

BRIDGE of Eta Kappa Nu



Lillian Chiamin Ho
1994 Winner

Alton B. Zerby and Carl T. Koerner
Outstanding EE Student Award



Also Featured:

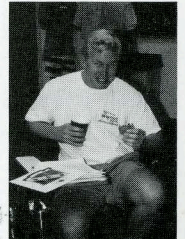
**Historical HKN Benchmarks-
Part II by Larry Dwon**

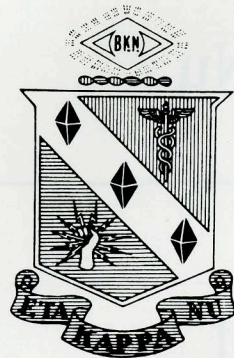


Beta Epsilon

Iota Xi

**Honorable
Mention
Reports**





Editor and Business Manager
J. Robert Betten

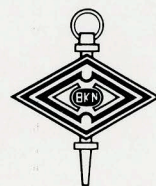
November 1994
Vol 91 - No. 1

Contributing Editors

Marcus D. Dodson

Larry Dwon

Alan Lefkow



The BRIDGE is published by Eta Kappa Nu Association, an electrical engineering honor society. Eta Kappa Nu was founded at the University of Illinois, Urbana, October 28, 1904, 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 help these students progress by association with alumni who have attained prominence.

The BRIDGE is published four times annually—November, February, May, August and is published by Eta Kappa Nu, Haywood Printing Company, 5th & Ferry Sts., Lafayette, Indiana. Second class postage paid at Lafayette, Indiana. Eta Kappa Nu Association, Subscription price: three years, \$15, Life Subscription, \$60.

Address editorial and subscription correspondence and changes of address to:

HKN BRIDGE, P.O. Box 2107
Rolla, MO 65401

Postmaster: Send address changes to: HKN Bridge, P.O. Box 2107, Rolla, MO 65401.

INTERNATIONAL EXECUTIVE COUNCIL

President—Bruce P. Johnson
Vice-President—Michael R. Hajny
Executive Secretary—J. Robert Betten

INTERNATIONAL BOARD OF DIRECTORS

Robert I. Egbert
Karl E. Martersteck
Russell J. Niederjohn
John D. Wolf

AWARD COMMITTEES

OUTSTANDING EE STUDENT AWARD COMMITTEE

(Zerby-Koerner Award)

Chairman:

Mr. Marcus D. Dodson, P.E.
Consulting Engineer
9302 Grindlay Street
Cypress, CA 90630

OUTSTANDING EE JUNIOR AWARD COMMITTEE

(Norman R. Carson Award)

Chairperson:

Ms. Laureen H. Parker
13030 Silver Creek Drive
Austin, TX 78727

OUTSTANDING YOUNG EE AWARD COMMITTEE

Chairman:

Dr. Robert A. Bartolini
14 Darvel Drive, Route 4
Robinsville, NJ 08691

OUTSTANDING TEACHING AWARD COMMITTEE

(C. Holmes MacDonald Award)

Chairman:

Mr. Robert F. Arehart
720 Emerson Street
Philadelphia, PA 19111

OUTSTANDING CHAPTER ACTIVITIES AWARD COMMITTEE

Chairman:

Mr. Alan Lefkow
17 Jacobs Road
Thiells, NY 10984

KARAPETOFF EMINENT MEMBERS' AWARD COMMITTEE

Chairman:

Mr. Donald Christiansen
434-A West Main Street
Huntington, NY 11743

Contents

Announcements

- 3** Paul K. Hudson
HKN Development Fund
Annual Campaign

Awards

- 4** Lillian Chiamin Ho Wins
1994 Zerby-Koerner Outstanding EE Student Award

- 13** Beta Epsilon and Iota Xi Win
Honorable Mention in Outstanding Chapter Activities Award Program

General Interest

- 8** Historical HKN Benchmarks-
Part II by Larry Dwon

In Memoriam

- 12** Julius A. Stratton, Former
MIT President

A Life Subscription to the BRIDGE is available at a modest cost of \$60. Send a check with name and address to:

**HKN BRIDGE
P.O. Box 2107
Rolla, MO 65401**

PAUL K. HUDSON HKN DEVELOPMENT FUND ANNUAL CAMPAIGN

Paul K. Hudson
1916-1988



Eta Kappa Nu Executive Secretary and BRIDGE Editor, 1958-1988

Established by the Board of Directors in April 1992, this important fund will honor the memory of Paul Hudson, a devoted servant of HKN and a man who truly exemplified the qualities that "balance the bridge."

The Hudson fund, managed by the HKN Board of Directors, will be used to support the general development of Eta Kappa Nu. For example, the fund will be used where necessary to help support HKN's national award programs; expansion, including the development of new college chapters and alumni chapters; and chapter visitations by current and past national officers and directors to assist with special occasions. All of these examples represent activities which Paul so heartily endorsed. Other developmental projects will be considered by the Board as funding grows and new objectives important to HKN become established.

As we honor Paul, we also honor donors to the fund by recognizing them as Paul K. Hudson Fellows. Five levels of giving are recognized, as in the form below. One-time donations at any level will be gratefully accepted. In addition, donors may now make pledges for annual donations. All donations will be counted cumulatively for the purpose of establishing the donor's current level of giving. Fellows at each level will be recognized annually by name in the BRIDGE.

Eta Kappa Nu thanks those who have already become Paul K. Hudson Fellows. We invite all members and friends of HKN to join the growing list of Fellows. And whether or not you are presently a Fellow, consider extending your support of the Hudson Fund on an annual basis. Simply fill out and return the form below. Thank you for your part in supporting and strengthening Eta Kappa Nu.

_____ I wish to become a Paul K. Hudson Fellow at the level of (check one)

_____ Distinguished Fellow (\$2000 and above)

_____ Century Fellow (\$1000 - \$1999)

_____ Sustaining Fellow (\$500 - \$999)

_____ Supporting Fellow (\$100 - \$499)

_____ Fellow (\$25 - \$99)

with the enclosed contribution of \$_____.

_____ I wish to pledge a total of \$_____ to the Hudson Fund, at \$_____ per year for _____ years, beginning _____.

NAME _____

ADDRESS _____

CITY, STATE, ZIP CODE _____

Return to: Eta Kappa Nu International Headquarters
Box HKN

University of Missouri-Rolla
Rolla, Missouri 65401

Zerby-Koerner Student Profile

The Alton B. Zerby and Carl T. Koerner Outstanding Electrical Engineering Student is outstanding by virtue of his/her scholastic excellence and high moral character; coupled with demonstrated exemplary service to classmates, university, community, and country.

Among the purposes which Eta Kappa Nu expects to achieve by the operation of this program are: Honor annually the outstanding electrical engineering student by providing accepted recognition of accomplishments in this field; Recognize the outstanding electrical engineering student's school; Motivate electrical engineering students to earn membership in Eta Kappa Nu; Distinguish the undergraduate chapter of Eta Kappa Nu from which the outstanding EE student was chosen; Provide additional opportunity for publicity and recognition of the Eta Kappa Nu Association and its objectives; and Encourage electrical engineering schools not having a chapter of Eta Kappa Nu to qualify and establish a chapter.

Inaugurated in 1965 as the Outstanding Electrical Engineering Student Award Program of Eta Kappa Nu, it has become a traditional means of providing recognition to deserving Electrical Engineering Students in the United States of America. In 1975 the name was changed to "The Alton B. Zerby Outstanding Electrical Engineering Student Award" to honor and perpetuate the memory of Mr. Zerby, a long time leader and Executive Secretary of Eta Kappa Nu, who was dedicated to the students. In 1993 the name was further changed to include Carl T. Koerner, to honor and perpetuate the memory of brother Carl, who had a lifelong dedication to Eta Kappa Nu, including serving as its President; and his selection as the fifth recipient of the prestigious Eta Kappa Nu Distinguished Service Award in 1975 in recognition of his contributions to electrical engineering and Eta Kappa Nu.

This award considers not only the scholastic achievements of the stu-

THE ALTON B. ZERBY and CARL T. KOERNER OUTSTANDING ELECTRICAL ENGINEERING STUDENT AWARD 1994

Anaheim, California
July 23, 1994

Text by
Marcus Dodson

THE ETA KAPPA NU ASSOCIATION 1994

EXECUTIVE COUNCIL

President	Bruce P. Johnson
Vice President	Michael R. Hajny
Executive Secretary	J. Robert Betten

BOARD OF DIRECTORS

Robert I. Egbert	Karl E. Martersteck
Russell J. Niederjohn	John D. Wolf

OUTSTANDING STUDENT AWARD COMMITTEE

Marcus D. Dodson, Chairman

Richard H. Cockrum	Robert J. Kennerknecht
Stuart McCullough	William E. Murray
Thomas L. Rothwell	Donald S. Stoica

JURY OF AWARD

David L. Hench	Chair, Los Angeles Council, IEEE
David G. Meyer	Junior Past President, HKN
Stanley White	Fellow, IEEE

LOS ANGELES ALUMNI CHAPTER

President	Richard H. Cockrum
Vice President	Mohammad A Massoudi
Secretary	Stuart McCullough
Treasurer	Rupert M. Bayley
Junior Past President	Donald S. Stoica

Student Award Winner

THE ALTON B. ZERBY and CARL T. KOERNER OUTSTANDING ELECTRICAL ENGINEERING STUDENT AWARD 1994



LILLIAN CHIAMIN HO
Winner

LILLIAN CHIAMIN HO, has a GPA of 4.0, and ranks first in her class of 271 students. She will graduate in May 1995, and was nominated by Psi Chapter at the University of Texas, Austin. She is a member of the Society of Women Engineers (SWE), Tau Beta Pi, as well as Eta Kappa Nu.

