

Background

The National Convention was created as the supreme legislative body of Eta Kappa Nu. The National Executive Council was given the responsibility to administer the national needs of the Association by implementing the articles and statutes of its Constitution.

In his 1909 article, brother M. L. Carr expressed the above concepts as follows: (1)\*

"Before bidding their Alma Mater goodbye, the founders created the National Executive Council by electing three of their number to the offices. The idea was to have the organization largely under the control of the graduate members and the parent chapter was given no more voice in the control of affairs than any other chapter ...."

As a consequence of the foregoing, national HKN business has been conducted by national conventions -- at first, in the assembled mode; but after 1933 mostly via mail conventions. Correspondence, telephone conversations, meetings of members of the National Executive Council, the National Advisory Board and the Board of Directors are other means by which the affairs of the organization have been conducted.

The Bridge carries many accounts of HKN conventions which were written by various officers of the Association. The minutes of conventions contain additional information. To do justice to all of it would entail a voluminous document. Therefore, only selected brief excerpts of some Presidents' reports will be included herein. The convention dates and presiding officers are listed in Table XII.

\*Numbers in this chapter apply to references listed on pages 150, 151, 152 and 153.

TABLE XII

## ETA KAPPA NU ASSOCIATION

## NATIONAL ASSEMBLED CONVENTIONS

Conv. No.	DATE			PLACE		PRESIDING OFFICER	HIGHLIGHTS
	Mo.	DAY	YEAR	CITY	STATE		
1			1905	URBANA	ILL.	M. L. CARR	
2			1906			E. B. WHEELER	
3			1907			C. E. ARMSTRONG	C. E. A. RESIGNED
4	5		1908	CHICAGO	ILL.	M. L. CARR	
5	5	24	1909	COLUMBUS	O.	A. F. MCKEE	
6	3	26	1910	PITTSBURGH	PA.	B. T. ANDERSON	
7	4	1	1911	CHICAGO	ILL.	C. T. EVANS	
8	4	6	1912	CLEVELAND	O.	B. T. ANDERSON	
9	4	11 & 12	1913	MADISON	WISC.	L. H. HARRIS	ORIGINAL CONSTITUTION REVISED
10	5	8 & 9	1914	STATE COLLEGE	PA.	A. H. HEITMANN	
11	4	16 & 17	1915	LAFAYETTE	IND.	A. B. ZERBY	
12	4	21 & 22	1916	CLEVELAND	O.	R. H. WEBB	
13	3	16 & 17	1917	CHAMPAIGN	ILL.	B. E. MILLER	NEW CONSTITUTION ADOPTED
14			1918			H. S. COCKLIN	CONVENTION CANCELLED
15	3	28 & 29	1919	CHICAGO	ILL.	F. A. COFFIN	
16	4	16 & 17	1920	COLUMBUS	O.	P. MACGILVARY	
17	4	8 & 9	1921	ITHACA	N. Y.	B. T. ANDERSON	
18	4	7 & 8	1922	PHILADELPHIA	PA.	J. M. SPANGLER	
19	4	6 & 7	1923	MADISON	WISC.	D. G. EVANS	
20	10	24 & 25	1924	URBANA	ILL.	G. P. SAWYER	
21	11	6 & 7	1925	WEST LAFAYETTE	IND.	A. A. HOFGREN	
22	11	6	1926	COLUMBIA	MO.	F. E. BROOKS	
23	11	11 & 12	1927	CINCINNATI	O.	F. E. BROOKS	
24	11	2 & 3	1928	MINNEAPOLIS	MINN.	E. S. LEE	
25	11	7, 8 & 9	1929	URBANA	ILL.	J. W. WEIGT	
26	11	14 & 15	1930	AMES	IOWA	M. S. MASON	
27	10	30 & 31	1931	ITHACA	N. Y.	G. H. KELLEY	
28	10	20 & 21	1932 1933	CHICAGO	ILL.	J. M. NEWMAN	VISITATIONS IN PLACE OF CONVENTION FIRST BIENNIAL MANY CHANGES; ANNUAL CONVENTIONS ABOLISHED 50TH ANNIVERSARY
29	10	15 & 16	1954	URBANA	ILL.	J. E. HOBSON	
30	10	9 & 10	1959	LINCOLN	NEB.	A. NAETER	
31	11	16 & 17	1962	CHICAGO	ILL.	J. A. M. LYON	

Table XIII includes pertinent information about the assembled conventions. In it, the principal emphasis is on the more important subjects which were discussed. However, it also includes references to additional details.

Selected accounts and quotations that follow have historical value, because they highlight the flavor and the trend in discussions at assembled conventions.

### Assembled Conventions

The 1905-1933 era is when Eta Kappa Nu held annual assembled conventions regularly and one biennial convention. After that no assembled conventions were held until 1954, which was a special 50th Anniversary Meeting. It was followed by just two others in 1959 and 1962.

1905-1906 The first convention was held in the spring of the 1905-1906 school year with M. L. Carr presiding as president. E. B. Wheeler was the secretary; and C. E. Armstrong was Treasurer. No annual report by the President has been found. However, "That First Banquet" was described thusly: (2)

"It's only a memory out of the past, the program of the first annual banquet ever held in Eta Kappa Nu; but it carries one back to those days when the founders met and discussed both fraternity problems and problems of technical interest.

"It bears the date of April 21, 1906 ....Twenty-six men in all, including the classes of 1905, 1906 and 1907 recorded their signatures...."

The following members attended:

Professor Morgan Brooks	F. D. Smith
M. K. Akers	J. W. Bard
S. H. Grauten	D. H. Cornell
R. O. Friend	W. S. Burnett
L. V. James	W. A. Rush
H. F. Hake	L. F. Wooster
F. W. Padfield	C. E. Armstrong
G. A. Williams	R. N. Fargo
T. F. Dodd	L. Garrison
G. W. Saathoff	W. K. Stacy
W. C. Maddox	T. H. Amrine
C. C. Carr	H. J. Weaver
H. G. Bergett	M. L. Carr

Several toasts were given based on clever quotations from classical writers. T. H. Amrine's quotation entitled "Wattless Current" illustrates the tone of that first banquet, "And still they gazed, and still the wonder grew, that one small head should carry all he knew" -- Goldsmith.

**TABLE XIII**  
**ETA KAPPA NU ASSOCIATION**  
**NATIONAL ASSEMBLED CONVENTION SUBJECTS**

SUBJECTS DISCUSSED	CONVENTION NUMBER																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	50	55	58	
CHAPTERS REPRESENTED: COLLEGE ALUMNI	1	1	1	1	2	4	6	8	10		11	11	*	7		14	16	16	18	19		21				23	23	22	58	65		
TOTAL ATTENDANCE	-	-	-	4	5	14	2	1	2	27	19		3	4	*	3		39	27	29	31	43		23		100	35	35	33	67	150	
PUBLICATION	x	x	x	x	x	x	x	x	x	x		x			x		x	x	x	x	x		x	x	x	x	x	x	x	x		
FINANCIAL MATTERS	x	x	x	x	x	x	x	x	x	x		x		x		x		x	x	x	x		x	x	x	x	x	x	x	x		
CONSTITUTION	x		x			x		x	x	x		x					x	x	x	x	x		x			x	x					
CHAPTERS, EXTENSIONS, ACTIVITIES	x	x	x	x	x	x	x	x	x	x		x	x		x		x	x	x	x	x		x	x	x	x	x					
HONORARY, EMINENT MEMBERS	x					x		x	x	x								x														
N.E.C. COMPOSITION	x					x		x	x	x			x				x															
CHARTER, EMBLEM, JEWELRY, ETC.	x				x	x	x	x	x		x	x	x				x		x	x				x	x							
EMPLOYMENT						x			x									x	x	x	x							x				
MEMBERSHIP	x					x		x	x	x		x	x				x									x	x					
RITUAL	x							x	x			x	x				x	x	x	x						x						
REMUNERATIONS									x									x														
CENSUS CARD										x								x														
SCHOLARSHIP CRITERIA											x							x	x	x	x											
PERSONAL/REGIONAL VISITATIONS													x					x												x	x	
ACCOUNTING SYSTEM													x	x				x							x			x				
SALARY SURVEY													x					x									x	x	x			
CHAPTER ADVISORS																			x													
CHAPTER AWARD																				x	x											
HANDBOOKS, MANUAL, ETC.																				x	x											
CHAPTER BY-LAWS																				x	x							x				
LIFE SUBSCRIPTION-BRIDGE																					x	x										
PUBLICITY																						x										
HKN RE-ORGANIZATION																							x									
EXECUTIVE SECRETARY																							x									
BOARD: NAB & DIRECTORS																							x									
CONVENTIONS																									x			x	x	x		
FILMS																																
REFERENCES **	#	#	#		76	3,	77	78,	7,	79,	10,	11	13		15,16	19	20	21,	23,	25		26,	28	30,31	34,	39,	41	42,	44,	46		
					4		5	8	9	80					17,18			22	24			27	27	32,33	36	40		43	45			

\*NO CONVENTION HELD

\*\*NUMBERS ARE REFERENCES IN BIBLIOGRAPHY

#WHEELER'S FILE OF LETTERS

The second annual banquet was held also at The Beardsley, Champaign, Illinois, on April 20, 1907.

1909-1910 B. T. Anderson was most unique in this era. He served as President of Eta Kappa Nu three different times -- 1909-'10, 1911-'12 and 1920-'21. This first occasion was due to Brother C. C. Carr's need to resign because he was transferred to Antwerp, Belgium. Brother Anderson wrote that the sixth convention, held March 26, 1910, was a record breaking one for attendance, for the amount of business transacted and for the good fellowship that prevailed. Other convention reports were recorded. (3, 4)

1911-1912 At the eighth convention, B. T. Anderson spoke about the remarkable growth of Eta Kappa Nu. He said that the future growth would depend largely on the efforts of all members. He then appointed the following committee "to assist the entire membership of Eta Kappa Nu:" (5, 6)

M. L. Carr (Chairman) - Underwriters, Chicago  
C. T. Evans - Cutler Hammer Co., Milwaukee  
E. B. Wheeler - Western Electric Co., New York City  
L. H. Harris - University of Pittsburgh, Pittsburgh  
F. H. Bagley - Union Switch & Signal Co., Pittsburgh  
T. H. Amrine - Westinghouse Lamp Co., East Orange, N. J.

It was at this convention that the alumni chapter indebtedness was wiped out and further alumni assessments were discontinued.

1912-1913 At the ninth convention, L. H. Harris remarked thusly to the participants: (7)

"In magnitude and importance, the work before this convention probably exceeds that which any convention has faced up to this time, if we except the first one."

He then proposed that a new constitution be drawn.

A. B. Zerby reported the 9th convention as follows: (8)

"The time consumed in acceptance of the revision (constitution) is certainly an indication of the Convention's belief that this matter is settled for all time."

Famous last words which will be proven wrong many times in the unfolding history of HKN.

The principal changes which were made are the following:

- a) More clearly defining the ideas as set forth in the original constitution.
- b) Describing more specifically the powers of the chapters.
- c) Change in the classes of the membership, making plain the qualifications of each class.

At this convention, also, M. L. Carr reported on the Employment Bureau concept which was then held for further action. Other members of his committee were those listed previously.

1913-1914 Brother A. H. Heitmann was in the thick of the scholarship discussion which became a serious issue in 1914. His article, "The Scholarship Standard" described the problem and solution. He wrote: (9)

"....Our old methods of selecting pledges received abuse, the natural result of undefined standards. Therefore, definite standards have been adopted."

1914-1915 A. B. Zerby presided at the 11th Convention when there were 10 active and six alumni chapters. A. B. Zerby reported that the NEC thought it best not to install any active chapters; because ten chapters placed the Association in such a position that it could wait for prospective chapters to come to it. (10)

1915-1916 H. S. Greene presided at the 12th Convention and presented a well received talk. In it he spoke of scholarship as meaning a great deal to the outside world. This was not so much because of what a person actually learned and remembered; but because it represented an ability to closely apply oneself, which is what is necessary in business. He believed hard work accounted for 95% of the successes in business. (11)

He went on to give the following interesting advice to the participants of the convention:

1. Stay away from booze.
2. Work hard.
3. Do anything you are told to do by your proper supervisor.
4. Work well with people.
5. Don't worry about your salary, increases will come.
6. Join outside organizations.
7. Don't overlook a small company.
8. Use your best judgement.

He ended with two quotations one of which was "You are if you are." Brother L. H. Harris, secretary of NEC also reported about this convention. (12)

1916-1917 B. E. Miller wrote about the 13th Annual Convention as follows: (13)

"In the first place it was the largest delegation that Eta Kappa Nu has ever had at a Convention....The Chicago Alumni Chapter is....revising all of our rituals ....Plans....to establish more Alumni Chapters. Consideration is being given to a Quarterly publication of The Bridge....and a National Employment and Information Bureau."

This was a busy convention at least as far as statute changes are concerned. There were 12 statutes adopted and two were defeated. Among the latter was a proposal to limit membership to members of the white race. Bro. Henry S. Cocklin wrote to the author on December 4, 1975, "It would be nice if Bro. Harris were given the credit for successfully opposing this item. His tactful determination was the deciding factor."

1917-1918 H. S. Cocklin reviewed, in retrospect, his term of office which was unique because it did not include an assembled convention. He wrote: (14)

"Two constitutional amendments were designed to assist in co-ordinating our active chapters...."

In his term of office, Brother Cocklin made several recommendations towards improving the Association as follows:

- a) More frequent publication of The Bridge.
- b) More Alumni Chapters needed.
- c) Reorganization of Council desirable.
- d) The Vice-President to be Bridge Editor.
- e) Paid Secretary-Treasurer needed.
- f) Bridge Editor should be compensated.
- g) Employment Bureau should be pushed.
- h) Standardized accounting system for chapters needed.

Brother Cocklin's big disappointment was the cancellation of the National Convention due to the war. The N.E.C. wasn't able to meet either.

1918-1919 F. A. Coffin presided over the 15th National Convention which he opened by stating: (15)

"We have passed the most difficult two years in the history of Eta Kappa Nu...."

A. B. Zerby, secretary to N.E.C., also remarked that:

"Second only to the 1913 National Convention, at which an entirely new constitution was adopted, the 1919 convention led them all."

The National Convention discussed a possible headquarters office with a paid Secretary-Treasurer similar to AIEE. Other decisions at the National Convention were: (16, 17, 18)

- a) The Bridge to be a quarterly beginning Fall, 1919.
- b) Subscription price to be \$2.00 per year with 50 cents going to NEC for Alumni activities.



- c) Bridge subscription to be collected from initiates for the college years plus two years beyond.
- d) Employment Bureau to be considered.
- e) NEC to be increased from 4-6 members -- President, 1st Vice-President, 2nd Vice-President, Secretary, Treasurer and Bridge Editor.

1920-1921 B. T. Anderson, now in his third term as President of Eta Kappa Nu, reported to the 17th National Convention as follows: (19)

"Since the last convention the elected officers for this year, Brothers Paton MacGilvary, President and F. T. Bangs, First Vice-President, found it advisable to resign and the remaining officers of the NEC appointed Brother J. M. Spangler, First Vice-President and the writer as President for the unexpired terms....the alumni interest is better....the active chapters are in a healthy condition....Four issues of The Bridge have been published since the last convention."

The Treasurer reported that the Association's Net Assets were \$645.99 and \$698.54, respectively as of April 1, 1920 and 1921. The Bridge Editor reported that were it not for Brother F. E. Brook's efforts in shouldering a large part of the burden, the job could not have been accomplished. The National Convention enacted a \$250 per annum honorarium plus 15% of solicited advertising income to The Bridge editor.

1921-1922 J. M. Spangler presided at the 18th National Convention. He opened the meeting by remarking as follows: (20)

"Now, this convention has been brought together at a considerable cost....get the most benefit by getting on your feet and fight things out."

Very general reports followed by the officers. The Treasurer reported the net assets as \$219.22 compared to \$698.54 the same time last year. The Bridge account showed a net credit of \$2,039.27 as of April 1, 1922. Investments were reported for about half of the extra cash on hand.

Chapters reported their initiation fee charges as follows:

Chapters	Fee (\$)	
1	15	
2	16	
2	20)	Not including price
1	22)	of emblem
7	25	
3	26	

Again many resolutions were enacted on such subjects as Ritual, Employment, The Bridge and Scholarship.

1922-1923 President D. G. Evans presided at the National Convention. His main topic of discussion was alumni chapter activities and the need for more active alumni. He also talked about the combined role of scholarship and other good attributes as measures of a good HKN member. He described Eta Kappa Nu as an honorary-professional Association. (21)

The Treasurer reported the assets as being \$3,670.24 with investments at \$1,765.86 and cash on hand at \$1,051.75.

The committee on Coat-of-Arms, (H. S. Cocklin, Chairman; G. W. Anderson; C. P. Hancock) reported that a Coat-of-Arms must have a proper blend of, 1) Ritualistic Value, 2) Technical Value, and, 3) Artistic Value. One designed by H. S. Cocklin; first, in accordance with the Science of Heraldry, another using the expertise of the fraternity jeweler; and, finally resorting to engineering judgement and the knowledge of what the Association represented, the present version was adopted by the Convention. (22)

1923-1924 President G. P. Sawyer presided at the 20th Convention. The Past President's report was read by Brother Sawyer. From it, the following excerpts are of interest: (23, 24)

"When we think of progress we naturally think of expansion; and, the fact that no new chapters have been added might raise a question. As a matter of fact, this absence of new chapters is to some extent a mark of progress. We have had the usual number of petitions for charters."

He went on to explain that small chapters would have resulted with some doubt of success. Credit was extended to J. W. Weigt -- The Bridge editor -- for a splendid job these past three years. The Treasurer's report showed the assets to be \$5,093.29 and investments at cost were \$4,177.55.

A great amount of time was taken up in discussing an Employment Bureau at this convention.

1924-1925 A. A. Hofgren presided at the meeting of the 21st Convention. Highlights of the meeting appear to be: (25)

1. Union College petition approved.
2. Delegate to ACHS was named.
3. Proposed changes in the wording of the Constitution.
4. Report of scholarship requirements resulted in a conclusion that there should be no definite standard of scholarship.

5. A proposed guidance pamphlet was turned down as being the province of the Society for Promotion of Engineering Education.

1927-1928 F. E. Brooks presided at the 23rd National Convention. Under old business, the committee on Reorganization (J. W. Weigt, Chairman; D. G. Evans, M. C. Hale) reported that a business manager should take over duties of secretary, assistant secretary, treasurer and Bridge editor. NEC should have 3 officers instead of 7. A National Advisory Board (NAB) should be established. The report was adopted and the secretary was authorized to rewrite the Constitution. (26)

Under the new organization the N.E.C. consisted of the President, Vice-President and Executive Secretary. An NAB consisting of 5 members was also provided. Two members were to be the last two living ex-Presidents. The remaining three members would be alumni members elected annually by the National Convention. The N.A.B. was given judiciary powers and the power to remove members of N.E.C. for cause, and to appoint new members for the unexpired term. (27)

1928-1929 E. S. Lee presided at the 24th National Convention. There was very little old business. One committee was appointed to study the insignia. President Lee reported that there now were 22 chapters and 3800 members (300 active). The Bridge was just paying for itself and J. A. Umhoefer was chosen from among 5 candidates to be the first Executive Secretary. HKN records were transferred from A. B. Zerby in Pittsburgh to J. W. Weigt in Great Neck, L. I. and from D. G. Evans in Racine, Wisc. to Riverhead, L. I. Lee suggested that education and industry were the two areas in which HKN could become especially useful. (28, 29)

Under new business there were some slight changes needed to the Constitution, undergraduate initiation fees were discussed, district and Biennial Conventions were discussed; and a modification of the accounting system was proposed.

1929-1930 J. W. Weigt presided at the 25th Annual Convention. He also delivered the address for the presentation of the HKN memorial to Illinois University. Professor Morgan Brooks spoke on behalf of the University. Masters Maurice and Richard Carr, the founder's sons unveiled the memorial and M. L. Carr brought the ceremonies to an end. (30)

J. A. Umhoefer wrote of the 25th Anniversary in the following manner: (31)

"One of the most interesting points in the history of the Association is its gradual evolution from an obviously professional fraternity at the time of its founding to the position of an honorary fraternity which it now holds."

The more important convention decisions were the following: (32)

- 1) Another salary survey of its membership was authorized.
- 2) Next Convention to be at Iowa State.
- 3) Further limitations were placed on the number of Juniors to be initiated by any chapter was tabled until the next convention.
- 4) Proposal to initiate electrochemical engineers at Penn State was rejected.
- 5) G. H. Kelley was elected Vice President.

1930-1931 M. S. Mason, President of NEC, wrote that during 1929-30 academic year 300 initiates were added making the total 4382 since 1905. The alumni chapters were showing signs of good activities and The Bridge published six issues in the year. (33)

He presided at the 26th Convention. Two important measures received the attention of the delegates: (34, 35, 36, 37)

- 1) A measure to limit still further the number of initiates.
- 2) A proposal to adopt biennial conventions.

Several observers of conventions felt that they were inefficient and failed to provide proper contacts between chapters and the officers. Also, conventions cost more each year constituting a serious drain on fraternity finances. The vote was 47 to 17, failing to receive the required three-fourths majority stipulated by the constitution. Visitations were also discussed. The Treasurer reported assets at \$9491.96 and investments at cost to be \$4843.80. (38)

1931-1932 The 27th National Convention was an important and busy one. G. H. Kelley, President of NEC presided. He introduced subjects of employment, biennial conventions, finances, active and alumni chapter growth, standardized chapter by-laws. (39)

J. A. Umhoefer completed his 3-year term as executive secretary and resigned. This action led to a suggestion by Chicago Alumni Chapter which was called the "Commission Plan," to be discussed later. Brother Umhoefer pointed out the major problems facing HKN were the financial losses due to conventions and the high assessments for new initiates. The latter prevented some desirable men from accepting membership. He also pointed out the apparent lack of cohesion between chapters and the unity of purpose that should characterize a good fraternity. He criticized the accounting system, also. J. A. Umhoefer urged the adoption of a biennial convention.

President Kelley reported the following economies taken during the year: (40)

- 1) Moved Executive Secretary's office from New York to Chicago.
- 2) Reduced Executive Secretary's salary from \$2400 to \$2200 per annum.
- 3) Eliminated office rent expense by including an allowance in the reduced Executive Secretary's salary.
- 4) Reduced printing costs of The Bridge.

He also recommended L. A. Spangler as Executive Secretary for a term to be determined by the National Convention. The Treasurer reported assets at \$8,835.23 and investments at cost to be \$4,843.80.

Whereupon the Chicago Alumni Chapter, believing that the Executive Secretary Plan (Full-Time Services) was not the best, because a man having the experience, ability and aggressiveness needed cannot be obtained at a salary such as HKN is paying, proposed its Commission Plan of running Eta Kappa Nu. In summary the plan was as follows:

- 1) One man who has the qualifications, time, facilities, and willingness to carry on this work, in addition to his regular vocation, shall be vested with the title of executive-secretary and direct the activities of the office, but
- 2) This man shall consult and be advised by five commissioners (the five who signed the proposal) in addition to reporting directly to the Vice President of the N.E.C. as directed by the Constitution.
- 3) The Executive Secretary would receive \$2200 and no extra expense (a saving of \$440 per year) with the understanding that any losses on account of The Bridge shall be deducted from his salary.
- 4) In case The Bridge shows a profit, a profit sharing plan shall be given the Executive Secretary as an incentive.

However, the New York Alumni Chapter opposed this plan with the following summarized reasons:

1. The present plan was a success -- at least as far as could be expected under the present circumstances.

2. The Commission Plan makes a large issue of the annual deficit. A careful study shows that the increasing losses are due to a sharp decrease in the number of initiates and to the fact that the Convention assessments levied do not pay the Conventions' costs. Any effort at corrections should be directed at Conventions -- the place of actual loss.
3. Careful audit shows that now The Bridge is self-sustaining and shows that the secretarial end now earns a profit.
4. The Commission Plan is simply a method of reverting back to previous methods and the plan is found wanting because a man in vocation could not devote the necessary time to the avocation.
5. The Commission Plan is an experiment while the existing full-time plan has been tried out and found successful.
6. The full time plan can be continued and the deficit made up as follows:
  - a) Lower salaries -- HKN men out of work would welcome this office.
  - b) Reduce costs of Bridge.
  - c) Biennial Conventions.

Much discussion prevailed. The outcome was to maintain the system with L. A. Spangler as a part-time Executive Secretary. The biennial convention was agreed on and a chapter visitation plan instituted in the alternate year.

1933-1934 President J. M. Newman presided at the first biennial National Convention. The more important excerpts from his report follow: (41)

"I believe the report of the finances will show the success of this plan (biennial) from a financial standpoint....The convention performs very definite functions....The visitation plan eliminates most of the business but does, to a certain extent, provide interchange of ideas....I see no reason why the visitation plan should not be continued and considered an entire success on the basis of the past two years.... Certainly any vital business can be conducted by the "paper" convention and other business can easily be handled by the biennial convention."

R. I. Wilkinson called for a long range policy for Eta Kappa Nu, which he suggested was a good task for NAB and NEC. He believed more alumni would participate if some worthwhile projects were to be devised.

The report of finances showed the following savings in 1933 over 1931: The Bridge (\$853.46); NEC expenses (\$487.85); Salary (\$562.06). The cost of visits to 22 chapters was \$553.50 compared to \$2,871.47 and \$3,123.00 for the 1931 and 1930 conventions, respectively.

The most important act of this convention was passed unanimously; and it abolished assembled Conventions as a rule. Most of the national business hereafter was to be transacted by Annual Mail Conventions. This action began in 1934.

1954-1955 The next assembled convention was held October 7-8-9, 1954 as the 50th Anniversary Convention of HKN. President J. E. Hobson presided.

Illustrative of the progress made are the following data:

	Convention	
	25th 1929	50th 1954
College Chapters	22	56 + 3 Eta
Alumni Chapters	10	12
Membership	4000	23,051
Initiates/year	250	2310 (1948-49)
" "		975 (1952-53)
" "		1039 (1953-54)

This was a busy convention with E. S. Lee dedicating a relocated boulder -- plaque commemorating the founding of Eta Kappa Nu, and many other such festivities. A. B. Zerby was honored with an Album of Testimonial Letters and a Certificate of Merit. Eminent members were also elected. (42, 43)

There were business matters taken care of at this convention, as well. One of the more important subjects concerned some basic changes in the Constitution. A summary follows:

1. Permission to allow the N.E.C. to shorten the term of a new Executive Secretary or one near or over the normal retirement age of 65 from three to any shorter interval of time.
2. Authorization to split the Executive Secretary and Bridge Editor jobs into two separate jobs.
3. A \$150 per month pension for Brother A. B. Zerby upon retirement.

Subsequent to the convention five of seven NAB members requested that the ratification ballot for the foregoing be withheld until after the NEC-NAB meeting on January 30, 1955. The general thought was that the proposed amendments were drawn in haste, were ambiguous in their entirety, and at the meeting mentioned they could be clarified. However, a statute was passed to provide the retirement pension. This subject was discussed very thoroughly by many active members of HKN in the weeks that followed the convention.

The New York Alumni Advisory Council comprised of 30 past national officers in residence in the area, and all past presidents and officers, at the time, of the New York Alumni Chapter opposed the first two changes and were in agreement with the latter one. Their reasons were the following:

1. An open-ended term of office (up to three years) would not be an attraction to a new man, and was an unfair threat to the security of a faithful employee like Brother Zerby.
2. A split of these jobs -- so long integrated -- would create serious problems of coordination (as proven a few years later).

The proposal to have a part-time Executive Secretary and Bridge Editor was tried for a period of a few years in the early thirties and discarded as being unsatisfactory.

Discussions with the Alumni Chapters in Philadelphia, Los Angeles and San Francisco revealed that they too would vote no on Items 1 and 2 and yes on Item 3. The New York Alumni Chapter and Council prepared an informative document and a letter describing its views and voting intentions which was to be sent to all active and alumni chapters. This material was not sent, however, because the turn of events after the NEC-NAB meeting precluded its need. Thus a concerned alumni group was ready to prevent a possible harmful act. A similarly concerned N.A.B. corrected the acts of the National Convention.

1959-1960 In 1959, a National Convention was held -- the Quinquennial. Professor P. K. Hudson, the new Executive Secretary, describes this convention in The Bridge. (44)

The first general session was opened by Larry Dwon, Past President. Eta Kappa Nu was especially honored by the presence of the Governor of Nebraska who welcomed the delegates. The discussion meetings did not follow prior national convention procedures. The Philips "66" plan was used in order to assure that all delegates participated in the discussion and all national HKN issues were brought to the floor for consideration.

President Albrecht Naeter presided at the official general meeting which included discussions of the following subjects:

1. Adoption of a new lapel pin as part of the official jewelry.
2. In the future the chapters were to have the privilege of inviting guests to their induction ceremonies. A Ritual Committee would be established to modify the ritual and submit it to the chapters for possible approval. All present members were released from their oath of secrecy.
3. The national dues were raised from \$14 to \$16 with \$1 of the increase assigned to The Bridge.
4. In the future the date on the emblems would be the date of induction.
5. The Executive Secretary was permitted to reduce the scope of the petitions required from prospective chapters in order to reduce expenses.
6. The manner in which constitutional amendments were to be handled was outlined.

One of the major problems discussed at this meeting was the financial situation of Eta Kappa Nu. Holmes C. MacDonald, Vice-President, indicated "The assets are worth \$110,000, \$58,000 in bonds of the U. S. Government and high grade corporations with nicely staggered maturity dates." He also said, "The liabilities do not look quite so rosy." His most sobering statement was the following:  
(45)

"Thus we are dipping dangerously into the till. In three short years we have overspent by nearly half the savings which HKN accumulated during the past 50 years. It seems logical that in this convention we should debate this issue and should set a sound economic course.

"We should consider raising fees, both alumni and student, to restore economic stability. Perhaps we should hold only mail conventions."

During discussions the participants engaged in very serious debate especially on the ritual and finances. In connection with the latter, Larry Dwon introduced the following facts:

"I have been concerned about the cost of HKN operations and have been advocating an increase in dues for about 10 years. Now it is true that Paul Hudson has done a marvelous job in reducing expenses.

It is also true that we have gone through a bad situation this year. We have had two national officers' salaries -- Executive Secretary and Consultant (A. B. Zerby). We should keep in mind, however, that we have been struggling to make ends meet for years with a dedicated person who was willing to work for \$5500 per year and that was A. B. Zerby's salary for only the last few years. The amount and caliber of work we have in the headquarters office would require, in my judgment, a \$10,000/year man on a full time basis. We are extremely fortunate in having recruited Paul Hudson on a part time basis for \$2000 per year, because he too is a dedicated HKN brother. Let us think of what we would face if Paul should decide he could not continue in this capacity. Who will run the organization if we don't build up the funds necessary to get qualified men in the future?"

The result of the foregoing statements and other members' comments was the needed two dollar increase in initiation fees. However, this result was not assured until one student came up with the stimulating observation of, "Heck fellas, you're debating about a couple of six-packs of beer." The convention may have been worth holding just for this practical moment.

There was a unanimous agreement that the convention was well planned and a great success.

1962-1963 J. H. Craig, Past President of HKN called the meeting to order on November 16, 1962 in Chicago, Ill. Among the highlights of this convention was Professor A. D. Moore's spectacular lecture-demonstration of the effects of electrostatics. (46)

The business sessions again utilized the Phillips "66" plan to effect complete participation of the delegates. Items of discussion included visitation of chapters, place of engineering science students in HKN, constitutional amendments, the possible need to further divide the nation into HKN geographic regions, the need for annual conventions, regional conventions, reduction of personal visitations to a minimum, a national newsletter, Eta Chapters, reports from Board Members who visit petitioning organizations to join HKN, and a clarification of the voting procedure. The great debate was on regional visitations.

It was a busy convention and seemed more hectic than the previous one at Lincoln. It was more costly also, which may partly account for no further assembled conventions since then.

This completes the section which covers the continuous period and the individual years when assembled conventions were held.

### Years of No Assembled Conventions

Starting in 1934 Assembled National Conventions of Eta Kappa Nu Association were discontinued except for three specially approved conventions in 1954, 1959 and 1962. Since then no assembled conventions have been held.

L. A. Spangler became Executive Secretary and Bridge Editor in 1931-'32. He saw the most pressing needs to be a reduction in expenses and initiation fees, to balance the budget and still "carry on" at the same time. He later wrote as follows: (47)

"Two years ago, initiates to Eta Kappa Nu paid about 8% more than last year. Two years ago, initiates paid 27 to 30 percent more than is required this year. The Bridge has not been cheapened in quality and is still being published 6 times a year, yet the officers do not anticipate using any portion of our reserves.... The next pressing need is to secure and maintain the active interest and cooperation of a large proportion of alumni."

1934-1935 President N. L. Best reported some planning ahead for the Eta Kappa Nu Association which, he said, was largely the work of R. I. Wilkinson, L. A. Spangler, C. A. Faust, E. F. Watson and E. B. Wheeler -- all HKN stalwarts. Members of the National Advisory Board were also credited. (48)

A summary of the basic plan follows:

1. Undergraduate Policies - Initiation fees will be reduced to a minimum. Plans for visiting chapters replaced conventions; it was therefore possible to reduce the assessment for such purposes from \$7.00 to \$2.00. Formulation of a suggested plan to guide active and alumni chapters. The Chapter Merit Award. Reduce secrecy in the society.
2. Alumni Policies - Establish Employment Bureaus. Establish a Medal of Achievement for young electrical engineers. A newsletter for all non-subscribers to The Bridge. A better Bridge. Future expansion of new chapters.

Because these policies proved worthwhile, history can record remarkable achievements. These various activities will be the province of part IV of this historical manuscript.

Another article by N. L. Best had the following by-line:  
(49)

"Installation of Beta Alpha, reduction of initiation fees, increase in employment activities, locating lost members, and development of life subscription plan for The Bridge among the many accomplishments."

He also reported negotiations with 15 other colleges which did not have HKN chapters. A survey of electrical engineering departments was started and completed during this year. This would serve as a valuable reference source for future extension activities.  
(50)

Brother Best also reported numerous initiation fee reductions in recent years and another \$2.00 reduction this year. There were 262 initiates compared to 242 the previous year. All chapters were visited, most of them by A. B. Zerby. Plans for an Active Chapter Handbook were formulated.

Other activities mentioned were New York Alumni Chapter's employment work of placing 52 men. Chicago, Milwaukee, Los Angeles and San Francisco were engaged in this activity also. During the past year, Morris Buck developed the Life Subscription Plan; addresses of 157 lost members were found and the planning for the Recognition of Outstanding Young Electrical Engineer Award was begun by R. I. Wilkinson.

1935-1937 C. A. Faust was president of HKN for two successive years. The by-line for his first term report indicated the following: (51)

"Installation of active chapters at Brooklyn Poly. and Michigan Tech. and alumni chapters in Cleveland, Washington and Detroit, instituting the individual award, increasing employment activities and the preparation of handbooks feature the record of 1935-36."

Policies directed toward the above accomplishments had been formulated over the past four years; and, this year was dedicated to putting these plans into action. The following paragraphs were actually written by C. A. Faust to include not only what had been published about his first term in office, but also that which wasn't published covering his second term:

"During the previous two or three years, many plans were conceived and developed to help achieve the principal goal of making Eta Kappa Nu of greater value to a larger number of all members, especially the alumni. As you will read in the reports for 1934-35 and 1935-36, much progress was made in those years. All efforts in the year covered herein were directed toward continuing this progress by converting more plans and ideas into action and accomplishments. In terms of hard work by all officers and chapters, cooperation by everyone involved, and outstanding achievements, it was a notable year.

### Two More Strong Chapters Installed

"Reversing the trend of previous years, three excellent college chapters were added in the two years of 1934-36. Continuing this highly desirable expansion, HKN installed chapters in two more outstanding schools in 1936-37 -- first at the University of Pittsburgh and then at the University of Michigan. Enthusiasm for HKN was unusually high among the faculty and upperclassmen at both of these colleges, assuring the new chapters of healthy, active starts.

"It would be appropriate to mention here that HKN was reaping the benefits of two major policy changes. Until 1934, our National Executive Council did not help or encourage any school to petition for a chapter and took no initiative in lining up or aiding prospects. Instead, a school was expected to hear about HKN, want a chapter, and then do the necessary in preparing a petition. At that point, the NEC decided whether or not to accept the new group. As a result of this policy, chapter additions were very few and far between, and in the four years of 1931-34, the number of chapters remained the same. Under the new policies, we contacted desirable schools, told them all about HKN, and then encouraged them to petition.

"Change No. 2 in policy concerned the development of sound methods for judging which schools should be contacted, making detailed studies to obtain reliable data, and then getting word to the best prospects. Two means were used primarily to inform faculty and students about HKN and help them reach a decision. First, they were contacted by letters, which were followed up diligently with all information requested. Second, Executive Secretary Zerby, other National officers and local alumni visited the schools and then served in a liaison capacity during the formative stages.

"These policies were upheld by all future regimes, which explains why HKN has continued to expand rapidly among the most desirable schools.

### Number of Initiates and Revenue Rise

"Addition of two more chapters (plus three in the preceding two years) caused an appreciable upturn in the number of initiates and total revenue per year. Along with cost reductions, resulting from an intensive economy drive, and higher-yielding investments, HKN experienced much-needed improvement in finances. During the years when enrollment dropped sharply, our balance almost disappeared, so the modest increase was greatly appreciated. Students, too, liked the cuts in initiation fees and prices of jewelry.

### College Chapters Have Record Year

"All chapters, along with a large number of good prospects, were seen under the Visitation Plan. While the level of activity seemed to be at an all-time high the previous year, our Executive

Secretary reported even more activity in 1936-37. At every stop, the visitor examined records, discussed ideas with officers, checked attitudes of faculty members, reviewed chapter activities, and exchanged ideas.

"Work was advanced on a comprehensive chapter handbook, a chapter guide for planning activities, and an explanation booklet on HKN for electrical engineering Freshmen and students elected to membership.

### Third College Chapter Competition Staged

"With all details of the Award established by National and the sponsoring New York Alumni Chapter, record numbers of college chapters participated in the second contest year and again in 1936-37. Articles in The BRIDGE on the winners and the runners-up attest that our chapters excel in scholarship and worthwhile activities.

### Work on Alumni Chapters Continues

"Paralleling the campaign to add top-flight college chapters is a drive to add desirable new alumni chapters and re-activate ones that suspended their operations temporarily. Last year, chapters were installed in Cleveland, Washington and Detroit. In 1936-37, efforts were concentrated on twelve more cities with 600 alumni with the hope of adding some of them soon. Our goal is to have alumni chapters in cities serving more than 50% of the HKN population. More work was done on a comprehensive handbook, which should stimulate more chapters and increase benefits.

### Employment Activity in New Phase

"For a long time after the 1929-34 depression hit, our Number 1 aim was to find employment for all HKNs and others seeking work. This activity, which spread from the New York Alumni Chapter to other alumni chapters and many college chapters, was so successful that we estimate more than 95% of our members are now employed. Partly to continue valuable organizations, but mainly to help employed members find positions better suited to their abilities, we used the past year to phase out the original plan and develop means to help the employed find better work. For college chapters, the big drive was to obtain more good leads and offers for graduating seniors. In this particular effort, alumni chapters proved to be very helpful.

### Recognition Award Completes Second Year

"Launched the previous year, with 47 nominees, the HKN competition to select and honor the Outstanding Young Electrical Engineer set another record for participants. Under the guidance primarily of Roger Wilkinson, high-ranking industrial and academic leaders were chosen for organization, promotion and selection duties. Guy Suits, of General Electric, won the Award and three were given Honorable Mention.

### The BRIDGE and Directory Expand

"Improvements in editorial content and appearance of The BRIDGE were made for the third year in a row, resulting in more circulation and advertising revenue, plus more satisfied subscribers. Missing HKNs, numbering 1,142 just three years ago, were reduced to 109 in two years and still more last year. With practically all missing members found, the Directory was re-issued a year ago after a lapse of 15 years. Then we added a geographical index and a supplement with new addresses. Last year, we concentrated on finding more "missing" persons.