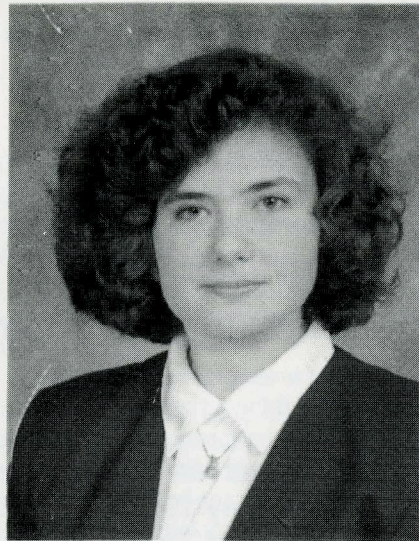
Lillian has held many leadership roles, including elected offices in Tau Beta Pi, Eta Kappa Nu, and the SWE. She is a volunteer tutor to help other engineering students. The College of Engineering selected her as one of a group of forty Student Recruiters who visit prospective students and their parents on behalf of the University. She has been active on the Student Engineering Council. She has also assisted with NSPE "Math Counts" competitions, JETS-TEAMS competitions, and served as judge for science fairs. Additionally, Lillian has volunteered in the community with such groups as Habitat for Humanity.

Miss Ho has earned all of her college expenses through scholarships, as a grader for the EE Department, and interning or working for the Austin Technology Incubator, Proctor & Gamble, and Mobil Oil.

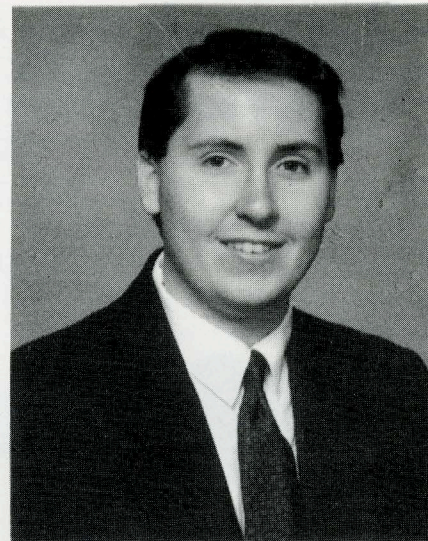
Won expense-paid trip to Pan Pacific Hotel in Anaheim, California and an Award Dinner in her honor, from the Alton B. Zerby Perpetual Memorial Trust established by the Eta Kappa Nu Official Family, and a monetary gift from the Carl T. Koerner Perpetual Memorial Trust established by Edith Ann Koerner.

She was recently recognized as the 1993 Outstanding Woman Engineering Student by the SWE, and is currently President of Psi Chapter of Eta Kappa Nu (after serving as Vice President). The Society of Technical Communications recognized one of her works as a "Distinguished Technical Report". One of her professors said: "Ms. Ho is a top engineering student by any standard, and I am happy to give her my strongest recommendation for this award. She is definitely a person of exemplary character and ability, and I am delighted to recommend her." The Associate Dean of Engineering says: "Lillian is one of the brightest, most articulate, thoughtful and caring people I have ever known. Without reservation, I highly recommend her as a deserving candidate for this prestigious recognition."

In what spare time she has, Lillian enjoys sewing and fashion design, piano, and dancing.

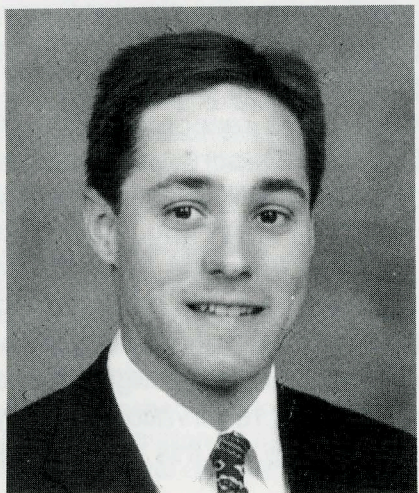


Heather Marie Kovarik
Honorable Mention



Bryan Lee Pellom
Honorable Mention

**THE
ALTON B. ZERBY and CARL T. KOERNER
OUTSTANDING ELECTRICAL ENGINEERING STUDENT
AWARD
1994**



Gregg David Pfister
Honorable Mention



William Weeks IV
Honorable Mention

Heather Marie Kovarik graduated with a 3.94 grade point average (GPA) and was nominated by Gamma Xi chapter at the University of Maryland. She is a member of the Institute of Electrical and Electronic Engineers (IEEE), Society of Women Engineers, Tau Beta Pi, Alpha Lambda Delta as well as Eta Kappa Nu.

On her summer jobs she constructed an FM receiver and demodulator, designed and built an eight channel router, and programmed several micro-controllers. While she was President of her Eta Kappa Nu chapter, the chapter visited an elementary school to introduce electrical engineering to a class of 4th and 5th graders by showing them a simple circuit, and making a flashlight out of a soft drink can. At the end of the session each student had a flashlight of their own making. She participated in Habitat For Humanity and knitted an afghan for a homeless person, also the Maryland Food Bank, and the Adopt A Highway program. In addition she tutored and taught other engineering students.

Heather enjoys skiing, and holds a yellow belt in Karate.

Bryan Lee Pellom has a 4.0 GPA, is first in his graduating class of 285 seniors, and will be graduating in December 1994. He was nominated by the Beta Chapter of Purdue University, and is a member of IEEE. He has been honored with membership in Phi Kappa Phi, Tau Beta Pi, Phi Eta Sigma, and Eta Kappa Nu.

His work includes participation in the Cooperative Engineering Student Program at Allison Transmission, a division of General Motors. He is a computer consultant to the Chemistry Department at Purdue. Also, he is assisting in graduate research in computer speech recognition of identically sounding words that have different meanings. He has served as a volunteer for the National Society of Professional Engineers "Math Counts" program for Junior High students.

Bryan enjoys playing golf and hiking

Gregg David Pfister graduated summa cum laude with a 4.0 GPA, ranking first in his class of 186 seniors. He was nominated by the Beta Kappa chapter at Kansas State University. He is a member of IEEE, and has been honored with membership in Tau Beta Pi, Golden Key, Steel Ring, and Eta Kappa Nu.

Gregg has been very active in community, church, and campus organizations, including "PUSH America" (People Understanding the Severely Handicapped). He contracted to paint houses to earn money for school. In cooperation with professors Roger Friedmann and David Soldan, he participated in preparing "Mechanisms by Which Electric and Magnetic Fields Effect Biological Changes" and "Electric Shock Hazards and Safety Precautions". He is proficient in several computer programming languages.

Gregg enjoys intramural athletics and farming.

William Weeks, IV graduated summa cum laude with a 4.0 GPA, ranking first in his class of 318 seniors. He was nominated by Delta Zeta chapter at Washington University, St. Louis. He is also receiving a Bachelor of Physics degree. He is a member of IEEE, and has been honored with membership in Tau Beta Pi, Golden Key, as well as Eta Kappa Nu.

Bill led a joint Tau Beta Pi-Eta Kappa Nu project to raise money for disadvantaged inner city youths. He has planned and organized many events on campus. In addition, he has been very active in his church. He co-authored "Current-Voltage Curves for a Spatially Periodic Germanium Diode" with Dr. B. Shrauner, published in the June 1993 Journal of Applied Physics. He was research assistant to Professor B. Rimoldi in the field of information sciences and numerical computations.

He enjoys playing golf, ping-pong, tennis, and constructing model trains.

FINALISTS:

- | | |
|-----------------------|--|
| Ronald Thomas Bentley | Georgia Institute of Technology |
| David Carl Kubicek | Iowa State University |
| Edwin Joseph Tan | University of Massachusetts |
| Joseph Duc Tran | California State Polytechnic Univ., Pomona |

(Continued from Page 4)

dent but also pays attention to other attributes; participation in service to classmates and university in the form of curricular and extra-curricular activities, demonstrated interest in community and fellow human beings, and regard for country. These all play a vital part in the considerations leading to being selected. It also measures the student against the traditional yardstick established by Eta Kappa Nu in its goal of achievement of the well-rounded person; one who is neither a scholarly drudge nor a gregarious sport, but one that might be considered an appropriate combination of the best qualities of both.

Four years were spent in the development of this program by the Los Angeles Alumni Chapter of Eta Kappa Nu. Much thought and effort went into the structuring and development of the many features that are needed, and the procedures which must be followed to be assured that a truly representative selection of the top Electrical Engineering students have been examined before the designation of one of these individuals as the Outstanding Electrical Engineering Student.

The program, thoroughly reviewed with the National Executive Council and the Board of Directors during the preliminary stages of its development, is formally approved and authorized as an official program of the Eta Kappa Nu Association. The Los Angeles Alumni Chapter has been designated as the implementing organization and has been authorized by the Executive Council to conduct the program.

The award winner's travel and expenses are covered by financial support from the Alton B. Zerby Trust Fund. An honorarium for the winner is made possible by the Carl T. Koerner Memorial Trust Fund, established in 1978 by his widow Edie Koerner and a large number of Carl's relatives and friends. Both Trust Funds, were established to honor their namesakes, who made significant contributions to Eta Kappa Nu. The Trust participants and the Eta Kappa Nu Board of Directors felt it appropriate that earnings from the Trust Funds underwrite this award.

HISTORICAL HKN BENCHMARKS

Part II: Expansion and Formative years

(With Personal Commentary)

by Larry Dwon



This is another article in the series which is leading up to Eta Kappa Nu's 100th anniversary in OCTOBER of year 2004. It is only a decade away. Begin thinking about what HKN might do locally and nationally to celebrate this event. In the interim, each member can add historical information to our files for use in this series. You may send historical material to HKN BRIDGE, P.O. Box 2107, Rolla, MO 65401.

College Chapters: On October 28, 1904, HKN's ALPHA chapter became an officially recognized honor organization on the Illinois University's Urbana campus. Enthusiasm to establish other college chapters grew rapidly and BETA Chapter at Purdue followed in 1905 only to be temporarily disbanded because an over-enthusiastic James Ray Thomas prematurely organized a chapter before receiving formal approval from the university administration—an act I understand, having done similar things in my own enthusiastic moments. This unintentional rule infraction initiated a confrontation between the presidents of Purdue and HKN. President and founder M. L. Carr, who represented HKN, refused to revoke HKN membership of the bonafide initiates; but he agreed to withdraw BETA's charter. This action established an important HKN policy, "once a member, always a member." After this discussion and compromise, a cooling down period followed. The HKN Constitution was then revised to make provision for an ETA (member-at-large) Chapter. The following Purdue members are unique. They are the first to be so initiated. They are the only members to

have individual initiations in an Eta and BETA chapter. These historically special members are recognized below.