### Life Subscriber Plan Grows in Popularity

"Although The BRIDGE Life Subscriber Plan for Alumni was developed largely by this year's National Vice-President, Morris Buck, and started two years ago, active promotion was begun this year and the results were better than expected. Now we are working on a life plan for student BRIDGE subscribers.

### Ritual Made More Impressive

"During the preceding year, the HKN ritual and accompanying "props" were modified to make the initiation ceremony more impressive and easier to memorize. With each of the five most recent chapter installations, further refinements were made, and all were approved by chapter and National officers, who used the latest version."

1937-1938 Morris Buck reported highlights of his term of office as follows: (52)

"College chapters at Pittsburgh and Michigan Universities were established bringing the total to 28. Thirty-three new nominations were received in The Outstanding Young EE Award with 27 holdover candidates on hand. The activity in employment has shifted emphasis from obtaining jobs for unemployed members to bettering their positions. A booklet on HKN was finished. The Constitution was revised and reprinted. A. B. Zerby visited all but two chapters; C. A. Faust and A. S. Dunston visited the latter ones."

A very significant observation made by Morris Buck was that the visitation plan was advantageous and workable. He added that those, who had watched both annual conventions and visitations, think the latter brought closer contacts between national officers and the chapters and between the chapters themselves than the conventions did. Besides, the visitation plan made possible a material reduction in the initiation fee -- five dollars (\$5.00). The fiscal year was changed from December 1 - November 30 to July 1 - June 30.

1938-1939 L. A. Spangler became president. A by-line to his report was as follows: (53)

The total number of colleges was increased to thirty by the addition of New York University and North Carolina State College. Individual award to young electrical engineers, increased activities on part of the chapters, a new handbook for college chapters, an employment conference of college chapters sponsored by an alumni chapter (Chicago), are other accomplishments of the year.

Other items he covered were Honorary Members, Mail Convention, Regional Convention Plan, and Constitution revisions.

1939-1940 B. F. Lewis was president next. He wrote that Eta Kappa Nu had done much in bringing to fruition some of the ideas that its Founder had at the inception of the organization 35 years ago. He reviewed some of the achievements giving credit to J. A. Umhoefer for conceiving a practical employment plan, an activity which received much wordage and not much implementation up to then. He considered this the most outstanding work which Eta Kappa Nu had undertaken up to that time. (54)

1940-1942 F. X. Burke was another member who was voted to the presidency for two terms. To him belongs the distinction of having written a president's corner in The Bridge in 5 of 9 issues during his term of office. He also wrote an article at the beginning of his tenure in which he explained the proposed increase in assessment for The Bridge and the plans associated therewith. (55)

A proposal to the 1940 mail convention reduced subscription rates but increased the term for initiates to 8 and 9 years respectively for seniors and juniors. Among the benefits promised as a result of these changes included the following:

1. Improvement of The Bridge
2. Publication of an Alumni Directory
3. Stimulation of Alumni Activities
4. Greater aid to college chapters on the part of alumni chapters
5. Expansion of The Bridge
6. Inauguration of a supplement -- The Newsitron
7. Financial aid to college chapters
8. Search for a satisfactory modification of the visitation-mail convention plan
9. Eta Kappa Nu Foundation (endowment)

In one of Brother Burke's president's corners he paid



tribute: (56)

"To the strong, farsighted band of loyal alumni in each city who were undaunted during the trying days of the early thirties and kept on working and sacrificing for HKN we owe more than most members realize....Born of those days are: The Recognition Award for the Most Outstanding Young Electrical Engineer, the Life Subscription Plan, The Chicago Regional Conference, The Outstanding Chapter Award and The Visitation Plan."

1943-1944 The next president to report in The Bridge was C. B. Hoffmann. His unique contribution, besides being a prolific writer of articles for The Bridge, was his attempt to get students to write also. He offered a twenty-five dollar (\$25.00) award for the best student paper published in The Bridge. His prime purpose in this venture was to get students to realize that HKN is also theirs and that "The Bridge is a medium through which they, as well as alumni, can and should express their interests." (57)

The results of the first offer were gratifying, so he renewed it, but this time not for a technical EE subject. This produced a paper entitled "A Study of the Coefficient of Distribution of Lipstick." (58)

1947-1948 N. S. Hibshman renewed the practice of a president's review of the state of HKN. He wrote that the time was propitious too for a critical examination of chapter policies. In addition he stated: (59)

"Initiations have been at a low point. Some chapters have been entirely dormant. On the other hand, the present pressure of college applications will inevitably mean a rise in scholastic standards and an increase in the competition for, and appreciation of, scholastic honors. Eta Kappa Nu should be ready."

1949-1950 Robin Beach wrote of the wealth of opportunities for self expression which are available to student members in HKN. Among them were the opportunities to expand their horizons into non-technical aspects of a professional person including his managerial talents. In the latter connection he wrote: (60)

"Characteristics of effective managerial talent encompasses many sterling qualities of which the salient ones are: - a warm interest in the welfare of co-workers; justice, honesty, and loyalty toward all associates; a deep sense of responsibility to the job and to the advancement of fellow employees; an active and enthusiastic devotion in promoting the most effective execution of every phase of the work, the cultivation of a sense of humor to alleviate trying situations; an alertness toward expressing appreciation to co-workers for tasks well done; the delegations of responsibility among subalterns to

develop their latent powers of leadership; and the employment of instructing, helping, guiding and encouraging fellow workers in the interests of living graciously and helpfully together in the common weal of daily endeavor."

The activities of and participation in HKN organization and management are ideal opportunities for a student to develop the foregoing qualities. He then itemized 25 services that could be rendered by each HKN chapter.

He also wrote on the well being of Eta Kappa Nu during his year of tenure as president: (61)

"Newly installed chapters included Manhattan College, Northeastern University, Clarkson College of Technology, Worcester Polytechnic Institute and Rutgers University.... At this time your Executive Secretary has had correspondence with 37 prospective colleges at which HKN chapters might some day materialize."

He also mentioned items of interest in Chapter Activities Reports, Visitations, Recognition Award, Eminent Members, Constitution Revision, Incorporation, Cooperation of College and Alumni Chapters, Financial Status, Assistant to the Executive Secretary.

He then made the following recommendations:

- 1) Each retiring president should prepare an annual report of his term of office.
- 2) A teaching award should be established.
- 3) The president deserves some small recognition by HKN for the time, effort and personal sacrifice he gives voluntarily to the Association.
- 4) Outstanding Alumni should be initiated into HKN by the Chapters of their Alma Mater.

He ended his report with a request for a feedback critique from the readers.

1950-1951 Frank E. Sanford was one of those Presidents who dug into past statistics about HKN and made some long range prognostications and recommendations. He wrote three articles, in 1950 and 1951 for The Bridge, describing these matters.

He observed that more new members were inducted in the immediate four prior years than in the previous 20 years, and more new members were added in the last two years than there were total members at the time of the 25th anniversary (1929). His principal conclusion was: (62)

"If we are either to continue or to increase our present activities, we must increase our income above the rate that will follow with the probable long-range rate of new memberships."

He also wrote the following which is in contrast with C. A. Faust's prior policy change:

"It has not been Eta Kappa Nu policy to take the initiative in expansion. Correspondence from interested groups in colleges has led to the negotiations and petitions. A plan adopted last summer will further require that petitions be submitted only by local EE honor societies which have been in operation for one or two years rather than by newly organized groups."

Consequently, a change in policy must have occurred slowly and imperceptibly in the intervening years from C. A. Faust's administration.

Brother Sanford had these conclusions:

1. Eta Kappa Nu is now in a very healthy financial condition and probably can continue on the present basis of operation, but activities or costs cannot be increased appreciably with the expected future income at present rate.
2. A deficit is possible in some future years with present costs and expected income. The present reserve should cover such a period, even if as severe as the depression thirties or war years.
3. Any long range expansion or addition to present costs should be accompanied by a plan for payment or increased income.
4. Policy for The Bridge should be reviewed -- for example, a change to quarterly publication should reduce the mechanical costs and still permit an expanded magazine.
5. A stronger drive should be made to broaden alumni interest in HKN affairs and The Bridge.
6. Some part of the reserve funds might be used for a revolving loan fund -- invested in our student members rather than in stocks and bonds.

A Special Mail Convention was used to enlarge the National Advisory Board from five to seven members. Six members would now be elected, three each year, as at present, but for two year terms instead of one year. There would be three geographical regions as determined by NEC. The retiring President would serve one year on

the NAB instead of two years. (63)

Brother Sanford made a strong appeal that elected members to NEC and NAB should be equally divided between members from the faculties and from industry. He also favored mail conventions over assembled conventions.

Incorporation of Eta Kappa Nu Association, enlargement of the National Advisory Board, and establishment of Eta Chapter were the principal changes in the Constitution. Simplification of the voting requirements of all chapters and clarification of the membership requirements in colleges with five year courses were also included. (64)

1952-1953 E. B. Kurtz maintained that the activities of an honor society primarily revolved around the local chapter, and the summation of the activities of the local chapters plus the activities of the alumni chapters constitutes the national society. (65)

He then reviewed the growth of chapters and membership in HKN and compared it to the growth of membership in American Institute of Electrical Engineers (AIEE).

1954-1955 Jesse E. Hobson wrote that his term of office was one of the most significant and eventful in the whole history of our Association. The Golden Anniversary was particularly important. (66)

The business of the Convention went forward smoothly and the following subjects were discussed:

- 1) Increase in dues in order to finance an Assembled Convention at least every five years. NEC and NAB felt that dues should not be increased and that the national treasury should be able to underwrite the costs of future conventions.
- 2) A Booklet, "The Golden Years" a commemorative history of HKN was presented to the Association by J. E. Hobson and the Stanford Research Institute. (67)
- 3) A. B. Zerby received a volume of personal letters expressing gratitude for his many years of loyal service to HKN.
- 4) "Engineering - A Career For Tomorrow" a 25-minute movie produced by University of Illinois under HKN auspices was reviewed.

Other activities in the school year included:

1. The "Employment Opportunities For Electrical Engineering Graduates Questionnaire" was sent

to all undergraduate chapters. The questionnaire was devised by NEC as a pilot research study.

2. An essay contest was announced.
3. The Award Dinner.
4. Chapters installed at Columbia University and Eta Chapters were established at Alabama and Southern Methodist.

At the 50th Annual Convention Brother Hobson delivered an address entitled, "Whither and Where." (68)

1955-1956 S. Reid Warren, Jr. stated that progress in a dynamic organization such as Eta Kappa Nu is a continuous process. This year began auspiciously. The first Eta Kappa Nu survey of electrical engineering graduates culminated in a report which influenced thinking in the engineering profession. Dr. J. Hobson and his associates at Stanford Research Institute carried out the planning, implementation and fruition of the survey; and SRI generously contributed most of the cost. This year another survey on a broader base was instituted with AIEE and IRE cooperation. (69)

He continued by describing the following other events that transpired during his term of office:

1. Chapters at Texas A&M College and Texas Technological College were established as well as branches of Eta at University of Virginia, Maryland and Denver. This makes 59 chapters, 8 branches of Eta and over 20,000 members.
2. Eminent members were inducted.
3. Outstanding Young EE's were recognized.
4. Alumni chapter activities flourished.

Problems that remained to be solved included reorganization of the structure of HKN. Changes in the Constitution and Statutes were needed. Another problem was related to The Bridge and to the office of the Executive Secretary. Specifically it was to find a way to keep A. B. Zerby as Executive Secretary for as long as he was willing and able to serve and to turn the duties of The Bridge to a professional person or some reasonable alternative. The third problem is the question of building the Award dinner into an event that will bring 500-1000 individuals.

1957-1958 C. T. Koerner wrote about "Eta Kappa Nu -- A New View". (70)

He covered such topics as HKN growth. He mentioned A. B. Zerby's request for retirement. The Bridge received a new look with

J. J. Raffone as editor. Some headquarters staff changes were made. The Constitution and Statutes were undergoing revision. A five-year convention was approved. National and local activities were mentioned similar to past presidents' reports.

In his article entitled "Today's World and Tomorrow's Challenge to Eta Kappa Nu," Brother Koerner reviewed the growth of the Association and prognosticated the 1975 potential. His predictions were that in 1975 Eta Kappa Nu would have 55,000 members and 110 chapters. (71)

1958-1959 "Eta Kappa Nu in Transition" is an article that describes one of those uniquely hectic times experienced by Eta Kappa Nu. Larry Dwon was president at the time. (72)

Some highlights of this transition period were the following:

1. Eta Kappa began to operate with an expanded Board of Directors -- the N.A.B. was discontinued. Between 1951 and 1958 the NEC constituted the Board.
2. A new Bridge Editor was working for HKN on a contractual basis. His goal was a 20,000 member circulation of "electrical engineering opinion leaders."
3. Professor P. K. Hudson became the new Executive Secretary and A. B. Zerby remained as a consultant.
4. The new Executive Secretary was in Urbana, Illinois; HKN headquarters office remained for a time in Dillsburg, Pa.; and The Bridge Editor was in New York. The administrative relationship among the respective interested parties became manifold, involved and more complicated for a variety of reasons.
5. All formerly mentioned national activities were continued and in addition a Distinguished Lecture Series was initiated in connection with the IRE Convention.

What occurred during the year requires more space for description than is justified here. The President's report was published in The Bridge. (73)

Topics covered by the report were: New Constitution Implemented; New Executive Secretary passed a critical year with flying colors; headquarters office moved to Urbana, Ill.; Bridge Publication changed; HKN Recognition Award; Distinguished Lecture; Eminent Member Inductions; Assembled Convention; Letter to Faculty Advisors; Public Relations; Analysis of Cash and Investment Portfolio; Analysis of Operating Income and Expenses; Handbook for National Officers; A. B. Zerby a devoted servant.

This was a difficult year. Consequently it is appropriate to record the following excerpt from Larry Dwon's concluding statement:

"Nothing of consequence could have been accomplished were it not for the excellent teamwork that existed, especially on the part of my associates, Jack Tarboux and Paul Hudson. I only wish that Jack were here (he died of a heart attack) so that I could personally thank him and tell him how much his advice meant to me when we faced the several trying problems that needed depth in human understanding...."

1959-1961 Albrecht Naeter was another President of Eta Kappa who served two successive terms. He came into the office as a result of J. Tarboux untimely death as Vice-President.

In his President's report Brother Naeter made these points: (74)

"I placed major emphasis on helping Eta Kappa Nu attain a sounder financial footing. Our Association can now face the future with greater confidence financially, and, is ready, I believe, to expand its activities.

"According to a budgeting analysis made by Past President Larry Dwon for a period of twelve years immediately preceding my first year's term in the presidency, total income exceeded expenses in the last seven years of the twelve year interval. In the latter part of this interval there were certain non-repetitive expenses incidental to getting ready for and moving the headquarters office from Dillsburg to Urbana that helped put the operation into the red.

"During my first year in office it was quite clear to NEC and directors that changes would have to be made to make sure that expenses would be reduced. Our Executive Secretary accomplished a lot by changing some office procedures, without reducing services. The official audit for the year shows income exceeded expenses by \$9,518.54 -- 20% of the income was saved."

At this time there were 37,000 members, 82 chapters and 7 alumni chapters which were known to be active.

Brother Naeter also wrote the following which indicated a change from past experience:

"In recent years there has been a growing feeling, particularly among the active chapters, that the visitations (personal) were not serving a useful purpose. The chapters are being asked to express reactions to having assembled

conventions at three year intervals and visitations only upon requests from the chapters or when NEC and Directors deem it desirable at certain chapters."

An Ad Hoc Committee on Cooperation with IRE consisting of John Tucker, John Craig, John Lyon, Chairman, was formed to explore the subject area. John Tucker suggested a special ritual for eminent member inductions. As a final comment Brother Naeter wrote, "This was a difficult year in selling advertisements in The Bridge."

## CONSTITUTION: 1904 - 1965

### Introduction

The Constitution of Eta Kappa Nu Association has changed in form and content and by statutory revisions many times since the original version was created by the founders. An excerpt has been included in a previous part from a letter written in late 1912 or early 1913 by E. B. Wheeler. The letter is reproduced completely as figure 17. This seems to be the first instance in which a member objected -- a founder no less -- to actions taking place at the National Conventions. Other objections have already been recorded which occurred subsequently.

A. H. Heitmann agreed with Wheeler on the matter of too many revisions; but the ninth annual convention in 1913 did enact substantial changes which together with prior enactments forced the need to revise the constitution. L. H. Harris was chairman of the revision committee. Other members were F. P. Wittich and R. S. Amdt.

A sampling of the revisions that prompted Brother Wheeler's letter may be useful at this time.

1. Second Convention - Established a semi-annual publication entitled "The Electrical Field" with an editor appointed by the National Convention and assistant editors selected by the Chapters. The expense of publication was to be met by a per capita assessment of the active members. This enactment was repealed by the sixth convention.

2. Third Convention - Established a semi-annual publication entitled "The Electrical Field" with an editor appointed by the President of the Executive Council and the assistant editors elected by the Chapters. The expense of the publication was to be met by subscription of 25 cents from members both active and graduate. This enactment was also repealed by the sixth convention.

Also at the 3rd convention an enactment was passed to provide funds for the expenses of the National Convention. The assessment was made equally among active chapters. This enactment was repealed by the sixth convention.

Figure 17

(Written sometime between  
( 12/14/12 & 1/27/13 )

Dear Bro. Heitmann:

I hope you will pardon my delay in answering your letter of Dec. 14th with reference to Eta Kappa Nu affairs.

Regarding the New York Alumni Chapter no meetings have been held now for about two years owing to the small number of members in the vicinity and the difficulty of getting them out to the meetings. Another thing which also seemed to throw cold water on the meetings was the fact that as soon as the chapter was organized the National Convention and Executive Council levied assessments for the expenses of the convention and the publication of the year book. Those of us who had been elected officers of the chapter finally gave up the matter as a bad job as we were unable to collect the assessments or get any attendance at the meetings and it seemed useless to attempt to keep the chapter in existence until there are more members in New York.

With reference to the matter of revising the constitution, I have been out of touch with fraternity affairs so long that I am not aware as to the necessity for such action consequently I am unable to offer any suggestions in the matter. I do know however that about every National Convention which has been held, has decided that the Constitution should be revised or amended, although in my opinion the temporary character of the convention would prevent it from attaining anything more satisfactory in the eyes of future conventions than the present Constitution seems to be. I do not consider that the Constitution is a subject for revision except by amendment as provided for in Article VIII, and as one of the founders of E.K.N. I wish to place myself on record before the coming convention as being opposed to such a procedure.

The present Constitution was written after long and careful consideration by the founders of E.K.N. as to the lines along which it should grow and the manner in which it should be governed and in my opinion the proposed action would not only be unconstitutional but would cheapen the organization in the eyes of college authorities and I am sure that you will find this view of the matter held by all who were associated in its organization. I should particularly like to have you obtain the views of Bro. Carr to whom we are indebted for the conception of Eta Kappa Nu and Bros. Bowser, Armstrong and Akers who were connected with its organization.

I hope the foregoing makes clear my position regarding the proposed revision of the Constitution and I shall be very glad indeed to explain my views at greater length, or to assist you with any suggestions as to amendments which seem desirable to adopt at this time.

I am showing this letter to Bro. Bowser whose address is 111 West 12th St. and am handing him your letter to me for his consideration and am asking him to write and let you know his views. In case you wish to write to Bro. M. L. Carr his address is 5047 Winthrop Ave., Chicago.

E. B. Wheeler

3. Fourth Convention - An enactment was passed to provide funds for publishing "The Electrical Field" and for the clerical expenditure connected therewith. Each chapter was assessed \$5.00 plus a pro-rata sum based on the number of copies a chapter received. This enactment was repealed by the sixth convention.

4. Fifth Convention - An assessment of one dollar (\$1) was levied on all members of the fraternity at large to meet the expenses of extensions (Acquisition of new chapters).

5. Sixth Convention - An assessment of active chapter members for the National Convention expenses was levied on a pro-rata basis considering the number of men in each chapter and the delegates allowed to the convention. The members of alumni chapters were assessed one half the amount of members in active chapters. Also at this convention, an officer was elected "to act ex-officio in any office of the National Council which is vacant by resignation or permanent disability of said officer."

6. Seventh Convention - A lengthy discussion on the advisability of electing a historian, "said historian to be a member of N.E.C." No action was taken.

7. Eighth Convention - The Secretary advised the convention that all printed copies of the Constitution were exhausted. A reprint was recommended "revised with the enactments subsequent thereto."

Also, the Treasurer recommended an immediate assessment of \$1.25 on existing active membership and an increase in the dues from \$1.00 to \$1.50. He said, "This would provide approximately \$200.00 to cancel present debts and to get out the new plates, and provide increased revenue made necessary by the increased bulk of business." At this convention, the alumni assessments were discontinued and the indebtedness of alumni chapters was cancelled.

#### Major Constitution Revisions

This brings us up to the historic 1913 convention held on April 12 and 13 at Madison, Wisconsin. It was at this convention that the Constitution underwent the first general revision. The events that preceded this revision are what caused E. B. Wheeler to write his undated (around January 1, 1913) letter, Fig. 17, to A. H. Heitmann. In Chapter II, A. H. Heitmann's complete reply to E. B. Wheeler was included as Fig. 5. It was primarily concerned with the scholastic issue.

Several enactments were passed at this convention as follows:

1. Each undergraduate and associate initiate was assessed three dollars (\$3.00) to defray the cost of the certificate, one copy of the Constitution and all expenses of the NEC.

2. The cost of the National Convention was pro-rated among the active members in a very specific manner spelled out in detail.

3. The Bridge was created as an annual publication to be issued between May 1 and May 30th. The staff was to be made up of an editor who "shall be vice-president of the N.E.C., associate editors and a manager each appointed by the vice-president." The price of The Bridge was established to be 50 cents and each chapter was to "order at least a number equal to the enrollment of the chapter as declared in its report to the Convention that year."

4. In case of death of a national officer the remaining members may appoint a man to fill such vacancy during the balance of the fiscal year."

5. N.E.C. was given the power "to decide all questions of expense incident to the installing of new chapters," provided it didn't exceed five dollars (\$5.00) per initiate as provided in the Constitution.

6. The Secretary of N.E.C. "shall receive from the Treasury of NEC the sum of one hundred dollars per year and the stationery and postage used in the performance of his duties."

With all these enactments facing the Constitution Revision Committee and the convention delegates it is no surprise that President L. H. Harris should have had reason to report the following: (75)

"....In magnitude and importance, the work before this Convention probably exceeds that which any Convention faced up to this time, if we except the first one. Questions involving future policies, the form of the organization, and even the very standing of Eta Kappa Nu as an Honorary Society will engage our attention; and upon the wisdom of our actions depends much of the future success of the organization."

There were other major revisions of the Constitution in 1927, 1941, 1951, 1958 and 1965. Table II lists the subjects which received this continuous attention of the National Convention and the years when some change was made in the subject category. Some of the specific changes are described below.

#### Highlights of Changes

Changes in the Constitution have taken place continuously. This section reviews the more important ones by primary titles of Articles of the Constitution starting with the Preamble.

Preamble The original constitution contained the following introductory statement:

"That those men in the profession of Electrical Engineering, who by their attainments in College or in practice have manifested a deep interest and marked ability in their chosen life work, may be brought into a closer union whereby mutual benefit may be derived, we do hereby ordain and establish the following.... Constitution."

This statement remained unchanged from 1905 -- in spite of numerous revisions of the constitution and/or statutes -- until 1958 when it took the following form:

"That those in the profession of Electrical Engineering who, by their attainments in college or in practice, have manifested a deep interest and marked ability in their chosen life work, may be brought into closer union so as to foster a spirit of liberal culture in the engineering colleges and to mark in an outstanding manner those who as students in electrical engineering, have conferred honor on their Alma Maters by distinguished scholarship, activities, leadership and exemplary character and to aid these students to progress through association with alumni who have attained prominence, we do hereby ordain and establish the following Constitution."

The foregoing statement has survived succeeding constitutional changes.

Name and Symbols The original constitution covered this subject as Article I which had two sections, one stipulating Eta Kappa Nu as the name, and the other referring to the early form of the Greek letters BKN.

This article remained the same until 1951 when section 3 was added as follows:

"This non-profit association is incorporated in the State of Delaware."

In 1958, Article I was expanded from three to eight sections which include, name of association, incorporation state, symbol, permission to use HKN instead of old Greek letters, colors, emblem, certificate specifications, seal and coat-of-arms and The Bridge as the official publication. Since 1958 there have been no changes.

Organization The original constitution covered this subject as Article II, sections 1 and 2. They read as follows:

"Section 1 This organization shall consist of chapters which have been or shall be established as hereinafter provided and named according to order of establishment, viz. Alpha, Beta...., Omega.

Section 2 Their general government shall consist of a National Convention and a National Executive Council."

In 1913, Article II was expanded to four sections; but the sense of the foregoing statements remained the same. This article remained unchanged in the 1922, 1925, and 1926 revisions of the Constitution.

In 1927, sections 1, 2 and 3 remained the same, but section 4 was revised to provide for a National Advisory Board. The 1937 constitution revision did not alter the foregoing.

In 1941, Article II became titled "Chapters and General Government" instead of "Organization." The article contained only two sections -- the first one simply stating that college and alumni chapters were included. Section 2 was revised to vest executive powers in NEC; legislative powers in the National Convention; and advisory and judiciary powers in the NAB. No further changes in this article occurred in 1951 and 1955.

In 1958, Article II was titled "Chapters, Members and General Government." Instead of two, there were three sections. Section one was similar to the prior one except Eta chapter was added. Section two indicated that members would be elected as prescribed in Article VI. Section three was a major change of prior section 2. Legislative powers were vested in the National Convention; policy determination, advisory and judiciary powers were vested in a "Board of Directors"; and administrative powers were vested in N.E.C. The respective powers were specified in Articles VI, VII and VIII. No further changes occurred in the 1962 and 1965 revisions of the constitution.

Chapters The original constitution covered the subject as Article III with seven sections. These sections included statements as to how chapters may be established as well as duties of the various officers.

Article III in the 1913 revision had three parts as follows:

Chapters: Sections 1 - 7

Active Chapters: Sections 1 - 6

Alumni Chapters: Sections 1 - 7

The article was generally expanded and made more explicit.

Article III in the 1922 revision reverted back to two parts, viz. Active chapters (sections 1-7) and Alumni chapters (sections 1-7).

This revision was more in the manner of consolidation and simplification. One illustrative change was that the President of NEC would "install" instead of "establish" an active chapter. The corresponding secretary in prior constitutions was "ex-officio associate editor of the official organ." This duty was removed in 1922 and an Associate Bridge-Editor was established in each chapter.

There were no changes in Article III in the 1925, 1926, 1927 and 1937 revisions of the constitution. In 1941, however, Article III was made only to cover active chapters (sections increased from 7 to 11) and Article IV then covered only alumni chapters

(sections increased from 7 to 8).

Section one now specified BEE and BS or Equivalent four year Electrical Engineering programs where chapters may be established. Other revisions included such items as who will be considered the charter members, permitting offices to be combined, and specified who were to be considered active members. The Associate Bridge Editor was changed to Bridge Correspondent.

In 1951, Article III, Section 1 contained a definition of a "technical school of recognized standing." Section 2 specified that a petition must be "accompanied by the written consent of the president, the dean of men, the dean of engineering and the head of the electrical engineering department or their equivalents, of the school petitioning." Thus, a difficulty, which arose with Beta Chapter at Purdue University in 1906, was finally recognized in the Constitution of Eta Kappa Nu 41 years later.

Article III in the 1951 constitution was increased to 14 sections from the 11 in 1941. Provisions were made for a Trustee-Committee in cases where "there will not be a sufficient number of students on the campus to maintain an active College Chapter." The powers of the Trustee Committee were spelled out.

Article IV of the 1951 constitution covered Eta Chapter thus re-establishing a provision taken out in 1913. Article V covered alumni chapters with no change from the previous constitution.

The Articles on chapters remained the same in the 1955 revision of the constitution. However, in 1958 the constitution was quite generally revised. The major revision seemed to be that eight men were now required to petition for an undergraduate chapter, instead of 5 as previously required. The remaining portions of the Articles on chapters were essentially the same with clarifying revisions only.

The 1962 and 1965 revisions of the constitution did not alter the 1958 version of the Articles on chapters.

National Government Article IV in the original constitution was entitled "National Government" and it contained six sections, which in an abbreviated fashion provided the following:

<u>Section</u>	<u>Stipulation</u>
1	The National Convention shall consist of two delegates elected by each chapter and of the National Executive Council.
2	National Council held annually.
3	N. C. may enact and repeal statutes.
4	Officers shall be President, Secretary and Treasurer.

Section      Stipulation

- 5      NEC is charged with execution of acts of constitution and enforcement of statutes.
- 6      NEC is vested with judiciary powers.

In section 4, the duties of the officers were specified.

In the 1913 revision of the constitution, Article V was now entitled "General Government" and contained 7 sections, which in brief stipulated the following:

Section      Stipulation

- 1      Limits delegates to 2 per chapter.
- 2      Conventions to be held between March 1 and April 30th each year.
- 3      National Convention shall constitute supreme legislative body with powers to enact and repeal statutes.
- 4      Officers shall be President, Vice-President, Treasurer and Secretary.
- 5      NEC charged with executive powers.
- 6      NEC vested with judiciary powers.
- 7      Decisions may be ratified by chapter by mail.

Section 4 also explained that one man shall be elected annually by National Convention for a term of three years beginning July 1. He would serve successively as Treasurer, Vice-President and President, one each year. The secretary was to be elected annually each year from nominations by the NEC.

In 1922, Article V remained titled "General Government." Sections 1 through 3 remained the same. Section 4 stipulated the officers to be as follows:

- |                  |   |
|------------------|---|
| President        | - Responsible for general welfare, etc. |
| 1st V.P.         | - Stimulate alumni chapters.            |
| 2nd V.P.         | - Stimulate active chapters.            |
| Bridge Editor    | - Responsible for Bridge publication.   |
| Secretary        | - Keep records, etc.                    |
| Ass't. Secretary | - Assist the Secretary.                 |
| Treasurer        | - Responsible for funds.                |

The above slate of officers constituted the N.E.C.

Section 5 stipulated how these men were to be elected. The method was generally the same as previously, with the one man elected each year successively holding the offices of 2nd V.P., 1st V.P. and President. The Bridge Editor was elected annually. The Treasurer was elected for a three year term. The Assistant Secretary was appointed annually by the Secretary with consent and approval of the three officers of N.E.C.

The 1925 and 1926 revisions had Article V as "General Government." There were nine sections as previously. The only change was that the Conventions would be held between October 1 and November 30.

In 1927, Article V was entitled "General Government" but it now had 13 sections. Sections 1 through 3 were the same as previously. Section 4 read as follows:

"The officers of the National Convention shall be a President, a Vice-President and an Executive Secretary. The President and Vice-President shall be graduate members."

Section 5 stipulated that the National Executive Council were to be elected as follows:

- a) One man shall be elected annually by the National Convention from open nominations for a period of two years. He shall serve successively as Vice-President and President, one year each.
- b) The Executive Secretary shall be elected for a term of three years by the National Convention from nominations by the President and Vice-President.
- c) The President and Vice-President shall take office on December 1 and the Executive Secretary on July 1.

Section 6 spelled out the duties of each officer.

Section 8 created for the first time a National Advisory Board consisting of:

- a) The last two living past Presidents.
- b) Three other members elected by the National Convention.

The N.A.B. was vested with judiciary powers which were subject to revision by the National Convention. NEC was charged with the execution of the acts and enforcement of the statutes of the National Convention.

The 1937 revision of the Constitution also had Article V entitled "General Government". It contained 13 sections as



previously but they had been revised considerably.

Among the changes were the following:

- a) Mail Conventions were introduced and they were to be normal procedure.
- b) Assembled Conventions were permitted under certain stipulated conditions and called as specifically prescribed.
- c) The National Advisory Board was empowered to place in motion the one man who would be elected annually by the National Convention to become Vice-President.

A very important provision which was introduced because of the discontinuation of Assembled Conventions was Section 13 which read as follows:

"Visitation to each active chapter shall be made at least once annually, these visitations to be made by an officer of the National Executive Council or by another Graduate, Associate or Honorary Member appointed by the Executive Secretary and approved by the President."

The 1941 revision contained the following articles:

- Article V - National Executive Council
- Article VI - National Conventions
- Article VII - National Advisory Board

These sections were generally rewritten in some instances; but the sense of stipulations were similar to the 1937 version.

In the 1951 revision, the articles were numbered differently:

- Article VI - National Executive Council - Board of Directors
- Article VII - National Convention
- Article VIII - National Advisory Board

Article VI was rewritten but remained generally the same except that the following was added:

"The three national officers herein designated as constituting the National Executive Council shall have control of all funds....The N.E.C. shall decide upon a fiscal policy and prepare and approve an annual operating

budget. It may in its discretion, invest and reinvest, in the name of the Association, funds of the Association, in bonds, stocks or other securities, regularly listed on the New York Stock Exchange. The Executive Secretary shall execute such transactions with the written consent of each member of the NEC."

Article VII remained generally the same except that section 3 dealing with visitations was rewritten. It now stated in part:

"Visitations to college chapters shall be made, preferably annually, by a national officer, by a member of the NAB or by a member of Eta Kappa Nu appointed by the National President...."

In Article VIII section 4, now required unanimous action by NAB to remove members of the NEC for good and sufficient reason.

The 1955 revision was the same as 1951 in Articles VI, VII and VIII.

The 1958 revision contained the following articles:

- Article VII - National Convention
- Article VIII - Board of Directors
- Article IX - National Executive Council

The constitution was entirely rewritten. The major changes were the following:

- a) A National Convention may be either a Mail Convention or an Assembled Convention.
- b) The Board of Directors....shall nominate candidates for National Office.
- c) A majority of the votes cast is necessary for the determination of any question including the enactment or repeal of statutes and the election of a candidate.
- d) A Regular Assembled Convention shall be held in each fifth year following the preceding Assembled Convention except that it may be deferred or cancelled if, by majority agreement of its members, the Board of Directors, declares an emergency condition to exist, making the Convention not in the best interests of Eta Kappa Nu, or declares the financial status of Eta Kappa Nu would be jeopardized by such Convention.
- e) A Special Assembled Convention shall be held, should urgent demand arise on the petitions of at least five

college chapters, including no less than one chapter from each geographic region, or at the discretion of the Board of Directors.

- f) The Board of Directors shall consist of National President, National Vice-President and Executive Secretary and two additional members from each geographic region who shall be elected to serve for two years.
- g) The National Executive Council shall appoint an editor of The Bridge subject to Approval by the Board of Directors.

There were other changes of considerable significance; but space does not permit a complete review. However, the following section 5 of Article IX is important enough to quote in its entirety to highlight the change from the original constitution:

Section 5. Nominations and eligibility for the National Officers shall be as follows:

- A. The Board of Directors shall nominate a single candidate for each of the offices of National President, National Vice-President and Executive Secretary.
- B. Groups of no less than five College Chapters, each group including no less than one chapter from each Geographic Region, may nominate individual candidates for each of the offices of National President, National Vice-President and Executive Secretary.
- C. Eligible for nomination to the offices of National President and National Vice-President are past members of either the Board of Directors or the former National Advisory Board and present members of the Board of Directors who, in the year of the election, are in the final year of their regular term of office.
- D. Eligible for the office of Executive Secretary shall be any Member of Eta Kappa Nu.

Articles VII, VIII and IX in the 1962 constitution were the same as those in 1958.

In 1965, part D was added to section 2 of Article VII which read as follows:

- D. Election of national officers and directors shall be by the Chapters through a preferential ballot conducted as follows: Ballots will be cast indicating first, second, third choice, etc. of the candidate for each office. The ballots will initially be counted according to the first choices. If no candidate receives a majority of the first choice votes, the candidate having the least number of first choice votes will be eliminated and the ballots on which he was named first choice will then be divided according to the second choices on those ballots and added to the ballots of the remaining candidates. Should none of these candidates have a majority, the candidates now having the least number of votes will be eliminated and his ballots will be divided among the candidates who still remain according to the next preference in order. This process of successively eliminating the lowest candidate will be continued until one candidate receives a majority of the votes. Should a tie exist amongst candidates receiving the least number of votes then the Board of Directors shall eliminate one of these candidates by a preferential ballot as described above.

Amendments and Statutes The preceding sections show that the Eta Kappa Nu Constitution has undergone many changes. There were major revisions in 1913, 1915, 1922, 1927, 1940, 1958 and 1965. Beyond that date no research was conducted as of this writing.

Article VIII -- Amendments -- of the original constitution had only one section. It read's as follows:

"Amendments to this Constitution may be made by a three quarters vote of three fourths of the chapters. The proposed amendment shall have been adopted by the National Convention, then voted upon afterwards by each chapter. The National Executive Council shall announce the vote to each chapter, after the report from each has been received."

In the 1913 revision of the Constitution, the Amendment Article X was changed to the following:

"Amendments to the Constitution shall be submitted to and passed by a three-fourths vote of the National Convention and ratified by three-fourths of the active chapters. A three-fourths vote of the active members of a chapter shall be necessary to ratify."

The 1922 revision kept the same provisions. In the 1925 edition of the Constitution, this Article X contained the same first section as above; but added the following section 2:

"Upon each reprint of the Constitution, the Secretary shall incorporate all amendments into the body of the Constitution."

All further revised editions -- 1926, 1927, 1937, 1941, 1951, 1955, 1958, 1962 and 1965 -- remained the same in this respect.

It would require considerable space to detail all the changes that took place in the Constitution via amendments and statutes. Some idea of the subjects that underwent changes are listed in Table II.

From this table it is quickly recognized that the following subjects received repeated attention and therefore they experienced many revisions.

Official Publication The 2nd and 3rd National Convention established a semi-annual publication entitled "The Electrical Field." The ninth national convention made it an annual titled "The Bridge", however one annual issue in 1909 was simply called the "Year Book."

After that, it remained "The Bridge" and was published in a variety of ways. The 18th National Convention specified that it be a quarterly to be published in November, January, March and May. The 29th National Convention specified that an Executive Secretary be hired who would also be editor of The Bridge and that it should be published six times per year. The fiftieth Convention re-established The Bridge as a quarterly publication. A Special Mail Convention in 1957 specified that The Bridge shall be published "at least" four times a year.

While the 43rd National Convention stipulated that The Bridge would be edited by the Executive Secretary, the 50th National Convention stated the following:

"Be it further enacted that the staff of this publication be made up of an editor and a Bridge Correspondent from each chapter, as provided in the Constitution, and such other staff members as may be appointed by the National Executive Council."

This same provision stayed in the 1958, 1962 and 1965 revisions.

Publication Expense The cost of publishing the official publication was covered by various assessments as specified by the National Conventions. Table XIV shows how these assessments and other related matters were changed from 1908 through 1965. No research was made beyond that date.

National Conventions and Visitations From the beginning the National Convention was designated as the supreme legislative body. It is important therefore, to trace its history among constitutional amendment and statute changes.