First ETA and BETA Chapter Initiates

1906 Class

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

1907 Class

F. H. Bagley	C. R. Moore
J. H. Cannon	C. A. Scott
C. R. Collins	H. N. Van Deusen
E. M. Greeson	G. B. Walker
L. H. Harris	A. W. Woodville
A. J. Loeb	Roscoe Seybold
A. F. McKee	F. J. Strassner

1908 Class

R. B. Best	W. E. Viol
M. B. Bogarte	A. B. Wagner
Paul L. Clark	R. H. Webb
Charles A. Jaqua	E. B. Winthrope

In 1913, BETA Chapter was re-established at Purdue at the request of the University's President.

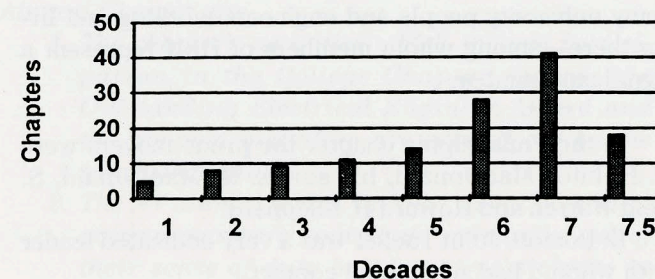
During the first 25-30 years of HKN history, the principal objectives were: 1) to establish a strong group of college chapters in leading engineering schools; and

2) build a sound financial structure. There was general agreement about the need for finances but not for a way to achieve the desired result. Regarding expansion there was much disagreement. Financial and expansion problems were unresolved issues in 1935 when President Nelson L. Best described plans for reorganizing and further developing the national Association's hierarchy. The principal members in this operational study were Roger I. Wilkinson, L. A. Spangler, Clifford A. Faust, Edward Watson, and E. B. Wheeler. All but one of them were New York alumni chapter members whom I knew personally. They impressed me with their ability to communicate their ideas and with their dedication towards Eta Kappa Nu and as honorable, professional men. They were highly respected by their peers and held important positions as engineers, managers and educators. Yet they volunteered extraordinary time to HKN. They each truly exemplified the character expected of a chosen HKN member which is spelled out at each initiation ritual ceremony.

In 1935, I graduated from Cornell. I then became associated with the New York Alumni Chapter. There were 23 college and 8 alumni chapters in the country. Conservatism about expansion prevailed. ECPD had only been in existence for three years. Its accreditation work was still not well understood nor adequately communicated to practicing engineers. Neither were some Engineering educators fully informed about accreditation procedures and practices.

A change in HKN policy came about as new generations of members were elected into national offices. Also, the national organization structure was changed from the initial three member National Executive Council (NEC) (president, vice president and secretary-treasurer). First, the National Advisory Board (NAB) was added. Then incorporation replaced the NAB with a Board of Directors which included the NEC. An accelerated expansion of college chapters began in the 1936-37 school year with the installation of chapters at the universities of Pittsburgh and Michigan. By 1975, there were 134 college chapters. The number of college chapters chartered annually and by decades is shown in the figure below.

Figure 1. Student Chapters Installed per Decade 1900-1975



After 1932, when ECPD accreditation procedures were established, the concern about whether a school had proper credentials for an Eta Kappa Nu chapter was largely alleviated and an active promotion program came into existence which included personal communications with engineering educators expounding the virtues of having an HKN chapter on campus and the adoption of procedures making a petition for a chapter easier than it had been. Another important change in HKN which helped it in several ways was the hiring of Alton B. Zerby as a salaried Executive Secretary and Bridge Editor.

More on this subject will be given in a future article dealing with the emergence of the BRIDGE as HKN's primary communication medium. With respect to the expansion of college chapters, A. B. (as many members called him), initiated a vigorous visitation practice among engineering colleges. He also encouraged alumni members to do likewise. His enthusiastic promotion of HKN earned him commendations among educators, students and alumni members. It wasn't long before he became known as Mr. ETA KAPPA NU. In 1972, he became the first recipient of the Distinguished Service Award. I had the privilege of making the presentation to him and his wife in Dillsburg, PA where HKN's first headquarters was located. In my opinion, the visitation program is a crucial service that HKN should preserve to enhance student members' edification about the association's background, ideals, goals and struggles to remain viable.

Expansion of HKN college chapters in the USA may be limited to the number of ABET accredited electrical engineering programs. Expansion to foreign schools has been explored and encouraged. Paul Hudson visited England and other countries in Europe and Canada. Professor A. D. Moore made inquiries in Canada. A suggestion was made for a chapter in Mexico by Professor Emeritus H. B. Hamilton of the University of Pittsburgh.

Clifford A. Faust deserves much of the credit for policy changes about college chapter expansion and implementation. He had the solid backing of the New York Alumni Advisory Council and chapter.

Alumni Chapters: Growth of alumni chapters has not been dramatic. Nevertheless, their contributions to increasing the prestige of HKN is phenomenal. There were about 15 alumni chapters in existence which operated sporadically during various periods. In 1976, the following information was gathered from various individuals and publications. I apologize if it seems that too much emphasis is made regarding activities of the New York chapter. I was so intimately involved that it is difficult not to be enthusiastic about activities mentioned. We welcome historical facts about other alumni chapter activities that are not covered here.

Pittsburgh Alumni Chapter was the first to be established in 1908, followed by others as indicated in the following listing: In 1909, L. H. Harris, Vice

President of the Pittsburgh Chapter wrote, "Until the time comes when ETA KAPPA NU can stand on a foundation of a large body of loyal alumni, the most urgent need will be more chapters in schools of established merit." That statement was made at a time when much debate prevailed about expanding student chapters and penalizing alumni chapters with assessments. E. B. Wheeler's July 27, 1950 statement gives some of the reasons regarding the long-standing dialogue. He wrote, "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 expenses practically kept them from functioning until it was cleared up by the NEC." The debate lasted into the depression years. Then student, but not alumni chapter expansion accelerated. Nevertheless, the activities proposed and implemented by a few alumni chapters increased substantially. The leaders were Boston, Chicago, Los Angeles, New York, and Philadelphia.

Early in HKN history the purpose of alumni chapters was discussed. In 1923, J. B. Kelly, HKN President wrote: "The contact of a young man just out of college with a group of men of HKN calibre could only be a benefit to that young 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 graduation from college. Instinctively such a group of men would want to help younger men in matters of employment." I agree without reservation! My association, in 1935, with the members of the N.Y. Alumni chapter was inspirational. Many of them had been or were, at the time, national officers of HKN, as well as, officers of very large business enterprises. Listening to their discussions of problems facing HKN and engineers motivated me into an intense desire to become helpful in the Association and the engineering employment situation. The record shows active involvement in both.

Shown below, is a tabulation of extraordinary alumni chapter activities which have had a great influence on enhancing the prestige of HKN.

Activity	Alumni Chapter	Chapter Organized
High School Guidance Program	Boston	1947
Activities at NEREM		
New England Area Meeting		
Employment Bureau Proposals	Chicago	1909
Employment Conferences		
Guidance Movies		
Lunches at Chicago Conferences		
1947 OYEE Award Dinner	Pittsburgh	1908
Ladies Auxiliary	Los Angeles	1923
Social Functions		
Outstanding Student Award		

Luncheon at IEEE Wescon Meetings		
Monthly meetings at Philadelphia Engineering Club	Philadelphia	1917
Joint student chapter initiations		
Outstanding Teacher Award		
Outstanding Chapter Merit Award	New York	1910
Outstanding Young EE Award Program		
Employment Committee		
Salary Surveys		
Bridge Life Subscription Plan		
Distinguished Lecture Program		
Regional Visitation Program		
Distinguished Service Award Program		
Advisory Council		
Annual Kary Luncheon		
First industrial chapter organized		

Many members contributed to the success of the foregoing list of activities. Any attempt to give due credit to all of them simply runs the risk of unintentionally overlooking or de-emphasizing someone. However, a few outstanding contributors deserve special recognition such as Roger I. Wilkinson who conceived and developed the OYEE Program. He also served in all offices of the N. Y. Alumni Chapter and several at the national level as well. Among the distinguished New York Alumni who contributed to the activities listed were F. E. Brooks, C. A. Faust, W. B. Groth, O. H. Loynes, Morris Buck, J. W. Weigt, R. W. Fouse, E. B. Wheeler, J. H. Craig, Robin Beach, A. F. Gabrielle, J. M. Monstream, N. S. Hibshman and others including, Alan Lefkow and Berthold Sheffield.

When the N. Y. Alumni Chapter began to flounder, due to the exodus of engineering firms from New York City, the remaining more active members were those employed by American Electric Power Service Corporation. A. F. Gabrielle and I prepared a charter and proposed the installation of an Industrial AEP Chapter, to function as the N. Y. Alumni Chapter as an interim operating mode. It functioned as such until AEP moved to Columbus, Ohio. The first officers were G. A. Mangiero, president, M. R. Hajny, vice president; D. Sebesta, secretary; J. S. Edmonds, treasurer. AEP Chapter still has its charter. Although it is not active, it could be, because Columbus, Ohio seems to be a good location for an alumni activity. It is a compact city with many university people and engineers working and living there—among whom members of HKN represent a significant number.

In the Philadelphia chapter the prime movers were C. Holmes MacDonald, his son E. H. MacDonald, S. Reid Warren and Howard H. Sheppard.

In Boston, John Tucker was a very dedicated leader with whom I had substantial contact.

In Chicago, J. E. Farley, H. A. Slocum and E. B. Kurtz played prominent roles on the Guidance Movie project and related activities.

In Los Angeles, Carl T. Koerner was a leader who I knew mainly because he was national president when I was vice president. We faced some unique HKN problems concerning the BRIDGE, finances and headquarters personnel (including moving the headquarters from Dillsburg to Urbana) during the 1957–1959 period. Other prominent volunteers were M. D. Dodson, W. E. Murray and R. J. Kennerknecht, as well as their ladies who comprised the Ladies Auxiliary activities.