TABLE XIV

ETA KAPPA NU ASSOCIATION

CHANGES IN REVENUE MATTERS OF OFFICIAL PUBLICATIONS

NATIONAL CONVENTION	4	8	18	19	23	29	31	36	37	43	50	52	54			
SCHOOL YEAR	1908-09	1909-12	1913-14	1914-15	1918-19	1922-23	1923-24	1927-28	1933-34	1935-36	1940-41	1941-42	1947-48	1954-55	1956-57	1958-59
NAME OF PUBLICATION ISSUES/YEAR	ELECT. FIELD 1	BRIDGE 1	BRIDGE 1	BRIDGE 1	BRIDGE 4	BRIDGE 4	BRIDGE 4	BRIDGE 4	BRIDGE 4	BRIDGE 4	BRIDGE 6	BRIDGE 6	BRIDGE 6	BRIDGE 4	BRIDGE 4	BRIDGE 4
ASSESSMENT PER CHAPTER	\$5															
ADDED PRORATA ASSESSMENT	YES	YES														
PRICE PER ISSUE-CENTS		25-40	50	50												
PRICE PER YEAR-\$					2.00	2.00	2.00	2.00	2.00		1.50		1.50			
CHAPTERS ASSESS INITIATES IN COLLEGE PLUS-YRS.					2	2	2	2	2		7		2-3	2-3	2-3	1-2
JUNIORS - \$					6.00	7.00	7.00	7.00	6.50		8.50		6.00	6.00	6.00	7.00
SENIORS - \$					5.00	5.50	5.50	5.50	5.00		7.00		6.00	6.00	6.00	7.00
ASSOCIATES - \$									5.00				6.00	6.00	6.00	7.00
GRADUATES - \$									5.00				6.00	6.00	6.00	7.00
LIFE SUBSCRIPTIONS																
UNDER 45 - \$										25		15	25	25	25	30
OVER 45 - \$										20		14	20	20	20	25
HONORARY - \$										10						
EMINENT - \$											Yes					
BRIDGE EDITOR'S COMPEN.																
ANNUAL - \$						500	750									
PERCENT OF ADV. REV.						15	15									

EXECUTIVE SECRETARY SALARY COVERS BRIDGE EDITOR FROM 1927 ON.

At the 3rd National Convention the expenses were divided equally among active chapters. At the 6th National Convention (1910) the expenses of the National Convention were divided according to a weighted prescribed formula. The same held true at the 9th convention. Statute 2 in the 1915 revision prescribes the formula of assessment. The proration is among all active members at the time of the convention.

Statute 8 stipulated that beginning with the 1915 Convention the entertaining chapter should submit its bill for expenses incurred and it shall constitute legitimate expenses of the convention which would be prorated among the active members. The 18th Convention again prescribed in detail what constitutes legitimate convention expenses and how they were to be prorated among the active members.

Starting with the 19th National Convention, each chapter was assessed a stipulated amount for each member to defray the expenses of the National Conventions. These assessments were as follows:

Convention	School Year	Assessment Per Initiate	
9	1913 - 14	\$5.00	
19	1923 - 24	\$5.00	
23	1927 - 28	\$7.00	
30	1934 - 35	\$2.00	Visitation
36	1940 - 41	\$2.00	"
52	1956 - 57	\$2.00	"

It should be noted that since 1933 most annual national conventions have been by mail. Assembled conventions were held in 1954, 1959 and 1962. Assembled national conventions may be held if the chapters approve of holding a "Special Assembled Convention" and they also approve a "satisfactory means of financing the cost thereof."

The alternative to assembled conventions has been personal and regional visitation programs for which a two dollar assessment is made of each initiate.

N.E.C. and Boards From the beginning there has been a National Executive Council (N.E.C.) as the executive function of the organization. Its composition changed from time to time as follows:

Convention	School Year	National Executive Council
Original	1905 - 06	President, Secretary, Treasurer
6	1910 - 11	President, Secretary, Treasurer Utility Officer
11	1915 - 16	President, Vice-President, Secretary, Treasurer
14	1918 - 19	President, First-Vice President Second Vice President, Bridge Editor, Secretary and Treasurer
15	1919 - 20	President, First Vice-President, Second Vice President, Bridge Editor, Secretary, Assistant Secretary and Treasurer
23	1927 - 28	President, Vice-President, Executive Secretary

At the 23rd National Convention, a National Advisory Board was created to consist of the past two living presidents and three members elected by the National Convention. At the 52nd Mail Convention, the Board of Directors replaced the NAB.

N.E.C. and Board Expenses To defray the expenses of the members of the National Executive Council (NEC), the National Advisory Board (NAB) and the Board of Directors, the initiates have been assessed over the years as follows:

Convention	School Year	Special Assessment	Initiation Fee
3	1907 - 08	1.00	1.00
8	1912 - 13	1.25	1.50
9	1913 - 14	3.00	1.50
Letter Ballot	1918 - 19	5.00	
18	1922 - 23	4.00	
23 *	1927 - 28	7.00	
30	1934 - 35	6.00	
36	1940 - 41	6.00	
52 **	1956 - 1957	6.00	
55	1959 - 1960	7.00	

\* National Advisory Board Created  
\*\* Board of Directors replaced NAB

In this connection, it is of interest to note that the secretary was to receive \$100 per year plus stationery and postage and that in 1915 this was raised to \$150. An act of the National

Convention in 1919 provide honorariums for the secretaries of NEC, viz. \$75 per year for the secretary and \$125 per year for the assistant secretary with postage, stationery and stenographic services in addition for each person. This was repeated by the 18th National Convention in 1922.

The 23rd National Convention in 1927 provided compensation for the Executive Secretary, a newly created function. It simply said that "the Executive Secretary of the National Executive Council shall receive from the Treasury of NEC a salary to be decided by the National Advisory Board, plus stationery, postage and other expenses necessary for the faithful performance of his duties."

At the 25th National Convention in 1929, the salary of the Executive Secretary was to be decided by the National Convention instead of the NAB.

The 50th National Convention provided a pension for the retired Executive Secretary of \$150 per month during his lifetime. This amount was to be taken from the reserves of the Association.

Assessments For Chapter Extensions The fifth convention in 1909 assessed all HKN members one dollar (\$1.00) for the expenses of installing new chapters. At the 8th Convention, all alumni chapter indebtedness was cancelled and all assessments to alumni members were discontinued.

In 1915, the National Convention authorized the NEC to decide all questions of expense incident to the installing of new Chapters providing that no assessment shall be made nor any cost placed on the charter members of the new chapter in excess of the amount per initiate as provided in the Constitution.

At the 18th National Convention, the foregoing was slightly altered in that no assessment shall be made on existing Chapters, nor any cost placed on the Charter members of the new Chapter in excess of the amount per initiate as provided in the Constitution and Statutes. At the 23rd Convention, this act remained intact. The same provision remains throughout all subsequent revisions.

Membership Article V of the original constitution specified four grades of membership, namely undergraduate, graduate, associate and honorary.

The undergraduates were to be male, juniors or seniors, strictly honest, temperate in habits and of unimpeachable character. Graduate members included those who had been members as undergraduates and others who have done meritorious work. At schools where chapters did not exist, associate members could be taken into membership with approval of N.E.C. Leaders in Electrical Engineering were eligible for Honorary Membership.

There were more details in the nine sections of this

article; but these are the essential points.

In the 1913 revision, Article VI covered membership and it contained eight sections. The same grades of membership were maintained. Added to the characteristics sought in an undergraduate member was "undoubted ability as evinced by his scholarship."

Section 3 specified that an outline of the chapter's method of selecting pledges, and qualifications thereof, including a standard of scholarship must be approved by the National Convention and each member of NEC.

Section 6 specified that Honorary Member elections must be approved by each member of NEC and by  $\frac{3}{4}$  of the active chapters, each with a  $\frac{3}{4}$  vote of the active members.

Section 7 specified that the maximum number of men which a chapter may elect from any one class shall not exceed 2.5 times the square root of the number registered in the junior E.E. class on December 1st. Thirty percent of this maximum number may be elected after December 1st of the Junior year, sixty percent after March 1st of the Junior year and the remaining of those eligible may be elected December 1st of the Senior year.

In the 1922 revision, there was a slight change in the provisions of the previous paragraph. The 1925 revision was the same as the 1922 issue.

In 1926, section 7 was altered by stipulating 90% of the maximum as being eligible for election during the Junior year. The 1927 revision was similar.

In the 1937 revision, section 3 specified that the chapter by-laws must incorporate the standard of scholarship. Section 4 was revised to stipulate conditions for Graduate Membership. The principal change was the following:

"....Such candidates before being pledged must be approved by all members of the Chapter, by the head of the electrical engineering department and by two of the three NEC members. No graduate of a college where a Chapter existed at the time he was an undergraduate may be pledged to membership by another Chapter without the consent of the former Chapter."

In 1941, the classification of members was changed to members and Eminent Members. The membership article number became VIII and there was a general revision of the contents. The characteristics of a desirable candidate became unimpeachable character and undoubted ability as evidenced by scholarship. The percent of the maximum eligible for membership at specified times was revised.

Section 7 specified Eminent membership qualifications and procedures for election. Honorary membership was discontinued as a practice.

In 1951, the membership article became IX and there was a complete revision. The membership qualifications remained the same as in 1941 except that the male qualification was dropped. The numbers eligible were fixed as the upper quarter of the junior class and the upper third of the senior class. All other items remained generally the same. However, Eta Chapter members could only come from the upper third of the Senior Class.

In 1955, this article remained the same as in 1951. However, in 1958, the membership article became VI again and it was substantially revised; but the stipulations were generally the same as in previous revisions. There was an increase in sections from nine to eleven. Eta Chapter was covered more thoroughly. The 1962 and 1965 revisions were unchanged in this respect.

Insignia Originally, Article VI specified the colors of the organization as navy blue and scarlet. The emblem was the Wheatstone Bridge. Certificates and the seal were mentioned. There were four sections.

These sections remained the same in the 1913, 1922, 1925, 1926, 1927 and 1937 revisions. In 1941 "the seal and coat-of-arms" was now mentioned in section 4. There were no changes thereafter. However, the Article numbers changed from VII in 1913, to IX in 1941 and X in 1951.

Fees and Dues Article VII covered this subject in the original constitution. It became Article VIII in 1913, Article X in 1941, Article XI in 1951 and Article X in 1961.

Section 1, of the original document, specified the initiation fee to be not less than five dollars (\$5.00), nor more than ten dollars (\$10.00) to be fixed by the Chapter. Section 4 stipulated that a per capita tax of not more than one dollar (\$1.00) may be levied annually by the National Convention to meet the expenses of the National Organization.

In 1913 the \$5 and \$10 figures remained the same. However, the initiation fee for Charter, Associate and Honorary members were fixed by statute. The National Convention was authorized to fix and levy a per capita tax on each initiate and active member for the purpose of defraying the cost of the certificates and charter, and all expenses of the National Executive Council.

In 1922, the initiation fee for initiates "shall be fixed by the Chapters, subject to the approval of the National Executive Council." The four sections of this Article remained the same until 1941.

In 1941, the National initiation fee for members was fixed by statute by the National Convention. In 1951, section 5 was added to fix the National fee and per capita tax for a member of Eta Chapter. In 1958, Section 6 was added which specified that Eminent Members will not be subject to assessments, fees or dues. There were no further changes in 1962 and 1965.

Table XV compiles the various changes in National dues and assessments to cover the expenses of Bridge publication, National Conventions and Visitations, expenses of NEC, NAB and Board of Directors members and expenses in connection with installing new chapters. From this table, it is observed that national dues rose from a minimum of five dollars (\$5.00) in 1906 to a maximum of twenty-one dollars (\$21.00) in 1928-1935. In 1936, a substantial reduction was made to fourteen dollars and fifty cents (\$14.50) for a junior member. Since then the national fees were raised to sixteen dollars (\$16.00) made up as follows:

Bridge	-	7.00
Visitation	-	2.00
NEC & Board	-	<u>7.00</u>
Total		16.00

The major reduction in 1935 was caused primarily by the discontinuance of assembled conventions and other cost reductions.

Discipline In the original constitution there was no article covering this topic. In 1913 Article IX was added. It had two sections as follows:

Section 1 - Each chapter shall have the sole power to discipline its members.

Section 2 - The National Executive Council shall have the power to suspend a Charter of any chapter for good and sufficient reasons, but such suspensions must be sustained or the action reversed at the next succeeding Convention.

In 1937 Section 2 was revised as follows:

"The National Advisory Board shall have power on recommendation of the National Executive Council to suspend the Charter of any Chapter for good and sufficient reasons, but such suspension must be sustained or the action reversed at the next succeeding Convention."

The above provision remained the same up to 1965. The Article number, however, changed to XI in 1941 and to XII in 1951.

Trust Fund There were no provisions for trust funds in the original constitution. This topic first appeared as Article XIII in

TABLE XV

ETA KAPPA NU ASSOCIATION

NATIONAL INITIATION FEES

SCHOOL YEAR	BRIDGE PUBLICATION	NATIONAL CONVENTIONS & VISITATIONS	N.E.C. AND BOARDS	CHAPTER EXTENSIONS	\$ TOTAL FEES
1907-08		5.00-10.00	2.00		↑ VARIABLE DEPENDING ON ASSESSMENTS ↓
1908-09				1.00	
1909-10					
1910-11					
12					
13			2.75		
14		5.00	4.50		
15					
1915-16					
17					
18	5.00/6.00				
19			5.00		
20					
1920-21					
22	5.50/7.00				
23					
24	5.50/7.00	5.00			
25					
1925-26			4.00		
27					
28	5.50/7.00	7.00	7.00		
29					
30					
1930-31					
32					
33	5.00/6.50				
34		2.00			
35					
1935-36			6.00		
37					
38					
39					
40					
1940-41	7.00/8.50	2.00	6.00		
1956-57	6.00	2.00	6.00		
1959-60	7.00	2.00	7.00		

1951. It remained the same in the 1955 revision but it changed to Article XI in 1958. The 1958 revision also contained more specific provisions than in 1951.

Generally speaking this article empowers the Association to establish trust funds separate from other funds either by legislative action or by the action of the Board of Directors. These trust funds may be for religious, charitable, scientific literary or educational purposes.



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# ETA KAPPA NU IN TRANSITION



RETIRING EXECUTIVE SECRETARY, A. B. Zerby, receives farewells from, left to right, C. Holmes MacDonald, John H. Craig, Larry Dwon, George Harness, Carl T. Koerner, (Zerby), J. G. Tarboux, Roger E. Nolte, and P. K. Hudson.

## Chapter IV ORGANIZATION and ACTIVITIES

### ORGANIZATION

#### Introduction

The original constitution spelled out the National Government of Eta Kappa Nu in Article IV, sections 1 through 6. Section 5 stated: (1)\*

"The National Executive Council is charged with the execution of the acts and the enforcements of the statutes of the National Convention."

Section 6 stated:

"The National Executive Council shall be vested with judiciary power, in the case of disputes, and in the interpretations of the Constitution and Statutes. Such decisions of the National Executive Council shall be subject to revision by the National Convention."

These two sections stipulated the ways and means by which the national affairs of Eta Kappa Nu were to be carried out. The stipulations were modified several times as HKN grew.

Section 4 has unique historic significance. It describes how the Association was to be managed initially and serves as a base of comparison with future revisions. It stated the following:

"The officers of the National Convention shall be a President, a Secretary, and a Treasurer who shall be elected by the Convention. They shall be elected from the graduate members, and for the first two years shall be chosen from the founders of the organization. Their terms of office shall be three years, and they shall serve as Treasurer, Secretary and President, one year each, in rotation. At the first National Convention, the President shall be elected for one year, the Secretary for two years, and the Treasurer for three years.

\*Numbers in this chapter apply to references listed on pages 237, 238 and 239.

"The President, the Secretary and the Treasurer of the National Convention shall constitute the National Executive Council, and as such they shall perform all duties vested in them by the Constitution."

These and other parts of the Constitution remained intact until 1913 when the first major revision occurred.

Prior parts of this history give the chronological changes which occurred as a result of actions taken by National Conventions. -- Eta Kappa Nu's supreme legislative body. It has the power to enact statutes for regulating all matters, pertaining to the organization as a whole, which are not provided for in the constitution.

While the constitution has changed perceptibly since the original version; the Association has grown remarkably also. Consequently the organization has evelved through several phases. Except in a few instances, the respective responsibilities of its principal components have not been altered substantially. They will be reviewed under the section entitled "Responsible Functions."

### Development

1904-1928 Era - Table XVI shows the components of Eta Kappa Nu's national organization as authorized by the respective changes in the Constitution. The 1904-1928 era is schematically portrayed by diagram "A" of Fig. 18. From Table XVI it is observed that the National Executive Council began simply enough consisting of a President, a Secretary and a Treasurer.

The first change occurred in 1909 when a Utility Officer -- later called Jr. Past President -- was created because of resignations of C. E. Armstrong and C. C. Carr. The former resignation appears to have been covered by M. L. Carr, the founder, probably by a combination of a draft and voluntary agreement. There is no recorded reason for C. E. Armstrong's resignation.

C. C. Carr was forced to resign because of a European job assignment. B. T. Anderson, who took over as President of N.E.C. wrote: (2)

"During the past year the National Executive Council lost one of its most active and consistent workers. President C. C. Carr, Alpha Chapter '06, who was transferred from the Chicago office to the Antwerp, Belgium office of Western Electric Co.....As Treasurer, Secretary, and finally President of the National Executive Council, as well as an active worker in the Chicago Alumni Chapter, he gave of his time and means to further the best interests of Eta Kappa Nu."

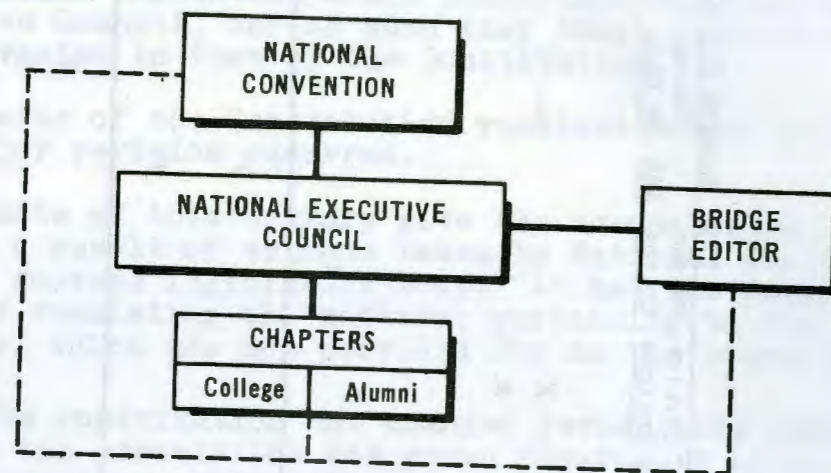
TABLE XVI - COMPONENTS OF NATIONAL ORGANIZATION  
ETA KAPPA NU ASSOCIATION  
1904 - 1975

SCHOOL YEAR	CONSTITUENTS OF NATIONAL EXECUTIVE COUNCIL									MEMBERS OF		ORGANIZATION Fig.-1 DIAGRAM
	PRESIDENT	1ST VICE PRESIDENT	2ND VICE PRESIDENT	SECRETARY	EXECUTIVE SECRETARY	ASSISTANT SECRETARY	TREASURER	UTILITY OFFICER	BRIDGE EDITOR	NAB	BOARD OF DIR.	
1904 - 1909	X			X			X					
1909 - 1912	X			X			X	X				
1912 - 1913	X			X			X	X.				
												-A-
1913 - 1918	X	X		X			X					
1918 - 1922	X	X	X	X			X					
1922 - 1928	X	X	X	X		X	X		X			
-----												
1928 - 1951	X	X			X						5	
												-B-
1951 - 1958	X	X			X						7	
-----												
1958 - 1959	X	X			X						7	
1959 - 1963	X	X			X						9	-C-
1963 - 1975	X	X			X						11	

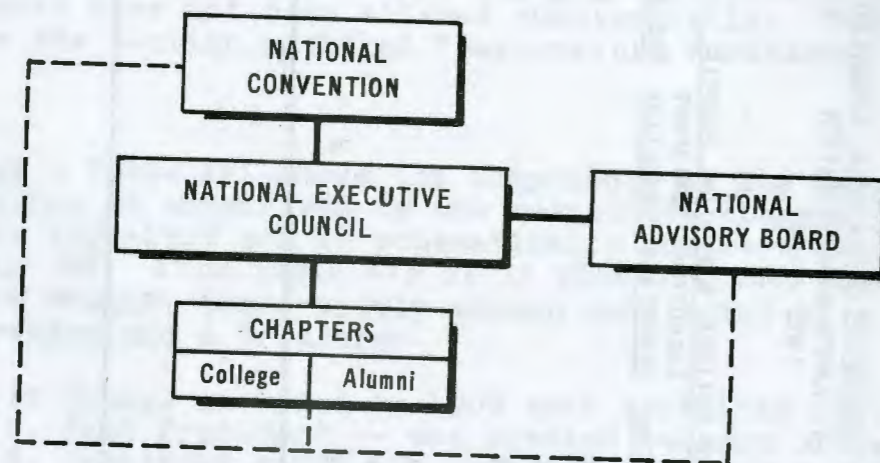
.TITLE BECAME JUNIOR POST PRESIDENT

Figure 18  
Eta Kappa Nu Association  
Changes in National Organization

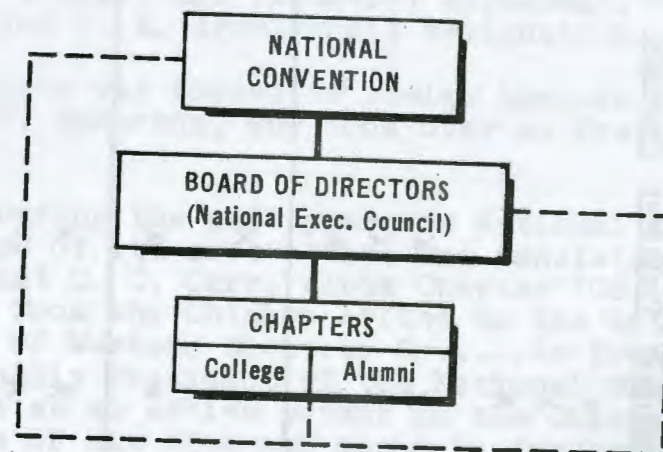
- A -  
1904 - 1928



- B -  
1928 - 1958



- C -  
1958 - 1975



————— Direct Responsibility (Two-way communication)

- - - - - Functional, Advisory and Elective Channel of Communication

The next significant change occurred in 1913 when the office of Vice-President was added to N.E.C. The Vice-President became responsible also as the Editor-in-Chief of The Bridge. Later in 1918, the National Executive Council comprised five officers -- President, First Vice-President, Second Vice-President, Secretary and Treasurer. In 1922, seven officers constituted the National Executive Council -- President, First Vice-President, Second Vice-President, Secretary, Assistant Secretary, Treasurer and Bridge Editor.

Although, in retrospect, some of the changes that occurred seem slight and inconsequential; they were considered necessary by concerned Eta Kappa Nu members who faced problems. The principal problem was that all of the work of running this growing organization was performed by volunteers in their spare time.

1928-1958 Era - J. A. Umhoefer wrote an article for The Bridge from which the following quotation is appropriate here: (3)

"The executive organization of the Association remained essentially the same throughout the years from its founding; all work connected with the offices was done by men working part time, devoting their spare hours to the advancement of fraternity activities. The Twenty-Third National Convention, however, completely revised the set-up, establishing the office of Executive Secretary as a full time office and making the National Executive Council a board composed of the President, and Vice-President and the Executive Secretary. It also established the National Advisory Board, composed of five men, three of whom hold elective positions and the other two being the last two past presidents of the N.E.C. This new organization officially went in office on July 1, 1928, and is the set-up under which the Association is now working."

This marks the beginning of a new era (1928-1958). For the first time a paid national officer was employed by Eta Kappa Nu. He was J. A. Umhoefer, the author of the above quotation. Prior to this time, some of the secretaries, assistant secretaries and The Bridge Editor received honorariums as provided by specific actions of the National Conventions. A large majority of the members continued to contribute their efforts voluntarily. Some of the officers also contributed financially, at times, to keep the Association solvent.

The organization of this era is shown in part B of Fig. 18. Two periods comprised this era -- one with five members on the N.A.B. and the other with seven members. The latter started in 1951. (4)

This period was marked with great development in Eta Kappa Nu which attests to the wisdom of creating the office of Executive Secretary. Nevertheless, the fruits of this creation stem from the dedicated manner in which the office has been run by J. A. Umhoefer, L. A. Spangler, A. B. Zerby and P. K. Hudson. Each man contributed

differently and substantially to the affairs of this office which incidentally also included editorship and publication of The Bridge. The transition from J. A. Umhoefer to L. A. Spangler to A. B. Zerby and then to P. K. Hudson was described in Chapter I.

The Growth of Eta Kappa Nu was phenomenal in this period in many ways; but the following parameters are the standouts:

- a) Growth of Chapters and membership.
- b) Outstanding HKN Activities
- c) Improved Financial Position
- d) The Bridge acquired professional quality

The various presidents' reports have already added the details for these topics. A comprehensive description of activities in which Eta Kappa Nu has been engaged will be covered later in this historical survey.

1958-1975 Era - The author had a unique opportunity of being Vice-President in 1957-1958, and President in 1958-1959 -- a transition period. It changed its organization to phase C of Fig. 18. The prior National Advisory Board was discontinued and an expanded Board of Directors replaced it. The national officers (NEC) remained members of the Board. It had three distinct periods of operation, initially with seven members on the Board; from 1959-1963 with nine members; and from 1963-1975 with eleven members. (5,6)

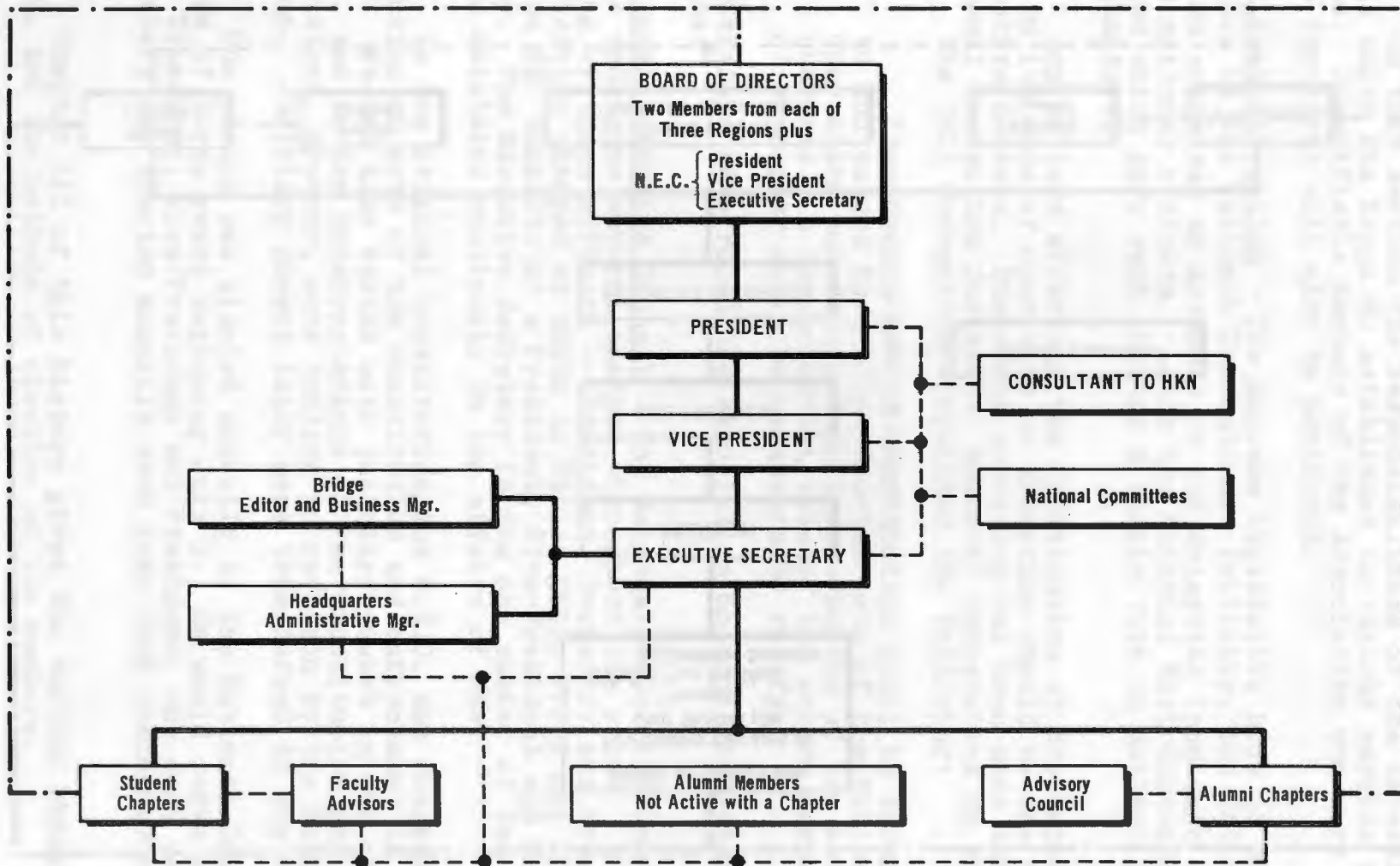
From an article in The Bridge, the following excerpt applies here: (7)

"....This last year our new Constitution was approved by the Chapters and filed with the State of Delaware. (Many persons -- including J. M. Monstream -- contributed to this successful venture; but substantial credit also is due the committee in Los Angeles, Cal. under C. T. Koerner's chairmanship). The new Constitution establishes a corporate type of a Board of Directors and provides a new method to elect national officers which should insure that the best qualified men -- those who are experienced in HKN tradition and its unique problems -- are selected."

In this article, the Eta Kappa Nu Association was depicted on an organization chart which is reproduced here as Fig. 19.

This organization has been simplified during Brother Hudson's tenure as Executive Secretary to that shown in Fig. 20. The Consultant (A. B. Zerby) was discontinued in 1960. The executive secretary again assumed the responsibility of Editor of The Bridge and the Administrative Manager at headquarters was eliminated in 1959. Also the Advisory Council associated with the New York Alumni Chapter ceased to function effectively in the 1960 decade.

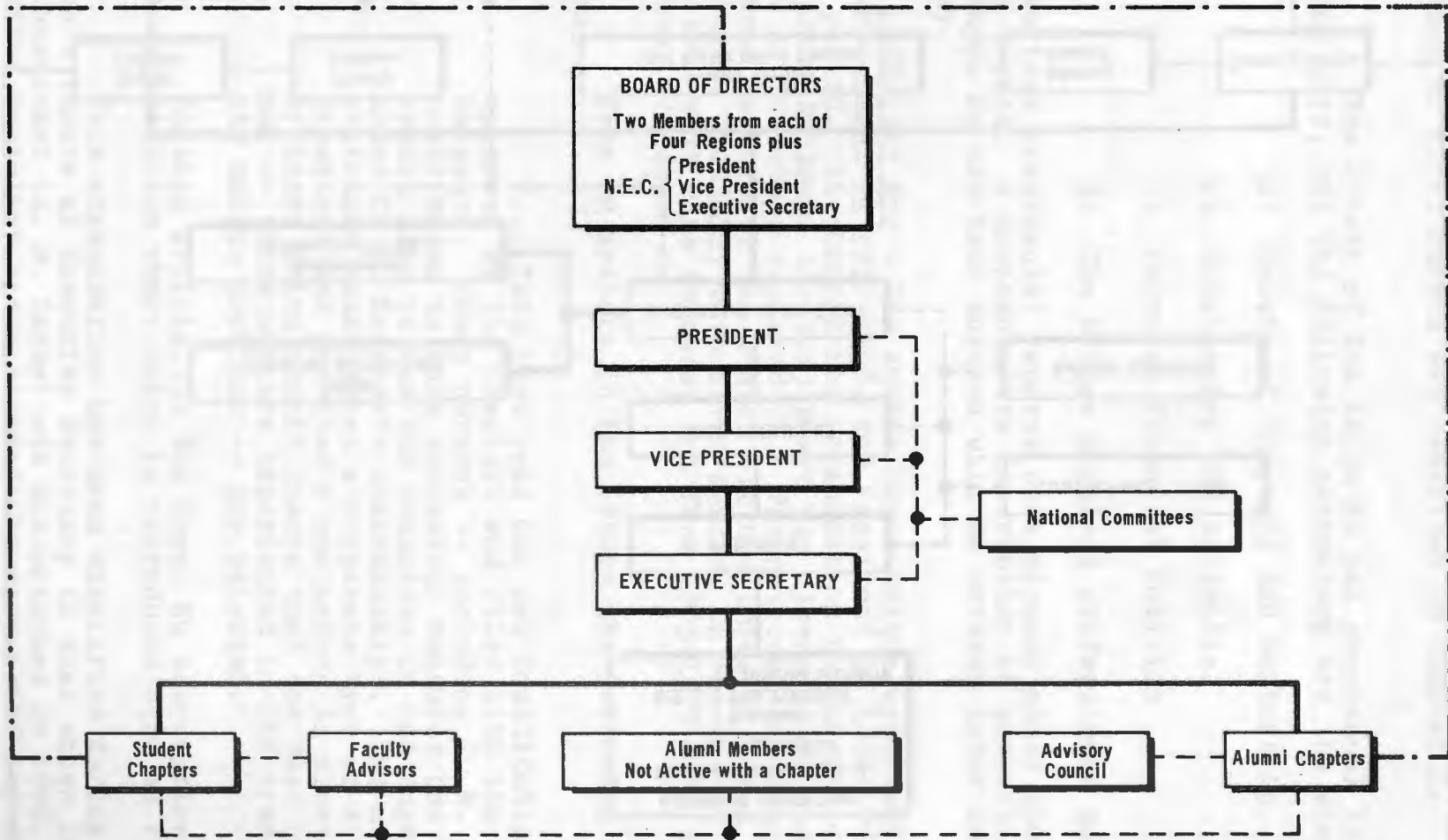
Figure 19  
 Eta Kappa Nu Association  
 Organization Chart  
 1959



- Direct Responsibility (Two-way communication)
- - - - Functional or Advisory Responsibility (Two-way communication)
- . . . Direct Responsibility of Chapters to nominate and elect members of the board. (Normally no communication)



Figure 20  
Eta Kappa Nu Association  
Organization Chart  
1975



- Direct Responsibility (Two-way communication)
- - - - Functional or Advisory Responsibility (Two-way communication)
- . - . - . Direct Responsibility of Chapters to nominate and elect members of the board.  
(Normally no communication)

## Responsible Functions

In this section the responsibilities of the several functions which Eta Kappa Nu established in various periods will be discussed. Identifiable members of the Association who were involved in these functions will also be mentioned.

National Convention - The supreme legislative body of the Association is the National Convention. Initially, the National Convention comprised an assembly of two delegates from each chapter plus the national officers. Later the National Mail Conventions were instituted which gave each chapter a single vote on matters proposed to the chapters.

Any matters affecting the Constitution of Eta Kappa Nu or changes in its mode of operation or direction should be the concern of all active members. Therefore, provision has been made through the National Convention for active members' expressions on such matters. The 1913 Convention stipulated the following:

"Amendments to the Constitution shall be submitted to and passed by a three-fourths vote of the National Convention and ratified by three-fourths of the active chapters. A three-fourths vote of the active members of a chapter shall be necessary to ratify."

These provisions have ruled the Association on constitutional matters ever since.

National Executive Council - The National Executive Council (NEC) has undergone several changes throughout the years. Initially consisting of three officers -- President, Secretary and Treasurer -- the composition changed as shown in Tables XVII, XVIII and XIX. Presently, the NEC consists of a President, Vice-President and Executive Secretary. The Executive Secretary is the one member of the officer group who maintains continuity in the affairs of HKN.

In the original constitution, the N.E.C. was charged with the execution of acts of the constitution and enforcement of its statutes. It was also vested with judiciary powers in the case of disputes, and in the interpretations of the Constitution and Statutes. Such decisions, however, were subject to revision by the National Convention. Judiciary powers later were transferred to the N.A.B.

One person was elected annually by the National Convention for a term of three years beginning July 1. He would serve successively as Treasurer, Vice-President and President, one each year. The Secretary was elected annually each year from nominations by the N.E.C.

Chapter III of this history gives the various changes to the N.E.C. and the methods of election of its members.

TABLE XVII - NATIONAL EXECUTIVE COUNCIL  
ETA KAPPA NU ASSOCIATION  
1904 - 1928

SCHOOL YEAR	CHAPTERS		NATIONAL EXECUTIVE COUNCIL								EDUCATORS ON NEC		BRIDGE EDITORS	NOTES	
	COL.	ALIM.	PRESIDENT	1ST V. P.	2ND V. P.	SECRETARY	TREASURER	UTILITY OFFICER	JUNIOR PAST. PRES.	ASSISTANT SECRETARY	NO.	%			
1904 - 05	1	-													HKN FOUNDED
06	1	-	M. L. CARR			E. B. WHEELER	C. E. ARMSTRONG				0	0			
07	1	-	E. B. WHEELER			C. E. ARMSTRONG	A. F. MCKEE				0	0			
08	2	1	C. E. ARMSTRONG			A. F. MCKEE	C. C. CARR				0	0			C. E. ARMSTRONG RESIGNED
			M. L. CARR												
09	2	2	A. F. MCKEE			C. C. CARR	C. T. EVANS*				1	33			
10	4	3	C. C. CARR			A. R. KNIGHT*	L. H. HARRIS*	B. T. ANDERSON			2	40			C. C. CARR RESIGNED
			B. T. ANDERSON												
1910 - 11	6	2	C. T. EVANS*			A. R. KNIGHT*	L. H. HARRIS*	B. T. ANDERSON			3	75			
12	7	3	B. T. ANDERSON			L. H. HARRIS*	A. H. HEITMANN	C. T. EVANS			1	25			
13	8	3	L. H. HARRIS*			A. H. HEITMANN	A. B. ZERBY		B. T. ANDERSON		1	25			
14	10	4	A. H. HEITMANN	A. B. ZERBY		L. H. HARRIS*	R. H. WEBB				1	25			
15	10	6	A. B. ZERBY	R. H. WEBB		" "	B. F. MILLER				1	25			
1915 - 16	11		R. H. WEBB	B. F. MILLER		" "	H. S. COCKLIN*				2	50			
17	12	6	B. E. MILLER	H. S. COCKLIN*		" "	F. A. COFFIN				2	50			
18	12	7	H. S. COCKLIN*	F. A. COFFIN		L. H. HARRIS*	J. M. STRAIT				2	40	F. A. COFFIN		
			A. B. ZERBY			A. B. ZERBY									
19	12	7	F. A. COFFIN	P. MACGILVARY	F. T. BANGS	A. B. ZERBY	A. C. GRAYSON				0	0	D. G. EVANS		
20	12		P. MACGILVARY	F. T. BANGS	D. G. EVANS*	"	"				1	25	J. B. KELLY	MACGILVARY & BANGS RESIGNED	
1920 - 21	14		B. T. ANDERSON	J. M. SPANGLER	D. G. EVANS*	"	"				1	25		(REPLACED BY ANDERSON AND SPANGLER)	
22	15		J. M. SPANGLER	D. G. EVANS*	J. B. KELLY	"	"				1	25			
23	16	9	D. G. EVANS*	J. B. KELLY	G. P. SAWYER	"	L. F. SEYBOLD			J. E. ZOLLINGER	1	17			
24	18	9	J. B. KELLY	G. B. SAWYER	A. A. HOFGREN	"	"			"	0	0	J. W. WEIGT		
25	18	7	G. P. SAWYER	A. A. HOFGREN	F. E. BROOKS	"	"			"	0	0	"		
1925 - 26	19	10	A. A. HOFGREN	F. E. BROOKS	A. R. KNIGHT	"	D. G. EVANS			"	0	0	"		
27	20	11	F. E. BROOKS	E. S. LEE	M. C. HALE	"	"			"	0	0	"		
28	20	10	E. S. LEE	J. W. WEIGT	"	"	"			"	0	0	"		
											0	0			
											20	19			
											==	==			

\*EDUCATORS

TABLE XVIII - NATIONAL EXECUTIVE COUNCIL  
ETA KAPPA NU ASSOCIATION  
1928 - 1958

SCHOOL YEAR	CHAPTERS		NATIONAL EXECUTIVE COUNCIL			EDUCATORS		NAB MEMBERS
	COLLEGE	ALLUMNI	PRESIDENT	VICE PRESIDENT	EXECUTIVE SECRETARY	No.	%	No.
1928 - 29	22	10	J. W. WEIGT	M. S. MASON	J. A. UMHOEFER	0	0	5
30	22	10	M. S. MASON	G. H. KELLEY	"	0	0	5
1930 - 31	23	10	G. H. KELLEY	E. F. WATSON	"	0	0	5
32	23	10	E. F. WATSON	J. M. NEWMAN	L. A. SPANGLER	0	0	5
33	23	10	J. M. NEWMAN	R. I. WILKINSON	"	0	0	5
34	23	8	R. I. WILKINSON	N. L. BEST	"	0	0	5
35	23	8	N. L. BEST	C. A. FAUST	A. B. ZERBY	0	0	5
1935 - 36	24	8	C. A. FAUST	M. BUCK	"	0	0	5
37	26	10	C. A. FAUST	M. BUCK	"	0	0	5
38	28	10	M. BUCK	L. A. SPANGLER	"	0	0	5
39	30	10	L. A. SPANGLER	B. F. LEWIS	"	0	0	5
40	33	10	B. F. LEWIS	F. X. BURKE	"	0	0	5
1940 - 41	34	10	F. K. BURKE	F. E. HARRELL	"	0	0	5
42	34	10	F. X. BURKE	F. E. HARRELL	"	0	0	5
43	36	11	F. E. HARRELL	C. B. HOFFMANN*	"	1	33	5
44	36	11	C. B. HOFFMANN*	W. E. KOCK	"	1	33	5
45	37	11	W. E. KOCK	O. H. LOYNES	"	0	0	5
1945 - 46	38	11	O. H. LOYNES	R. W. FOUSE	"	0	0	5
47	38	12	R. W. FOUSE	N. S. HIBSHMAN*	"	1	33	5
48	40	12	N. S. HIBSHMAN*	T. W. WILLIAMS	"	1	33	5
49	46	12	T. W. WILLIAMS	R. BEACH*	"	1	33	5
50	49	12	R. BEACH*	F. E. SANFORD	"	1	33	5
1950 - 51	53	12	F. E. SANFORD	O. W. ESHBACH*	"	1	33	5
52	54	12	O. W. ESHBACH*	E. B. KURTZ*	"	2	66	7
53	56	12	E. B. KURTZ*	E. T. B. GROSS*	"	2	66	7
54	58	12	E. T. B. GROSS*	J. E. HOBSON	"	1	33	7
55	61	12	J. E. HOBSON	S. R. WARREN*	"	1	33	7
1955 - 56	67	12	S. R. WARREN*	J. D. RYDER*	"	2	66	7
57	71	12	J. D. RYDER*	C. T. KOERNER	"	1	33	7
58	73	12	C. T. KOERNER	L. DWON	"	0	0	7
TOTAL						16	18	

\*EDUCATORS

TABLE XIX - NATIONAL EXECUTIVE COUNCIL  
ETA KAPPA NU ASSOCIATION  
1958 - 1976

SCHOOL YEAR	CHAPTERS		NATIONAL EXECUTIVE COUNCIL				EDUCATORS		BOARD OF DIRECTORS
	COLLEGE	ALLUMNI	PRESIDENT	VICE PRESIDENT	EXECUTIVE SECRETARY	No.	%		
1958 - 59	74	12	L. DWON	J. G. TARBOUX*	P. K. HUDSON*	2	66	7	
60	80	11	A. NAETER*	C. H. MACDONALD	"	2	66	9	
1960 - 61	84	12	"	J. H. CRAIG	"	2	66	9	
62	84	12	J. H. CRAIG	J. A. M. LYON*	"	2	66	9	
63	92	12	J. A. M. LYON*	J. E. LAGERSTROM*	"	3	100	9	
64	98	12	J. E. LAGERSTROM*	R. J. KOOPMAN*	"	3	100	11	
65	99	12	R. J. KOOPMAN*	H. H. SHEPPARD	"	2	66	11	
1965 - 66	105	6	H. H. SHEPPARD	C. M. HYDE	"	1	33	11	
67	105	5	C. M. HYDE	W. P. SMITH	"	2	66	11	
68	113	5	W. P. SMITH*	J. E. FARLEY	"	2	66	11	
69	116	5	J. E. FARLEY	J. C. HANCOCK*	"	2	66	11	
70			J. C. HANCOCK*	A. F. GABRIELLE	"	2	66	11	
1970 - 71			A. F. GABRIELLE	L. B. CHERRY*	"	2	66	11	
72	129	5	L. B. CHERRY*	F. C. WEIMER*	"	3	100	11	
73	132	5	F. C. WEIMER*	W. E. MURRAY	"	2	66	11	
74	132	5	W. E. MURRAY	W. A. KLOS*	"	2	66	11	
75	135	5	W. A. KLOS*	C. M. BUTLER*	"	3	100	11	
1975 - 76	133	5	C. M. BUTLER*	E. E. EYMAN*	"	3	100	11	
					TOTAL	<u>40</u>	<u>74</u>		

\*EDUCATORS

In 1975, the national officers and their respective duties were as follows:

President - shall be responsible for the coordination of the work of the other members of the N.E.C. and of all general executive duties. He shall be responsible for the appointment of all committees which are to serve during his term of office. He shall have charge of or preside at the National Convention and shall preside at all meetings of the National Executive Council and of the Board of Directors. He shall install new College Chapters either in person or by official representation. He shall sign all membership certificates and charters.

Vice-President - shall approve disbursements by cash or check, by initialing vouchers and countersigning all checks. He shall assume any duties assigned to him by the President. He shall preside in the absence of the President.

Executive Secretary - All other duties fall on the Executive Secretary as spelled out in Article IX, Section 8, part C.

The duties of the various interim officers between the original organization and the latest one have been spelled out in Chapter III of this historical sequence.

An interesting observation is the distribution of educators and practicing engineers from industry who were members of the N.E.C. in the periods specified below:

Period	Educators on N.E.C.		Distinguishing Feature of Period
	No.	%	
1904-1928	20	19	No Board
1928-1958	16	18	N.A.B.
1958-1976	40	74	Board of Directors

These data indicate a substantial increase in educator participation on the N.E.C. Fig. 21 shows this change even more dramatically.

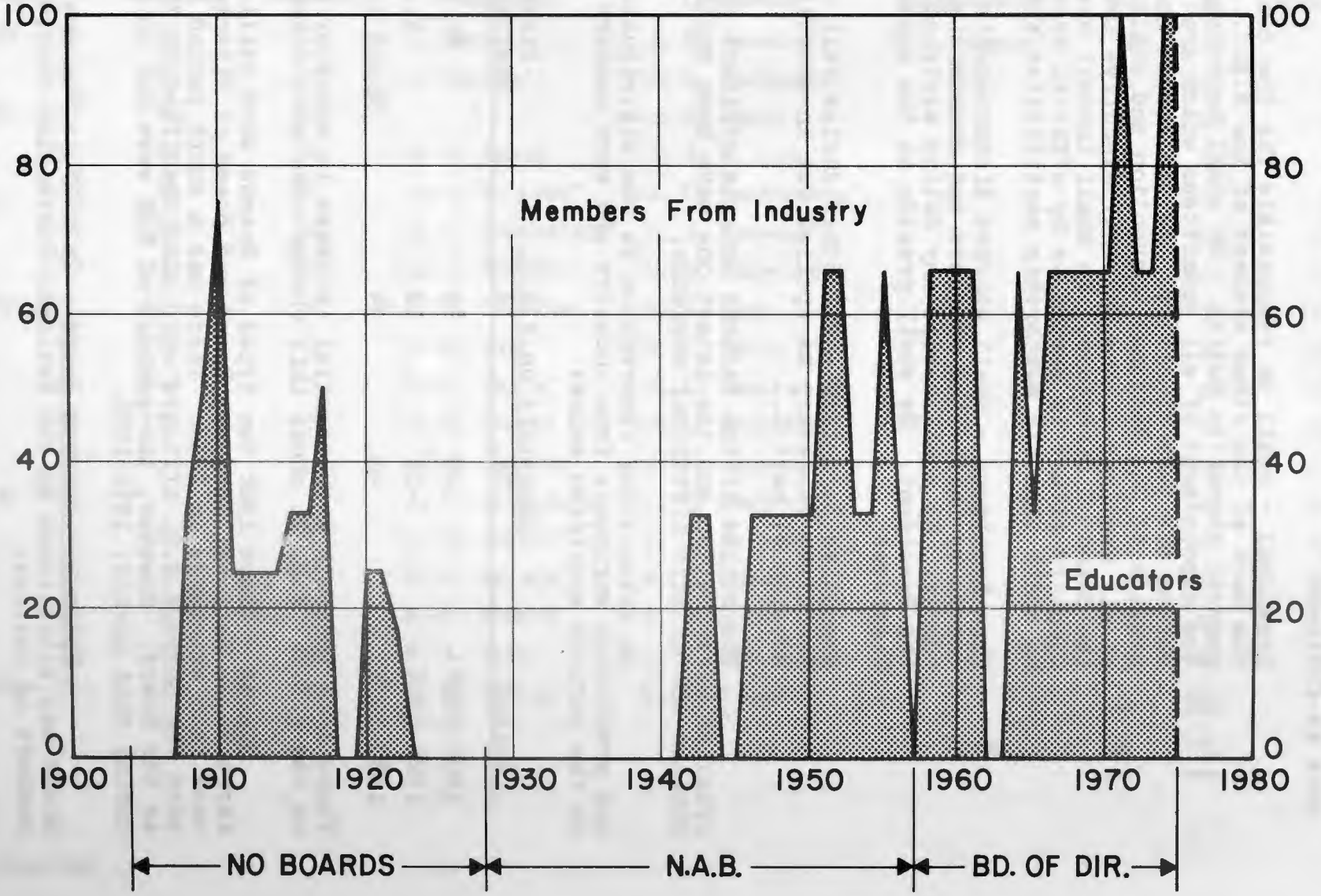
Boards - Since 1928 two types of Boards were utilized by Eta Kappa Nu -- National Advisory Board and Board of Directors. The latter came into existence in 1958. There was a short period of transition when the three N.E.C. officers were also specified by the Constitution as the Board. However, the members of NAB were not on this Board during that period, 1951-1958.

National Advisory Board - In 1927, a National Advisory Board was established by the National Convention consisting of five members as follows:

- a) The last two living past Presidents

FIGURE 21  
ETA KAPPA NU ASSOCIATION  
NATIONAL EXECUTIVE COUNCIL  
EDUCATOR AND INDUSTRY MEMBERS - PERCENT

PERCENT



- b) Three other members elected by the National Convention
- c) These members elected from among their colleagues a Chairman and a Secretary of the Board.

The NAB was now vested with judiciary power in case of disputes and in the interpretation of the Constitution and the Statutes. Such decisions of the NAB were still subject to revision by the National Convention. The NAB had powers to remove members of N.E.C. for cause and was authorized to appoint successors for any unexpired terms of officers of N.E.C. The N.A.B. had access to all records of the Association; but it was not a body of the National Convention. It did report to the National Convention in writing, however.

All decisions, appointments and acts of N.A.B., as also of N.E.C., required ratification by the National Convention.

In 1951, the N.A.B. was increased from 5 to 7 members. The members of this body are listed in Table XX. It is interesting to note that in the period of its existence there were 53 educators elected to the N.A.B. representing 32% of all members on this board. Fig. 22 gives a year-by-year change in the distribution of members -- from education and industry.

Board of Directors - On August 6, 1951, Eta Kappa Nu Association was incorporated in the State of Delaware. The names and places of residence of the incorporators, are as follows:

Frank E. Sanford	Jackson, Michigan
Ovid W. Eshbach	Kenilworth, Illinois
Alton B. Zerby	Dillsburgh, Pennsylvania

As of this time, executive powers of the Association were vested in three national officers, a President, a Vice-President and an Executive Secretary. These three officers constituted the National Executive Council and the Board of Directors. The advisory and judiciary powers of the Association were vested in the National Advisory Board.

On April 11, 1958 a Certificate of Amendment was filed with the Secretary of State of The State of Delaware by C. T. Koerner, President, and A. B. Zerby, Executive Secretary. As of this date the Board of Directors became responsible for the policies of the Association. The N.E.C. was responsible for administration and execution of the acts and Statutes of the National Convention and such policy as established by the Board of Directors.

Thus, beginning with the school year 1958-1959, the National Advisory Board went out of existence. The Board of Directors took its place with seven members including the three officers who constituted the National Executive Council. Table

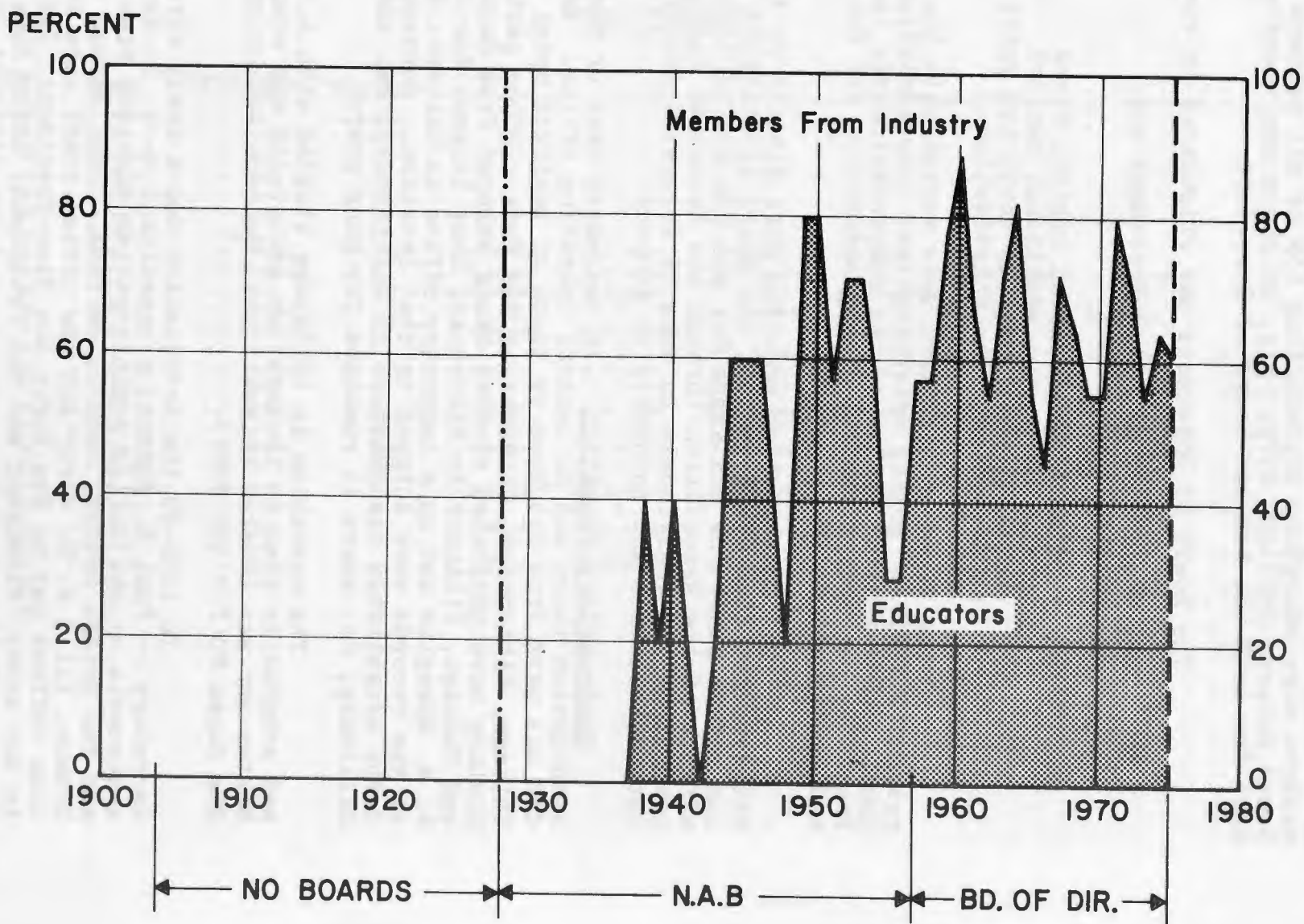


TABLE XX - NATIONAL ADVISORY BOARD MEMBERS  
ETA KAPPA NU ASSOCIATION  
1928 - 1958

YEAR	EDUCATORS		NATIONAL ADVISORY BOARD						
	No.	%	CHAIRMAN	MEMBERS					
1928 - 29	0	0	A. A. HOGREN	A. B. ZERBY	F. E. BROOKS	C. H. REEDER	C. S. GEORGE		
30	0	0	F. E. BROOKS	"	E. S. LEE	"	"		
1930 - 31	0	0	E. S. LEE	"	J. W. WEIGT	J. S. BELTZ	W. S. PETERSON		
32	0	0	J. W. WEIGT	"	M. S. MASON	C. S. GEORGE	J. M. NEWMAN		
33	0	0	M. S. MASON	"	G. H. KELLEY	"	"		
34	0	0	J. M. NEWMAN	"	A. F. WEBER	E. F. WATSON	L. M. GUMM		
35	0	0	R. I. WILKINSON	L. A. SPANGLER	E. P. CARPENTER	C. H. MACDONALD	J. M. NEWMAN		
1935 - 36	0	0	"	"	N. L. BEST	M. J. SUMMERS	J. W. JONES		
37	0	0	"	"	"	"	"		
38	0	0	C. A. FAUST	A. T. JOHNSTON	"	W. J. HERRMAN	C. M. TOMLINSON		
39	2	40	M. BUCK	C. A. FAUST	L. A. DOGGETT*	C. B. HOFFMAN*	H. W. SMITH		
40	1	20	"	L. A. SPANGLER	V. E. LOWDEN	H. R. REED*	O. WIEMER		
1940 - 41	2	40	L. A. SPANGLER	H. N. WALKER*	B. F. LEWIS	M. S. MCILROY*	C. S. THAELE		
42	1	20	"	B. F. LEWIS	J. J. CASSIDY	H. A. DAMBLY	E. B. PAINE*		
43	0	0	F. M. STARR	"	L. F. HUNT	C. C. DASH	F. X. BURKE		
44	1	20	C. H. MACDONALD	R. BEACH*	N. L. BEST	F. E. HARRELL	"		
45	3	60	R. BEACH*	C. B. HOFFMAN	N. S. HIBSHMAN*	"	M. B. REED*		
1945 - 46	3	60	N. S. HIBSHMAN*	"	R. BEACH*	W. E. KOCK	"		
47	3	60	R. BEACH*	P. C. CROMWELL*	P. H. PUMPHREY*	"	O. H. LOYNES		
48	2	40	R. W. FOUSE	"	R. BEACH	F. E. SANFORD	"		
49	1	20	N. S. HIBSHMAN*	J. E. HOBSON	W. J. LYMAN	"	R. W. FOUSE		
50	4	80	T. W. WILLIAMS	N. S. HIBSHMAN*	E. T. B. GROSS*	E. B. KURTZ*	K. T. WILDES*		
1950 - 51	4	80	R. BEACH*	T. W. WILLIAMS	"	"	C. B. HOLT*		
52	4	57	F. E. SANFORD	F. J. HALLENBECK	"	J. M. MONSTREAM	A. NAETER*	S. R. WARREN*	
53	5	71	O. W. ESHBACH*	"	C. R. AMMERMAN*	"	"	"	
54	5	71	E. B. KURTZ*	"	O. W. ESHBACH*	C. T. KOERNER	"	"	
55	4	57	"	"	"	"	"	"	
1955 - 56	2	29	J. E. HOBSON	L. DWON	E. B. KURTZ*	L. W. ROBERTSON	E. T. B. GROSS*	E. E. GRAZDA	J. G. TARBOUX*
57	2	29	S. R. WARREN*	"	"	"	J. W. RITTENHOUSE	"	"
58	4	57	J. D. RYDER*	R. E. NOLTE*	"	C. H. MACDONALD	M. B. REED*	"	C. F. HILL
TOTAL	53	32							

\*EDUCATORS

FIGURE 22  
ETA KAPPA NU ASSOCIATION  
NATIONAL ADVISORY BOARD AND BOARD OF DIRECTORS  
EDUCATOR AND INDUSTRY MEMBERS - PERCENT



XXI lists the members who have served on the Board of Directors since 1958. It is interesting to observe that 119 of these members were educators representing 65% of all members of the Board between 1958 and 1976. Fig. 22 shows the trend of membership for both the NAB and Board of Directors.

The Board of Directors was stipulated to comprise:

- a) The President, Vice-President and Executive Secretary
- b) From each geographical region, fixed by the Board, two additional members who shall be elected to serve two years, as provided in the Constitution

The Board of Directors were vested with the following responsibilities: policy determination; interpretation of the Constitution and the Statutes; the compensation for the Executive Secretary; removal of any members of NEC for good and sufficient cause.

The Constitution provides more details on these matters; but succinctly stated, the Board establishes policies and future plans for Eta Kappa Nu; and NEC administers the affairs of the Association through the Executive Secretary, committees and individuals to whom it delegates specific responsibilities and authority to proceed.

Headquarters Operation - 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 being located in Chicago, Pittsburgh, Columbus or New York. Other parts of this history have indicated records being shipped from Racine, Wisconsin, and Chicago, Illinois to Riverhead, Long Island, for instance. 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 headquarters in Wilkesburg, Pa. and later in Dillsburg, Pa. where it remained for many years.

The operation in Dillsburg started with A. B. Zerby alone and eventually grew to include two assistants and eventually a Bridge Editor who was located in New York. He remained on contract with Eta Kappa Nu for two years.

In 1958-59, the Association had a newly hired Executive Secretary -- Paul K. Hudson; a consultant -- A. B. Zerby; two office assistants -- one titled Administrative Manager, Miss Connie Rosella; and the Bridge Editor, John J. Raffone. Paul Hudson was located in Urbana, Ill.; A. B. Zerby and the office staff were in Dillsburg; John Raffone was in New York; the Vice-President, Jack Tarboux, was in Ann Arbor, Michigan; and the President, Larry Dwon, was in New Jersey. This was truly a complicated transitional change. It went from an Association of Chapters to a Corporation; from scattered

TABLE XXI - BOARD OF DIRECTORS  
ETA KAPPA NU ASSOCIATION  
1958 - 1976

SCHOOL YEAR	EDUCATORS		EXECUTIVE COUNCIL			OTHER MEMBERS OF THE BOARD									
	No.	%	PRESIDENT	VICE PRESIDENT	EXEC. SECT.										
1951 - 52	2	67	O. W. ESHBACH	E. B. KURTZ	A. B. ZERBY	NONE									
1952 - 53	2	67	E. B. KURTZ	E. T. B. GROSS	"	"									
1953 - 54	1	33	E. T. B. GROSS	J. E. HOBSON	"	"									
1954 - 55	1	33	J. E. HOBSON	S. R. WARREN, JR.	"	"									
1955 - 56	2	67	S. R. WARREN, JR.	J. D. RYDER	"	"									
1956 - 57	1	33	J. D. RYDER	C. T. KOERNER	"	"									
1957 - 58	0	0	C. T. KOERNER	L. DWON	"	"									
1958 - 59	4	57	L. DWON	J. G. TARBOUX	P. K. HUDSON*	C. H. MACDONALD	R. E. NOLTE*	M. B. REED*	J. H. CRAIG						
	60	78	A. NAETER*	C. H. MACDONALD	"	J. D. TILLMAN*	G. T. HARNESS*	J. A. TUCKER*	"	F. W. NORRIS*	J. A. M. LYON*				
1960 - 61	8	89	"	J. H. CRAIG	"	R. C. GORHAM*	D. B. JAGOB*	"	J. E. LAGERSTROM*	"	"				
	62	67	J. H. CRAIG	J. A. M. LYON	"	"	"	R. J. KOOPMAN*	"	W. E. KOCK	W. B. GROTH				
	63	55	J. A. M. LYON*	J. E. LAGERSTROM*	"	H. H. SHEPPARD	E. C. LOWENBERG*	"	A. K. HAWKES	"	"	G. W. SWENSON*	C. M. HYDE*		
	64	72	J. E. LAGERSTROM*	R. J. KOOPMAN*	"	"	"	T. J. ROTHWELL	A. K. HAWKES	E. NOGES*	G. B. HOADLEY*	"	"		
	65	82	R. J. KOOPMAN*	H. H. SHEPPARD	"	L. STAUDER*	W. P. SMITH*	"	O. M. SALATI*	"	"	"	"		
1965 - 66	6	55	H. H. SHEPPARD	C. M. HYDE	"	"	"	"	"	J. FARLEY	A. F. GABRIELLE	J. ENGLE*	F. TATUM*		
	67	45	C. M. HYDE	W. P. SMITH*	"	H. L. ABLIN*	W. D. BONSER	C. H. MACDONALD	J. C. HANCOCK*	"	"	"	"		
	68	72	W. P. SMITH*	J. FARLEY	"	"	"	"	"	G. E. DREIFKE*	C. E. HUTCHINSON*	D. THORN*	R. W. SCHINDLER*		
	69	64	J. E. FARLEY	J. C. HANCOCK*	"	L. B. CHERRY*	"	W. K. MAGADAM	C. C. ROGERS*	"	C. E. HUTCHINSON*	"	"		
	70	55	J. C. HANCOCK*	A. F. GABRIELLE	"	"	"	"	"	E. C. GLOVER*	M. S. SHEPPERD	F. C. WEIMER*	M. WEINER		
1970 - 71	6	55	A. F. GABRIELLE	L. B. CHERRY*	"	M. VANVALKENBURG*	W. E. MURRAY	H. C. SLOOUM	L. W. ZELBY*	"	"	"	"		
	72	80	L. B. CHERRY*	F. C. WEIMER*	"	"	"	"	"	N. H. FARNAT*	O. W. MUCKENHIRN*	W. A. KLOS*	"		
	73	70	F. C. WEIMER*	W. E. MURRAY	"	C. M. BUTLER*	R. S. MACMILLEN	B. SHEFFIELD	D. E. TODD*	"	"	"	"		
	74	55	W. E. MURRAY	W. A. KLOS*	"	"	"	"	"	W. H. PICKERING	E. D. EYMAN*	A. A. CHIZMADIA	R. A. ERDEY*		
	75	64	W. A. KLOS*	C. M. BUTLER*	"	E. L. STELLE*	G. R. KANE*	M. D. DODSON	R. W. LUCKY	"	"	"	"		
1975 - 76	6	60	C. M. BUTLER*	E. D. EYMAN*	"	"	"	"	"	C. H. DUNN*	Q. G. GENNARO	A. HAUSER	"		
TOTAL	119	65													

\*EDUCATORS

headquarters to one consolidated in Urbana, Illinois; from two staff people, a consultant, a Bridge Editor, an Executive Secretary to the latter only, with part time help to provide various needed skills. Since then the operation has been centralized in Urbana; and the Executive Secretary again is responsible for editing The Bridge in addition to his many other duties.

Responsibilities of the Executive Secretary are many and broad in scope. They are specified in the Constitution. Carrying them out in the manner required for the good of the Association necessitates special skills and dedication of the kind A. B. Zerby and others who preceded him gave mostly voluntarily to Eta Kappa Nu. Prof. Paul K. Hudson followed A. B. Zerby's example superbly. He does so on a part time basis, however, because he also teaches Electrical Engineering at the University of Illinois on a half time basis.

Local Chapters - There are four kinds of chapters in the Association -- College, Alumni, Eta and Industrial -- each of which has been described in Chapter II. Brother E. B. Kurtz related the parts to the whole of Eta Kappa Nu as follows: (8)

"An honor society primarily revolves around the local chapter; and the summation of the activities of the local chapters plus the activities of the alumni chapters constitute the national society."

The college chapters -- active and Eta -- are organized to carry out the intended purpose of Eta Kappa Nu among students and faculty. The alumni and industrial chapters are organized to do likewise among graduate electrical engineers in industry.

College Chapters - Each college chapter officer group includes a President, Vice-President, Secretary, Treasurer and Bridge Correspondent, although in some instances these offices are combined in an assortment of ways. Each college chapter also has a faculty advisor who is sometimes elected by the student members. Very often he is assigned to the responsibility by the chairman of the Electrical Engineering department -- sometimes not entirely with his voluntary acquiescence.

The function of Faculty Advisor is a very important position and should be entrusted to a person who is thoroughly informed about Eta Kappa Nu matters; and one who is dedicated to its ideals and to helping students realize the importance of properly carrying out extra-curricular responsibilities which they accepted when they were elected to office. In addition, the Faculty Advisor is a principal continuity link between Eta Kappa Nu national and campus activities over a span of years.

It is a rare occasion when student officers on their own are well informed enough and self motivated enough to carry out their responsibilities effectively. Consequently, some chapters do admirably well on occasion; others do very poorly quite consistently; and too many of them simply seem to exist in a mode of mediocrity for a long time, with sporadic pips of superb effort.

There exists a need to continually instill the spirit of the Founders regarding Eta Kappa Nu in each of the college chapters. This may be the most important need which Eta Kappa Nu faces in the future. One of several possible solutions is an inspired Faculty Advisor.

A Faculty Advisor Award For Excellent Service Rendered would help to acknowledge the good work of outstanding Faculty Advisors. Such an Award may have the potential of inspiring others to perform well also. The importance of effective Faculty Advisors was presented to the Board of Directors on several occasions by C. Holmes MacDonald and Larry Dwon. (9)

Alumni Chapters - These chapters are also organized to extend the purpose of Eta Kappa Nu beyond the campus and for the entire lives of its members. Each Chapter is organized to function through elected officers of President, Vice-President, Secretary and Treasurer. In some instances a corresponding secretary or a Bridge Correspondent is also elected. One difference between college and alumni chapters is the absence of an appointed advisor. Where alumni volunteers have remained closely active over a number of years -- C. Holmes MacDonald was a good example in Philadelphia -- the continuity and inspirational needs of the chapter were provided. For many years, the New York Alumni Chapter was fortunate in having among its members about 30 past national and local officers who constituted the New York Alumni Advisory Council. This Council provided desirable motivation to succeeding officers and new members as well as other services to NEC and NAB. Pittsburgh, Boston and Chicago have been fortunate in having dedicated patrons to rely on in various periods of their existence. Los Angeles continues to enjoy such a state of well being.

However, the most disruptive difference between college and alumni chapters is the difference in life style in the industrial world. Unlike the compact college campus environment; most large cities, where alumni chapters have really flourished, comprise a complicated system of work, professional, community and personal forces which are further affected by commuting and business travel requirements. Consequently, a professional person has many priority decisions to make in which voluntary services to Eta Kappa Nu often get neglected. Such considerations have made it very difficult at times to inspire a critical mass of alumni members to meet on a regular basis. It can be expected that only a few really dedicated members of HKN would place a sufficiently high priority on voluntary services to activities for which HKN has become renowned. Still some persons have risen to the occasion in each decade as prior parts of this history have documented. In recent years Los Angeles, Philadelphia and New York have maintained very good to fair activity among its alumni members.

Los Angeles uses a social impetus to maintain its group strong. It has done yeoman work in Constitution revision, Outstanding Senior Awards, advice on matters relating to finances, and preparation of a detailed handbook for Alumni Chapters.

Philadelphia also uses a monthly social luncheon as its catalyst; but much effort has gone into regional visitation meetings, joint initiations among local college chapters and other similar joint efforts. It also is a primary participant in the Outstanding Teacher Award activity.

Chicago's Alumni Chapter has been famous for its past employment conferences and especially for its work on two guidance films which will be described later. It also has organized some regional visitations.

To New York belongs well deserved honor for several nationally known activities which gained considerable recognition for HKN -- The Chapter Award, The Recognition of the Outstanding Young Electrical Engineer; the Regional Visitation Concept, the Employment Committee during the depression, the Salary Surveys, the editing of The Bridge for many years and the New York Advisory Council.

Unfortunately all good situations seem to reach a peak and then they regress. So it has occurred with New York Alumni Chapter. From its height in the depression and post World War II period, it has become less active as a meeting chapter but its committees continue to give dedicated attention to all of the activities which have been mentioned above. More recently its more active members established the first Industrial Chapter.

In 1975, Ms. Quayne G. Gennaro has taken it upon herself to reorganize the New York Alumni Chapter. She is also the first lady member of the Board of Directors. In 1975, she organized a well attended chapter meeting and a Regional Visitation of College Chapters at Pratt Institute of Technology.

It is the intention to have separate histories prepared by each alumni chapter which will present more significant details of their contributions to the total cause of the Eta Kappa Nu Association. Philadelphia Alumni Chapter was so reported in The Bridge already. (10)

Industrial Chapters - In 1975, the first Industrial Chapter was organized at American Electric Power Service Corporation. Two principal influencing members in this act were Brothers A. F. Gabrielle and Larry Dwon -- each a past president of the New York Alumni Chapter and of the national Association.

Another important factor was a high concentration of HKN members in American Electric Power Service Corporation who for many years strove to keep the New York Alumni Chapter viable in spite of the conditions mentioned previously which mitigated against its former highly active and productive nature.

The industrial chapter concept was described in Chapter II.

Advisory Council - At the concluding meeting of the New York Alumni Chapter in the 1932-33 school year, president C. A. Faust mentioned a unique event. He spoke of a special meeting of past and present chapter officers who would consider ways of aiding the New York Alumni Chapter as well as the National Organization.

This was the beginning of the New York Alumni Advisory Council -- a group of especially devoted members, without National portfolio, who would on several future occasions be called upon to give advice regarding national HKN issues. This group also guided new officers of the New York Alumni Chapter and generally instilled in them the Founder's spirit of HKN. Having been one so advised and helped by this unique group and, a member thereof later, makes it easy to write enthusiastically about its sphere of assistance on important matters.

Included among the areas of assistance envisioned initially were changes in the By-Laws; ways of improving local meetings; how to make a chapter more valuable to the members; a questionnaire to determine members' preferences as to meetings and activities; the formation of an Employment Committee; and offering advice to national officers based on prior experience in national office of HKN.

The last mentioned fortuitous situation established the reasonableness of such an Advisory Council. It comprised a group of devoted Eta Kappa Nu members who had demonstrated extra-ordinary concern about the Association's welfare and objectives, through self-motivated participation locally and nationally. Table XXII lists the principal officers of the New York Alumni Chapter from 1910 through 1976. Those men who also held national office on NEC or NAB are noted along with the years they served on these bodies. Those men among the listed group -- as well as R. Beach, N. S. Hibshman, J. W. Weigt, O. H. Loynes -- who remained resident in the New York Area, in the period 1932-1960, comprised the New York Advisory Council. At times, 30 such men were active in the Council simultaneously, at meetings held once each year and several times on special request by national officers.

Among its efforts the following are samples:

1. Recommended new members for various offices in the New York Alumni Chapter, National Advisory Board and National Executive Council.
2. At the request of NEC the Advisory Council would meet with the National Officers and members of NAB to discuss national problems and to give advice on such matters.
3. On some occasions the New York Advisory Council investigated and studied matters that came to its attention and then alerted NEC and NAB of its views before action was taken by them on sensitive subjects. In some instances the New York Advisory Council prevented undesirable actions.
4. In 1945 the Advisory Council recommended that the New York Alumni Chapter should conduct an employment information service. Earlier in the thirties it established an Employment Committee which had been very successful.
5. In 1948 it proposed a Vladimir Karapetoff Award in honor of its eminent lecturer of long standing.

TABLE XXII - NEW YORK ALUMNI CHAPTER OFFICERS  
MEMBERS OF NEW YORK ADVISORY COUNCIL  
ETA KAPPA NU ASSOCIATION

NEW YORK ALUMNI CHAPTER PRINCIPAL OFFICERS

SCHOOL YEAR	PRESIDENT	YEARS ON		VICE PRESIDENT	YEARS ON		SECRETARY	YEARS ON		TREASURER	YEARS ON	
		NEC	NAB		NEC	NAB		NEC	NAB		NEC	NAB
1909 - 10	B. T. ANDERSON	5		E. B. WHEELER	2		F. H. BAGLEY					
1910 - 11	E. B. WHEELER	2					R. E. BOWSER			R. E. BOWSER		
12	E. B. WHEELER	2					"			"		
13	E. B. WHEELER	2										
14	E. B. WHEELER	2										
15	E. B. WHEELER	2					L. H. GRAVES					
1915 - 16	B. T. ANDERSON	5					C. M. HALL			C. M. HALL		
17	B. T. ANDERSON	5					A. H. HEITMAN	3		A. H. HEITMAN	3	
18	C. J. MALONEY			J. R. FRY			M. C. HALE	2		E. E. BROWNING		
19	B. T. ANDERSON	5		F. K. ROWE			A. C. GRAYSON	1		S. G. BOYD		
20				F. E. BROOKS	3		F. K. ROWE					
1920 - 21	E. E. EBY			A. C. GRAYSON	1		I. E. COLE			F. E. BROOKS	3	
22	G. P. SAWYER	3		I. E. COLE			H. D. BENDER			O. M. HULLINGER		
23	M. S. MASON	2	2	H. D. BENDER			R. E. HANTZSCH			G. H. MCCARTHY		
24	E. F. WATSON	2	1	R. E. HANTZSCH			R. A. STROTHMAN			C. T. GRANT		
25	M. C. HALE	2		R. A. STROTHMAN			R. GUENTHER			D. M. TERRY		
1925 - 26	R. A. STROTHMAN			R. GUENTHER			P. S. DARNELL			L. S. NEBB		
27	G. P. SAWYER	3		F. E. BROOKS	3	2	L. S. NEBB			C. T. GRANT		
28	L. S. NEBB			G. T. GRANT			G. A. ALBERT			R. I. WILKINSON	2	3
29	R. I. WILKINSON	2	3	G. J. KNADEL			G. C. HUGGLER			E. F. SMITH		
30	G. J. KNADEL			A. PAONE			J. UMHOEFER	3		I. E. COLE		
1930 - 31	I. E. COLE			A. F. WEBER			C. A. FAUST	3	2	H. WHITTLE		
32	A. F. WEBER			C. A. FAUST	3	2	K. G. VANWYEN			A. R. CHAPPELKA		
33	C. A. FAUST	3	2	A. R. CHAPPELKA			B. F. LEWIS	2		O. W. MANZ		
34	A. R. CHAPPELKA			R. W. FOUSE	2	2	R. C. TAYLOR			R. B. SCHANCK		
35	R. W. FOUSE	2	2	B. F. LEWIS	2		W. A. CLARK			H. M. FEE		
1935 - 36	B. F. LEWIS	2	2	A. PAONE			O. H. LOYNES	2		H. M. FEE		
37	A. PAONE			O. H. LOYNES			A. W. ZIEGLER			T. C. DUNCAN		
38	O. H. LOYNES	2	2	A. W. ZIEGLER			T. C. DUNCAN			D. M. TERRY		
39	A. W. ZIEGLER			D. M. TERRY			E. J. THIELEN			W. H. HAPPE		
40	D. M. TERRY			E. J. THIELEN			M. F. FITZPATRICK			E. H. BASHORE		
1940 - 41	E. J. THIELEN			R. W. PASHBY			B. A. FAIRWEATHER			T. J. WRIGHT		
42	R. W. PASHBY			W. H. TIDD			J. H. BOLLMAN			J. W. HOSTEHER		
43	W. H. TIDD			V. L. DZWONCZYK	2	3	F. J. HALLENBECK		4	H. W. SYMONDS		
44	V. L. DZWONCZYK	2	3	J. W. HOSTETTER			A. E. LEITERT			H. W. SYMONDS		
45	J. W. HOSTETTER			A. E. LEITERT			J. A. WELLER			N. A. TURNBULL		
1945 - 46	A. E. LEITERT			J. D. ADASHKO			L. W. KIRKWOOD			C. H. WAGNER		
47	J. D. ADASHKO			L. W. KIRKWOOD			A. R. LONGENECKER			C. P. STEINHAUSER		
48	L. W. KIRKWOOD			H. A. TURNBULL			C. P. STEINHAUSER			M. BRENNER		
49	H. A. TURNBULL			F. J. HALLENBECK			M. BRENNER			L. W. STAMMERJOHN		
50	F. J. HALLENBECK		4	M. BRENNER			L. W. STAMMERJOHN			A. YOCKEL		

TABLE XXII (CONT'D)

NEW YORK ALUMNI CHAPTER PRINCIPAL OFFICERS

SCHOOL YEAR	PRESIDENT	YEARS ON		VICE PRESIDENT	YEARS ON		SECRETARY	YEARS ON		TREASURER	YEARS ON	
		NEC	NAB*		NEC	NAB*		NEC	NAB*		NEC	NAB*
1950 - 51	M. BRENNER			E. E. GRAZDA			J. H. CRAIG	2	2	A. YOCKEL		
52	E. E. GRAZDA			J. H. CRAIG			E. D. CALLAHAN			J. W. STEINER		
53	J. H. CRAIG	2	2	E. D. CALLAHAN	2	2	F. W. YOUNG			A. J. LAND		
54	J. H. CRAIG	2	2	E. D. CALLAHAN			F. W. YOUNG			J. W. STEINER		
55	E. D. CALLAHAN			F. W. YOUNG			E. F. SCHUSTER			J. F. DOWLING		
1955 - 56	E. D. CALLAHAN			F. W. YOUNG			E. F. SCHUSTER			W. B. GROTH		
57	F. W. YOUNG			E. F. SCHUSTER			W. LEVIDOW			J. JOSEPH		
58	E. F. SCHUSTER			W. B. GROTH			Z. LYON			R. CRANE		
59	W. B. GROTH			J. H. MULLIGAN			J. W. STEINER			L. F. DION		
60	J. H. MULLIGAN			W. LEVIDOW			H. PERLIS			L. F. DION		
1960 - 61	W. LEVIDOW			H. PERLIS			E. SAGAN			T. PICK		
62	H. PERLIS			A. F. GABRIELLE	2	2	U. A. SPERANZA			W. BENDER		
63	A. F. GABRIELLE	2	2	W. BENDER			U. A. SPERANZA			E. G. DEMOTT		
64	B. SHEFFIELD			D. DOUGLAS			H. GREENBERG			E. G. DEMOTT		
65	D. DOUGLAS **			H. GREENBERG			F. A. RUSSELL			B. RENZ		
1965 - 66	P. F. CARLE, JR.			H. GREENBERG			F. A. RUSSELL			A. LEFKOW		
67	I. ENGLESON			F. A. RUSSELL			-			A. LEFKOW		
68	I. ENGLESON			E. W. MARKARD			J. C. STRATTON			A. LEFKOW		
69	F. A. RUSSELL											
70	A. LEFKOW			R. A. DONIA			F. CARDELLI			R. J. DEASY		
1970 - 71	R. A. DONIA			L. L. NOCK			R. J. DEARY			T. F. GARRITY		
72	J. PROVANZANA			R. J. DEASY			T. F. GARRITY			R. BOZGO		
73	F. CARDELLI			T. F. GARRITY			G. MANGIERO			J. PROVANZANA		
74	G. MANGIERO			Q. G. GENNARO		2	E. CARDELLI			J. PROVANZANA		
75	G. MANGIERO											
1975 - 76	Q. G. GENNERO		2									

\*NAB DISCONTINUED (1958) AND THEREAFTER WAS BOARD OF DIRECTORS.