L. A. Spangler, Executive Secretary, at the time, wrote to E. B. Wheeler on November 21, 1932, "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 even of the founders...but apparently no one has yet hit upon a plan."

Soon after, the OYEE Award Program was developed by Roger Wilkinson which involved many, but not a large percentage, of alumni members. Other programs have been mentioned previously. However, after a couple of decades, the New York Alumni Chapter, where many activities were born, developed and implemented since 1936, began to atrophy because of reasons A. F. Gabrielle wrote to Executive Secretary P. K. Hudson on August 31, 1967. He perceived the problem to be the following: "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 New York Alumni Chapter are:

1. The chapter's activities which include participation in the College Chapter Award, the Outstanding 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 primarily out of their sense of duty but do not participate in

any trips, activities, lectures, etc."

Tony Gabrielle continued his letter to Paul Hudson with some suggestions of national and international activities. Soon after, the AEP Industrial Chapter was proposed and chartered to preserve the activities of the NY Alumni chapter which regretfully marked the end of a very dedicated chapter of alumni members who played a prominent role in building the prestige of Eta Kappa Nu, while keeping it viable during its struggle to expand. For some reason, the early base of enthusiasm did not spread to the succeeding generations of members. Contributing factors were the exodus of engineering firms away from New York City into suburbia and elsewhere, and members moving to suburbia to live, which made coming to meetings in the city an undesirable chore. Meetings in suburbia were not successful either.

The foregoing describes the life and death of a very important segment of alumni chapters. They produced many desirable activities in which members and their friends participated. There were periods when established activities were maintained but new activities were not created. One period of regression occurred between 1939 and 1950. This period included World War II. The most progressive periods were 1904–1912, 1928–1938, 1950–1954 and 1972–1975. Twenty activities in which alumni actively participated in a prominent way include the following:

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

The foregoing are well-known activities which have given HKN prominent visibility and are mainly due to alumni efforts. Dedicated members who made and continue to make them possible deserve to be recognized by HKN and their engineering peers for their Distinguished Services.

In Memoriam

Julius A. Stratton

Julius A. Stratton '23, who served as MIT's eleventh president from 1959 to 1966, died of pneumonia on June 22, at the age of 93.

Stratton was an internationally-known scientist who distinguished himself as both an educator and an administrator. He had been associated with MIT since his undergraduate years at the Institute, which began in 1920.

During his administration, Dr. Stratton revised the curriculum and expanded the graduate program. In the last three years of his tenure, more than \$40 million in new buildings were constructed. Stratton was also revered as a champion of student welfare. He helped with the development of McCormick Hall, the allotment of living space for married students, and the expansion of athletic facilities. When the student center opened in 1965, the student body requested that the building be named after him, in recognition of his devotion to student life and student affairs.

Along with his dedication to MIT, Stratton served under several U.S. presidents on a variety of national boards and committees. Also, he was active in professional and scientific organizations and was a trustee of several education and cultural institutions.

Chairman of the Corporation Paul E. Gray said, "As professor, the first director of the first university interdepartmental laboratory, provost, chancellor, and as president, Jay Stratton provided distinguished, wise, and compassionate leadership to the Institute during a time in which the relationship between the research universities and the federal government was in flux, and the complexion and mission of MIT was also in transition. Jay's strong commitment to the arts and humanities at MIT was particularly important in a period when those activities were first flowering."

President Charles M. Vest said, "Jay Stratton's leadership in science and academia helped shape not only MIT, but institutions throughout the

nation."

Stratton was born in Seattle, on May 18, 1901. When he was young, his family lived in Germany, and he started school there. Later, growing up in Seattle, he developed an interest in the then-frontier field of radio.

Stratton came to MIT in 1920, and earned his SB in electrical engineering in three years. As an undergraduate, he was secretary of the Radio Society. He returned to MIT for his graduate work and received his master of science degree in electrical engineering in 1926. He did a doctoral study at the Swiss Federal Institute of Technology and received an ScD degree in mathematical physics in 1928.

He again returned to MIT, this time as an assistant professor in the electrical engineering department. He later transferred to the physics department, where he became an associate professor in 1935 and a full professor in 1941.

His research included work on the propagation of short waves, which at the time were not as well understood as the long waves used in radio transmission. He was a leading member of a group at MIT engaged in the study of electromagnetic theory and microwaves, laying the foundations for modern electronics. In 1941 he published "Electromagnetic Theory," a scientific classic regarded as an authoritative text. He was also the author of many articles and technical papers, as well as co-author of several books.

In the 1940s, Stratton worked on radar development at the newly created Radiation Laboratory, and in 1942 he went to Washington, D.C. as an expert consultant. He was active in improving the use of radar for the war effort by organizing technical advisory committees to the Air Force on programs of ground radar, radar fire control, and radar bombing. In 1946 he was awarded the Medal for Merit for his services.

As an administrator, Stratton had a great impact on MIT's directive and expansion. Through his efforts, the School of Humanities and Social Sciences was created in 1950. With his experience as director of the Research Laboratory of Electronics,

which started out as the Radiation Laboratory, he set the standard for the organization of interdisciplinary programs at MIT and elsewhere.

Stratton became MIT's first provost in 1949 and was also made a vice president in 1951. He was named chancellor in 1956 and became acting president in 1957 when then-President James R. Killian, Jr. was appointed special assistant to President Dwight D. Eisenhower for science and technology. In January 1959, Stratton became president. He retired in 1966 and was elected a life member of the MIT Corporation. He was a life-member emeritus at the time of his death.

After a tenure as Chairman of the Board of Trustees of the Ford Foundation from 1966 to 1971, he returned to Cambridge to work on a history of MIT.

Stratton served as vice president of the National Academy of Sciences from 1961 to 1965. In addition, he was a member of the American Philosophical Society and the Council on Foreign Relations; a Fellow of the American Academy of Arts and Sciences, the American Physical Society, and also the American Association for the Advancement of Science. He was a life Fellow of the Institute of Electrical and Electronics Engineers; a member of Sigma Xi, Tau Beta Pi, and an eminent member of Eta Kappa Nu.

He was a Life Trustee and Member of the Corporation of the Boston Museum of Science and a member emeritus of the Draper Laboratory.

He received the Distinguished Public Service Award of the U.S. Navy, the Medal of Honor of the Institute of Radio Engineers, the Faraday Medal of the British Institution of Electrical Engineers, and the Boston Medal for Distinguished Achievement. He held 17 honorary degrees from universities in the United States, Great Britain, and Canada.

Stratton is survived by his wife, Catherine N. (Coffman) Stratton, three daughters, Catherine Nelson Stratton of London, Mrs. Lew (Cary) F. Boyd of Newbury, Mass., and Mrs. Laura Thoresby of London; and a granddaughter, Caroline Stratton Boyd.

1992-93 Chapter Awards

by Alan Lefkow

The Outstanding Chapter-Activities Award program epitomizes the characteristics of a successful member of Eta Kappa Nu. Members' election to Eta Kappa Nu demonstrates their academic ability. But members, working together in concert as a college chapter demonstrate their humanitarian side with their activities of service to their fellow students, their department, their school, and the community at large. In return, the Chapter Award program provides recognition of college chapters for their programs of service to their students and community.

For the academic year 1992-93, seven college chapters received awards for having an outstanding program of activities. Awards are broken into three categories. *Certificate of Merit* winners are recognized as up-and-coming chapters whose programs demonstrate unselfish dedication to their fellow students and community. *Honorable Mention* winners are recognized as truly outstanding chapters whose extensive program of activities stands out from the rest. The *National Winner* is simply that chapter whose program stands out above all these others.

For the 1992-93 school year, seven chapters received recognition for their programs of excellence. Beta chapter of Purdue University copped the National Winner award, their twelfth win in as many years. Beta Epsilon chapter of the University of Michigan, and Iota Xi chapter of the University of Arizona received Honorable Mention awards. Four other chapters were cited for their meritorious programs and received

Certificates of Merit. They were Gamma Mu chapter of Texas A & M University, Delta Pi chapter of Colorado State University, Nu chapter of Iowa State University, and Zeta Pi chapter of the State University of N.Y. at Buffalo.

Outstanding chapters are selected based on their annual chapter report. Any chapter that sends in an annual report is automatically entered into the competition. Reports arrive at National after the end of the academic year and into early fall. They are judged in the winter, and the winners announced by spring. The Chapter Award program is also unique. One winning award can touch the hearts of a whole chapter. The award plaques themselves have been made as rich as possible. The National and Honorable Mention winners receive metal plaques engraved in color. The Certificate winners receive their awards laminated in walnut.

Winning chapters send in reports of distinction that do justice to their programs of activities, and many of these reports have been published in the pages of BRIDGE as examples to others. Desktop publishing and other professional services on campus have contributed to annual reports that look as good as the chapter they portray. A winning report requires hard work, but then so does an outstanding program of activities. The Honorable Mention Reports of Beta Epsilon and Iota Xi are presented here as encouraging examples of Winning Reports.

The Beta Epsilon Times

National Edition Annual Report October 1993

HKN teams up with Habitat for Humanity

"If I had a hammer, I'd hammer in the morning, I'd hammer in the evening, and all the day long!"

On Saturday, October 24, members of Eta Kappa Nu participated in Habitat for Humanity. Habitat for Humanity is a Christian organization established by ex-president Jimmy Carter that helps people who do not have the funds to buy a home, build one for themselves.

With the help of volunteers and a twenty-year, interest free loan from Habitat for Humanity, these people can build their homes in about a year. The future owners must work a certain number of hours on their own homes and must also work a certain number of hours on future Habitat homes.

So, it's almost a self-perpetuating machine. The morning dawned rather gray and misty, but not to fear for by 9 o'clock the day was looking bright and sunny.

About ten HKNers journeyed over to Ypsilanti, ready to do some hammering, lifting, and painting.

In the time that they were there, they sorted wood, transported a huge dirt pile to the front yard, raked topsoil, pulled nails out of old boards, and put up some dry wall. Not too bad for a morning's work!

Dirty and tired, they all headed home, but everyone agreed that the time was well spent, and that the Habitat for Humanity was definitely an activity worth repeating in future semesters.