\*\*PART OF TERM COMPLETED BY B. SHEFFIELD.

Because some of the New York Alumni Advisory Council meetings dealt with delicate national Association issues; they did involve some frank and heated discussions. However, in all instances, after the heat of sincere dialogue subsided, the welfare of HKN was enhanced as a result of these meetings. These men were experienced and loyal Eta Kappa Nu members. Intelligent men with strong individual views; but sincere beliefs in Eta Kappa Nu's objectives; and of its importance to the Electrical Engineering profession; have always found ways to resolve their differences.

The eventual establishment of the Board of Directors seemed to obviate the need and usefulness of the New York Alumni Council. It served well when it was needed. It faded away when it was less needed.

National Committees - Much of the work of HKN has been voluntarily planned, organized and implemented by individuals and national standing committees as distinguished from temporary committees at assembled national conventions. There were many of the latter type. They were effective in proposing operating and statutory changes as other parts of this historical manuscript have revealed. In this section, only the national standing committees which were appointed for major studies and for implementation of national programs will be reviewed.

The first major committee appears to have been a Constitution and Statutes Committee appointed by the 8th Convention on April 6, 1912. The Committee included L. H. Harris, Chairman; F. P. Wittich; and R. S. Amdt.

In 1913, at the 9th Convention, B. T. Anderson appointed a committee, "to assist the entire membership of Eta Kappa Nu." It comprised the following members:\*

M. L. Carr (Chairman) - Underwriters, Chicago  
C. T. Evans - Cutler Hammer Co., Milwaukee  
E. B. Wheeler - Western Electric Co., New York City  
L. H. Harris - University of Pittsburgh, Pittsburgh  
F. H. Bagley - Union Switch & Signal Co., Pittsburgh  
T. H. Amrine - Westinghouse Lamp Co., East Orange, N. J.

This committee proposed an Employment Bureau which is described in a later section.

A Ritual Committee, with D. G. Evans as Chairman, was reported at the 17th National Convention on April 8 and 9, 1921. At this same Convention, a Committee on Relations Between Alumni and Active Chapters was mentioned comprising H. W. Stevens, C. T. Evans and R. E. Moody.

Another Ritual Committee was reported at the 18th Convention on April 7 and 8, 1922. It consisted of J. B. Kelly, Chairman; J. W. Weigt, B. C. Knerr and O. W. Mang, Jr.

A Coat-of-Arms Committee -- H. S. Cocklin, G. W. Anderson and C. P. Hancock -- was appointed at the 19th Convention in 1923.

In 1924, at the 20th Convention, a Committee on Scholastic Standing was appointed. Its chairman was A. A. Hofgren. At this National Convention, the following committee chairmen reported on the Employment Bureau concept:

National Committee	-	W. F. Schaller
Chicago Alumni	-	E. Pugh
Cleveland Alumni	-	H. M. Sharp
Ft. Wayne Alumni	-	C. H. Ridgley
Milwaukee Alumni	-	F. A. Kartoh
New York Alumni	-	F. K. Rowe
Pittsburgh Alumni	-	S. Hancock
Schenectady Alumni	-	J. J. Baker

In 1927, at the 23rd National Convention, a Committee on Reorganization was appointed consisting of J. W. Weigt, Chairman; M. C. Hale; and D. G. Evans. (11)

In 1929, a Silver Anniversary Committee came into being. It consisted of J. A. Umhoefer, Chairman; A. B. Zerby (Publicity); E. S. Lee and G. H. Kelley (Memorials); M. C. Hale (Speakers) and F. E. Brooks (Finances).

There may have been other committees appointed which the available literature didn't report. Nevertheless, the first major, really long term, standing group -- it cannot truly be classified a committee -- was the National Advisory Board. It was created in 1927. It was the subsequent work of the N.A.B. and N.E.C. members in the early depression days that conceived and later developed the majority of activities which will be described in succeeding sections. To implement the work required in these activities necessitated that many alumni members became involved -- non-members as well -- in various committees, juries and advisory councils. The committee members and individuals so engaged will be recognized below.

Table XXIII lists the major committees and their operating periods. It starts with the Outstanding Chapter Award Committee in 1932.

Chapter Award Committee - Initially, the chapter which received an Award was selected by a Board of Selection consisting of three members of the National Executive Council, and one member of the New York Alumni Chapter. In later years, the Board of Selection evolved into a Chapter Awards Committee comprised mainly of New York Alumni members. Table XXIV shows the participants on these Boards and Committees. The following committee chairmen deserve special mention, for their leadership:

TABLE XXIII - NATIONAL COMMITTEES  
ETA KAPPA NU ASSOCIATION  
1932 - 1975

COMMITTEE NAME	YEARS IN OPERATION	
	NUMBER	ACTUAL PERIOD
OUTSTANDING CHAPTER	43	1932 - 1975
OUTSTANDING YOUNG ELECTRICAL ENGINEER	37	1938 - 1975
SCHOLARSHIP FUND	5	1946 - 1950; 1958
EMPLOYMENT SURVEY	3	1947 - 1950
CONSTITUTION REVISION	1	1950 - 1951
LEGAL INCORPORATION	1	1950 - 1951
HKN FOUNDATION	2	1952 - 1954
BRIDGE	4	1952 - 1956
BRIDGE POLICY	13	1956 - 1969
NEW CHAPTERS	9	1953 - 1962
FINANCES AND INVESTMENTS	12	1952 - 1960; 1962 - 1966
FINANCIAL COUNSELLORS	2	1960 - 1962
HEADQUARTERS ORGANIZATION	2	1953 - 1955
SEMI-CENTENNIAL CONVENTION	2	1953 - 1955
ALUMNI ACTIVITIES	9	1954 - 1963
CONSTITUTION AND STATUTES	20	1955 - 1975
MOVIE	18	1957 - 1975
PUBLICITY	18	1957 - 1975
HKN TRUST FUND	5	1958 - 1963
HKN DISTINGUISHED LECTURE	3	1956 - 1959
EMINENT MEMBER	8	1963 - 1971
ACHS REPRESENTATIVE	7	1968 - 1975
OUTSTANDING STUDENT	7	1968 - 1975
NATIONAL VISITATION	5	1970 - 1975
OUTSTANDING TEACHER	3	1972 - 1975



TABLE XXIV- THE CHAPTER MERIT AWARD SELECTION COMMITTEE  
ETA KAPPA NU ASSOCIATION  
1932 - 1975

SCHOOL YEAR

CHAPTER AWARD COMMITTEE MEMBERS

1932 - 33	R. I. WILKINSON	J. M. NEWMAN	L. A. SPANGLER	J. W. WEIGT	
1933 - 34	"	N. L. BEST	"	M. S. MASON	
1934 - 35	C. A. FAUST	"	A. B. ZERBY	"	
1935 - 36	"	M. BUCK	"	J. B. KELLY	
1936 - 37	L. A. SPANGLER	"	"	"	
1937 - 38	"	B. F. LEWIS	"	"	
1938 - 39	F. X. BURKE	"	"	G. P. SAWYER	
1939 - 40	"	F. E. HARRELL	"	H. WHITTLE	
1940 - 41	C. B. HOFFMAN	"	"		
1941 - 42	"	"	"	L. L. CARTER	
1947 - 48	R. BEACH	F. E. SANFORD	"	T. W. WILLIAMS	
1948 - 49	"	"	"	L. W. KIRKWOOD	
1949 - 50	O. W. ESHBACH	"	"	M. BRENNER	
1950 - 51	"	E. B. KURTZ	"	E. F. GRAZDA	
1951 - 52	E. T. B. GROSS	"	"	"	J. H. CRAIG
1952 - 53	E. F. SCHUSTER	E. D. CALLAHAN	"	"	"
1953 - 54	J. H. STEINER	"	"	"	"
1954 - 55	F. W. YOUNG	"	"	"	L. DWON
1955 - 56	"	"	"	E. F. SCHUSTER	"
1956 - 57	"	W. B. GROTH	"	"	H. B. HANSTEEN
1957 - 58	"	"	"	"	J. H. MULLIGAN
1958 - 59	L. DWON	"	"	W. LEVIDOW	"
1959 - 60	I. E. COLE	S. FISHMAN	"	"	H. J. PERLIS
1960 - 61	A. F. GABRIELLE	R. E. ANDERSON	"	"	"
1961 - 62	E. D. CALLAHAN	E. G. DEMOTT	"	F. A. RUSSELL	B. SHEFFIELD
1962 - 63	E. MARKLAND	P. F. CARL	"	"	H. GREENBERG
1963 - 64	W. T. McMAHON	"	"	"	B. RENZ
1964 - 65	"	D. G. FINK	"	A. LEFKOW	"
1965 - 66	B. RENZ				
1966 - 67	"				
1967 - 68	A. F. GABRIELLE				
1968 - 69	"				
1969 - 70	"				
1970 - 71	A. LEFKOW				
1971 - 72	"				
1972 - 73	"				

Chairmen	Year	Chairmen	Year
J. M. Newman	1932-'33	E. E. Grazda	1952-'53
R. I. Wilkinson	1933-'34	J. H. Craig	1953-'54
N. L. Best	1934-'35	E. D. Callahan	1954-'55
C. A. Faust	1935-'36	F. W. Young	1955-'56
M. Buck	1936-'37	E. F. Schuster	1956-'57
L. A. Spangler	1937-'38	W. B. Groth	1957-'58
B. F. Lewis	1938-'39	J. H. Mulligan	1958-'59
F. X. Burke	1939-'41	W. Levidow	1959-'60
F. E. Harrell	1941-'42	H. J. Perlis	1960-'61
C. B. Hoffman	1942-'43	A. F. Gabrielle	1961-'62
T. W. Williams	1947-'48	F. A. Russell	1962-'64
R. Beach	1948-'49	B. Renz	1964-'67
O. W. Eshbach	1949-'50	A. F. Gabrielle	1967-'70
E. B. Kurtz	1950-'51	A. Lefkow	1970-'75
E. T. B. Gross	1951-'52		

OYEE Award Committee - The Recognition of Outstanding Young Electrical Engineers began in 1936. Two primary groups of volunteers have been responsible for the successful development and continuing success of this major activity of Eta Kappa Nu -- The Award Organization Committee and the Award Jury. A third group deserving credit comprises the members who each year organize the Award Dinner at which the winners and honorable mentions have been publicly honored. The A.O.C. and the dinner planners have been members of the New York Alumni Chapter.

The members of the Award Organization Committee are listed in Table XXV. The members of the various Award Juries are listed in Table XXVI. The following chairmen deserve special mention for their extra-ordinary volunteer effort:

<u>Chairman</u>	<u>Years</u>	<u>Special Note</u>
R. I. Wilkinson	1935-1946	Originator of Award
O. H. Loynes	1946-1947	
L. Dwon	1947-1951	Responsible for Awards from 1942-1951
E. Elvove	1951-1955	
J. H. Craig	1955-1959	
W. B. Groth	1959-1966	
B. Sheffield	1966-1970	
H. J. Perlis	1970-1975	
D. Christianson	1975-	

The Award was discontinued during World War II but all interim years were covered in 1947 in one massive combined effort -- a truly substantial undertaking.

Scholarship Fund - Morris Buck was chairman of this activity from 1945 through 1950. Between 1950 and 1957, the activity was not reported in The Bridge. In the school year 1957-'58 C. T. Koerner was chairman. The objective of this activity was to create a scholarship or fellowship program similar to that of Tau Beta Pi.

TABLE XXV - OYEE AWARD ORGANIZATION COMMITTEE  
ETA KAPPA NU ASSOCIATION  
1935 - 1976

COMMITTEE MEMBER	AWARD YEARS			No.	COMMITTEE MEMBER	AWARD YEARS			No.
	CHAIRMAN	MEMBER				CHAIRMAN	MEMBER		
C. J. BALDWIN		1974 - 76		2	C. T. KOERNER		1958 - 60		2
R. BEACH		1947 - 68		21	M. J. KOLHOFF		1974 - 76		2
H. H. BENNETT		1974 - 76		2	E. S. LEE		1935 - 41, 1947 - 76		36
M. BRENNER		1951 - 57		6	W. LEVIDOW		1961 - 62		1
W. BUCK		1936 - 42		6	B. F. LEWIS		1939 - 42, 1947 - 67		23
E. D. CALLAHAN		1962 - 69		7	O. H. LOYNES	1946 - 1947	1939 - 40, 1946 - 47		2
L. L. CARTER		1939 - 40, 1947 - 51		5	R. W. LUCKY		1969 - 76		7
D. CHRISTIANSEN	1975 -	1973 - 76		3	S. MALLARD		1974 - 76		2
J. H. CRAIG	1955 - 1959	1955 - 66		11	E. MARKARD		1966 - 73		7
R. CRONE		1967 - 72		5	M. S. MASON		1938 - 42, 1947 - 51		8
J. D. D'AREY		1974 - 76		2	D. H. MCCOYNAUGHY		1951 - 54		3
R. DONIA		1971 - 72		1	J. M. MONSTREAM		1951 - 73		22
H. W. DUDLEY		1939 - 40		1	J. H. MULLIGAN		1957 - 66, 1969 - 76		16
V. L. DZWONEZYK (L. DWON)	1942 - 1951	1942 - 76		34	R. W. PASHBY		1941 - 42		1
E. ELVOVE	1951 - 1955	1950 - 57		7	H. J. PERLIS	1970 - 1975	1961 - 76		15
J. ENGELSON		1966 - 76		10	D. C. PRINCE		1940 - 41		1
O. W. ESHBACH		1935 - 40, 1947 - 57		15	S. J. RAITER		1967 - 76		9
J. FARLEY		1958 - 60		2	F. A. RUSSELL		1967 - 76		9
C. A. FAUST		1935 - 36		1	J. D. RYDER		1956 - 58		2
D. G. FINK		1947 - 49		2	C. F. SAVAGE		1969 - 72		3
R. W. FOUSE		1947 - 54		7	E. F. SCHUSTER		1960 - 64		4
A. F. GABRIELLE		1963 - 76		13	B. SHEFFIELD	1966 - 1970	1964 - 76		12
E. E. GRAZDA		1967 - 70		3	R. M. SHOOP		1949 - 51		2
W. B. GROTH	1959 - 1966	1958 - 76		18	R. SLADE		1966 - 71		5
W. C. HALE		1938 - 39		1	L. A. SPANGLER		1938 - 39		1
H. H. HENLINE		1935 - 41, 1947 - 54		13	S. R. WARREN		1955 - 57		2
N. S. HIBSHMAN		1955 - 67		12	R. I. WILKINSON	1935 - 1942	1935 - 76		41
J. E. HOBSON		1955 - 56		1	F. W. YOUNG		1957 - 58		1
P. K. HUDSON		1963 - 69		6	A. B. ZERBY		1941 - 42		1

TABLE XXVI-RECOGNITION OF OUTSTANDING YOUNG ELECTRICAL ENGINEERS  
ETA KAPPA NU ASSOCIATION  
AWARD JURY MEMBERS - 1936 - 1975

SCHOOL YEAR	AWARD JURY MEMBERS						THE ENGINE				
	Vol.	No.	Pa.								
1936 - 37	E. B. MEYER PRESIDENT-AIEE	L. W. W. MORROW EDITOR-ELECTRICAL WORLD	R. I. REES GENERAL (RETIRED)	C. A. BUTCHER MGR.-WESTINGHOUSE	E. S. LEE PAST PRES.-HKN	R. I. WILKINSON PAST PRES.-HKN			33	2	2
1937 - 38	V. BUSH DEAN-MIT	H. P. HAMMOND DEAN-PENN STATE	A. M. DUDLEY E.E.-WESTINGHOUSE	T. F. BARTON ENGR.-GE CO.	H. H. BEVERAGE PRES.-I.R.E.	M. C. HALE PAST PRES.-HKN	R. I. WILKINSON PAST PRES.-HKN		34	2	4
1938 - 39	R. L. SACKETT DEAN EM.-PENN STATE	R. E. DOWERY PRES.-CARNEGIE TECH.	A. M. DUDLEY WESTINGHOUSE	J. C. PARKER PRES.-AIEE	W. WILSON VP-BTL	M. BUCK PAST PRES.-HKN			35	2	4
1939 - 40	H. S. ROBERTS PRES.-PIB	F. H. FARMER PRES.-AIEE	A. M. DUDLEY WESTINGHOUSE	W. H. HARRISON V.P.-AT&T	W. H. HARRISON PAST PRES.-HKN	G. P. SAWYER PAST PRES.-HKN			36	2	2
1940 - 41	C. P. CHABE CH. ENGR. PE CO.	R. E. HELLMUND CH. ENGR.-WEM CO.	R. W. SORENSON PRES.-AIEE	F. E. BROOKS CH. ENGR.-NY TEL CO.	F. E. BROOKS CH. ENGR.-NY TEL CO.	C. P. COPPER CO. F. E. BROOKS	E. F. WATSON ENGR.-BTL		37	2	3
1941 - 42	R. L. SACKETT DEAN EM.-PENN STATE	CH. ENGR.-WEM CO.	M. ELDRIDGE OFFICE OF PROD. MGMT.	CH. ENGR.-NY TEL CO.					38	2	3
1947 - 48	A. B. CLARK V.P.-BTL	F. E. BROOKS CH. ENGR.-NY TEL CO.	O. W. EMBACH DEAN-NORTHWESTERN	U. OF ILLINOIS	W. L. EVERITT U. OF ILLINOIS	E. L. MORELAND V.P.-MIT	C. A. POWEL WEM CO.	C. G. SUITS VP-GE CO.	44	2	1
1948 - 49	J. E. MURDOCH CH. ENGR.-PENN ST CO.	R. W. WILBRAHAM UNITE ENGRS.	N. S. HIBSHMAN DEAN-PRATT INST.	U. OF PENN.	D. W. EMBACH U. OF PENN.	S. R. WARREN U. OF PENN.	C. F. CRAIG VP-AT&T		45	2	8
1949 - 50	J. M. FOOTE COMM. & SOUTH CORP.	N. S. HIBSHMAN DEAN-PRATT INST.	W. B. KOUVENOVEN DEAN-JOHN HOPKINS	MIT	W. B. KOUVENOVEN UNITE ENGRS.	R. W. WILBRAHAM UNITE ENGRS.			46	1	2
1950 - 51	F. BLACK EDITOR-ELECT. WORLD	R. BEACH CONSULT. ENGR.	E. HAUBMANN DEAN-PIB	A. H. KENDE VP-CON. ED. CO.	F. E. SANFORD PRES.-HKN				47	2	2
1951 - 52	S. H. MORTENSEN ALLIS CHALMERS	J. O. PERRINE EDITOR BTL	P. SPORN PRES.-AG & ES CORP.	E. A. WALKER DEAN-PENN STATE	F. E. SANFORD COMMON. ASSOC.	O. W. EMBACH DEAN-NORTHWESTERN			48	1	6
1952 - 53	T. G. LECLAIR COMM. ED. CO.	P. BEACH CONSULT. ENGR.	T. C. FRY BTL	H. J. KELLY PRES.-BTL	C. B. JOLLIFFE EXEC. VP-RCA	E. B. KURTZ PRES.-HKN			49	2	3
1953 - 54	E. T. B. GROSS PRES.-HKN	N. S. HIBSHMAN ABST. SECT.-AIEE	H. A. PETERSON U. OF WISCONSIN	D. B. SINCLAIR GEN. RADIO	F. V. SMITH SERGEANT & LUNDY	A. F. VANDYOK RCA CORP.			50	2	6
1954 - 55	E. M. STRONG CORNELL UNIV.	G. E. PENDRAY MGMT. CONSULT.	S. R. WARREN VP-HKN	L. R. GATY PHILA. ELEC. CO.	R. BROWN VP-BTL	E. T. B. GROSS PAST PRES.-HKN			51	2	3
1955 - 56	S. L. BAILEY CONSULTANT	J. H. FOOTE COMMONWEALTH ASSOC.	J. E. HOBSON DIR.-SRI	S. R. WARREN VP-U. OF PENN.	H. A. WINNE VP-GE CO.	J. F. CALVERT U. OF PITTSBURGH	J. A. HUTCHESON VP-WEM CORP.		52	2	6
1956 - 57	M. D. HOOPER P.S. & E&G CO.	K. B. McCAHON DEAN-CASE INST.	S. R. WARREN ABST. VP-UN. OF PENN	J. E. HOBSON DIR.-SRI	J. W. McRAE PRES.-SANDIA CORP.	N. S. HIBSHMAN SECT.-AIEE			53	2	4
1957 - 58	I. S. COGESHALL DIR.-WESTERN UNION	R. R. HOUGH AT&T CO.	C. J. BELLER C.E.I. CO.	A. V. HAEFF VP-HUGHES	J. M. WALLACE MGR.-WEM CORP.	W. E. KOCK BENDIX AVIATION			54	2	14
1958 - 59	L. F. HICKERNELL PRES.-AIEE	J. A. HUTCHESON WEM CORP.	C. N. LINDER VP-GE CO.	A. N. GOLDSMITH CONS.-RCA	R. J. SHANK VP-HUGHES	L. DWON MGR.-AIEE CORP.	G. J. TAYLOR PRES.-IES	H. PRATT SECT.-IRE	55	2	24
1959 - 60	J. B. BROWDER PRES.-IES	L. DWON PAST PRES.-HKN	L. C. HOLMES VP-AIEE	A. G. KANDOIAN VP-ITT	A. NAETER PRES.-HKN	C. V. ROSEBERRY VP-WEM CORP.	E. WEISS PRES.-IRE		56	2	8
1960 - 61	W. R. CLARK LEEDS & NORTHRUP	J. H. CRAIG AT&T CORP.	E. J. GREEN EX. VP-BTL	J. C. McPHERSON VP-IBM	R. G. SLAVER PRES.-IES	R. B. TEARE, JR. CARNegie INST. TECH.			57	2	8
1961 - 62	J. H. CRAIG AT&T CO.	R. P. CRAIG MGR.-IBM	R. R. HOUGH VP-AT&T	W. E. KOCK DIR.-BENDIX LABS	R. F. METTLER EX. VP-SPACE TECH.	J. M. WALLACE MGR.-WEM CORP.	J. PIERCE EXEC. DIR.-BTL		58	2	10
1962 - 63	J. H. CRAIG SO. N.E. TEL. CO.	B. O. EVANS VP-IBM	A. G. HALL DIR.-PHILCO	D. G. HALL VP-MARTIN CO.	S. C. KILLIAN VP-LAPP INS. CO.	C. H. LINDER VP-GE CO.	S. R. WARREN ABST. VP U OF PENN		59	2	11
1963 - 64	S. R. WARREN ABST. VP-U OF PENN	L. K. DE ROSA VP-ITT	L. K. KIRCHMAYER MGR.-GE CO.	F. MCGINNIS DIR.-SPERRY GYRO	C. F. WAGNER WEM CORP.	J. E. LAGERSTROM ABST. DEAN-IOWA STATE			60	2	19
1964 - 65	D. G. FINK GEN. MGR.-IEEE	J. B. FISK PRES.-BTL	W. S. HILL MGMT. CONS.	E. J. GREEN PRES.-ECPD	J. HILLIER VP-RCA	ABST. DEAN-IOWA STATE	E. R. PIGRE VP-IBM	H. H. SHEPPARD VP-RUMBEY ELEC. CO	61	2	8
1965 - 66	W. K. MAGADAM VP-AT&T	G. E. BEGGS, JR. PRES.-LEEDS & NORTH	G. H. BROWN EXEC. VP-RCA	J. P. ECKERT VP-SPERRY RAND	J. A. HADDAD DIR-IBM	WASHINGTON U	H. H. SHEPPARD VP-IBM	R. T. WEIL DEAN-MANHATTAN	62	2	8
1966 - 67	W. P. SMITH DEAN-KANSAS	C. A. GUNTHER VP-RCA	R. I. WILKINSON BTL	R. I. WILKINSON BTL	B. SHEFFIELD RCA	VP-PE CO.	W. B. GROTH IBM	C. W. HYDE VP-BURROUGHS	63	2	5
1967 - 68	E. D. BECKEN VP-RCA	J. FARLEY ILL. BELL TEL.	R. I. WILKINSON BTL	R. I. WILKINSON BTL	B. SHEFFIELD RCA		W. P. SMITH DEAN-KANSAS	E. A. LEACH VP-SPERRY GYRO	64	2	7
1968 - 69	W. C. MORRISON VP-RCA	S. R. COLLIS ABST. VP-AT&T	A. B. GIORDANO DEAN-PIB	J. H. MULLIGAN VP-IEEE	B. SHEFFIELD RCA		J. E. FARLEY PRES.-HKN	J. WALSH VP-SANGAMO	65	2	18
1969 - 70	C. R. WILLIAMSON ABST. VP-AT&T	W. L. RUBIN DIR.-SPERRY GYRO	S. W. HERWALD VP-WEM CORP.	J. C. HANCOCK PURDUE UNIV.	R. I. WILKINSON BTL		A. F. GABRIELLE VP-HKN	D. G. WILSON PURDUE UNIV.	66	2	4
1970 - 71	L. B. CHERRY VP-HKN	A. E. FITZGERALD VP-NORTHEASTERN	R. I. WILKINSON P.P.-HKN	L. H. RODDIS PRES.-CON ED	L. E. SALINE GE CO.		G. N. STAGG PRES.-STAGG SYST.	J. V. N. GRANGER CONSULTANT			
1971 - 72	L. B. CHERRY PRES.-HKN	H. CHESTNUT MGR.-GE CO.	A. HAUSPURG VP-CON ED.	J. G. TRUKAL VP-PIB	R. I. WILKINSON PP-HKN		P. C. WEIMER VP-HKN	A. F. GABRIELLE PRES.-HKN	68	2	4
1972 - 73	W. MAGADAM VP-NY TEL. CO.	H. H. SHEPPARD VP-RUMBEY ELEC. CO.	S. R. WARREN ASSOC. DEAN-U OF P	P. C. WEIMER OHIO STATE	G. H. BROWN EX. VP-RCA		E. R. CHOPE INDUSTRIAL NUCLEONICS	P. E. HAGGERTY TEXAS INSTRUMENTS	69	2	13
1973 - 74	J. HILLIER EXEC. VP-RCA	W. E. MURRAY PRES.-HKN	H. C. BARNES ABST. VP-AIEE	R. I. WILKINSON PAST PRES.-HKN	H. L. KEITZ PRES.-AT&T		J. J. GUARRERA PRES.-IEEE	A. F. GABRIELLE PRES.-HKN	70	3	5
1974 - 75	W. L. GLOMB VP-ITT&T	R. K. HELLMANN CONSULTANT	K. H. OLSON PRES.-DIGITAL E. CO.	C. J. BALDWIN MGR.-WE CORP.	W. A. KLOS PRES.-HKN		P. I. WILKINSON PAST PRES.-HKN	J. RAGGIZINI N.Y.U.	71	3	5

\*THIS JURY PICKED WINNERS AND HONORABLE MENTIONS FOR ALL SUSPENDED YEARS SINCE 1941-42.

Employer Survey - R. I. Wilkinson was chairman of this Special Survey from 1946 to 1948, as it was called originally. In 1948 the name changed to Employer Survey. No additional information could be found or recollected.

Constitution Revision - E. B. Kurtz was chairman of this committee from 1949-1951. From 1951 to 1957 this committee seems not to have been in existence.

Then a Constitution and Statutes Committee appeared with Chairmen C. T. Koerner from 1957 to 1958 and W. T. Jessup from 1958-1975. Both of these gentlemen are members of the Los Angeles Alumni Chapter.

The members of this committee are listed below:

<u>Committee Member</u>	<u>Years Served</u>
C. A. Faust	1957-1964
W. T. Jessup	1957-1975
R. C. Lewis	1957-1963
H. J. Summers	1957-1967
C. T. Koerner	1959-1967
S. R. Warren	1959-1967
T. O. Rothwell	1963-1967

Legal Incorporation - J. M. Monstream, a patent lawyer and member of the New York Alumni Chapter, carried the bulk of this legal effort for Eta Kappa Nu Association. He was active on this subject from 1949-1958; but The Bridge lists him only from 1949-1951.

HKN Foundation - The chairmen of this activity were Morris Buck from 1946-1950, E. T. B. Gross from 1951 to 1952 and J. E. Hobsen from 1952 to 1954. The original name of this activity was Scholarship Fund.

Bridge - E. E. Grazda was the chairman of The Bridge Committee from 1952 to 1956 and from 1957-1969 when it became known as The Bridge Policy Committee. The committee members over this span of years are listed below:

H. A. Berger	1956-1969
M. Brenner	" "
H. L. Garbarina	" "
P. B. Garrett	" "
F. E. Sanford	" "

This committee deserves considerable credit for helping to improve The Bridge during A. B. Zerby's tenure. It also served objectively at a critical time in 1958-'59.

New Chapters - The chairmen of this committee are listed below:

<u>Chairman</u>	<u>Years</u>
A. Naeter	1952-1954
C. T. Koerner	1954-1956
J. W. Rittenhouse	1956-1957
W. T. Jessup	1957-1958
G. T. Harness	1958-1959
A. B. Zerby	1959-1960
F. N. Norris	1960-1962

W. T. Jessup served as a committee member during 1958-1959. No other members were reported.

Finances and Investments - This activity had the following chairmen directing its affairs:

<u>Chairman</u>	<u>Years</u>
O. W. Eshbach	1952-1957
N. S. Hibshman	1957-1959
C. T. Koerner	1959-1960
R. C. Gorham	1962-1963
R. J. Koopman	1963-1964
H. H. Sheppard	1964-1966

In the years 1960-1962 Brothers C. T. Koerner and C. H. MacDonald were named Financial Counsellors.

Other members of the Finance and Investment Committee included the following:

W. Murphy	1956-1957	A. K. Hawkes	1963-1964
J. M. Monstream	1957-1959	E. C. Lowenberg	1963-1964
C. H. MacDonald	1958-1959	H. H. Sheppard	1963-1964
W. S. Rile	1959-1960	T. J. Rothwell	1963-1964
P. B. Jacob	1962-1963	E. Noges	1964-1965
J. F. Lagerstrom	1962-1963	G. B. Hoadley	1964-1965
C. M. Hyde	1964-1965	G. W. Swanson	1964-1965

Headquarters Organization - A committee dealing with this subject was operative between 1952 and 1954. L. A. Spangler was the chairman. Other members were M. Brenner, E. T. B. Gross, J. E. Hobson and F. E. Sanford.

Semi-Centennial Convention - E. T. B. Gross was chairman of a committee appointed to plan and organize the 50th Anniversary Convention of Eta Kappa Nu. Other members on this committee included: J. E. Hobson, R. D. Borgstadt, J. H. Craig, W. L. Everitt, D. F. Hang, P. K. Hudson, D. S. Babb, G. W. Staats and A. B. Zerby.

Alumni Activities - The chairmen of this committee from 1954 to 1963 are listed below:

<u>Chairman</u>	<u>Year</u>
C. T. Koerner	1954-1956
C. F. Hill	1956-1957
R. E. Nolte	1957-1958
J. A. Tucker	1958-1960
P. J. Jacob	1960-1963

The following members served on this committee:

<u>Member</u>	<u>Years</u>	<u>Member</u>	<u>Years</u>
C. B. Damrell	1959-'61	F. J. Herrmann	1962-'63
A. K. Hawkes	1959-'60	K. C. Perkins	1957-'58
R. M. Wilson	1959-'62	J. R. Haden	1957-'58
W. D. Bonser	1958-'61	G. Harness	1957-'58
J. H. Mulligan	1959-'60	F. W. Young	1957-'58
W. S. Einwechter	1959-'60	W. B. Groth	1958-'59
L. W. Hornfeck	1959-'60	F. F. Zimkiewicz	1958-'59
Austin	1960-'61	J. Blake	1958-'59
W. Levidow	1960-'61	P. Nippes	1958-'59
M. F. Kannes	1961-'63	R. M. Nilson	1958-'59
R. S. Rupp	1961-'63	J. Read	1958-'59
J. D. Arnett	1961-'63	W. C. Damford	1958-'59
W. F. Howse	1961-'63	J. E. Hancock	1958-'59
H. J. Perlis	1961-'63		

Movie Committee - The first Movie Committee was organized in 1954. The chairmen of this committee are listed below:

<u>Chairman</u>	<u>Year</u>
W. L. Everitt	1954-1957
J. A. Hughes	1957-1959
J. V. Fitzpatrick	1959-1961
J. E. Farley	1961-1976

Other members of the committee are the following:

<u>Member</u>	<u>Years</u>	<u>Member</u>	<u>Years</u>
A. W. Schaefer	1957-'58	W. F. Lanterman	1957-'58
C. G. Miller	1957-'59	H. H. Slocum	1957-'62
R. S. Phillips	1957-'67	H. O. Saunders	1958-'62
L. A. Spangler	1957-'67	J. V. Fitzpatrick	- '63
J. E. Farley	1957-'65	A. K. Hawkes	1963-'67
L. W. Helke	1957-'58		

HKN Trust Fund - The chairmen of this committee were:

<u>Chairman</u>	<u>Year</u>
F. E. Brooks	1958-1959
J. A. M. Lyon	1959-1961
R. J. W. Koopman	1961-1963

There were no other members indicated for this activity.

National Public Relations - This activity was the responsibility of the following chairmen and members:

<u>Chairman</u>	<u>Year</u>
W. J. Summers	1957-1958
J. M. Mulligan	1958-1960
L. Dwon	1960-1963
H. H. Sheppard	1967-1969
C. Hutchinson	1969-1974
B. Sheffield	1974-

Other members in 1957-1958 were C. A. Faust, J. M. Mulligan, G. Steward and A. Rose.

HKN Distinguished Lecture - This activity was conceived by L. Dwon who chaired the event from 1956-1958. W. B. Groth was chairman in the 1958-1959 school year at which time the following members were on his committee: L. F. Dion, J. J. Duffy, W. Levidow, and L. P. Rice.

Eminent Member - The Eminent Member Commission was formed in 1963. The commission was chaired by M. J. Kelly until 1971. Other members were L. V. Berkner and A. D. Moore from 1964 through 1968. In 1968, W. E. Kock and O. M. Salati became commission members and remained so until 1971.

In 1964 an Eminent Member Screening Committee was organized to provide a reservoir of names for the Eminent Member Commission. The committee existed until 1970 and comprised the following members: O. M. Salati, Chairman; J. Bordmann, G. E. Dreifke, W. J. Johnson, and W. K. McAdam.

Outstanding Student Award - This activity began in 1968. Since then L. Hamilton has been chairman.

ACHS Representative - C. H. MacDonald was Eta Kappa Nu's representative to the Association of College Honor Societies from 1970 to 1975. Professor P. K. Hudson became the representative in 1975. In years prior to 1960 A. B. Zerby was the representative.

Regional Visitation - In 1970, L. Dwon was appointed chairman of this activity. He organized many Regional Visitations until 1975 when economic considerations curtailed the operation.

National Quinquennial Convention - The first of two assembled conventions authorized after the 50th Anniversary Convention, was organized by the following members:

National Steering Committee:

Larry Dwon, Chairman  
Albrecht Naeter  
C. Holmes MacDonald  
Paul K. Hudson

Alumni Advisory Committee:

J. E. Hobson  
J. A. Tucker

University of Nebraska Advisory Committee:

M. Hobson, Dean of Engineering  
F. W. Norris, Chairman EE Department  
C. M. Hyde, Faculty Advisor, Psi Chapter  
H. Deering, Program Coordinator, Conferences & Institutions  
J. Kohl, Student Member

1962 National Assembled Convention - The second assembled convention since the 50th Anniversary was organized by Brothers P. K. Hudson, Executive Secretary; Director A. K. Hawkes and Chicago Alumni Chapter President M. F. Kann.

## ACTIVITIES

### Introduction

Eta Kappa Nu is more than an Honor Society. In addition to bestowing honor on deserving people, it is dedicated to serve the electrical engineering profession and society. HKN renders its service by means of local and national activities.

It is the purpose of these remaining sections to record the more significant highlights of some very successful activities which Eta Kappa Nu has conceived, organized and implemented over the years. Several of them have brought distinction to the Association.

### Chapters

Individual chapters of Eta Kappa Nu are organized to achieve the objectives for which the Association was conceived. Local college chapters perform through student and faculty participation. Alumni chapters and industrial chapters perform through graduates who are employed in various industries.

College Chapters - In college chapters, the faculty advisor is a key person in maintaining continuity of the Eta Kappa Nu spirit and the many aims of the Association. Student officers are the persons who actually should carry out the responsibilities of their offices with or without prompting by the faculty advisor. Some chapters do admirably well; others do very poorly; and too many of them at times seem simply mediocre in their efforts. There is a continuing need to instill the spirit of the founders in each of the chapters -- college and alumni.

Brother Robin Beach, National President (1948-49) enumerated twenty-five services which chapters of HKN could organize, sponsor and

activate. The following twenty services are abbreviated and up-dated versions of his recommendations: (12)

1. Freshman guidance meetings.
2. Prizes for freshmen and sophomores based partly on scholarship and partly on achievements in activities and hobbies.
3. Meetings with freshman and sophomores in which scholarship and extracurricula activities are discussed in proper perspective.
4. Stimulating HKN members in public speaking and report writing on topics requiring special effort to investigate.
5. Planning, organizing and conducting an electrical show in cooperation with AIEE and IRE (now IEEE) which would be of interest to high school students and lay public.
6. Plan and organize a lecture series of outside speakers on timely and provocative topics of importance to engineers.
7. Utilizing some HKN meetings to discuss subjects related to engineering such as biographies of great professional men, political and environmental factors, business and economic matters.
8. Delegation of work to all members of the chapter through committees, task forces and individual assignments.
9. Tutoring.
10. Evaluating teachers, laboratories and teaching methodologies to improve the system.
11. Presenting an HKN plaque to the engineering school which highlights HKN objectives and gives recognition to faculty advisor and officers.
12. Social meetings with faculty to promote interaction and rapport.
13. Amateur shows for all EE students to enhance departmental cohesion.
14. Appoint long range steering committees to point up school needs and potential objectives.

15. Encourage career meetings to point up opportunities in the various branches of electrical engineering.
16. Evaluate student talks constructively to improve their deliveries including the use of television feedback via memory cassettes.
17. Observe birthdays of famous scientists and engineers with appropriate bulletin board displays and exhibits.
18. Display up-to-date engineering projects of major significance via pictures, models, etc. which are obtained from industry through cooperative efforts of faculty and placement office representatives.
19. Present valuable reference books, pamphlets and other educational facilities to the engineering library.
20. Plan programs in which students are informed about job seeking activities including resume writing, letters, interviews and related matters.

Other activities were mentioned by Brother Beach. Still others could be included to extend the services by which HKN chapters would help students, the school and ultimately the profession of Electrical Engineering. "Participation in such activities is a good base for future management responsibilities in industry", wrote Brother Beach.

Above all else, however, the officers must realize that their office is not simply an honor which was bestowed on them by their classmates. It is in fact an obligation to carry out the responsibilities of their respective offices as specified in the Constitution. The same condition applies to the faculty advisor, only more so, because he represents the continuing link from year-to-year in the HKN system. He is the interface with other faculty, national officers, students, and industry as well.

Examples of things which outstanding chapters have done are described in many issues of The Bridge. References to them will be given under the topic Chapter Merit Award later in this historical review.

Alumni Chapters - The very same fundamental considerations apply to alumni chapters as have been enumerated for college chapters. There are many services which they can render to the members, the profession of Electrical Engineering and the community. The environment is different, however. There is no appointed faculty advisor;



but there may be a dedicated patron or group of members who make it their business to maintain the needed continuity and spirit of purpose.

Some alumni chapters have been outstanding in their participation in local and national activities. Descriptions of their specific contributions will be revealed in their respective histories later, each to be written by local knowledgeable participating members. The Bridge has published numerous accounts of Alumni Chapter activities through Chapter Letters and feature stories. However, only the Philadelphia Alumni Chapter wrote its history, thus far. (13)

All alumni chapters have engaged in dinner meetings with selected speakers; visits to interesting places; theater parties; regional visitations and a myriad of other activities. However, a few of them have conceived, organized and implemented some truly extra-ordinary programs which have distinguished Eta Kappa Nu from other honor societies. These particular activities are listed in Table XXVII.

Industrial Chapters - A relatively new activity among alumni members is the formation of Industrial Chapters. As of this writing only one chapter has been established. It is at the American Electric Power Service Corporation in New York. It is officially named, the AEP Alumni Chapter of Eta Kappa Nu.

The objectives and activities of the foregoing chapter were enumerated in Chapter II.

#### Awards

One important function of an honor society is to recognize exemplary achievements. Eta Kappa Nu has established a number of outstanding activities that address themselves to honoring men and women of unusual achievement and superb character. In the following sections the following Awards will be described briefly:

- Outstanding Chapter Merit Award
- Outstanding Young Electric Engineers Award
- Outstanding Student Award
- Outstanding Teacher Award
- Honorary Members
- Eminent Members
- Distinguished Service Award

One recognition that deserves future consideration is an Outstanding Faculty Advisor Award.

Chapter Merit Award - For the purpose of stimulating interest in chapter activities and giving due recognition for high attainments, the New York Alumni Chapter created the Chapter Merit Award to the

TABLE XXVII - EXTRA ORDINARY ACTIVITIES OF ALUMNI CHAPTERS  
ETA KAPPA NU ASSOCIATION

EXTRA-ORDINARY ACTIVITIES	ALUMNI CHAPTER	THE BRIDGE		
		VOL.	No.	Pg.
HIGH SCHOOL GUIDANCE PROGRAM	BOSTON	53	1	28
MISCELLANEOUS FUNCTIONS AT NEREM	"	61	2	21
NEW ENGLAND AREA MEETING	"	60	3	11
EMPLOYMENT BUREAU PROPOSALS	CHICAGO	13	1	26
EMPLOYMENT CONFERENCES	"	36	4	2
GUIDANCE MOVIES	"	67	3	3
LUNCHEONS AT CHICAGO ELECTRONICS CONFERENCES	"			
LADIES AUXILIARY	LOS ANGELES	33	1	18
SOCIAL FUNCTIONS	"	61	2	18
OUTSTANDING STUDENT AWARD	"	62	1	13
LUNCHEON AT IEEE WESCON MEETINGS	"	63	2	17
MONTHLY LUNCHEONS AT ENGINEERS CLUB	PHILADELPHIA	30	3	20
JOINT STUDENT CHAPTER INITIATIONS	"	61	3	19
OUTSTANDING TEACHER AWARD	"	70	1	21
OUTSTANDING CHAPTER MERIT AWARD	NEW YORK	30	1	17
OUTSTANDING YOUNG ELECTRICAL ENGINEERS AWARD	"	32	3	6
EMPLOYMENT COMMITTEE	"	30	2	3
SALARY SURVEYS	"	27	1	5
LIFE SUBSCRIPTION PLAN TO THE BRIDGE	"	31	5	12
DISTINGUISHED LECTURE	"	54	4	18
REGIONAL VISITATION PLAN	"			
DISTINGUISHED SERVICE AWARD PROPOSAL	"			

TABLE XXV  
TABLE XXII

most outstanding undergraduate chapter each year. That Chapter which accomplishes the most to enhance its value to the chapter members, the national Association and the university -- particularly the Electrical Engineering department -- is judged to be the most outstanding. (14)

The Award consists of a plaque which indicates the nature of the recognition conferred upon the chapter. The four major points considered in this recognition are:

1. Activities of the chapter as a whole, such as sponsoring an electrical show or smoker; giving a prize to the freshman in Electrical Engineering with the highest marks; holding joint meetings with other organizations; sponsoring lectures; initiating or advancing E.E. department activities; dedicating memorials; establishing club rooms; and building prestige for HKN by any other means.
2. Frequency, place and nature of regular chapter meetings, and number of initiation banquets or other special meetings.
3. Scholarship of the chapter, as compared with the university's all-men's average.
4. Minor consideration is given to the activities and honors of the individual members as a means of appraising more accurately the standards of the chapter in selecting men.

The respective winners of this Award since 1932 are indicated in Tables XXVIII and XXIX. The nature of the Award has changed. Initially the winning chapter received a silver plaque and the honorable mentions received a certificate. Since 1962 the national winner received a gold plaque, the regional winners a silver plaque and the honorable mentions received a certificate.

Each year the chairman of the selection committee writes an article in *The Bridge* describing the activities of the winning chapters. Tables XXVIII and XXIX give reference to these articles. Three of the more comprehensive analyses of college chapter activities were made by C. A. Faust, E. E. Grazda and E. D. Callahan. (15,16,17,18)

Recognition of OYEE - The Recognition of Outstanding Young Electrical Engineers has achieved for Eta Kappa Nu more recognition among educators, professional societies, industry and governmental agencies employing electrical engineers than any other single activity. This Award was conceived by E. B. Wheeler and Roger I. Wilkinson. (19)

However, to Brother R. I. Wilkinson belongs the principal credit for developing the original plan and for implementing the procedures and practices associated therewith. He has unselfishly

TABLE XXVIII - THE CHAPTER MERIT AWARD  
 NEW YORK ALUMNI CHAPTER  
 ETA KAPPA NU ASSOCIATION  
 1932-1962

SCHOOL YEAR	MERIT AWARD CHAPTER	SCHOOL	CHAPTERS COMPETING No.	HONORABLE MENTIONS	REFERENCE ARTICLE THE BRIDGE			
					DATE	VOL.	No.	Pg.
1932 - 33	GAMMA	OHIO STATE UNIV.	9		DEC. 33, JAN. 34	30	2	16
1933 - 34	BETA	PURDUE UNIV.			FEB. - MAR. 34	30	3	8
1934 - 35	PI	OREGON STATE			DEC. 34 - JAN. 35	31	2	5
1935 - 36	KAPPA	CORNELL UNIV.	11		OCT. - NOV. 1935	32	1	8
					OCT. - NOV. 1936	33	1	2
1936 - 37	OMEGA	OKLAHOMA A&M	19	KAPPA, EPSILON, SIGMA, RHO	DEC. 36 - JAN. 37	33	2	8
					DEC. 37 - JAN. 38	34	2	2
1937 - 38	EPSILON	PENN STATE	21		FEB. - MARCH 38	34	3	6
					DEC. 38 - JAN. 39	35	2	2
1938 - 39	SIGMA	CARNEGIE TECH.		BETA-ZETA, BETA, EPSILON, KAPPA	FEB. - MARCH 39	35	3	4
					DEC. 39 - JAN. 40	36	2	8
1939 - 40	DELTA	ILLINOIS INST. OF TECH.	24	BETA, SIGMA, TAU	FEB. - MARCH 40	36	3	4
					JANUARY 1941	37	2	8
1940 - 41	BETA-ZETA	NEW YORK UNIV.			MARCH 1941	37	3	18
1941 - 42	KAPPA	CORNELL UNIV.	24	THETA, BETA-ZETA	MAY, 1943	39	4	4
1947 - 48	DELTA	ILLINOIS INST. OF TECH.		MU, BETA-PI	MARCH, 1949	45	3	10
1948 - 49	DELTA	"		ALPHA, BETA-IOTA, BETA PI	JANUARY, 1950	46	2	9
					MARCH, 1950	46	3	12
1949 - 50	BETA-PI	CITY COLLEGE OF N.Y.		BETA, UPSILON, BETA-IOTA	SEPTEMBER, 1950	46	6	6
					NOVEMBER, 1950	47	1	1
					JANUARY 1951	47	2	18
1950 - 51	BETA	PURDUE UNIV	35	BETA-BETA, BETA-EPSILON, BETA-NU, BETA-PI	FALL 1951	48	1	1,3
				GAMMA DELTA	SPRING 1952	48	3	3
1951 - 52	BETA-ALPHA	DREXEL INST. OF TECH.	34	BETA, DELTA, BETA-BETA	FALL, 1952	49	1	5,6
					SPRING, 1953	49	3	9
1952 - 53	BETA-ALPHA	DREXEL INST. OF TECH.	39	BETA, DELTA, OMEGA, BETA-PI, GAMMA-DELTA	FALL, 1953	50	1	14
					SUMMER, 1954	50	4	16
1953 - 54	GAMMA-THETA	MISSOURI, ROLLA	50	PSI, BETA ALPHA, BETA-PI	FALL, 1954	51	1	19
1954 - 55	"	" "	38	LAMBDA, PSI, BETA-PI	WINTER, 1955	51	2	26
1955 - 56	UPSILON	UNIV. OF SO. CAL.		LAMBDA, BETA-NU, BETA-UPSILON, GAMMA THETA	FALL, 1955	52	1	4,9
					FALL, 1956	53	1	18,22
1956 - 57	BETA-NU	RENSSELAER POLY		ZETA, UPSILON, BETA RHO, GAMMA THETA	SPRING, 1957	53	3	22
1957 - 58	GAMMA THETA	MISSOURI-ROLLA		BETA PI	FALL, 1957	54	1	26,28
1958 - 59	" "	" "		BETA PI, PSI, UPSILON	FALL, 1958	55	1	42,45
1959 - 60	" "	" "		UPSILON, BETA-PI, GAMMA GAMMA	WINTER, 1959	56	2	19,21
				BETA ZETA	FALL, 1960	57	1	16
1960 - 61	BETA EPSILON	UNIV. OF MICHIGAN		BETA-PI, GAMMA GAMMA, GAMMA THETA	WINTER, 1960	57	2	14
1961 - 62	GAMMA THETA	MISSOURI-ROLLA		UPSILON, BETA-PI	WINTER, 1961	58	2	9

TABLE XXIX - THE CHAPTER MERIT AWARD RECIPIENTS: 1962 - 1974  
 NEW YORK ALUMNI CHAPTER  
 ETA KAPPA NU ASSOCIATION

SCHOOL YEAR	MERIT AWARD		REGIONAL AWARDS				HONORABLE MENTIONS	REFERENCE ARTICLE THE BRIDGE			
	CHAPTER	SCHOOL	EASTERN	EAST CENTRAL	WEST CENTRAL	WESTERN		DATE	VOL.	No.	Pg.
1962 - 63	BETA PI	CITY COLLEGE OF N.Y.	BETA PI	BETA UPSILON		GAMMA CHI	GAMMA XI	WINTER 1964	60	2	9
1963 - 64	-	-	BETA PI	BETA UPSILON	GAMMA THETA	GAMMA CHI		SPRING 1965	61	3	26
						RHO					
1964 - 65	RHO	UNIVERSITY OF COLORADO	BETA PI	BETA	GAMMA THETA						
				BETA UPSILON							
1965 - 66	BETA PI	CITY COLLEGE OF N.Y.	BETA PI	BETA	GAMMA THETA	RHO					
1966 - 67	BETA PI	" " " "	BETA PI	BETA	GAMMA THETA	RHO					
				BETA OMICRON							
1967 - 68	GAMMA XI	UNIVERSITY OF MARYLAND	GAMMA XI	TAU	GAMMA THETA	UPSILON					
1968 - 69	BETA ALPHA	DREXEL INST. OF TECH.	BETA ALPHA	BETA UPSILON	GAMMA THETA	UPSILON					
1969 - 70	GAMMA GAMMA	CLARKSON INST. OF TECH.	GAMMA GAMMA	XI	BETA CHI	UPSILON					
1970 - 71	GAMMA XI	UNIVERSITY OF MARYLAND	GAMMA XI	DELTA UPSILON	GAMMA THETA	UPSILON		NOVEMBER 1970	67	1	30
1971 - 72	GAMMA XI	" " "	GAMMA XI	EPSILON UPSILON	GAMMA THETA	GAMMA CHI		MAY 1972	68	3	1
1972 - 73	OMEGA	OKLAHOMA STATE		XI		GAMMA CHI	GAMMA THETA	NOVEMBER 1974	71	1	2
1973 - 74	GAMMA CHI	NEW MEXICO STATE	-	-	-	-	XI				
							RHO				

served on all Award Organization Committees since its inception and on many of the Juries.

For this devoted attention to this responsibility Roger was honored at the 1957 Award Dinner by past recipients of the OYEE Award. They presented him with a plaque, Fig. 23 in tribute "To his initiative in creating and developing" the Award.

The Award to the Outstanding Young Electrical Engineer is meant for a person who is less than 35 years old and less than 10 years from his BS degree in electrical engineering, on May 1 of a given year. It is intended truly for the whole person type of individual, who excels not only in his professional pursuits; but also in community, religious, cultural and other activity areas.

Table XXX lists the Award Winners and Honorable Mentions. It also gives references to brief biographies of these men which have been published in The Bridge.

Table XXXI gives further references to articles published in The Bridge on general aspects of this activity and the associated Award Dinners at which the recipients have been honored.

The Award was discontinued during World War II. However, in 1947 all the missing years were made up in one massive effort at which five outstanding Electrical Engineers were selected as well as twelve honorable mentions who were distributed appropriately in each passed year. (20)

Since its inception there have been several articles written which comprehensively analyzed the statistics associated with this Award. Those articles which appeared in The Bridge are listed below: (21,22,23,24,25)

- a) "Some Data Compiled from 1936 Recognition,"  
R. I. Wilkinson
- b) "Salary Performance of 102 Candidates for the  
HKN Award," R. I. Wilkinson
- c) "What Do Ye More Than Others?"  
R. I. Wilkinson
- d) The Most Outstanding Young Electrical Engineers  
1936-1953, V. L. Dzwonczyk
- e) Outstanding Young Electrical Engineers: 1936-1969  
Larry Dwon

Outstanding Student Award - In 1961, the Los Angeles Alumni Chapter began to discuss a student activity which might provide greater incentive for electrical engineering students to become more proficient. (26)

FIGURE 23



TABLE XXX RECOGNITION OF OUTSTANDING YOUNG ELECTRICAL ENGINEERS  
ETA KAPPA NU ASSOCIATION  
AWARD WINNERS AND HONORABLE MENTIONS

SCHOOL YEAR	NAME	OYEE	HONORABLE MENTION	BIOGRAPHER	THE BRIDGE			SCHOOL YEAR	NAME	OYEE	HONORABLE MENTION	BIOGRAPHER	THE BRIDGE		
					VOL.	NO.	PG.						VOL.	NO.	PG.
1936-'37	F.M. STARR	X		R.I. WILKINSON	33	2	4	1955-'56	W.E. CHOPE	X		F.W. TRUXALL	52	2	8
	E.W. BOEHNE		X	M.S. MASON	"	"	5		J.N. GRACE		X	C.H. WEAVER	"	"	10
	P.L. BELLASCHI		X	J.W. WEIGT	"	"	5		H.R. JOHNSON		X	A.V. HAEFF	"	"	12
	A.C. SELETZKY		X	A. PAONE	"	"	6		D.B. SHUSTER		X	G.A. FOWLER	"	"	14
	C.E. VEINOTT		X	B.F. LEWIS	"	"	7		G. WADE		X	L.D. HARRIS	"	"	16
1937-'38	C.G. SUITS	X		R.I. WILKINSON	34	2	5	1956-'57	J.J. BARUCH	X		G.S. BROWN & L.L. BERANEK	53	2	4
	L.L. CARTER		X	K.G. VANWYNYEN	"	"	6		R.B. SEIDEL		X	R.E. SEIDEL	"	"	6
	P.T. FARNSWORTH		X	A. PAONE	"	"	7	1957-'58	R.P. CRAGO	X		C.F. McELWAIN	54	2	15
	C.A. FAUST		X	L.F. UNDERWOOD	"	"	8		G.W. STAGG		X	LARRY DWON	"	"	17
1938-'39	W.E. KOCK	X		R.I. WILKINSON	35	2	5		W.R. BEAM		X	I. WOLFF	"	"	19
	H.E. GOVE		X	A. PAONE	"	"	6	1958-'59	M.R. CURRIE	X		L.M. FIELD	55	2	25
	G.M.L. SOMMERMAN		X	E.J. THIELEN	"	"	7		D.A. BUCK		X	W.C. DANFORTH, JR.	"	"	27
1939-'40	L.A. MEACHAM	X		O.H. LOYNES	36	2	3	1959-'60	E.A. SACK, JR.	X		G. ZENER	56	2	9
	C.K. GIERINGER		X	W.E. KOCK	"	"	5		W.O. FLECKENSTEIN		X	W.M. BACON	"	"	9
	J.E. HOBSON		X	L.L. CARTER	"	"	6		J.M. WENTWORTH		X	J.H. ROE	"	"	12
1940-'41	J.E. HOBSON	X		O.H. LOYNES	37	2	4	1960-'61	K.E. OLSEN	X		H.E. ANDERSON	"	"	13
	D.G. FINK		X	M.F. FITZPATRICK	"	"	5		R.R. JOHNSON		X	H.E. ANDERSON	57	2	9
	S.C. HIGHT		X	F. HARVEY	"	"	6		T.H. THOMPSON		X	R.W. PORTER	"	"	10
1941-'42	C. BRUNETTI	X		F.E. BROOKS	38	2	4		W.B. GREEN		X	L. VIETH	"	"	11
	G. F. LEYDORF		X	A.R. FINLEY	"	"	6	1961-'62	C.J. BALDWIN, JR.	X		J.R. FORTIER	"	"	12
	S. RAMO		X	F.F. WATSON	"	"	7		W.L. SNEVEL, JR.		X	J.K. DILLARD	58	2	11
1942-'43	J.R. PIERCE	X		V.L. DZWONCZYK	44	2	3		H.A. ZOLLINGER		X	L.R. BICKFORD, JR.	"	"	13
	G.D. GILBERT		X	A.R. LONGENECKER	"	"	13	1962-'63	J.T. DUANE	X		M.H. FISHER	"	"	14
	D.B. SMITH		X	A.R. LONGENECKER	"	"	14		F.A. GIGGA		X	W.B. GROTH	59	2	11
1943-'44	N. I. HALL	X		B.F. LEWIS	"	"	4		D.C. FORSTER	X		W.B. GROTH	"	"	13
	A.G. KANDIAN		X	V.L. DZWONCZYK	"	"	15	1963-'64	F.J. YOUNG		X	M.R. CURRIE	60	2	20
	J.W. MCGRAE		X	J.D. TEBB	"	"	16		W.L. GREENBERG		X	N. GREENBERG	"	"	21
1944-'45	R.W. PORTER	X		E.S. LEE	"	"	6	1964-'65	W.L. SHEVEL, JR.	X		R. LANDAUER	61	2	9
	W.G. INGERSON		X	W.R. MACDONALD, JR.	"	"	17		P. DRAGOMIRIS		X	J.J. CADEMARTORI	"	"	11
	E.H. KRAUSE		X	J.M. MONTSTREAM	"	"	18	1965-'66	F.S. VIGLIANTE		X	W.A. DEPP	"	"	13
	D.W. PUGBLEY		X	E.E. GRAZDA	"	"	19		E.M. DAVIS, JR.	X		A.H. ESCHENFELDER	62	2	9
1945-'46	J.M. WALLACE	X		R.I. WILKINSON	"	"	8		R.S. McCARTER		X	J.A. MCCARTHY	"	"	11
	J.A. MORTON		X	A.J. CHICK & R.M. RYDER	"	"	21	1966-'67	M.H. LEWIN	X		B. SHEFFIELD	63	2	4
	E.A. POST		X	A. PAONE	"	"	22		R.L. BRASS		X	J.J. YOSVILLE	"	"	6
1946-'47	E.M. WILLIAMS	X		R.W. FOUSE	"	"	10		W.B. BRIDGES		X	D.C. FOSTER	"	"	6
	B.B. BAUER		X	R.W. FOUSE	"	"	24	1967-'68	H.S. NATHANSON		X	W. NEWELL	"	"	6
	A.C. HALL		X	R.W. FOUSE	"	"	25		R.F. ELFANT	X		W.L. SHEVEL, JR.	64	2	4
	D.L. WAIDELICH		X	R.W. FOUSE	"	"	26		G.H. HEILMEIER		X	J. HILLIER	"	"	7
1947-'48	R.R. HOUGH	X		S.C. HIGHT	44	2	11		R.W. LUCKY		X	W.O. FLECKENSTEIN	"	"	6
	M. CAMRAS		X	R.B. VAILE, JR.	"	"	27	1968-'69	G.H. HEILMEIER	X		J. HILLIER	65	2	18
	J.B. WIESNER		X	K.L. WILDES	"	"	28		L.D. DAVISSON		X	A.V. BLAKRISHNAN	"	"	20
1948-'49	A.M. ZAREM	X		R. LAMBERSON	45	2	3		S.R. HOFSTEIN		X	K.H. ZAININGER	"	"	21
	J.W. FORRESTER		X	G.S. BROWN	"	"	6	1969-'70	R.W. WYNDRUM, JR.		X	D. FELDMAN	"	"	21
	M.E. MOHR		X	A.C. NORWINE	"	"	8		R.E. LARSON	X		P.E. MERRITT	66	2	4
1949-'50	R.C. CHEEK	X		J.M. WALLACE	46	2	3		G.D. BERGLAND		X	J.A. GITHENS	"	"	6
	L.M. FIELD		X	F.O. GLOVER	"	"	6		W.G. SCHEERER		X	D.J. LEONARD	"	"	7
	L.G. GITZENDANNER		X	J.A. MILLER	"	"	7	1970-'71	J.B. FARISON	X		H.J. PERLIS	67	2	2
1950-'51	D.P. CAMPBELL	X		R.A. PLACHTA	47	2	4		E.R. BERLEKAMP		X	H.J. PERLIS	"	"	3
	A.W. EDWARDS		X	J.M. WALLACE	"	"	7		A.M. NOLL		Z	H.J. PERLIS	"	"	4
	K.A. KESSELRING		X	Mrs. J.P. KESSELRING	"	"	9	1971-'72	E.R. BERLEKAMP	X		H.J. PERLIS	68	2	2
	R.W. MAYER		X	Mrs. E.S. MAYER	"	"	11		H.J. HOVEL		X	H.J. PERLIS	"	"	3
1951-'52	L.G. GITZENDANNER	X		J.L. MICHAELSON	48	2	7		G.P. SHURAYM		XX	H.J. PERLIS	"	"	3
	B.R. LESTER		X	K. CRANDELL	"	"	9	1972-'73	G.P. SHURAYM	X		H.J. PERLIS	69	2	10
	R.L. TRENT		X	L. HUSSEY	"	"	11		J.E. GOELL		X	H.J. PERLIS	"	"	11
1952-'53	J.V.N. GRANGER	X		P. JOHNSON	49	2	5		L.W. HOLMSTROM		X	H.J. PERLIS	"	"	11
	E.O. JOHNSON		X	"	"	"	7	1973-'74	L.R. RABINER		X	H.J. PERLIS	"	"	12
	F.W. STAATS		X	S. BECKWITH	"	"	8		J.T. LAMACCHIA	X		H.J. PERLIS	70	3	3
1953-'54	P.A. ABETTI	X		L. WETHERILL	50	2	6		G.K. BECKMANN		X	H.J. PERLIS	"	"	4
	J.E. JACOBS		X	J.F. CALVERT	"	"	8		D.C. BOSSER		X	H.J. PERLIS	"	"	4
	A.G. KEGEL		X	N.V. PETROE	"	"	9	1974-'75	L.J. FORYS		X	H.J. PERLIS	"	"	4
1954-'55	R.F. METTLER	X		N.I. HALL	51	2	5		H.J. HOVEL	X		H.J. PERLIS	71	3	3
	E.E. DAVID, JR.		X	W.E. KOCK	"	"	8		S.J. HONG		X	H.J. PERLIS	"	"	4
	J.F. FULLER		X	L.M. ROBERTSON	"	"	9		R.B. FAIR		X	H.J. PERLIS	"	"	4
	L.K. KIRCHMAYER		X	S.B. CRARY	"	"	11								
	S.B. CRARY		X	L.E. SALINE	"	"	12								

TABLE XXXI - RECOGNITION OF OUTSTANDING YOUNG ELECTRICAL ENGINEERS  
 THE BRIDGE ARTICLES COVERING EVENTS  
 1935 - 1976

SCHOOL YEAR	OYEE COMMITTEE CHAIRMEN	THE BRIDGE REFERENCE			SCHOOL YEAR	OYEE COMMITTEE CHAIRMEN	THE BRIDGE REFERENCE		
		VOL.	No.	Pg.			VOL.	No.	Pg.
1935 - 36	R. I. WILKINSON*	32	3	6	1960 - 61	W. B. GROTH	57	2	8
37	"				62	"	58	2	26
38	"	34	3	3	63	"	59	2	11
39	"	35	3	2	64	"	60	2	22
40	"	36	3	2	65	"	61	2	8
1940 - 41	"	37	2	3	65 - 66	"	62	2	12
42	" **				67	B. SHEFFIELD	63	2	5
43	" **				68	"	64	2	5
44	" **				69	"	65	2	18
45	" **				70	"	66	2	3
1945 - 46	" **				1970 - 71	H. J. PERLIS	67	2	1
47	O. H. LOYNES **	43	3	24	72	"	68	2	1
48	L. DWON#	44	3	5	73	"	69	2	10
49	"	45	3	3	74	"	70	3	3
50	"	46	1	1	75	"	71	3	2
1950 - 51	"	47	2	2	1975 - 76	D. CHRISTIANSON			
52	E. ELVOVE	48	2	2					
53	"								
54	"								
55	"								
1955 - 56	J. H. CRAIG	52	2	5					
57	"	53	2	4					
58	"	54	2	14					
59	"	55	2	24					
60	W. B. GROTH	56	2	8					

NOTES: \* CONCEIVED, DEVELOPED AND IMPLEMENTED AWARD  
 \*\* AWARD SUSPENDED TEMPORARILY  
 # AWARD RESUMED AND RECEIPIENTS PICKED FOR  
 THIS AND ALL SUSPENDED YEARS.



In 1962, a decision was made to recognize an outstanding E.E. student in the nation. Among the decision makers were the following members:

J. Arnett, President	Los Angeles Alumni Chapter,	1961
T. Rothwell,	" " " " "	, 1962
L. Hamilton, Secretary	" " " "	, 1961
G. Mleczo, Treasurer	" " " "	, 1961

A detailed first draft of the intended program was prepared by Brother G. Mleczo. In 1964, the Board of Directors reviewed the proposal and authorized a survey of scholastic standards and practices at various universities at which Eta Kappa Nu chapters were operating. It also requested a well defined and planned program. The program was then fully developed by Brother Mleczo and a survey of scholastic standards was conducted by L. Hamilton, W. Murray and S. McCullough. The program was given a green light in 1964 by the Board.

The definition developed by the originators follows:

"The Outstanding Electrical Engineering Student may be described as being outstanding by virtue of his scholastic excellence and high moral character; coupled with demonstrated exemplary service to his classmates, university, community, and country."

The first young man was selected for the honor in 1965. His name is Carl Anthony Cooper, of Upsilon Chapter, of Eta Kappa Nu, at the University of Southern California. Honorable mentions were D. T. Mangano, of Beta Beta, at Brooklyn Polytechnic Institute; and R. L. Didday, of Beta Chapter, at Purdue University. Other recipients since then are listed in Table XXXII. The respective Award Juries are listed in Table XXXIII.

A comprehensive description of how this Award is implemented is given in an article by L. E. Hamilton. (27)

Outstanding Teacher Award - To recognize excellent teaching of Electrical Engineering students, to improve Faculty-Student-Alumni relations, and to promote the best interest of HKN and the colleges having HKN Chapters is the objective of this Outstanding Teacher Award.

The recipient is honored with a certificate and a plaque at a luncheon held in his honor by HKN National Board of Directors in conjunction with a major IEEE convention.

This Award was conceived by the Philadelphia Alumni Chapter and was first presented in 1973. Brother S. J. Gitomer was the first Chairman of the Distinguished Young E.E. Teacher Award Committee which consisted of the following members: (28)

TABLE XXXII - THE HKN STUDENT AWARD WINNERS  
ETA KAPPA NU ASSOCIATION  
1964 - 1974

SCHOOL YEAR	OUTSTANDING EE STUDENT	HONORABLE MENTIONS	SCHOOL	THE BRIDGE		
				VOL.	No.	Pg.
1964 - 65	C. A. COOPER	D. T. MANGANO	UNIV. OF So. CAL.	62	1	17
		R. L. DIDAY	POLYTECHNIC INST. OF BK. PURDUE	"	"	17
1965 - 66	T. L. THOMAS	M. E. HELLMAN	OHIO STATE	63	1	8
		D. E. WOOLF	NEW YORK UNIVERSITY	"	"	"
1966 - 67	D. F. JOHNSTONE	J. C. ZUERCHER	CARNEGIE TECH.	"	"	9
		D. L. ALF	MARQUETTE UNIV.	"	"	9
1967 - 68	D. A. HANSON	G. N. HENDERSON	PURDUE	64	1	7
		D. E. KNEBEL	WISCONSIN	"	"	7
1968 - 69	T. L. NIEMEYER	L. T. TODD, JR.	UNIV. OF PENNSYLVANIA	"	"	7
		B. S. BARBAY	ILLINOIS	65	2	2
1969 - 70	R. W. ALFORD	J. K. LOX	PURDUE	"	"	2
		D. R. KERTZ	KENTUCKY	"	"	2
1970 - 71	A. M. USAS	R. N. BUSWELL	OHIO STATE	66	2	10
		S. C. CARHART	FLORIDA	"	"	11
1971 - 72	N. H. RUNYAN	F. M. GRUPPUSO	TEXAS (ARLINGTON)	"	"	11
		G. H. BRANDENBERGER	MISSOURI (COLUMBIA)	"	"	11
1972 - 73	J. S. GORDON	E. K. L. CHENG	TEXAS (ARLINGTON)	67	1	3
		S. L. HARKNESS	MICH. TECH. UNIV.	"	"	4
1973 - 74	S. R. BRAMMER	L. M. KAPLAN	M.I.T.	"	"	4
		I. K. LAO	PRINCETON	68	2	6
1964 - 65	C. A. COOPER	D. T. MANGANO	MANHATTAN	"	"	7
		R. L. DIDAY	TUSKEGEE	"	"	7
1965 - 66	T. L. THOMAS	M. E. HELLMAN	POLY. INST. OF BKLYN.	"	"	7
		D. E. WOOLF	NEW MEXICO	69	2	4
1966 - 67	D. F. JOHNSTONE	J. C. ZUERCHER	WASHINGTON U.	"	"	5
		D. L. ALF	OHIO UNIV.	"	"	5
1967 - 68	D. A. HANSON	G. N. HENDERSON	TUSKAGEE	"	"	5
		D. E. KNEBEL	TEXAS (AUSTIN)	70	3	6
1968 - 69	T. L. NIEMEYER	L. T. TODD, JR.	NEW MEXICO	"	"	7
		B. S. BARBAY	PITTSBURGH	"	"	7
1969 - 70	R. W. ALFORD	J. K. LOX	MISSOURI (RULLA)	"	"	7
		D. R. KERTZ	MISSOURI (COLUMBIA)	"	"	7
1970 - 71	A. M. USAS	R. N. BUSWELL	TEXAS (ARLINGTON)	71	3	6
		S. C. CARHART	COOPER UNION	"	"	7
1971 - 72	N. H. RUNYAN	F. M. GRUPPUSO	OHIO UNIV.	"	"	7
		G. H. BRANDENBERGER	TUSKEGEE	"	"	7
1972 - 73	J. S. GORDON	E. K. L. CHENG	NEWARK COLLEGE	"	"	7
		S. L. HARKNESS		"	"	7

TABLE XXXIII - THE HKN STUDENT AWARD JURIES  
ETA KAPPA NU ASSOCIATION

SCHOOL YEAR	AWARD JURY						THE BRIDGE		
	VOL.	No.	Pg.	VOL.	No.	Pg.	VOL.	No.	Pg.
1964-'65	L. V. BERKNER PRES. GRAD. RES. CENTER OF SOUTHWEST	J. HILLIER V.P. RCA LABS.	M. J. KELLY FORMER PRES. BTL	W. H. PICKERING DIRECTOR JET PROP. LABS. CAL. TECH.	C. STARR PRES. ATOMICS INT.	J. B. WIESNER DEAN MIT	62	1	14
1965-'66	H. H. BEVERAGE	G. S. BROWN	L. A. DUBRIDGE	A. N. GOLDSMITH	F. E. TERMAN	A. M. ZAREN	63	1	9
1966-'67	W. L. EVERETT	D. G. FINK	W. E. KOCK	S. RAMO	E. WEBER	V. ZWORYKIN	64	1	7
1967-'68	J. BARDEEN	R. R. HOUGH	E. L. KANOUSE	E. H. SCHULZ	J. A. STRATTON	J. R. WHINNERY	65	2	2
1968-'69	H. E. EDGERTON PROF. EM - MIT	W. K. MACADAM V.P. N.Y. TEL. Co.	K. A. NORTON INT. RADIO CONS. COMM.	J. R. PIERCE EXEC. DIR. BTL	J. D. RYDER PROF. EE - MICHIGAN ST.		66	2	8

R. Aerhart	W. Johnson
R. Burger	A. Kidder
I. Cogan	H. MacDonald
N. Farhat	H. Paxon
C. Fletcher	R. Rikoski
S. Gitomer	H. Sheppard
S. Heyer	T. Williams
T. Hudson	

The first Award Jury consisted of the following men:

A. E. Humphrey	J. Vollmer
W. E. Murray	S. R. Warren, Jr.
L. B. Cherry	F. C. Weimer

This jury selected Charles V. Smith, of the University of Texas-Arlington, for first place honors. Honorable Mentions were D. P. Gelopulos, Arizona State University; R. Pimmel, Ohio State University; and E. K. Stanek, West Virginia University.

In 1974 the North Texas Alumni Chapter implemented the Award procedures with a committee chaired by A. P. Sage of the Southern Methodist University's Department of Electrical Engineering. The following members comprised the Jury of Award: (29)

A. P. Sage	T. W. Ellis
R. Hawthorne	C. J. Hamilton
G. Hoehn	

This jury selected James A. Heinen of Marquette University for first place. Honorable Mentions were M. D. Aldridge, West Virginia University; R. P. Rhoten, Oklahoma State University; and W. M. Waite, University of Colorado.

Honorary Members - The original Constitution included Honorary members among the four grades listed. Article V, Section 5 stated:

"Electrical Engineers, who by their work have shown themselves to be leaders in the profession, shall be eligible for Honorary membership."

In 1910, L. H. Harris wrote about Honorary Members as one of the problems facing Eta Kappa Nu -- "that of giving to it standing among men." He wrote further thusly: (30)

"....The matter of selecting men to honor in this way is, however, one that deserves careful consideration, for there are men of good standing who will accept membership in an organization without thought as to the good or harm that may result to them to accept honorary membership, for the sake of carrying their names on the roll is vain glory indeed, and not worthy of the serious purpose of our society."

He went on to indicate that Alpha Chapter set a good example in its choices.

The next article on Honorary members appeared in 1920. A. B. Zerby wrote that there were many questions asked about this highest order of membership in HKN. He stated the qualifications as being a leader in the profession who has done things. Only active chapters had the power of choosing Honorary members and the Constitution actually prohibited such action by alumni chapters. Honorary members had to be approved by the N.E.C. and by a three fourths vote of the active chapters. A three fourths vote of the active members of a chapter was necessary for approval. (31)

Volumes 6, 7, 8, 9 and 20 of the Bridge listed Honorary Members fairly prominently. Subsequently, some of the Honorary members were pictured on the covers of The Bridge. These issues were listed in Chapter I. On other occasions, short biographical sketches have appeared in The Bridge. Table XXXIV lists all the Honorary members who have been uncovered in this research.

The Honorary member category was discontinued in the 1941 revision of the constitution and in its place there appeared the category of Eminent member.

Eminent Membership - This category of membership was proposed in 1937-38 as an amendment to the Constitution by Morris Buck, B. F. Lewis and A. B. Zerby, officers of N.E.C. It appeared as Article VIII, Section 7, in the 1941 Constitution as follows:

"Eminent Membership may be offered only to those individuals who by their technical attainments and contributions to society have shown themselves to be outstanding leaders in the field of electrical engineering and great benefactors of their fellow men. Proposals for election of Eminent Members may be made by college chapters, alumni chapters, or any member of the National Executive Council or of the National Advisory Board. The candidate must have the unanimous approval of the N.E.C., the approval of the N.A.B. and the approval of at least three-fourths of the College Chapters. Acquiescence by three-fourths of the active members shall be necessary for a chapter's approval. Eminent Members shall be initiated by the National President or his deputy."