HKNers assemble as they wait for instructions.

Beta Epsilon assumes active role in curriculum decision-making

The Beta Epsilon chapter of HKN provides many services to the students at the University of Michigan. Of these, perhaps the most exciting is supplying a student voice on the subject of the Electrical Engineering (EE) and Computer Engineering (CE) curriculums. Each year, a student representative from each of the EE and CE disciplines is given the responsibility to serve on their respective departmental curriculum committees.

These representatives are not only given a voice on the committee but also one of six outstanding votes. When it comes to making a decision that will affect the curriculum, the students have the opportunity to speak their minds and cast a ballot which will carry as much weight as any other voting professor on the committee: it is this fact that guarantees the students' right to interject comments and concerns.

Several advisory professors also attend meetings but are not afforded a vote.

The curriculum committees have recently decided to heavily modify both the core curriculum and the individual classes within. It is doing this in response to student suggestions and

concerns taken from HKN course evaluations and course enrollment figures, among other forms of student society input.

Current issues being considered include: reducing the 128 EE curriculum to a 120 hour program, allowing students to complete the 4 year Engineering programs in four years instead of the usual four and one half; the elimination of certain classes and the introduction of others better suited to student needs; and finally the establishment of a Combined Undergraduate-Graduate program (CUG), which would offer undergraduate students the ability to receive a Masters degree after a single year of graduate school, provided they maintain a specified grade point average.

Beta Epsilon is looking forward to helping implement these changes in the near future.

Section	Page
Editorials	A2
Business	B1
Sports	C1
Entertainment	D1

Editorials

Notes from the Presidents

We hope that this report will provide you with a glimpse into our lives—the lives of the Eta Kappa Nu members of the Beta Epsilon Chapter at the University of Michigan.

This last year saw a boom in new membership as we initiated one of our largest elective classes during the fall term. Elective duties this year included helping man the ever-popular HKN about stand, tutoring at the library, working at the hospital, and participating in a myriad of other volunteer activities.

We also witnessed one of our most active years of member participation. Actives and electees came together both to work and to play. Long days and nights spent in library study sessions were followed by stress-relieving events that provided a momentary reprieve from the books. We HKNers broadened our range of social events from the old standbys such as TG's (Happy Hours) and the annual hayride, to include some new ones such as ice-skating, a U of M hockey game, and even a few rounds of whirleyball.

At the end of each term, the electees were formally initiated into Eta Kappa Nu and received their "wings." With finals looming over us, we enjoyed one last fest together at the Initiation Banquet before setting down to hit the books and burn the midnight oil.

We believe that this year has been made better for each one of us because of the friendships we have made through our involvement in Eta Kappa Nu. We sincerely hope that these pages will be able to reflect some of the spirit and enthusiasm that we have, both for our school and community and for our fellow HKNers, here at the University of Michigan.

Technical Day: A day to learn

by Eric Glover

October 17 was an unusually warm day in Ann Arbor; a perfect day for the multitude of High School students and parents to expose themselves to Engineering education. It was Tech Day; a day designed to give prospective students a chance to explore various fields of engineering offered here at Michigan. Each engineering discipline (Electrical, Mechanical, Chemical, etc.) had a few student representatives setting up demonstrations and organizing tours.

I was a tour guide for the Electrical Engineering and Computer Science (EECS) department. The EECS group was organized by both Eta Kappa Nu and the Institute of Electrical and Electronics Engineers (IEEE). At about eleven o'clock, 15 people followed behind me as I showed them a few highlights of the EECS department.

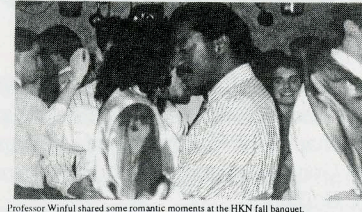
It is important that students in High School, and parents have a positive view of engineering. I was excited to see the collective enthusiasm of the group; many people asked questions and even more made an active attempt to see everything.

The first stop, the epitome of Electrical Engineering, was the Clean Room. Unfortunately, people were not allowed inside, but through the yellow tinted, reinforced windows, we could see the millions of dollars worth of equipment as a professor explained all about clean room, and IC technology. echo was reduced. The importance of learning through demonstrations cannot be underestimated; it helps to give a better feel for the applications of the material we learn, and provides a higher level of interest in the subject.

I think what impressed people most was to see in person the technologies encompassed by Electrical Engineering. Tech Day was a learning experience for everyone. The students discovered how diverse Electrical Engineering really is, and I learned more about the many specializations and resources available to me as an Electrical Engineer.

Robert E. Moggiogian
Director
University of Michigan Mathematics Laboratory

A2 The Beta Epsilon Times National Edition



Professor Winful shared some romantic moments at the HKN fall banquet.

Brainstorming at the Hands-On Museum

In the fall term of this past year, two electees, Ted Belding and Alan Stremberger, chose to do volunteer work at the Ann Arbor Hands-On Museum (HOM) to satisfy their initiation requirements for HKN. The HOM is a science museum with hands-on exhibits for people of all ages. Many of the exhibits are just as likely to fascinate a college student as a ten-year-old; needless to say, volunteers spent some time getting acquainted with the various displays.

The project was to write a 15-minute presentation for the museum staff. Past presentations had discussed such topics as geological drift, leaves, and animal camouflage. Presentations are mainly attended by young children and their parents, so these electees had to choose a topic that was both interesting to many age groups and easy to understand. After some brainstorming, during which hology and other ideas were considered, the volunteers decided to give a short overview of the history of computing.

They first scoured the libraries for information on the subject. Both electees, despite being computer engineers, learned quite a bit that they hadn't known beforehand. The presentation took over twenty hours of work to prepare. It started by describing people's use of calculators for the past 5000 years, beginning with the abacus in Mesopotamia. These number systems could not be used to do all the calculations done today because the number zero hadn't been invented, among other reasons. The abacus was used by the British government until 1826, and versions of it are still used in Asia today. Belding and Stremberger demonstrated simple addition and subtraction on a modern Japanese abacus.

Next discussed was the development of mechanical calculators from Wilhelm Schickard's "Calculating Clock" in 1623 up to the slide rule, which was the dominant tool for field calculations from 1850 to the 1970s when electronic calculators quickly made it extinct. The presentation included a simple model of an analog adder to explain the principle behind the slide rule.

The presentation then followed the history of computers, starting with the ENIAC and leading up to the present day. Vacuum tubes, transistors, and integrated circuits were obtained to show the children how improved technology made possible the rapid development of more powerful computers. The presentation ended with the comparison of a low-end modern personal computer to the computing power of the massive ENIAC.

The presentation was intended to interest children in how computers worked, and how people developed computers from simple tools such as the abacus. While not always certain of success, these hardworking electees still enjoyed preparing the presentation as they learned some useful facts in the process of writing.

Winful wins prize a second time

Professor Herbert G. Winful has become exceedingly familiar with the chapter's Professor of the Year Award, offered at the end of every winter term. After all, he has been the recipient for two of the past three years. The Corresponding Secretary, in charge of determining the winner of the award, passes out ballots to electrical and computer engineering students, asking them to select whom they feel to be the best professor.

Professor Winful, Beta Epsilon's advisor since 1988, epitomizes what students believe should be present in all great educators. While engaging in optical research, Professor Winful also manages to provide quality instruction to students taking courses in electromagnetics. His quiet and shy demeanor nevertheless commands respect in the classroom, and students find that he is untrustingly committed to making certain every person receives the education they rightfully deserve.

Professor Winful maintains an active interest in undergraduate activities. He is always willing to be a guest speaker at HKN meetings; he has also participated in the chapter's social events. These supplementary activities give students the much needed opportunity to get to know their instructors and to look to the future beyond their undergraduate education. Thanks, Professor Winful, for your continued support!

The Beta Epsilon Times	
Editor	Brian Vikstrom
Writers	Sean Allen Ted Belding Ravi Chandron Floy Chang Chris Conley Eric Glover Jonathan Han Mark Olszewski Mark Roberts Debbie Satyanathan Nathan Schultz Susan Shumabock Brian Shu Derek Steele

Beta Epsilon Officers provide support

Each term ushers in a new set of industrious officers, eager to bring new ideas to the chapter. Undoubtedly, these officers have been an inspiration to all, every year, the chapter has grown both in size and stature under their care.

Elections are held at the end of the term, when new officers are determined and previous officers have the opportunity to serve in different positions. Below is a list of those officers for the 1992-1993 academic year:

Office	Fall Term, 1992	Winter Term, 1993
President	Kevin Urban	Floy Chang
Vice-President	Mark Roberts	Allen Oh
Treasurer	Allen Oh	Paul Doad
Recording Secretary	Lenann Fu	Derek Steele
Corresponding Secretary	Jim Johnson	Mark Roberts
Project Chair	Nathan Schultz	Lenann Fu
Activities Chair	Floy Chang	Sean Allen
Bridge Correspondent	Charles Lefurgy	Mark Olszewski
Newsletter Chair	Courney Bond	Debbie Satyanathan



The changing of the guard: Winter officers pose with newly elected fall officers.

Course evaluation guides give direction to enquiring students

The Course Evaluation Guide was created by Eta Kappa Nu in order to help electrical and computer engineering students better determine which classes and/or professors might be best suited for them. (Faculty have also found the Guide useful as feedback on their teaching.) The Guide is assembled every semester just before class registration time.

The information in the Guide consists mostly of the results of the surveys distributed by Eta Kappa Nu members throughout the various EECs classes during the Fall '92 and Winter '93 semesters. Other information includes a brief summary of each of the possible concentrations in the EECs department. A new addition in the Winter '93 guide was a list of the courses, section numbers and the professors teaching the courses for the following term.

The survey was completely voluntary and only those surveys returned to the Eta Kappa Nu office were counted. To provide a reasonable degree of accuracy, tallies only included classes with three or more responses. One item that the official departmental surveys are missing is a section that includes students' comments on the classes and professors. This item was added to HKN questionnaires; there was a section for comments, many of which were included in the guide.

For the Fall '93 term, the Course Evaluation Guide Committee is intent on getting more faculty and student feedback to improve the Guide as well as working to get a better return of surveys from the upper level classes.