The first Eminent Member was inducted in 1950. Robin Beach, National President (1949-50) wrote: (32)

"The afternoon of January 30, 1950, Eta Kappa Nu Association entered upon an inspiring and illustrious extra curricular phase of its career and, thereby, gave birth to a new era in its growth and development -

TABLE XXXIV - HONORARY MEMBERS

ETA KAPPA NU ASSOCIATION

1904 - 1941

NAME	TITLE	THE BRIDGE			NAME	TITLE	THE BRIDGE		
		VOL.	No.	Pg.			VOL.	No.	Pg.
W. L. ABBOT		37	5	9	D. S. KIMBALL	DEAN, CORNELL U.	28	1	COVER
S. J. BARNETT, DR.	PROF., CAL. INST. OF TECH.	9	1	11	C. L. KINSLOE	PROF., PENN STATE	30	4	COVER
F. BEDELL	PROFESSOR, CORNELL U.	20	1	40	C. T. KNIPP	PROF., UNIV. OF ILLINOIS	6	1	4
M. C. BEEBE	PROF., UNIV. OF WISCONSIN	7	1	5	B. G. LAMME		20	1	40
E. B. BENNETT	HEAD EE DEPT., WISCONSIN	29	4	COVER	A. C. LANIER	CH. EE DEPT., MISSOURI (C)	31	4	COVER
E. J. BERG, DR.	DEAN, UNION COLLEGE	29	1	COVER	P. M. LINCOLN	HD. EE DEPT., CORNELL U.	20	1	40
P. S. BIEGLER	DEAN, UNIV. OF SO. CAL.	28	3	COVER	A. M. MACCUTCHEON	PROF., CASE INSTITUTE	20	1	40
M. BROOKS	PROF., UNIV. ILLINOIS	6	1	4	C. M. MARTSOLF	BELL TEL. OF PENN.	8	1	4
J. M. BRYANT	PROF., UNIV. ILLINOIS	6	1	4	A. S. McALLISTER, DR.	PROF., PENN STATE	8	1	4
F. C. CALDWELL	PROF., OHIO STATE UNIV.	30	2	COVER	S. G. McMEEN		20	1	40
L. D. COWELL	PROF., CASE INST. OF TECH.	7	1	5	R. C. MUIR	PRO., UNIV. OF WISCONSIN	35	4	12
J. C. CLARK	PROF., CASE INST. OF TECH.	7	1	5	M. W. NICHOLS, DR.		9	1	11
C. L. CORY	DEAN, UNIV. OF CAL.	20	1	40	H. H. NORRIS	BOSTON ELEVATED R.R. Co.	9	1	11
H. B. DATES	PROF., CASE INST. OF TECH.	6	1	4	E. B. PAINE	PROF., UNIV. OF ILLINOIS	29	2	COVER
R. H. DEARBORN	PROF., OREGON AGRIC. COL.	20	1	40	H. PENDER	PROF., UNIV. OF PENN.	28	5	COVER
P. S. DONNELL	DEAN, OKLAHOMA A & M	28	4	COVER	J. R. PRICE	PROF., UNIV. OF WISCONSIN	7	1	5
A. S. DUNSTAN	HD. EE DEPT., ALABAMA POLY.	31	3	COVER	L. D. ROWELL	PROF., PURDUE	9	1	11
H. S. EVANS	DEAN, UNIV. OF COLORADO	28	2	COVER	H. J. RYAN, DR.	PROF., STANFORD	20	1	40
D. D. EWING	PROF., PURDUE	20	1	40	H. B. SHAW	PROF., U. OF MISSOURI (COL.)	8	1	4
F. A. FISH	PROF., IOWA STATE	20	1	40	E. O. SHREVE		20	1	40
C. E. FLEAGER	V.P. PACIFIC TEL. & TEL. Co.	27	2	13	R. SIBLEY	PROF., UNIV. OF CAL.	20	1	40
E. H. FREEMAN	HD. EE DEPT., ARMOUR INST.	30	1	COVER	J. E. SNOW	PROF., ARMOUR INST. OF TECH.	20	1	40
C. F. HARDING	HD. EE DEPT., PURDUE	30	3	COVER	C. P. STEINMETZ, DR.	PROF., UNIV. OF ILLINOIS	7	1	5
A. M. HOLCOMB	PROF., CASE INST. OF TECH.	8	1	4	A. STILL	PROF., PURDUE	20	1	40
J. H. HUNT	PROF., OHIO STATE UNIV.	6	1	4	A. N. TOPPING	PROF., PURDUE	20	1	40
J. P. JACKSON	PROF., PENN STATE UNIV.	6	1	4	W. L. UPSON	PROF., OHIO STATE U.	6	1	4
F. F. JOHNSON	HD. EE DEPT., IOWA STATE	31	1	COVER	J. W. WATSON	PROF., WISCONSIN	8	1	4
V. KARAPETOFF	PROF., CORNELL UNIV.	20	1	40	A. M. WILSON	HD. EE DEPT., CINCINNATI	31	5	COVER
C. F. KETTERING	CONSULTANT, G.M. RESEARCH	20	1	40					

that of inducting Eminent Members into its Brotherhood."

Dr. Vannevar Bush, Royal W. Sorensen and Vladimir K. Zworykin became the first three Eminent Members. A special ritual was prepared by E. B. Kurtz and R. W. Fouse. The officers at the ceremony were Robin Beach, National President; F. E. Sanford, National Vice-President; A. B. Zerby, Executive Secretary; and E. B. Kurtz, T. W. Williams and Eric T. B. Gross of the National Advisory Board. Brothers E. B. Wheeler (founder), E. M. Strong and C. F. Dalziel served as escorts for the candidates.

On April 28, 1969, the Constitution was amended with respect to Eminent Membership as follows:

Article VI, Section 1: Induction to membership in Eta Kappa Nu Association shall be in one of two forms: Member and Eminent Member.

Section 5: Induction as Eminent Member is reserved for those individuals who, by their technical attainments and contributions to society, have shown themselves to be outstanding leaders in the field of electrical engineering, and great benefactors of their fellowmen.

Statutes, Title 7, Section E: Nominations to eminent membership may be made by a college chapter, an alumni chapter, or by any member of Eta Kappa Nu. For election, the candidate must receive the approval of a majority of the Board of Directors, and the approval of three-quarters of the college chapters.

By-Laws; Article IV, Section 2: Eminent members shall be inducted by the National President or his deputy.

In 1962, an Eminent Member Commission was established to relieve the Board of Directors of this important selection process. In October 1964, an Eminent Member Committee was established to recruit and evaluate nominations before they were sent to the Commission for selection. Approval of a candidate who is favorably reported out by the Eminent Member Commission, is still required by the National Board of Directors and the chapters.

Members of the Eminent Member Commission are listed in Table XXXV. The members of the Committee have been listed in a previous section.

In 1970, Brother M. W. Weiner, member of the Board (1969-71) analyzed the rate at which Eminent Members were initiated. Fig. 24 illustrates the cumulative growth and Table XXXVI lists the Eminent Members since 1940. The table also gives references to The Bridge articles about each of them.

TABLE XXXV - EMINENT MEMBER COMMISSION  
ETA KAPPA NU ASSOCIATION  
1962 - 1971

COMMISSION MEMBER		SCHOOL YEAR	COMMENTS	THE BRIDGE		
CHAIRMAN	MEMBER			VOL.	No.	Pg.
M. J. KELLY	A. D. MOORE	1963 - 64	EMINENT MEMBER - 1954	60	4	2
	W. E. KOCK		" " - 1961			
M. J. KELLY	A. D. MOORE	1964 - 65	" " - 1954	61	1	2
	L. V. BERKNER		" " - 1961			
M. J. KELLY	A. D. MOORE	1965 - 66		62	1	2
	L. V. BERKNER					
M. J. KELLY	A. D. MOORE	1966 - 67		63	1	2
	L. V. BERKNER					
M. J. KELLY	A. D. MOORE	1967 - 68		64	1	2
	W. E. KOCK					
	O. M. SALATI		BOARD REPRESENTATIVE			
M. J. KELLY	A. D. MOORE	1968 - 69		65	1	2
	W. E. KOCK					
	O. M. SALATI		BOARD REPRESENTATIVE			
M. J. KELLY	A. D. MOORE	1969 - 70		66	1	2
	W. E. KOCK					
	O. M. SALATI		BOARD REPRESENTATIVE			
M. J. KELLY	A. D. MOORE	1970 - 71		67	1	2
	W. E. KOCK					
	O. M. SALATI		BOARD REPRESENTATIVE			
			BOARD REPRESENTATIVE			

FIGURE 24

ETA KAPPA NU ASSOCIATION  
CUMULATIVE GROWTH OF EMINENT MEMBERSHIPS  
1950 - 1975

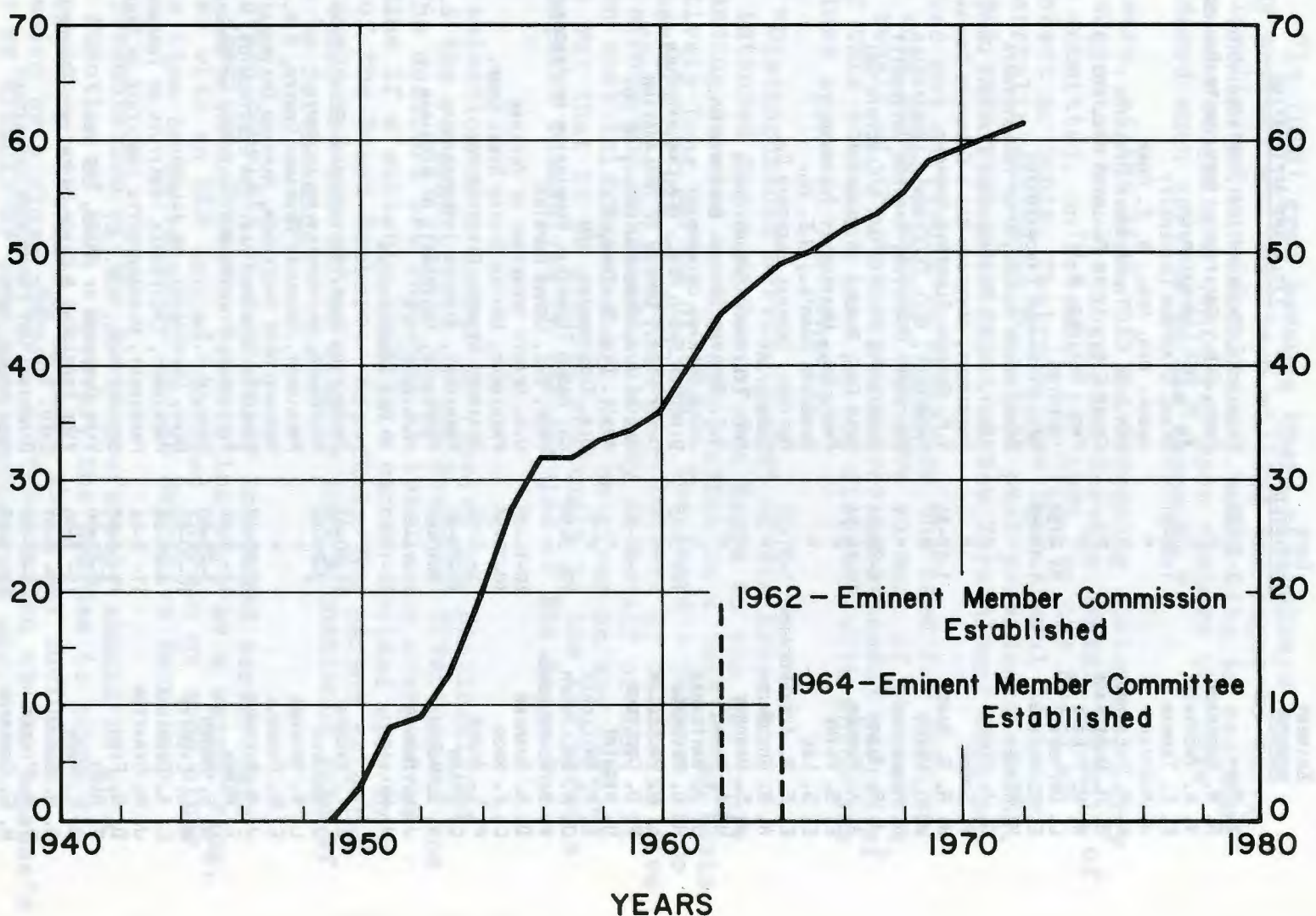


TABLE XXXVI - EMINENT MEMBERS  
ETA KAPPA NU ASSOCIATION  
1940 - 1975

EMINENT MEMBER	DATE INITIATED	TITLE AND AFFILIATION	THE BRIDGE		
			VOL.	NO.	Pg.
V. BUSH	1-30-50	PRESIDENT, CARNEGIE INST. OF WASHINGTON	46	3	1
R. W. SORENSON	"	PROF. E.E., CALIFORNIA INST. OF TECHNOLOGY	"	"	"
V. K. ZWORYKIN	"	V. P. RCA LABORATORIES	"	"	"
F. E. TERMAN	1-22-51	DEAN, STANFORD UNIVERSITY	47	3	5
J. SLEPIAN	"	ASSOC. DIR. RES., W. E. CORP	"	"	"
K. B. MCEACHRON	"	MGR., GE CO. TRANSFORMER DIVISION	48	2	4
S. H. MORTENSON	"	CHIEF E.E., ALLIS CHALMERS MFG. CO.	"	"	5
W. H. TIMBIE	"	PROF. RETIRED; M.I.T.	"	2	5
L. DEFOREST	5- 2-52	INVENTOR	48	3	1
E. C. MOLINA	1-19-53	BELL TELEPHONE LABORATORIES	49	2	9
H. PENDER	"	DEAN, MOORE SCHOOL, U OF PENNSYLVANIA	"	"	10
C. A. POWEL	"	ASS'T. TO VP; WESTINGHOUSE ELECTRIC CORP.	"	"	12
P. SPORN	"	PRESIDENT, AMERICAN GAS & ELECTRIC COMPANY	"	"	13
W. R. G. BAKER	1-18-54	V.P. GENERAL ELECTRIC COMPANY	"	"	"
M. J. KELLY	"	PRESIDENT, BELL TELEPHONE LABORATORIES	"	"	"
R. RUDENBERG	"	PROFESSOR EMERITUS, HARVARD UNIVERSITY	"	"	"
J. B. BLACK	4-20-54	PRESIDENT, PACIFIC GAS & ELECTRIC CO.	50	4	14
A. A. POTTER	10-16-54	DEAN EM., PURDUE UNIVERSITY	51	3	26
E. B. PAINE	"	PROF. EM., UNIVERSITY ILLINOIS	"	"	"
E. S. LEE	"	DIRECTOR ENGR'G.; G.E. Co.	"	"	"
E. F. W. ALEXANDERSON	1-31-55	RETIRED, GENERAL ELECTRIC Co.	51	3	14
A. N. GOLDSMITH	"	CONSULTANT	"	"	16
H. S. OSBORNE	"	BELL TELEPHONE LABORATORIES	"	"	18
H. A. WINNE	"	V.P. RETIRED GENERAL ELECTRIC Co.	"	"	20
J. B. WHITEHEAD	"	JOHNS HOPKINS UNIVERSITY	"	"	19
H. H. BEVERAGE	10- 5-55	DIRECTOR RADIO RES., RCA LABORATORIES	52	1	19
L. N. MCCLELLAN	"	CHIEF ENGR., BUREAU OF RECLAMATION	"	"	19
W. D. COOLIDGE	1-30-56	ASS'T. DIR. RESEARCH LABS., GE Co.	52	3	12
H. NYQUIST	"	ASS'T. DIR. SYSTEMS, AT&T	"	"	14
L. N. BRILLOUIN	"	DIR. ELECTRONICS, IBM	"	"	12
J. H. DELLINGER	10- 3-56	CH. RADIO TECHNICAL COMMISSION OF AERONAUTICS	53	2	14
W. B. KOUWENHOVEN	"	PROF. EM., JOHNS HOPKINS	"	"	15
D. A. QUARLES	10-14-58	U.S. DEPUTY SECRETARY OF DEFENSE	55	2	29
C. F. HOOD	10-30-58	PRESIDENT, UNITED STATES STEEL CORP.	"	"	33
P. L. ALGER	4- 2-60	RETIRED, GENERAL ELECTRIC Co.	56	4	10
C. STARR	10-29-60	PRESIDENT, ATOMICS INTERNATIONAL	57	2	17
A. D. MOORE	9-10-61	PROFESSOR, UNIVERSITY OF MICHIGAN	58	2	18
J. L. BURNES	11-14-61	PRESIDENT, RCA	58	2	15
J. HILLIER	11-17-61	VP RCA LABORATORIES	58	1	23
C. F. WAGNER	11-20-61	CONSULTING ENGR. WESTINGHOUSE ELECT. CORP.	58	2	16
J. BARDEEN	3-29-62	PROFESSOR, UNIVERSITY OF ILLINOIS	58	4	10
L. V. BERKNER	"	PRESIDENT, GRADUATE RESEARCH CENTER, S.W., DALLAS	"	"	10
E. M. PURCELL	"	GERHARD GADE PROFESSOR, HARVARD UNIVERSITY	"	"	10
J. B. WIESNER	10-10-62	DIRECTOR RESEARCH LAB. FOR ELECTRONICS, M.I.T.	"	"	10
E. WEBER	11- 5-62	PRESIDENT, POLYTECHNIC INSTITUTE OF BROOKLYN	"	"	10
G. S. BROWN	3-25-63	DEAN, M.I.T.	59	2	17
W. L. EVERITT	10-30-63	DEAN, UNIVERSITY OF ILLINOIS	59	4	6
L. A. DUBRIDGE	8-25-64	PRESIDENT, CALIFORNIA INSTITUTE OF TECHNOLOGY	61	2	15
J. A. STRATTON	11- 5-64	PRESIDENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY	"	"	21
D. G. FINK	11- 4-65	GENERAL MGR., I.E.E.E.	62	3	14
S. RAMO	8-25-66	VICE CHAIRMAN OF BOARD, TRW INC.	63	2	8
W. E. KOOK	11- 3-66	VICE PRESIDENT & CHIEF SCIENTIST, BENDER CORP.	63	3	7
G. H. BROWN	11- 2-67	EXEC. V.P., RCA	64	3	8
W. H. PICKERING	8-22-68	DIRECTOR, JET PROPULSION LABORATORY	65	2	3
H. E. EDGERTON	11- 7-68	PROF. EMER., MIT	65	3	8
E. R. PIORE	11- 6-69	V.P. & CH. SCIENTIST, IBM CORP.	66	3	8
P. E. HAGGERTY	8-20-69	CHAIRMAN OF BOARD, TEXAS INSTRUMENTS, INC.	67	1	6
W. CISLER	3-19-69	CHAIRMAN OF BOARD, THE DETROIT EDISON Co.	69	1	14
E. L. KANOUSE	8-17-70	CHIEF ENGINEER, L. A. DEPT. OF WATER & RIVER	70	3	11
E. C. JORDAN	4-24-74	HEAD OF E.E. DEPT., UNIVERSITY OF ILLINOIS	71	2	5
E.T.B. GROSS	4- 6-76	PHILIP SPORN PROFESSOR OF POWER ENGINEERING, RPI	72	1	12

Distinguished Service - Chapter II of this historical review contained the following quotation by M. L. Carr, founder, which is appropriate as an introduction to this subject: (33)

"It (HKN) grew because there have always been many members who have been 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 Eta Kappa Nu."

Unaware, at the time, of the foregoing statement, Larry Dwon, in 1971 suggested the Distinguished Service Award. Details of the Award were submitted, on November 15, 1971, to the Board of Directors by Robert A. Donia, Chairman, New York Alumni Advisory Board; A. F. Gabrielle and Larry Dwon both past presidents of HKN. All three members were past presidents of New York Alumni Chapter.

It was not difficult to recognize the need for such an Award when one knew several members who gave so much of themselves, unselfishly, on behalf of the Association over an extended period of time. Proof of this statement lies in the dispatch with which the Board of Directors approved the concept.

The "Distinguished Service Award" of Eta Kappa Nu Association is intended for a member of Eta Kappa Nu who has truly rendered outstanding service to the Association on a continuing basis and for a relatively long period of time. The Award's purpose is to inspire other members of HKN to similarly volunteer or otherwise give of their time, effort and particular ability in behalf of HKN. It is the intention that this Award shall not be given on any regular periodic cycle; but that it be granted sparingly to the few persons who truly distinguish themselves in the service of Eta Kappa Nu Association.

The selection of a member to receive the Distinguished Service Award is the responsibility of the Board of Directors of the Association. The dossiers are reviewed at least once every three years to determine if a suitable candidate can be decided upon by a large majority of the Board Members. Hopefully the person selected would have distinguished himself so clearly that a unanimous vote of the Board would be forthcoming.

The Award consists of a suitably inscribed certificate plus a token of gratitude from the Association such as a watch, ring, lucite pen holder with an HKN emblem imbedded therein or some other more appropriate item to be selected by the Executive Secretary.

The presentation of the Award preferably should be at a suitable public function of HKN. However, the Awardee is given the privilege of suggesting alternative methods which may include a private presentation by a close member, a presentation at the Awardee's chapter (student or alumni) or some more appropriate way.

A biography of the Awardee's accomplishments in behalf of HKN shall be published in The Bridge along with pictures of the presentation.

The Award shall receive "full status" among other honors in HKN. Therefore, it should also be included in the certificate booklets that go to all new members of Eta Kappa Nu.

As of 1976 the members who received this Award are listed in Table XXXVII.

### Visitation Programs

The college chapter visitation program had its beginning in 1932. It was the result of a decision to discontinue annual assembled conventions and instead to hold them biennially. Thereafter, in the interim years, each chapter would be visited by the Executive Secretary, another officer, or a delegated alumni member. (34)

Personal Visits - The success of personal visitations together with the large differential in cost between assembled conventions and the visitation program caused the former to be discontinued for a long time except by special vote of the chapters. Consequently, only one biennial convention was held in 1933. Between that convention and the 1954 convention the personal visitation and mail convention programs prevailed as the principal contact media among chapters, exclusive of The Bridge.

The value of person-to-person meetings between students, faculty and alumni members has been real and well recognized. However, some officers felt that an assembled convention was a better method to accomplish this personal contact; and at the same time to transact national Association business. Other members who had experienced both systems; and were understandably concerned with the financial aspects, did not agree. After a few years, the personal visitation plan became an established mode of operation which provided substantial benefits.

In 1941, a four chapter regional visitation conference was held in Cleveland on May 17 and 18. National Vice-President, F. E. Harrell, and the Cleveland Alumni entertained and visited with student delegates from Ohio State, Pittsburgh, Carnegie Institute of Technology and Case Institute of Technology. This appears to have been the first regional visitation. (35)

In the 1950 decade, there began to emerge signals from some chapters that the personal visitation program wasn't desired. Still other chapters considered the visits to be very useful in spite of some undesirable features.

As a result of this dichotomy involving several considerations, the personal visitation plan almost ceased to be used. Consequently,



TABLE XXXVII - DISTINGUISHED SERVICE AWARD  
ETA KAPPA NU ASSOCIATION

AWARD		SAMPLE OF DISTINGUISHED SERVICE TO HKN	REFERENCE ARTICLE			
YEAR	RECIPIENT		AUTHOR	THE BRIDGE VOL.	NO.	PG.
1971	A. B. ZERBY	1910 EPSILON CHAPTER TREASURER; 1912-'13 NATIONAL TREASURER; 1913-'14 NATIONAL VICE PRESIDENT; 1914-'15 NATIONAL PRESIDENT; 1917-'28 NATIONAL SECRETARY; 1928-34 N.A.B.; 1934-'58 EXECUTIVE SECRETARY AND BRIDGE EDITOR; 1958-'60 CONSULTANT; GENERALLY KNOWN AS MR. ETA KAPPA NU	L. DWON	69	1	9
1972	R. I. WILKINSON	1923 NU CHAPTER INITIATE; NEW YORK ALUMNI CHAPTER; 1927 BRIDGE CORRESPONDENT; 1928 TREASURER; 1929 PRESIDENT; 1932-'33 NATIONAL VICE PRESIDENT; 1933-'34 NATIONAL PRESIDENT; 1934-'37 N.A.B.; ASSISTANT EDITOR OF BRIDGE SEVERAL YEARS; CREATED OUTSTANDING YOUNG E.E. AWARD; BRIDGE ARTICLES; CHAIRMAN AND MEMBER OF NUMEROUS NATIONAL COMMITTEES	B. SHEFFIELD	70	3	8
1973	C. A. FAUST	1927 NU CHAPTER INITIATE; NEW YORK ALUMNI CHAPTER; 1930 SECRETARY; 1931 VICE PRESIDENT; 1932 PRESIDENT; 1934-'35 NATIONAL VICE PRESIDENT; 1935-'37 NATIONAL PRESIDENT; 1937-'39 N.A.B.; ASS'T EDITOR OF BRIDGE; ORGANIZED AND CONDUCTED EMPLOYMENT COMMITTEE DURING DEPRESSION; HELPED CREATE MANY OUTSTANDING ACTIVITIES DURING DEPRESSION YEARS; HONORABLE MENTION IN OYEE AWARD; BRIDGE ARTICLES; STARTED COLLEGE CHAPTER EXPANSION PROGRAM AFTER STUDYING 137 EE CURRICULA AND GRADUATES OVER 8 YEAR PERIOD.	C. T. KOERNER	71	2	16
1974	C. H. MACDONALD	1916 LAMBDA CHAPTER INITIATE; 1933 HELPED FOUND PHILADELPHIA ALUMNI CHAPTER; 1934-'35, 1943-'44, 1957-'58 N.A.B.; 1958-'60, 1965-'67 BOARD OF DIRECTORS; 1959-'60 NATIONAL VICE PRESIDENT; ORGANIZED JOINT INITIATIONS; FINANCIAL COUNSELOR TO HKN; BRIDGE ARTICLES; PATRON OF PHILADELPHIA ALUMNI CHAPTER	P. K. HUDSON	71	2	10
1975	C. T. KOERNER	1930 KAPPA INITIATE; 1931-'35 MEMBER NEW YORK ALUMNI CHAPTER, 1935-'40 ACTIVE IN SAN FRANCISCO ALUMNI CHAPTER; 1940 LOS ANGELES ALUMNI CHAPTER; SECRETARY-TREASURER, VICE PRESIDENT, PRESIDENT; LOS ANGELES ALUMNI CHAPTER ADVISORY BOARD; 1953-'55 N.A.B.; 1956-'57 NATIONAL VICE PRESIDENT; 1957-'58 NATIONAL PRESIDENT; 1969-'76 ASSISTANT BRIDGE EDITOR; SEVERAL NATIONAL COMMITTEES.	W. JESSUP C. A. FAUST	72	3	20
1976	L. DWON	1933 KAPPA INITIATE; NEW YORK ALUMNI CHAPTER; 1935-'38 EMPLOYMENT COMMITTEE; 1940-'42 BRIDGE CORRESPONDENT; 1942-'43 VICE PRESIDENT 1943-'44 PRESIDENT; 1948-'51 CHAIRMAN OYEE AWARD COMMITTEE; 1940-'48 ASSOCIATE BRIDGE EDITOR; 1955-'57 N.A.B.; 1957-'58 NATIONAL VICE PRESIDENT; 1958-'59 NATIONAL PRESIDENT; 1958-'59 BOARD OF DIRECTORS; 1969-'76 ASSISTANT BRIDGE EDITOR; 1970-'76 CHAIRMAN VISITATION PROGRAM; NUMEROUS BRIDGE ARTICLES; 1975 HISTORY OF ETA KAPPA NU	R. I. WILKINSON A. F. GABRIELLE	54 73	1	14

this subject became a major discussion topic at the 1962 National Assembled Convention.

Regional Visitation Plan - At that 1962 meeting, a recommendation was made by the New York Alumni Chapter and all metropolitan New York college chapters, with support from the Philadelphia Alumni and Boston Alumni Chapters that, in place of individual chapter visitations, consideration should be given to Regional Visitations of College Chapters. It was pointed out that an example of such a visitation plan had been executed in November 1962, by the New York Alumni and the college chapters in close proximity of New York City, including representatives from Philadelphia and Boston. It was actually called to prepare the chapters for the Assembled Convention, which was to be held in Chicago, Illinois, later in November 1962. It was unanimously considered to have been a success.

The following year, after the Assembled Convention, Philadelphia, Boston and New York Alumni Chapters each organized separate regional meetings. A formal national Regional Visitation Program was instituted in 1967. It was implemented by P. K. Hudson, Executive Secretary. Larry Dwon was appointed Chairman of the Regional Visitation Program in 1970. It ran successfully until 1975 when, because of excessive costs, it was curtailed in scope.

The principal purpose of the Regional Visitation Program was to provide a mechanism by which chapters could relate periodically to each other, to national officers and to alumni members. Its main objective was to discuss chapter activities, problems and goals of Eta Kappa Nu. It was hoped that these meetings would help each chapter perform better through mutual assistance -- to inject the spirit of Eta Kappa Nu which some members may have more of than others.

Some form of a visitation plan by HKN officers actually is a requirement of the Constitution; but of course it must operate within the budget constraints of the society.

The Regional Visitation plan devised by L. Dwon divided the country into 12 and later 16 regions as illustrated in Fig. 25. Two criteria were used in this division, 1) reasonable travel distances, 2) reasonable number of chapters to effect a good discussion meeting. Table XXXVIII lists the chapters in each regional visitation area. Table XXXIX shows the planned Regional Visitation Program Schedule.

For each regional meeting, a national officer was assigned to make a visit. Each visitation had prescribed ground rules and some prescribed questions that were to be discussed. The regional visitations that have been completed can be observed in Table XXXIX; and the individual stories about these visitations are referenced in Table XL.

#### Audio Visual Information

The need for telling the Eta Kappa Nu story properly was

FIGURE 25  
HKN REGIONAL VISITATION AREAS

ETA KAPPA NU CHAPTERS

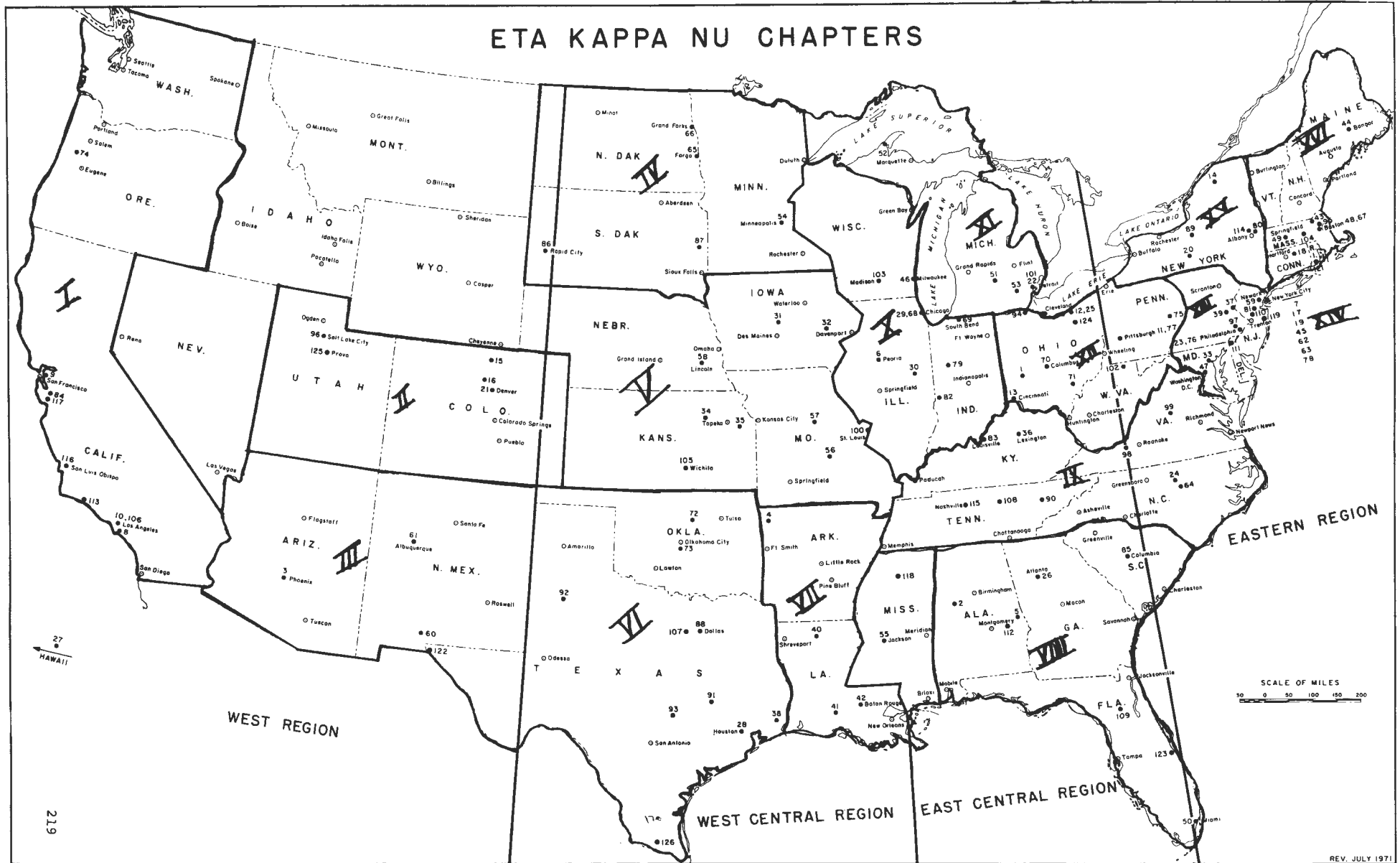


TABLE XXXVIII - REGIONAL VISITATION AREAS AND SCHOOLS  
ETA KAPPA NU ASSOCIATION

SCHOOLS AT WHICH HKN CHAPTER IS LOCATED AND NUMBER OF REGION AND LOCATION

I		II		III		IV		V		VI		VII		VIII	
No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL
8	CAL. STATE (L.B.)	15	COLORADO ST.	3	ARIZONA ST.	54	MINNESOTA	31	IOWA ST., IOWA CITY	28	HOUSTON	4	ARKANSAS	2	ALABAMA
9	U. OF CAL. (BERK.)	16	U. OF COLORADO	60	NEW MEXICO ST.	65	NO. DAKOTA ST.	32	IOWA STATE, AMES	38	LAMAR STATE	40	LOUISIANA POLY.	5	AUBURN
10	U.S.C. (L.A.)	21	U. OF DENVER	61	U. OF MEXICO	66	NO. DAKOTA	34	KANSAS STATE	72	OKLAHOMA ST.	41	S. W. LOUISIANA	26	GEORGIA TECH.
74	OREGON STATE	96	U. OF UTAH	122	U. OF TEXAS (E.P.)	86	SO. DAKOTA	35	KANSAS	73	OKLAHOMA ST.	42	LOUISIANA STATE	50	MIAMI
84	SAN JOSE STATE	125	BRIGHAM YOUNG			87	SO. DAKOTA ST.	56	MISSOURI (ROLLA)	88	SO. METHODIST	55	MISSISSIPPI ST.	85	SO. CAROLINA
106	CAL. STATE (L.A.)							57	MISSOURI (COL.)	91	TEXAS A&M	118	MISSISSIPPI	109	FLORIDA
113	U. OF CAL. (S.B.)							58	NEBRASKA	92	TEXAS TECH.			112	TULKEEGEE
116	STATE POLY. (S.L.O.)							100	WASHINGTON	93	TEXAS (AUST.)			123	FLORIDA I.T.
117	SANTA CLARA							105	WICHITA STATE	107	TEXAS (ARL.)				
										120	TEXAS A&I				

SCHOOLS AT WHICH HKN CHAPTER ARE LOCATED AND NUMBER OF REGION AND LOCATION

IX		X		XI		XII		XIII		XIV		XV		XVI	
No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL	No.	SCHOOL
24	DUKE	6	BRADLEY	22	DETROIT	1	AIR FORCE I.T.	23	DREXEL	7	P.I.N.Y.	14	CLARKSON	18	CONNECTICUT
36	KENTUCKY	29	I.T.T.	51	MICHIGAN STATE	11	CARNEGIE MELLON	33	JOHNS HOPKINS	17	COLUMBIA	20	CORNELL	43	LOWELL TECH
64	NO. CAROLINA ST.	30	ILLINOIS	53	MICHIGAN	12	CASE WESTERN	37	LAFAYETTE	19	COOPER UNION	80	R.P.I.	44	MAINE
83	LOUISVILLE	46	MARQUETTE	94	TOLEDO	13	CINCINNATI	39	LEHIGH	45	MANHATTAN	89	SYRACUSE	48	M.I.T.
90	TENNESSEE	52	MICHIGAN TECH.	101	WAYNE STATE	25	CLEVELAND ST.	47	MARYLAND	59	N.J.I.T.	114	UNION	49	MASSACHUSETTS
98	V.P.I.	68	NORTHWESTERN			70	OHIO STATE	76	PENNSYLVANIA	62	CCNY			67	NORTHEASTERN
99	VIRGINIA	69	NOTRE DAME			71	OHIO U	97	VILLANOVA	78	PRATT			95	TUFTS
108	TENN. TECH.	79	PURDUE			75	PENN STATE	110	PRINCETON	81	RUTGERS			104	WORCESTER POLY
115	VANDERBILT	82	ROSE-HULMAN			77	PITTSBURGH	111	DELAWARE	119	MONMOUTH			121	RHODE ISLAND
		103	WISCONSIN (MAD.)			102	W. VA. UNIV.								
						124	AKRON								

NUMBERS REFER TO MAP FIGURE 25

TABLE XXXIX - REGIONAL VISITATION SCHEDULE  
ETA KAPPA NU ASSOCIATION

VISITATION		1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
I	S '68		*		*			*		X		X	
II	F '71					*		X		X		X	
III	-						X		X		X		X
IV	-						X		X		X		X
V	-							*		*		*	
VI	F '69							X		X		X	
VII				*		*							
VIII	S '71							X		X		X	
IX						*							
X	F '67	*	*		*			X		X		X	
XI	S '71							X		X		X	
XII									*		X		X
XIII	F '63	*	*	*	*	*	*	*	*	X	X	X	X
XIV	F '62	*	*	*	*	*	*	*	X	*	X	X	X
XV	F '63						*		X		X		X
XVI					*					X		X	

NOTES: \*VISITATIONS HELD  
XVISITATIONS SCHEDULED

TABLE XL - REGIONAL VISITATION ARTICLES  
ETA KAPPA NU ASSOCIATION

SCHOOL YEAR	LOCATION	VISITATION	AUTHOR	ARTICLE REFERENCE		
				VOL.	THE BRIDGE No.	Pg.
1963-64	CAMBRIDGE, MASS.	NEW ENGLAND AREA MEETING		60	3	11
1965-66	HAWAII	HAWAII	H. H. SHEPPARD	62	2	2
1966-67	CHICAGO, ILL.	CHICAGO REGIONAL		64	1	8
1967-68	PHILADELPHIA, PA.	PHILADELPHIA REGIONAL	W. A. HOLLAND	64	3	9
	" "	RESUME OF HKN REGIONAL	O. M. SALATI	64	3	10
1967-68	LOS ANGELES	LOS ANGELES REGIONAL	W. BONSER	64	4	7
1967-68	SKOKIE, ILL.	CHICAGO REGIONAL	R. J. MILLER	65	1	4
1967-68	DENVER, COLORADO	ROCKY MT. REGIONAL	F. L. FIEDLER	65	2	6
1967-68	NEW YORK, NEW YORK	NEW YORK REGIONAL	P. F. CARL, JR.	65	2	8
1968-69	VILLANOVA, PA.	PHILADELPHIA REGIONAL	O. M. SALATI	65	3	18
1969-69	NEW YORK, NEW YORK	NEW YORK REGIONAL	E. CARDELLI	66	1	6
			J. H. PROVANZANA			
1968-69	LAWRENCE, KAN.	KANSAS REGIONAL		66	1	20
1969-70	NEWTON Sq., PA.	PHILADELPHIA REGIONAL	W. JOHNSON	66	2	20
1969-70	CAMBRIDGE, MASS.	BOSTON, REGIONAL	M. WEINER	66	2	24
1970-71	NEWTOWN Sq., PA.	PHILADELPHIA REGIONAL	J. R. PASTERNAK	67	3	24
1970-71	NEW YORK, N.Y.	NEW YORK REGIONAL	J. H. PROVANZANA	67	3	26
			L. SKARIN			
1970-71	JOLIET, ILL.	CHICAGO REGIONAL	L. DWON, H. SLOCUM	67	4	22
			J. MORRISON			
1970-71	COLUMBUS, O.	COLUMBUS REGIONAL	J. BARTON	68	1	8
1970-71	RALEIGH, N.C.	SOUTH-EASTERN REGIONAL	D. E. FORT	68	1	22
1970-71	NORMAN, OK.	THE SOUTHWEST REGIONAL	W. MEEKS	68	1	27
1971-72	PHILADELPHIA, PA.	PHILADELPHIA REGIONAL	L. DWON	68	4	2
1971-72	DENVER, COLORADO	ROCKY MOUNTAIN REGIONAL		68	4	13
1971-72	CAMBRIDGE, MASS.	BOSTON VISITATION	L. DWON	69	2	20
1971-72	SYLMAR, CAL.	WESTERN VISITATION	W. BONSER, M. DODSON,	69	2	22
			C. T. KOERNER			
1972-73	BROOKLYN, N.Y.	NEW YORK REGIONAL	Q. G. GENNARO	70	1	17
1972-73	ROLLA, MO.	WEST CENTRAL REGIONAL		70	2	8
1972-73	LONG BEACH, CAL.	LOS ANGELES REGIONAL	H. J. SUMMERS	70	2	20
1972-73	AKRON, O.	AKRON REGIONAL		70	2	22
1973-74	DALLAS, TEXAS	TEXAS REGIONAL	A. P. SAGE	70	4	19
1973-74	DETROIT, MICH.	REGION II VISITATION	W. WIKTOR, JR.	70	4	20
1973-74	RALEIGH, N.C.	PHILADELPHIA REGIONAL	H. H. SHEPPARD	71	1	10
		N. C. STATE REGIONAL	S. WHISENANT	71	2	2

recognized in the depression years when the number of initiates were falling off rapidly for a variety of reasons. At that time the publication of pamphlets was initiated. These will be dealt with later.

In the early 1950 decade, E. B. Kurtz conceived a broader need which could fall into the province of Eta Kappa Nu's desire to serve the Electrical Engineering profession. He proposed a sound-movie for high school students as an engineering guidance aid.

Sound Movies - "Engineering - A Career For Tomorrow" is the title of Eta Kappa Nu's first career guidance film which was produced in commemoration of the 50th Anniversary of the Association. E. B. Kurtz, during his term as National President (1952-'53) conceived the idea and recommended the film. He wrote: (36,37)

"At present, high school seniors have very little, if any, reliable information on engineering or on electrical engineering as a lifework available to them ....As a consequence, students select electrical engineering on a hit and miss basis....

"To encourage qualified students to select engineering requires that they be correctly informed....

"Since the problem of self selection thus goes far beyond the mere checking the ability with tests, I propose that HKN prepare about a 30 or 45 minute sound movie in which the process of engineering training would be set forth...."

The 50th Anniversary Convention of Eta Kappa Nu considered this recommendation, and decided to develop a high school level guidance film entitled "Engineering -- A Career For Tomorrow." Its theme was chosen to span the communications and electric power fields of interest.

Eric T. B. Gross appointed the committee to propose and report on the film idea. This committee included E. B. Kurtz, Chairman, R. O. Borgstadt, W. L. Everitt, J. E. Farley and R. I. Wilkinson. Chicago Alumni Chapter took charge of implementation.

With the cooperation of the Television Motion Picture Unit at the University of Illinois, the Illinois Bell Telephone Company and Commonwealth Edison Company, the movie was completed and the premier showing was made May 13, 1955 at a joint meeting of Delta Chapter and the Chicago Alumni Chapter. It was shown again at the General Session of the American Society for Engineering Education, on June 20-24, 1955, at Pennsylvania State University.

The cost of the 25 minute film was estimated at \$15,000 of which \$2,000 came from HKN. The University of Illinois donated equipment and staff and the Chicago Alumni Chapter raised the remaining portion of the money.

The Fall, 1956, issue of The Bridge made an appeal to each college chapter to use "Engineering - A Career For Tomorrow" as an important chapter project in 1956-57. In the Winter 1957 issue of The Bridge, a new HKN-Chapter Award was announced as follows: (38,39)

"Beginning with the 1956-57 school year, the Chicago Alumni Chapter will make an annual award to the college chapter conducting the most effective program in pre-college student guidance. The film, 'Engineering - A Career For Tomorrow' can serve as a nucleus for this activity."

Purdue's Beta Chapter won the Award which the Chicago Alumni Chapter presented on November 4, 1957. This seems to have been a one-shot affair. (40)

In 1962, the Movie Committee completed a big promotional project for the film. By this time, 76 film owners were listed in its directory. The total films produced to that date were 130 color and 16 black and white. The film showing was estimated to be 16,000 times. (41)

"Engineering -- The Challenge of the Future" was a sequel to the above original film. The purpose of this new movie was again to stimulate high school students' interest in an engineering career. It was released in 1970; and by May, 1971, over 200 copies were sold to industry and educational institutions in Canada, Puerto Rico, Australia, Zambia and from Hawaii to New York. (42)

This 23 minute film was designed to answer a high school student's questions: What is an engineer? Should I consider engineering? What does an engineer do to help people? What happens after I graduate? High school students, guidance counselors, engineering faculty and practicing engineers were included in the total dialogue.

Work began on this new film in 1967. J. H. Craig, National President (1961-'62) selected a committee to seek funds for this new undertaking. Walter K. MacAdam, President of IEEE presented the movie project to its Board. A decision to co-sponsor the film was the result. Support was also obtained from 18 industry sponsors and the National Guidance Committee of Engineers Council for Professional Development. Its chairman at the time was Brother Larry Dwon.

A new Advisory Board was formed to review the script. It included the following leaders in industry and education:

J. H. Craig, V.P. Engineering, Southern New England Telephone Company

Dr. M. R. Currie, V.P. and Manager, Hughes Aircraft Company

L. Dwon, Manager Engineering Manpower, American Electric Power Service Corporation

Dr. W. L. Everitt, Dean, College of Engineering, University of Illinois

Dr. N. A. Hall, Executive Director, The National Academy of Engineering

A. C. Ingersol, Dean, School of Engineering, University of Southern California

L. F. Lischer, V.P. Commonwealth Edison Company

Dr. S. R. Warren, Jr., Ass't. V.P. Undergraduate Affairs University of Pennsylvania

A. K. Hawkes, V.P. Marketing, Computer Horizons, Inc.

J. E. Farley, District Switching Manager, Illinois Bell Telephone Company

Slide Presentations - The first documented attempt at reviewing the progress of HKN from a national point of view, for the benefit of a local chapter's insight, was made by Brother E. B. Kurtz, National President (1952-'53). His article, "The Past, Present and Future of HKN" utilized several charts to explain the growth of Eta Kappa Nu. He used them in talks before many new members of chapters he visited, in connection with the visitation program which was described elsewhere. (43)

In 1971, a need arose among the chapters, for a method to tell the Eta Kappa Nu story on campus in a better manner than through pamphlets or verbal presentations often given by inexperienced and inadequately informed students. The Board of Directors discussed this need and assigned one of its members, H. A. Slocum, the task of developing something appropriate. He suggested a slide-script presentation.

The second major slide presentation project thus was started by H. A. Slocum of the Chicago Alumni Chapter, in 1971. After discussing some proposed script concepts and potential slides with J. E. Farley, Chairman, Movie Committee, agreement was reached to utilize the central theme which had been proposed by A. F. Gabrielle, in April of 1971, namely:

1. Basic Concept of Eta Kappa Nu
2. What benefits can a student expect when he joins the society

H. A. Slocum then developed slides based on an idea of Five Keys to Eta Kappa Nu. In March 1972, he presented a draft of the script and some preliminary slides to the Board. Its title was, "What Makes



Eta Kappa Nu Tick."

Larry Dwon was then requested by the Board of Directors to work with H. A. Slocum in an attempt to finalize the project. Several showings of the initial proposal to interested alumni members, as well as, students and some faculty resulted in suggestions for a major revision. The end result was again presented to the Board of Directors in March 1972. Some significant changes had been made and the new slide presentation was titled, "Eta Kappa Nu Association: An Honor Society That Serves Society." The Board authorized the funds to reproduce the 28 slide sets and the accompanying script, for all chapters. F. C. Weimer, National President (1972-'73) reproduced the slide sets. In addition, authorization was granted to produce 50 cassettes on which the script had been recorded by Larry Dwon. The elements of this visual aid project were distributed and put to use in an assortment of ways with a variety of feedback responses.

### Publications

Official Magazines - The primary publication of Eta Kappa Nu is The Bridge. It was preceded by the Year Book and The Electrical Field as Chapter I, of this historical review, indicated.

Alpha Chapter of HKN was the first one to publish a chapter periodical -- Alpha Quarterly. Epsilon Chapter in 1912 issued at regular intervals a "Chapter Letter" to all of its alumni. (44)

Early issues of The Bridge published directories of HKN members; later subdividing them into Bridge subscribers and non-subscribers. The first directory appeared in the 1909 Year Book, Volume 5, (erroneously marked Volume I). Directories subsequently appeared in the following issues:

<u>Volume</u>	<u>Year</u>	<u>Volume</u>	<u>Year</u>	<u>Issue</u>
5	1909	16	October 1919	1
6	1910	16	March 1920	3
7	1911	17	February 1921	2
8	1912	18	February 1922	2
9	1913	19	January 1923	2
10	1914	20	March 1924	3
11	1915	21	March 1925	3
12	1916	22	March 1926	3
14	1918	24	March 1928	3

Newsletters - National Newsletters were first mentioned in 1935 by N. L. Best, National President (1934-1935). He wrote: (45)

"A Newsletter will be sent each year to all alumni who are not subscribers to The Bridge, and in this way every alumnus, active or not, will be reminded at least once each year that Eta Kappa Nu is continuing a broad field of activities."

The second issue of the "Newsitron" was a four page issue, the front page of which is illustrated in Fig. 26. The last issue appears to have been published in January 1947.

Later, Brother P. K. Hudson, Executive Secretary, published an Eta Kappa Nu Newsletter. The first one appeared on October 1, 1963, Fig. 27.

Miscellaneous - Handbooks and pamphlets were mentioned by C. A. Faust, National President (1935-'37) in his first term's annual report. He wrote: (46)

"Last Fall a four-page mimeographed summary was prepared, outlining the organizations, purposes and accomplishments of Eta Kappa Nu. These were distributed to all the active chapters and their faculty advisors to serve as a guide in planning activities.

"Work is now under way on a very comprehensive active chapter handbook....

"An eight-page booklet giving pertinent facts about Eta Kappa Nu has been prepared for distributing to all electrical engineering freshmen....

"A similar booklet has been prepared for distribution to men elected to membership....

"Another large handbook is being prepared, this one for alumni chapters....An innovation in this handbook is....standard report forms for the secretary and treasurer."

Morris Buck, National President (1935-'36) also mentioned the distribution of the foregoing booklets in his annual report. (47)

L. A. Spangler, National President (1938-'39) devoted part of his annual report to a new active chapter handbook. He wrote: (48)

"In February 1938, a new revised and greatly augmented active chapter manual was issued under the title of 'College Chapter Handbook'. This supersedes the manual for corresponding secretaries which was made up about fifteen years ago and revised about five years later....

"The twenty-two pages of this publication are truly



# THE NEWSITRON

Supplement to "The Bridge" of ETA KAPPA NU

Once  
a Year  
to All  
Members

BETA

April, 1941

## All Alumni Can Contribute To Eta Kappa Nu Recognition

Every Brother, Every Alumni and College Chapter Eligible to Make Nominations

Busy times for all of us—and we are in tune with the times in urging every alumnus to do his job *now*, by sending the enclosed blank to A. B. Zerby with his nomination for the HKN Recognition. You should have attended the 1940 Award Dinner at the Philadelphia Engineers Club, as the gala first night of the A.I.E.E. Winter Convention, Jan. 27. Read elsewhere how vaudeville artist and band leader Stew Hight with Stooze Benny Lewis wowed the house with their "Flivver Act" and how Don Fink and Jesse Hobson went on from there.

These Recognition winners are versatile reformers and workers—every one. Don't believe a new crop of Edisons, Karapetoffs and Steinmetzes are not growing up just because you know them. Honor them while they live. Encourage the younger fellows.

Busy times—and all the more reason for each of us to relax a bit, size up the real worth of the HKN Recognition program, and then look over the work of our associates who are eligible for recognition. There is no tonic greater than active interest in your younger colleagues, and the support of such a program.

New vitality for HKN stems from the award activities. The accomplishments of younger engineers have been publicized, perhaps to the amazement of management and older engineers, but certainly with wholesome effect upon the young men at the start of their training or in their first jobs. These men cultivated new fields—or old ones more intensively—and they lived in this world at the same time. They did not bury themselves in the job.

HKN has been copied; an award to a young mechanical engineer is now a feature of the annual A.S.M.E. dinner, along with the honorary awards to older men.

Most of our awards have gone to men nominated by heads of electrical schools and A.I.E.E. sections. This is not because the professors proposed better men. It is because others proposed so few men. Evi-

dently golden performance is tarnished by familiarity—or the alumni in industry simply don't try to know the accomplishments of the younger men, especially in their hobbies, community service and activities outside the job.

Take a look at the men around you—send "A.B." your nomination for an award winner. It will be acceptable any time up to May 15, 1941. Don't let down now. The award has five good years behind it and with your help it will have a still brighter record far into the distant future.



Roger I. Wilkinson

of the Bell Telephone Laboratories who was responsible for establishing the HKN Recognition. To him is due great credit for its continuing success.

### Hoffmann, Burke-Harrell Tickets for National Election

This year's election of national officers for HKN smacks somewhat of U. S. politics for, in addition to the nomination of Prof. C. B. Hoffmann of Cincinnati for National Vice President, the present incumbents of the offices of National President and National Vice-Presidents, F. X.

Burke and F. E. Harrell, have been nominated for re-election. Our procedures for the two possible results of the election however are unique. If the present officers receive more votes than Hoffman, Burke will be President and Harrell will be Vice President one more year, after which time Harrell will become President automatically in accordance with the HKN Constitution. If Hoffman receives the more votes he will become Vice President and Harrell will be elevated to the Presidency on July 1 of this year.

The following have been nominated for election to the National Advisory Board, three to be chosen: John J. Cassidy, M '32 of the Micro Switch Corp.; Harold A. Dambly, E. '21, Instructor at Drexel Institute; Lloyd F. Hunt, U 'Assoc., Southern California Edison Co.; Prof. Ellery B. Paine, A Hon., University of Illinois.

### Professor Quizard . . .

The "Bridge" Answers These

1. Who is Kary? (Who's Who)
2. What does N.A.B. stand for? (Ask Benny)
3. Optimists are convinced that tilting pin ball machines is a better investment than what kind of shares? (Vol. 37, No. 1)
4. Who are the five Award Winners and for whom do they work? (Vol. 37, No. 3)
5. What is the MARB? (Vol. 35, No. 3)
6. What is a real lover of music? (Vol. 36, No. 5)
7. Which chapters were winners of the New York Alumni Award? (Vol. 37, No. 2)
8. Who was the first to receive a Life-Subscription to the Bridge? (Vol. 32, No. 2)
9. Who is the HKN expert on TON-SOR ANALYSIS? (Vol. 32, No. 5)
10. Who is the Loose Connection? (Vol. 35, No. 1); what is Unbalances; and what is a Zero Sequence (The Bridge)

Answer any twenty questions. The honor system will prevail. All pages will be marked by the famous step-system—papers thrown into air at the top of stairs papers on top step receive 100%; others marked accordingly. (Refer to Radio Department at Cornell.)

# Eta Kappa Nu News Letter

National Headquarters

October 1, 1963

## BOARD OF DIRECTOR'S MEETING

The Board of Directors held its annual summer meeting in Chicago in June. Retiring President John A. M. Lyon, University of Michigan, presented his annual report to the Board, summarizing the achievements of the year and urging further progress in some of the problems that are yet to be solved by the Association. There are still schools which are good candidates for new chapters of HKN, and their affiliation will not only give them an opportunity for recognizing good scholarship on their own campuses, but will also add strength to the Association. HKN should continue to emphasize its role as an honor society. Membership should be recognized as a highly prized mark of distinction, and the designation of HKN as a service organization should be considered a secondary objective.

The Tellers Committee reported the results of this year's election, announcing that Dr. John E. Lagerstrom, Associate Dean of the College of Engineering, Iowa State University, Ames, Iowa, has been elected president. Dr. Richard J. W. Koopman, Washington University, St. Louis, Missouri, has been elected vice-president. New directors, one from each of the four new regions, are as follows:

Eastern Region	Prof. George Hoadley, Head, Dept. of Elec. Eng. North Carolina State College, Raleigh, N. C.
East Central Region	Prof. George Swenson, Dept. of Elec. Eng. Michigan College of Mining and Technology Houghton, Mich.
West Central Region	Dr. Clyde Hyde, Head, Dept. of Elec. Eng. University of Nebraska, Lincoln, Nebraska
Western Region	Prof. Endrik Noges, Dept. of Elec. Eng. University of Washington, Seattle, Wash.

The Board heard reports by both the New Chapters Committee and the Constitution Committee. At the assembled convention in Chicago last November, the Directors were asked to study whether new Chapters brought into HKN should be subjected to a probationary period before installation as Chapters of the Association. The New Chapters Committee studied the records of those Chapters established in the recent past and reported that in no instance was there any indication that a period of probation would have been helpful in assuring the desired Chapter strength. No new Chapter has failed to become well established under the present system of

the 'bible' for active chapter officers and members....

"It is hoped that a similar handbook for the guidance of alumni chapters may be issued during the present fiscal year."

It would be impossible to uncover all the various publications that must have been created in the past 70 years by members of HKN for the benefit of the Association. However, the following few are sufficiently important to bear listing among those which have been found:

You Have Been Elected

A Worthwhile Goal....For Every Electrical Student

Engineering: A Career For Tomorrow and Directory

Engineering: The Challenge of The Future

National Organization of HKN and Long Range View  
of Growth and Finances

The Golden Years

Alumni Chapter Handbook

Handbook for College Chapters

Employment Plans of Electrical Engineering Graduates

Eta Kappa Nu Constitution (various Revisions but  
especially the attractive one devised by P. K. Hudson)

### Employment

This subject received considerable attention of active Eta Kappa Nu members since its founding. National Conventions -- 4,6,7,9,13,15,16,19,20 and 21 -- discussed the divergent views of participants. The early issues of The Bridge contained articles on employment in many types of industries. This was partly a directive to the various editors from the National Convention as a compromise approach to do something while agreement on an Employment Bureau had not been obtained.

Employment Plans - The first article which related to the above dialogue appeared in The Bridge in 1917. Brother F. T. Bangs, President of the Chicago Alumni Chapter wrote a proposal as follows: (49)

1. Necessary announcements, applications and procedures would be worked out by three members of the Chicago Alumni Chapter.
2. Members seeking employment would fill out applications.
3. Lists of available people would be supplied to employers.

4. Applicants would pay a fee for the service.

5. After the preliminary work was done a member would handle the bureau on a salaried basis.

The idea was said not to be a new one. Other chapters had discussed the subject numerous times.

At the 1919 National Convention several plans were proposed; but three created the most interest: (50)

1. Employment Bureau Plan - Deemed too expensive.
2. The Employment Directory Plan - Abandoned.
3. The Indirect Plan - Adopted.

The objective of the indirect plan was fraternal cooperation among all the members of HKN to help each one along toward greater success in the electrical engineering profession. This resulted in many articles in The Bridge about various industries.

At the 19th National Convention in 1923, the employment question was again discussed at considerable length. The result was a request that each Alumni Chapter should study the problem with respect to its local needs and situations and report next year.

At the 20th National Convention, all Alumni Chapters reported with vigor. The National Convention also received the following telegram from M. L. Carr -- the founder -- which was later followed with a more detailed letter discussing the matter in depth:

"Can see nothing incompatible with fraternity ideals in an employment bureau; but question the wisdom of attempting to duplicate similar work of national engineering organizations and other associations. Believe an employment bureau would be a source of useless anxiety to fraternity officers and probably a money losing venture...."

The outcome of the discussions that ensued resulted in the following summarized action:

1. N.E.C. is not in a position to institute a national employment bureau.
2. Present employment committees should be continued with an increase in the amount of publicity given to their activities.

3. Alumni Chapters should establish an advisory service for nearby active chapters.
4. Space should be devoted in The Bridge to articles descriptive of employment in the electrical industry.
5. The Standing Committee was dismissed with thanks.

The next big event was the great depression following the 1929 stock market crash. Subsequent unemployment caused Eta Kappa Nu to tackle the situation in earnest in a number of different ways:

Employment Committee - The New York Alumni Chapter, headed by C. A. Faust, organized a committee on employment which met once each week. Clifford wrote to Larry Dwon, on February 25, 1976, after reading the first draft of this manuscript. He made the following observation:

"....We met every week in the sumptuous Board of Directors room in the penthouse on the 11th floor of the then fairly new McGraw-Hill Building, and I believe our out-of-work HKNs received a 'big lift' in sitting around the huge oblong mahogany table. Occasionally, we would wander into a Horn & Hardardt for a bite to eat after a meeting, but we never had a meeting in a place like that. Also I don't recall ever having a meeting in the Engineering Societies Building...."

Clifford's foregoing statement is accurate for the time he was chairman of the committee. However, after he went West, the committee did hold its meetings in Horn and Hardardt Restaurant and the Engineering Societies Building. At these meetings unemployed members were given advice on job seeking methods and leads on potential jobs. This committee operated during the entire 1930 decade under the guidance of several chairmen: C. A. Faust, from 1932 to 1936; L. F. Underwood, 1937; R. W. Pashby, 1938; and J. G. Adashko, 1939.

Employment Conferences - The Chicago Alumni Chapter planned, organized and implemented five annual employment conferences each of which have been described in The Bridge. References to these descriptions are indicated in Table XLI.

Bridge Articles - A number of articles giving job seeking hints and advice appeared in The Bridge. Principal contributors in this series were L. O. Stewart and A. D. Moore. Others who contributed may be observed in the above mentioned table. These articles were so popular that they were offered for sale as a pamphlet.

TABLE XLI - ARTICLES ON EMPLOYMENT RELATED SUBJECTS  
ETA KAPPA NU ASSOCIATION  
1931 - 1975

TITLE - EMPLOYMENT ARTICLE	AUTHOR	REFERENCE ARTICLE		
		THE BRIDGE		
		VOL.	NO.	PG.
ARE 1931 MEN FINDING JOBS	E. F. WATSON	27	5	9
HKN EMPLOYMENT SURVEY - CLASS OF 1931		27	5	10
EMPLOYMENT POSSIBILITIES FOR 1931 GRADS MEAGER	J. M. NEWMAN	28	5	12
EVERY MEMBER EMPLOYED IS NEW YORK CHAPTER'S GOAL	H. HEDINGER	30	2	3
HOW DO I OBTAIN THE RIGHT JOB	C. B. SMITH	30	4	6
30 MEN PLACED AS NEW YORK EMPLOYMENT ACTIVITY CONTINUES	C. A. FAUST	30	5	12
WHAT CAN WE DO TO HELP OUR UNEMPLOYED-N.Y. PLAN	C. A. FAUST	31	3	2
SIDE LIGHTS ON THIS BUSINESS OF GETTING A JOB	L. F. UNDERWOOD	31	3	4
SAN FRANCISCO ALUMNI ORGANIZED AN EMPLOYMENT SERVICE	C. R. CURRIER	31	3	6
MILWAUKEE ORGANIZED BUT ONLY UNDERWAY	R. TYLER	31	3	6
POINTERS-ON SEEKING EMPLOYMENT	A. D. MOORE	32	2	2
WHAT CAN WE DO TO HELP OUR EMPLOYED AS WELL AS OUR UNEMPLOYED-N.Y. ALUMNI	J. G. ADASHKO	32	3	2
A JOB FOR ALL OF US		33	3	2
PERSONNEL LEAFLETS PLAY IMPORTANT ROLE IN JOB-SEEKING	L. O. STEWART	34	1	8
SELF ANALYSES IS FIRST STEP IN JOB-SEEKING	L. O. STEWART	34	1	9
JOB AND COMPANY ANALYSIS-2ND STEP	L. O. STEWART	34	2	13
EMPLOYMENT CONFERENCE-CHICAGO ALUMNI	J. J. CASSIDY	34	3	10
YOUNG ENGINEER SELLS HIS SERVICE THROUGH LETTERS OF APPLICATION	L. O. STEWART	34	3	14
ABOUT EMPLOYMENT-AN EDITORIAL	A. B. ZERBY	34	5	1
STEP UP TO SUCCESS	L. O. STEWART	34	5	9
MORE ABOUT EMPLOYMENT-AN EDITORIAL	A. B. ZERBY	35	1	1
EMPLOYMENT CONFERENCES		35	1	6
EMPLOYMENT AGAIN-EDITORIAL	A. B. ZERBY	35	2	1
EMPLOYMENT CONFERENCE-SECOND IN CHARGE	BERNHARD, CASSIDY, KETEL, MILLER	35	2	8
ARE YOU LOOKING FOR A JOB		35	4	9
THIRD EMPLOYMENT CONFERENCE-CHICAGO	W. F. WELLS	36	2	10
THE CHICAGO CONFERENCES LEAD THE WAY	L. F. BERNHARD	36	4	4
THE DIVERSIFIED EMPLOYMENT OPPORTUNITIES FOR E. E. GRADUATES	P. T. NIMS	36	5	9
I WAS FIRED-ALMOST		37	1	6
FOURTH EMPLOYMENT CONFERENCE-CHICAGO	J. J. CASSIDY	37	2	13
ON CHOOSING THE RIGHT JOB	R. I. WILKINSON	37	3	7
WHAT ARE OPPORTUNITIES TODAY	E. S. LEE	37	3	10
THE ENGINEER AND THE MARKETING MAN NOW COME FROM THE SAME MOLD	H. L. RUSCH	37	3	11
FIFTH ANNUAL REGIONAL CONFERENCE-CHICAGO	E. L. ANDERSON	38	2	8
EMPLOYMENT POSSIBILITIES		38	2	16
COLLEGE RECRUITING FROM INDUSTRY'S STANDPOINT	K. A. MEADE	40	5	3
EMPLOYMENT		41	6	11
POINTERS ON SEEKING EMPLOYMENT	A. D. MOORE	42	1	3
SELF ANALYSIS IS FIRST STOP IN JOB SEEKING	L. O. STEWART	42	1	7
JOB AND COMPANY ANALYSIS	L. O. STEWART	42	1	9
THE LETTER OF APPLICATION	L. O. STEWART	42	2	7
SOME QUESTIONS AND ANSWERS ABOUT EDUCATION AND EMPLOYMENT		42	2	9
STAGING THE INTERVIEW	L. O. STEWART	42	3	13
STEP UP TO SUCCESS	L. O. STEWART	42	3	15
IS YOUR JOB THE RIGHT ONE	K. A. MEADE	43	6	1
WRITING SUPERIOR REPORTS-A POWERFUL CAREER AID	R. BEACH	46	3	9
EMPLOYMENT OUT-LOOK FOR ENGINEERS		46	4	14
EMPLOYMENT SURVEY-BETA NU CHAPTER	F. J. ELLERT	47	1	5
WHY CAN'T ENGINEERS BE RECRUITED	F. M. ZIMMERMAN	48	3	13
JOB EVALUATION CHART	R. W. JOHNSON	49	2	14
SOME ADVICE FOR THE ENGINEERING GRADUATE	JO KAMMERMAN	49	2	15
THE OUT LOOK FOR ENGINEERS	C. BRUNETTI	51	1	12
ARE YOU A BALANCED OR UNBALANCED MAN	E. B. KURTZ	51	4	10
NEW ENGINEERING MANPOWER-A CRITICAL UTILITY PROBLEM	W. J. SEELEY	52	2	20
PERSONNEL PROBLEMS OF ELECTRIC UTILITIES	J. D. RYDER	52	4	4
HOW CAN WE GET MORE ENGINEERS	H. A. BERGEN	53	3	16
COLLEGE RECRUITING STILL A HASSLE	H. L. CARLSTON	55	2	10

In summary, Eta Kappa Nu members have always considered the employment area as a proper service function in which the Association should help its members. The big question has been by what means should this service be rendered. There were strong promoters of the Employment Bureau Concept. The other strong group of promoters held out -- and eventually succeeded in convincing their brothers -- that a cooperative indirect approach was more becoming to HKN. This approach included employment committees, articles in The Bridge, and a self help approach with brotherly advice and assistance on a low key basis.

Reading the many articles in Table XLI demonstrates the willingness to help by many informed brothers. It also shows that employment matters were deemed more important in the early days of HKN, during the depression, after World War II and only sporadically since then.

### Surveys

Over the years Eta Kappa Nu conducted some fact finding surveys within and external to the Association. Among them the following have resulted in articles for publication. Table XLII gives references for the following:

Salary Surveys

Engineering Graduating in Selected Years

Bridge Appeal

Career Data on Outstanding Young Electrical Engineers

Employment Field for Aspiring Electrical Engineering Graduates

Survey on Eta Kappa Nu Ritual

Survey on College Chapter Activities

The succeeding paragraphs will describe some of the foregoing.

Salary Surveys - This subject received considerable attention since 1919. That year D. G. Evans, editor of The Bridge, wrote of a need for some statistics upon the subject of salaries paid to electrical engineers in order that the young members might have some guidance in their progress. Brothers F. W. Anderson of the Chicago Alumni Chapter had been collecting such information from members of the Chicago Chapter. Brother F. T. Coup, of Milwaukee Alumni Chapter, suggested a coordinate paper on which such data could be plotted by each member to avoid the personal factors in such requests for data. A sample coordinate sheet was published. (51)

At the 17th National Convention Brother D. G. Evans reported that only six replies were received from the above attempt at securing salary data so the matter was dropped.

TABLE XLII - ARTICLES DESCRIBING SURVEYS  
ETA KAPPA NU ASSOCIATION

TITLE-SURVEY ARTICLE	TYPE OF SURVEY	REFERENCE ARTICLE			
		AUTHOR	THE BRIDGE		
			VOL.	No.	Pg.
THE SALARY CURVE	SALARY	D. G. EVANS	15	1	43
SALARY STATISTICS OF HKN ALUMNI	"	"	20	1	6
SALARY STATISTICS OF HKN ALUMNI	"	"	20	2	3
" " " " "	"	"	20	4	3
THE CONTRIBUTION OF HKN TO THE INVESTIGATION OF ENGINEERING EDUCATION	"	H. P. HAMMOND	22	4	147
A SECOND SALARY SURVEY BEING CONDUCTED BY THE ASSOCIATION	"	"	26	4	16
SALARY STATISTICS ANALYZED	"	M. S. MASON	27	1	5
COMPARISON OF ENGINEERS' SALARIES IN FIVE MAJOR INDUSTRIES	" "	J. A. UMHOEFER			
		M. S. MASON	27	3	10
		J. A. UMHOEFER			
SALARIES IN MANUFACTURING AND OTHER INDUSTRIES	"	J. A. UMHOEFER			
MA Y SIGNIFICANT FACTORS INFLUENCE ENGINEERS' SALARIES	"	M. S. MASON	27	5	15
		J. A. UMHOEFER			
RECENT SALARY SURVEYS OF ENGINEERING GRADUATES	"	M. S. MASON	28	3	3
		J. A. UMHOEFER			
THE SAG OF THE SALARY	"	H. L. WRIGHT	28	4	3
2809 ELECTRICAL ENGINEERS GRADUATE EVERY YEAR	ENGINEERING GRADUATES	C. A. FAUST	32	5	8
WHAT IS AN ENGINEER WORTH TODAY	SALARIES	A. D. MOORE	33	5	2
SOME DATA ON SALARIES-1936 RECOGNITION OF YOUNG ELECTRICAL ENGRS.	"	R. I. WILKINSON	33	5	4
SALARY LEVELS	"	A. D. MOORE	34	4	4
SALARY PERFORMANCE OF 102 CANDIDATES FOR THE HKN AWARD	"	R. I. WILKINSON	37	2	10
ANALYSIS OF THE BRIDGE APPEAL	BRIDGE	V. L. DZWONCZYK	38	6	13
A GLANCE AT EE SALARIES AND EMPLOYMENT	SALARIES	R.G. KLOEFER, E.L. SITZ, D.G. MOSS	48	4	5
THE MOST OUTSTANDING YOUNG ELECTRICAL ENGINEERS: 1936-1951	CAREER DATA	V. L. DZWONCYK	49	2	17
OUTSTANDING YOUNG ELECTRICAL ENGINEERS 1936 - 1953 PART I & II	"	V. L. DZWONCZYK	50	2	12
			50	3	
EMPLOYMENT PLANS OF ELECTRICAL ENGINEERING GRADUATES		B. KLASS			
PERSONNEL PROBLEMS OF PUBLIC UTILITIES IN THE COLLEGES	VARIOUS ASPECTS	W. B. GIBSON J. D. RYDER	52	4	4
OUTSTANDING YOUNG ELECTRICAL ENGINEERS: 1936-1969	CAREER DATA	L. DWON	67	2	6
SURVEY ON-INITIATION RITUAL	RITUAL	L. DWON	68	3	8
SURVEY ON CHAPTER ACTIVITIES AND NEEDS	CHAPTER	L. DWON			

In 1923 The Bridge published three curves derived from a salary survey which related salaries with years elapsed since graduation. The curves showed the arithmetic average, an upper limit above which only 5 percent of the data lay and a lower limit below which only 5 percent of the data lay. In subsequent issues various comparisons were made among industries. D. G. Evans was the responsible person for this study.

A second survey, in 1926, resulted in another series of curves and comparative data in several articles published in The Bridge. Brothers M. S. Mason and J. A. Umhoefer were the responsible persons for this study.

It is of significant interest to note that the much referred to Engineering Education Report by Messrs. Wickenden and Hammond used Eta Kappa Nu data from these early salary studies. Credit is given to the Association in this historic document on engineering education.

Later, Brothers A. D. Moore and R. I. Wilkinson wrote articles on specific aspects of the salary question as did H. L. Wright, R. G. Kloefler, E. L. Sitz and D. G. Moss.

In more recent years this subject has not been discussed in The Bridge.

OYEE Recognition - The Outstanding Young Electrical Engineers Award accumulated considerable useful information which has been analyzed and published in The Bridge by R. I. Wilkinson and Larry Dwon. These articles provide an inspiring comparison of truly outstanding young people some of whom went on to achieve even more eminence in the Electrical Engineering profession.

Employment Survey - In 1955, Eta Kappa Nu, American Institute of Electrical Engineers and the Stanford Research Institute combined to survey engineering graduates about their employment aspirations. The data collected appeared in a publication issued by S.R.I. and in published papers. Brother J. D. Ryder wrote an article for The Bridge which pointed up some problems which electric institutes were facing. The data came from this survey.

As mentioned previously, Table XLII gives the references to these and other surveys.

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# CHAPTER DIRECTORY

Alpha	University of Illinois	Gamma Psi	Lafayette College
Beta	Purdue University	Gamma Omega	Mississippi State University
Gamma	Ohio State University	Delta Alpha	Wayne State University
Delta	Illinois Institute of Technology	Delta Beta	Lamar State College of Technology
Epsilon	Pennsylvania State University	Delta Gamma	Louisiana Tech. University
Zeta	Case West. Reserve U.	Delta Epsilon	Ohio University
Theta	University of Wisconsin	Delta Zeta	Washington University
Iota	University of Missouri	Delta Eta	University of Massachusetts
Kappa	Cornell University	Delta Theta	Pratt Institute
Lambda	University of Pennsylvania	Delta Iota	Louisiana State University
Mu	University of California-Berkeley	Delta Kappa	University of Maine
Nu	Iowa State University	Delta Lambda	Duke University
Xi	Auburn University	Delta Mu	Villanova University
Omicron	University of Minnesota	Delta Nu	University of Alabama
Pi	Oregon State University	Delta Xi	Air Force Institute of Technology
Rho	University of Colorado	Delta Omicron	University of New Mexico
Sigma	Carnegie Mellon University	Delta Pi	Colorado State University
Tau	University of Cincinnati	Delta Rho	University of North Dakota
Upsilon	University of Southern California	Delta Sigma	University of Notre Dame
Phi	Union College	Delta Tau	University of Southwestern Louisiana
Chi	Lehigh University	Delta Upsilon	Bradley University
Psi	University of Texas-Austin	Delta Chi	Cooper Union
Omega	Oklahoma State University	Delta Omega	University of Hawaii
Beta Alpha	Drexel University	Epsilon Alpha	Cleveland State University
Beta Gamma	Michigan Tech. University	Epsilon Beta	Arizona State University
Beta Delta	University of Pittsburgh	Epsilon Gamma	University of Toledo
Beta Epsilon	University of Michigan	Epsilon Delta	Tufts University
Beta Eta	North Carolina State University	Epsilon Epsilon	University of Houston
Beta Theta	Massachusetts Institute of Technology	Epsilon Zeta	Lowell Technological Institute
Beta Iota	State University of Iowa	Epsilon Eta	Rose Hulman Institute
Beta Kappa	Kansas State University	Epsilon Theta	California State-Long Beach
Beta Lambda	Virginia Polytechnic Institute	Epsilon Iota	San Jose State University
Beta Mu	Georgia Institute of Technology	Epsilon Kappa	University of Miami
Beta Nu	Rensselaer Polytechnic Institute	Epsilon Lambda	Vanderbilt University
Beta Xi	University of Oklahoma	Epsilon Mu	University of Texas-Arlington
Beta Omicron	Marquette University	Epsilon Nu	California State-Los Angeles
Beta Pi	City College of New York	Epsilon Xi	Wichita State University
Beta Rho	West Virginia University	Epsilon Omicron	University of Delaware
Beta Sigma	University of Detroit	Epsilon Pi	Princeton University
Beta Tau	Northwestern Technological Institute	Epsilon Rho	Tennessee Tech. University
Beta Upsilon	University of Kentucky	Epsilon Sigma	University of Florida
Beta Phi	University of Tennessee	Epsilon Tau	University of Cal.-Santa Barbara
Beta Chi	South Dakota School of Mines	Epsilon Upsilon	Tuskegee Institute
Beta Psi	University of Nebraska	Epsilon Phi	Calif. Poly. State University
Beta Omega	University of Connecticut	Epsilon Chi	University of Louisville
Gamma Alpha	Manhattan College	Epsilon Psi	University of Santa Clara
Gamma Beta	Northeastern University	Epsilon Omega	University of Mississippi
Gamma Gamma	Clarkson College	Zeta Alpha	Monmouth College
Gamma Delta	Worcester Polytechnic Institute	Zeta Beta	Texas A. & I. University
Gamma Epsilon	Rutgers University	Zeta Gamma	University of Rhode Island
Gamma Zeta	Michigan State University	Zeta Delta	University of Texas-El Paso
Gamma Eta	Syracuse University	Zeta Epsilon	Florida Institute of Technology
Gamma Theta	University of Missouri-Rolla	Zeta Zeta	University of Akron
Gamma Iota	University of Kansas	Zeta Eta	Brigham Young University
Gamma Kappa	Newark College of Engineering	Zeta Theta	California State Poly College
Gamma Lambda	Columbia University	Zeta Iota	Clemson University
Gamma Mu	Texas A & M	Zeta Kappa	Tennessee State University
Gamma Nu	Texas Technological College	Zeta Lambda	Prairie View A & M College
Gamma Xi	University of Maryland	Zeta Mu	Northrup Inst. of Tech.
Gamma Omicron	Southern Methodist University	Zeta Nu	University of Tulsa
Gamma Pi	University of Virginia	Zeta Xi	S. E. Massachusetts
Gamma Rho	South Dakota State University	Zeta Omicron	W. VA. Inst. of Tech.
Gamma Sigma	University of Utah	Zeta Pi	S. U. of N. Y.-Buffalo
Gamma Tau	North Dakota State University	Zeta Rho	University of New Haven
Gamma Upsilon	John Hopkins University	Zeta Sigma	Polytech. Inst. of N. Y.
Gamma Phi	University of Arkansas	Zeta Tau	San Diego State Univ.
Gamma Chi	New Mexico State University		