Meetings combine learning and learning

Meetings for the Beta Epsilon chapter provide many opportunities for members to interact with each other. Monday evening meetings are not only a chance to utilize each others' talents within the group, but also both continuing and new projects within the surrounding community as well.

The Beta Epsilon chapter has striven to use meetings as a focal point for bringing out new ideas, projects, and suggestions. Every term, new volunteer projects and charity fundraisers are initiated by members.

Faculty and corporate speakers join us for the majority of our meetings to keep us informed of new technology, programs, and avenues that we may choose to pursue during our academic careers. Guest speakers also share personal experiences with the group during refreshments after the meeting, when members can break into small, informal groups to discuss ideas, stories, and experiences with one another.

After all, meetings are the integral part of what makes Beta Epsilon chapter such an enthusiastic and active group. Members are not simply fellow engineers, but friends, supporters, and goal setters who have formed a community with a common vision for the local chapter.

Beta Epsilon Chapter 1992 - 1993 speakers

- Fall 1992**
- 10/12 NASA in Transition
 - Professor England
 - 11/9 Computerized
 - Professor Cardiology
 - Professor Jenkins
- Winter 1993**
- 2/15 Big Things and Little Things
 - Professor Norman Scott
 - 3/8 Optical and Magnetic Character Recognition Technologies
 - UNSYS Corporation
 - 3/22 Ford Electric Vehicles
 - Ford Motors Company

HKN supplies needed service for math lab

Math lab is a tutoring lab located at 1520 East Engineering, on Campus Center at the University of Michigan. It was set up to help students of all 100 and 200 level Math courses and is open from 10-2 PM, Monday through Friday, and 2-5 PM on Sunday.

A manager is always present in the lab to assign students to tutors who are spread out in five different rooms. The manager also conducts and grades tests for some 100 level courses taken under self-study plans.

Eta Kappa Nu members took advantage of the opportunity (and flexible hours) and volunteered at Math Lab, providing a much needed service to the University. With the thousands of students that arrived throughout the year, HKNers always had their hands full. The great success of this newfound service assures the Beta Chapter's commitment to it for years to come.

Hospital hands help children

One of the most beneficial volunteer projects involved with HKN is working at the hospital. Depending on your interest, you can get involved in various departments in the hospital such as the burn center, Mott Children's Hospital, the geriatric clinic, and the Kelling Eye Center, to name a few.

One member got the opportunity to volunteer at the outpatient center for child psychiatry for two semesters. While much time was spent stopping fights and dodging projectile crayons aimed intentionally at helpful and friendly volunteers, working with the children and their carefree playfulness proved to be refreshing.

Developing friendships and earning the most of the kids was indeed a highlight. Volunteers learned to appreciate and respect parents who have children that are autistic, or have attention deficit disorders. They realized how much patience and composure parents need to raise such children. The Beta Epsilon chapter is glad to provide the time caring for their parents a well-deserved break, albeit a temporary one.

EECS Speaks is the engineering voice

"The EECS Speaks deadline is Wednesday, so somebody please turn in something!" ring the newsletter chair's announcement every Eta Kappa Nu meeting. Yet in spite of the sometimes frightfully close deadlines, HKN members always came through. In fact, for the last issue, these dedicated members submitted an overabundance of material, forcing editors to perform the begrudging task of selecting which articles to run!

EECS Speaks is the HKN/IEEE (Institute of Electrical and Electronics Engineers) newsletter that comes out once a month during the fall and winter terms. For the first term this year, EECS Speaks had Courtney Bond serving as HKN newsletter chair and was sponsored by General Electric. This past term, the newsletter was sponsored by Tellabs, with Debbie Satyanathan as chair.

As a news provider, EECS Speaks duty is to inform all of the EECs students of what is going on in the College of Engineering, especially in the EECs Department. Specifically, the past two terms, EECS Speaks had articles on upcoming HKN and IEEE events; the forming of new societies, such as ACM, the Association for Computer Machinery; and other society news, such as about UMEEC, the University of Michigan Engineering Council.

EECS Speaks allows students to share their thoughts. During the past year, EECS Speaks readers heard from the HKN president and from the IEEE chairperson. Topics ranged in content from HKN President Floy Chang's advice to former HKN President Kevin Urban's nostalgia tours. Students also read views on theory vs. experience, the administration, along with the occasional poetry and cartoons.

With different newsletter chairs for the different semesters, EECS Speaks enjoyed a delightful contrast in styles. The first term's issues contained puzzles and recipes, while the second term offered more humor, running excerpts from insurance company's records of driver's accident descriptions. A music review of Monty Python's new album afforded bemused readers with heavy chuckles.

An article found in both terms' newsletters, "Constant of the Month," was always written by a different HKN member. These constants ranged from QXWZK, "for simplicity," to numbers 5, 21, and 24 and were concerned with completely random topics. Other topics described the HKN activities such as "Bowling for Donations," the annual hayride, and a violent hockey game.

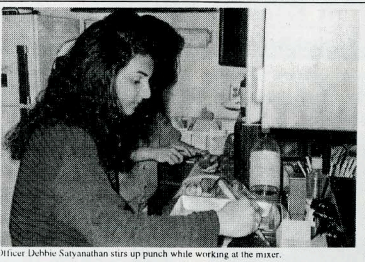
The very last issue contained the "Official MIT Nord Test." Many members of HKN took this test with nerd percentiles ranging from the upper 20's to the mid 70's. Perhaps the next stereotype is true after all.

As can be seen, EECS Speaks serves several purposes — to spread news, to share thoughts, and to provide entertainment. This past year, it certainly seems to have succeeded in meeting these goals.

Book exchange offers buying alternative

Students are all too familiar with the criminally high prices of textbooks. The Beta Epsilon chapter, committed to alleviate the pain of purchasing these materials, established an engineering book exchange for those interested in buying and selling used texts. Each semester, the chapter posts a chart next to the donut stand, and persons wishing to sell books need only to list their names, numbers, books, and prices they are asking.

The chart is not only restricted to selling. Those engaged in purchasing may also scribe their names, numbers, and the books for which they are searching. This insured both vendors and buyers the power to communicate and has provided the best alternative to Bookstore prices. Of course, the chapter must now still find a method to keep classes from changing textbooks every two or three years.



Debbie Satyanathan sits up punch while working at the mixer.

Tutoring keeps electee minds alert as they assist other students

The Beta Epsilon chapter has traditionally run a free tutoring service for University students with Tau Beta Pi at the undergraduate library. A room is reserved for several hours Tuesday through Thursday for any students having questions concerning lower level math, physics, chemistry, and engineering courses.

Postings placed around campus inform students of the service. Professors, also informed of the program, can tell their individual classes.

Our incoming electee class actively performs the tutoring each term, getting the opportunity to assist others who they refresh their own memories of important concepts. Tutoring also provides an opportunity to become better acquainted with others in the electee class; two electees are assigned to work together for each hour of the tutorial service is running.

For many, this is a new and rewarding experience, especially among those that had previously benefitted from such a service. This is a big reason why tutoring has remained a core part of the service projects which have become a mainstay of our chapter.

Bowling brings money to Arbor House

This past fall marked the first annual Eta Kappa Nu Bowl-a-Thon. Active members and electees teamed the streets and buildings for weeks, collecting pledges for each pin they would score from all they encountered. Finally, at 9:30 on Friday, November 6, over 40 members arrived at Colonial Lanes dressed in their finest bowling apparel. The Bowl-a-Thon was underway.

Although grace and dignity was occasionally lacking, enjoyment was not.

After the bowling ended, the pledge-gatherers scoured the streets again, hunting down every last person who had made a pledge and collecting every cent due. At final tally, the event raised over \$100, which was donated to the Arbor House, a home for families of children who are receiving treatment at the UM Hospital. All those involved agreed that the event was a great success and plan to continue this new tradition in the years to come.

Mixing at the mixer

Each term, the Beta Epsilon chapter organizes and holds a Student-Faculty Mixer in the EECs Atrium. This widely attended event allows both the faculty and the staff of the department to talk informally with students about ideas and concerns and provides professors with personal feedback on their courses. Chapter members provide refreshments throughout the mixer.

Classrooms are simply unable to establish the same range of informal interaction between members of the University community. The faculty mixer is invaluable because it brings everyone involved into a closer union. At such a large university as Michigan, this interactive opportunity is extremely welcome.

Bowling brings money to Arbor House

This past fall marked the first annual Eta Kappa Nu Bowl-a-Thon. Active members and electees teamed the streets and buildings for weeks, collecting pledges for each pin they would score from all they encountered. Finally, at 9:30 on Friday, November 6, over 40 members arrived at Colonial Lanes dressed in their finest bowling apparel. The Bowl-a-Thon was underway.

Although grace and dignity was occasionally lacking, enjoyment was not.



Presenting the contribution to the Arbor House are Conley, Chang and Urban.

Business

Donuts make cents at HKN

This year, the Beta Epsilon chapter has continued its tradition of making the mornings a bit easier for engineering students, faculty, and staff alike by selling donuts, coffee, and other refreshments daily. Lines were especially long between classes, when hungry students picked up a little something to eat before—or, in many cases, during—their next class.

In addition to serving the engineering community, the donut stand provides the chapter with most of its income, which is used to fund social events and service projects. The stand also gives electees an opportunity to develop interpersonal skills while fulfilling service requirements for initiation.

The stand is open from 8:00 a.m. to 12:40 p.m. from Monday to Friday, staffed by at least two HKN members to provide customers with fast and friendly service. Items on the menu include dozens of varieties of donuts (with an extra helping of the favorite), cookies, muffins, an assortment of candies, as well as coffee, tea, and hot chocolate. Active members wishing to attend the banquet free of charge run the stand until electees assume control a few weeks into the term.

This past year saw the addition of a rotating "Donut of the Week," introducing both clientele and staff to new donut varieties. Encouraged to be more environmentally sound, the Beta Epsilon chapter has also begun offering reusable coffee mugs as an alternative to our regular foam cups.

Come write for the Beta Epsilon Times. Open 5 days a week, we are located at:

- 1221 EECs Building
Ann Arbor, MI 48109
- or just call us at (313) 763-9028

Balancing the books at HKN

Balancing the budget is not an easy task, as President Clinton can attest. The Beta Epsilon chapter, with all its activities and programs, has one of the largest budgets of the university's societies. Keeping tab of each credit and expenditure can easily become an accounting nightmare, especially for engineers who would much rather be writing programs or making circuits. Fortunately, the chapter has been blessed with treasurers capable of managing such expenses along with having a donut stand to bring in enough money to keep its budget afloat.

Here is a breakdown of the credits and expenditures for the past year:

Credits	Fall '92	Winter '93
Donut Stand Revenue	14,629.89	14,510.78
Resume Book	908.00	35.00
T-Shirt Revenue	114.00	400.00
TG's	100.85	108.10
Grants and gifts	1038.10	1528.54
Electee Dues	2470.00	1564.00
Banquet	154.00	343.00
Miscellaneous	1942.53	921.00
TOTAL CREDITS	21,429.37	19,410.42
Expenditures	Fall '92	Winter '93
Donuts	5340.50	5939.57
Candy and Juice	3108.52	2793.82
Donut Stand Supplies	878.21	545.86
Meeting Food	1284.14	1309.60
Officer Meeting Food	311.61	369.17
Banquet	3268.25	2831.00
National Dues	864.00	625.00
Scholarship	2500.00	250.00
Plaques	93.60	450.95
Pins	410.25	
Michigan Daily Ad	133.20	133.20
Copies	659.15	609.26
Course Evaluation Guide	290.00	
Resume Book Print & Mail	436.73	16.94
Pictures/Slide show	17.00	
T-Shirt Design Contest		50.00
T-Shirts		457.50
IM Sports	192.00	290.00
TG's	145.50	215.64
Student/Faculty Mixer	903.00	1187.33
Monte Carlo Night		189.56
Springfest	1200.00	
Other Social Events	280.00	629.55
Charity Donations	1638.69	
Bank Fees	44.58	35.17
Phone Bills	19.13	95.25
Miscellaneous	291.75	446.22
TOTAL EXPENDITURES	20,546.59	20,322.15

T-shirts captivate buying public

Eta Kappa Nu T-shirts remain a popular item for trendy engineers. Well over 75 shirts have been sold thus far, and retailers continually complain of the struggles associated with keeping up with the high demand. Designed by Jonathan Han, this year's T-shirt features four frames describing the skills the Beta Epsilon chapter provides its members.

The first is to learn new languages. This frame focuses on an engineer fluent in the binary language: impressive!

The second frame depicts engineers selling donuts to professors, revealing HKN's ability to help people develop business skills.

In the third frame, a student in front of a protoboard winds up wrapping himself in wire. The caption reads: Wire new circuits. We certainly hope that this engineer is not one employing the help of the chapter!

Finally, to show that HKN can help a person to grow more mature, we are given a glimpse of a student sobbing in front of a computer which has crashed.

Engineering students are elated with the product, and we hope that next year's line will be no less successful. In the meanwhile, let's congratulate Jonathan Han for a job well done.

Football briefing

This past year, HKN had enough interest in intramural football to provide two teams. Team HKN I lost the first game 13-0, the opposition scoring twice immediately. Fantastic interceptions by Joe Swartz and Jan Allen could not offset the unstoppable strength of the other team.

Team HKN II won 12-6. Everybody had football fever and HKN provided a large turnout. HKN scored in the first half with a Jim Johnson touchdown pass to Stuart Daniels. The touch down responded by tying up the score. The game seemed evenly matched, but HKN was not to be denied. In the final minutes, HKN II marched down the field on a drive that ended in a Sean Allen touchdown pass to Kevin Urban to win the game. Congratulations HKN II!

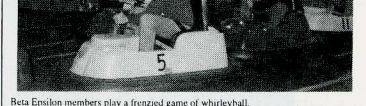
All eyes on whirlyball: sport of the future

Beta Epsilon member Tyler Ford goes to the top of the key. He shouts — wait! He's hit in the back, and still scores! What?! The ref doesn't call a foul on the opposing team? Tyler's other teammates don't seem to care as they wave their Jai-lai in the air and drive over to the other half of the court. What kind of sport is it? Well it's not an Olympic sport, but certainly some of you have heard of it — Whirlyball!

It's a game where players drive around in bumper cars and use their Jai-lai (scoops) to handle a whirly ball. There are five players to a team and there are backboards at each end of the court. Each game is 15 minutes long.

About 50 Eta Kappa Nu members and their guests played for an hour on Saturday, March 6 at a converted movie theater.

While 20 people played on two separate courts, the rest watched and laughed. Cigdem Yasar and Debbie Satyanathan did their best impressions of Al Rose while Sweet Child 'O Mine played on the Jake Box. Beer cans mysteriously appeared in the crowd. One could say the atmosphere was made of pure exhilaration and excitement. This is definitely the sport of the future and HKN members look forward to watching whirlyball as an Olympic event.



Beta Epsilon members play a frenzied game of whirlyball.

HKN fights uphill battle in soccer

Beta Epsilon members participating in soccer this year faced a difficult challenge. For the season opener, many first-time players showed up but quickly discovered the importance of stamina. Out of breath players wandered aimlessly off the field feeling discouraged, but determined to make the second attempt a better one. However, in their second game against the Dynamo U-Grange, HKN players lost their spark 9-0. Goalie Jon Allen was sidelined for the first half of the game due to a collision on the field, but recovered before the next game.

HKN finished up the season 0-4. The last two games, while losses, did showcase some HKN highlights — most notably that of HKN finally making the scoreboard. In the last regular game of the season, Sean Allen had the honor of being the first member to score, in spite of HKN playing three players short of the desired nine. In the final playoff game, our team lost by a marginal 4-3. Again, the team played short handed and the opponents used subs to wear out team down for the win. Two goals were scored by Kevin Urban and one by Stuart Daniels.

Not all was lost. Players enjoyed the strenuous activity and, through sheer willpower, almost overcame the problems inherent in playing short a few players.

Sports and Fashion

Swishers bounce in and out of play

The Eta Kappa Nu Swishers made a promising start in the initial games of the season. In the first game, HKN got off to an early 12 point half time lead by combining outside shooting and strong rebounding. After losing the lead early in the second half, the Swishers recovered and went inside to Kristy Miller. Strong rebounding by HKN women and solid defense kept the second half drive and the ensuing 46-37 victory.

In the second game, the HKN swishers played a tight slug of war battle in the first half. Midway through the second half, the opponent began taking the ball inside on every possession and took a twelve point lead. The HKN Swishers battled back with strong aggressive plays by both Sean Allen and Cigdem Yasar in the final minutes. Down one with six seconds remaining, HKN made a desperate attempt at victory, but the final half court shot fell just short and the Swishers lost 52-51.

The co-recreational team had high expectations going into their season finale and the playoffs. Winning two more games, this team proved that nothing could quench HKN's thirst for conquest — that is, nothing but another great team. The Swishers were stopped in the final game of the season, but preparation is under way to get the Swishers back on top of the heap.

The co-recreational team had high expectations going into their season finale and the playoffs. Winning two more games, this team proved that nothing could quench HKN's thirst for conquest — that is, nothing but another great team. The Swishers were stopped in the final game of the season, but preparation is under way to get the Swishers back on top of the heap.

HKN hockey fans approve Illinois slaughter

On Friday, January 29, 35 HKN members and their friends travelled to York Ice Arena to see the Michigan hockey team play the University of Illinois-Chicago (UIC). The game lasted for about an hour longer than expected because of the unusual number of fouls; the total came to 54 penalties. At one point, eight players were put in the penalty box, and many were ejected from the game towards the end of the third period.

Members Tim Chang and Cigdem Yasar had never been to a hockey game before, shocking people through their inability to recite the fight song. By the end of the night, though, they were singing just as loud as the rest as the home team stomped UIC 8-1.

Hayride wrecks havoc for HKN

Despite the reports of coming rain, the Eta

The Annual Report of The Iota Xi Chapter of Eta Kappa Nu

University of Arizona
Tucson, Arizona

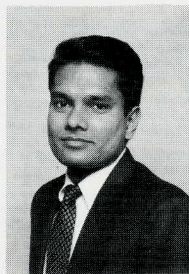
Submitted to the
Eta Kappa Nu National Association
University of Missouri-Rolla
Rolla, Missouri

President's Message

The year 1992-93 has been a year of profound change for the Iota Xi Chapter. The following sections give a view of the number of activities undertaken and of the efforts involved in each of the activities. The driving goal was to establish the chapter as an organization committed to serving the electrical engineering profession. The pursuit of this goal has led us not only to organize a breadth of service activities but has also given our organization an unprecedented cohesiveness. Our activities have given us visibility in the College of Engineering and Mines and in the University of Arizona. We have built ties with faculty and students, various student organizations, several industries, undergraduate and graduate program administrators, and high school students.

This success has come by God's grace and everyone's enthusiasm and participation. Notably all the officers and many members and initiates contributed to the activities. The Electrical and Computer Engineering Department has given excellent support to the chapter in realizing our goals. For tracking members of the past three years and for many other activities, I would like to especially acknowledge contributions made by Joseph Wu, who served as Treasurer for 1992-93.

In closing, I believe that the chapter truly fulfilled the ideals of Eta Kappa Nu and will continue to provide worthwhile service in the future.



Anupam Goyal
Anupam Goyal
President
Iota Xi Chapter of Eta Kappa Nu
1992-93

Intel, MCI, and Motorola. All of their presentations and ideas were invaluable to members.

Eta Kappa Nu did well in fundraising this year. The membership pulled together and spent a great deal of time and effort to raise funds. The results show that the hard work was worth it. Much of the chapter's funds came from car washes on sunny Arizona days, support from the student government, and the annual Spring Fling carnival, which again was a great success. All of these would not be possible without excellent member participation and support.

In addition to all of the hard work, there were times for play. There were three picnics over the course of the year. We also found time for several Friday lunch gatherings, and even some time for intramural sports.

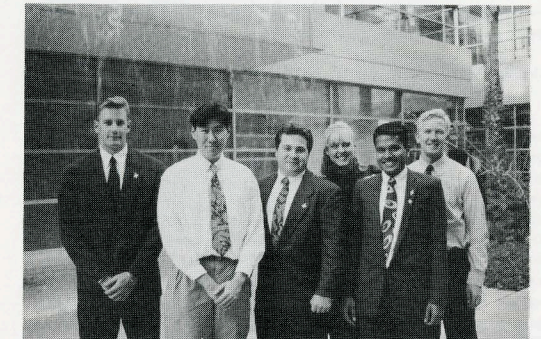
We would also like to recognize the support of the Electrical and Computer Engineering Department of the University of Arizona. The support comes not just in material form like the new office, the posting space in the lobby of the building, and the new UNIX account, but it comes in the intangible forms such as all of the help the professors have given us in helping with the seminars, and the work from the main office staff which helped our group in every way imaginable. It is because of their work as well that we can call this chapter a success.

The Officers

Fall 1992 - Spring 1993
Iota Xi Chapter Eta Kappa Nu Officers

Anupam Goyal - President
Craig Duda - Vice President
Joseph Wu - Treasurer
Steven Moore - Corresponding Secretary
Christine Miller - Recording Secretary
Michael McWilliams - Bridge Correspondent

Dr. Jo Dale Carothers - Faculty Advisor



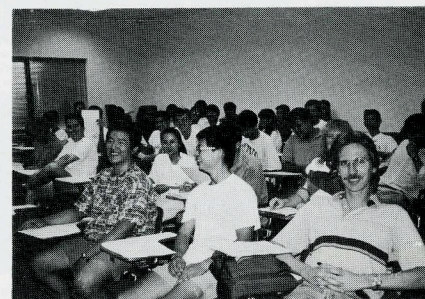
From L to R: Fearless leaders Steven Moore, Joseph Wu, Craig Duda, Christine Miller, Anupam Goyal, and Michael McWilliams.

Table of Contents

A Year in Review	3
The Officers	5
Academic and Service-Oriented Activities	6
Fund Raising	11
Social Activities	15
Banquets and Initiation	19
Administrative Improvements	23
Treasurer's Report	25
Calendar of Events	29
Conclusion	30
Summary Form	32

A Year in Review

The fall 1992 semester started off with an entire cast of new officers who possessed many new goals for the chapter. The overall plan for the 1992-93 school year was to strengthen the chapter in both membership and participation. The projects and activities undertaken throughout the year stand as testaments to our satisfied goals.



The smell of pizza brings old members back and potential initiates in.

The chapter's academic activities continued though the entire year. These activities included tutoring, seminars on graduate school and electrical engineering specializations, a freshman mentoring program, a professional internship program and a financial aid information program. Each of these projects were meant to benefit the school and community, and electrical engineers in general.

We also strived to interact with various people in industry so that our members could get an idea of the challenges that they will soon face in the professional world. Some of the companies that we interacted with were IBM,

Academic and Service-Oriented Activities

Many of the activities of our chapter benefit the world of academics. The rewards go not only to HKN members but to those in our department, our college, and far beyond. After all, one of the goals of this organization is to promote our profession and engineering as well.

Tutoring

One of the pledge activities of our chapter is tutoring. Each initiate helps out by taking office hours once a week to answer any questions that he or she can. Office hours were also taken by many active members who wanted to help out. Tutoring was a much used service in the ECE department, used by both upper and lower classmen alike. Even though some of the problems brought to us were beyond the education of the tutors, most of the questions were answered. In the fall semester, HKN had its own tutoring room, but in the spring semester HKN had its new office, the department welcomed several new professors and the HKN tutoring room reverted into an office by the spring semester.

Engineering Freshman Mentoring Program

This was another of the fall semester projects that HKN was involved in. The College of Engineering and Mines noted that there was a high rate of transfer of students from engineering as they went through school. Diego Navarette of the Minority Engineering Program helped set up the Engineering Freshman Mentoring Program to help keep students in the college. Incoming engineering freshmen were paired up with an upperclassman in the college and that mentor would meet periodically with the freshmen to see how things were progressing. Many different engineering organizations participated in the program. Twelve HKN members were mentors to three or four freshmen each and met with them over the course of the semester to help them along. This big brother/big sister program proved to be beneficial to those freshmen who had trouble adjusting to the engineering curriculum as well as to college life itself.

Financial Aid Information Program

In the beginning of the fall semester, HKN was offered a chance to do some community service by participating in the Financial Aid Information Program. In this project, a database was set up on various scholarships available to graduating high school seniors. Seniors interested in attending college were invited to come to apply for scholarships by giving their vital statistics and matching them to those available. All that we needed to do was staff the terminals so that any questions that were asked could be sent through the computer. The participation in this event was not particularly high because this service was set up for a limited time and was so early into the semester, but several people put a lot of work into the program.

Tour by Elementary School Students

One day in the fall semester, about 30 or so elementary school students showed up at the Electrical and Computer Engineering Building wanting a tour. Apparently, one of the professors had promised them a tour but was suddenly called out of town. HKN came to the rescue. More specifically, Craig Duda, our



Craig Duda and his young tour group pose for a quick picture. Incidentally, Craig is the one with the black t-shirt in the front row.

vice-president organized an impromptu tour of the department with the help of some HKN members. The tour went surprisingly well and the children were not unleashed by their teachers to destroy the building.

Professional Internship Program (PIP)

PIP was a program set up by the local school district (Tucson Unified School District) that sought out some well qualified high school seniors and put them into different "professional settings" to expose them to the kind of work that exists in industry. In the middle of the fall semester, it came to our attention that there were three students that wanted to learn about electrical engineering and some of the work that goes along with it. These three students came to the university for five hours a week, and were paired up with different professors or different HKN students to show them what sort of things that electrical engineers can do. We gave them a sample of the homework that EE students suffer through as well as short tours of different labs covering computers, circuits, and even holography. By the end of the semester, Reben, Patrick and Gene had a pretty good idea of the broad field of electrical engineering.

Graduate School Seminar

One of the seminars that HKN put together was the Graduate School Seminar. As surprising as this may seem, some students that get through the EE program go on to more punishment as a graduate student. The purpose of this seminar was to give an introduction to graduate school by having professors, and yes, some graduate students speak on the coursework, research, and opportunities that entail going on to a graduate degree. HKN faculty advisor, Dr. Jo Dale Carothers gave an overview of graduate education and research while Dorian Voorhees of the Graduate College gave information about the various sources of funding for graduate school. Sandi Sledge, the graduate advisor of the ECE department, spoke about the application process and graduate programs at the University of Arizona. Several graduate students also fielded questions about various career choices and their reasons to pursue graduate study. The seminar was held in the latter half of the fall semester and surprisingly enough several students were even interested in more school.

Outstanding Junior and Senior Awards

The Iota Xi Chapter also nominated an outstanding junior and senior for the Norman Carson and Alton Zerby Awards that HKN gives out each year. For this academic year, the Iota Xi chapter was proud to send in our nominations for Anita Sharma as our outstanding junior, and Phuc Tran as our outstanding senior. We would also like to acknowledge our runner-ups, Derek Hutton for the Junior award and Lisa Bastian for the Senior award. We congratulate our nominees and wish them luck in their bids for the Carson and Zerby awards.

IEEE/HKN Outstanding Teaching Award

Last year, students from the IEEE student branch and our HKN chapter here founded the IEEE/HKN Outstanding Teaching Award to recognize and reward some of the excellence in teaching in the Electrical and Computer Engineering Department. Nominations were solicited from the ECE student population by filling out a form with a short answer/essay format and reviewed by four students and a dean from the engineering college. This year, we are proud to announce Dr. Richard W. Ziolkowski as the recipient. Congratulations go out to him from the HKN Iota Xi chapter as well as the IEEE student branch.

Adopt-an-Engineer

The Adopt-an-Engineer program is part of National Engineers' Week (this year held on February 15-19, 1993). Tau Beta Pi and Eta Kappa Nu both organized an entire day's program for high school students interested in pursuing engineering in college.

HKN helped arrange for volunteers by speaking to various engineering students, putting volunteers through orientations, and pairing them up with high school students that were interested in their particular field of study. The volunteers took students to their classes, to their engineering departments, and showed them around some of the other facilities on campus. About 40 U of A engineering students volunteered for over 50 local high school students interested in engineering. In the afternoon, four speakers from industry and academics provided information about careers in government, industry and academics. Later, tours of the Control and Manufacturing Process Lab, the Microelectronics Lab, the Low-Speed Wind Tunnel Lab, and the Nuclear Reactor Lab were also given.

Technical Elective Seminar

The other seminar sponsored by HKN was the technical elective seminar. This seminar explained the technical options available to those sophomores and juniors unsure of what field of electrical engineering to pursue. In our department, there are different coursework emphases besides the general courses. The options offered at the U of A are microelectronics, signal processing, control systems, electromagnetics, optics, communications, circuits, and biomedical. Professors from different fields explained technical options offered in their areas. Dr. John Reagan discussed the Optics and Electromagnetics groups. Dr. Arthur Witulski and Dr. Christopher Wolff discussed the Microelectronics group. Dr. Pamela Nielsen discussed the Systems group and Dr. Jo Dale Carothers discussed the strengths of the Computer group. While the turnout for this particular year was lower than expected, HKN intends to conduct this seminar again based on the need and the past record of its success.

Fund Raising

As the other HKN chapters can attest to, fund raising is an important aspect to any organization. Fund-raisers have allowed us to have many activities that we would not normally have done. Also, they have been good at bringing the chapter together, as members and initiates worked together on these projects.

Car Washes

Over the course of the year, our chapter put together two car washes. The first of which was put together by Jenny Gaudet, who volunteered to be the chairperson. On October 17, 1992, the car wash was held at Two Pesos, a popular fast food Mexican restaurant near campus. Even though it was a hot day, as it sometimes is in Arizona, it was a great success in that it brought out the membership and a few faculty. The \$54 that it raised (after buying supplies and sodas) was eventually used in the second picnic that was held.



Our second car wash was primarily organized by Rick LeBaron. The second car wash wasn't held in as nice a place as the first but the 7-11 on a busy

street did even better for drawing people. March 6, 1993 was also a hot day but after a few more supplies, we made over \$86. The two car washes taught us the value of soap that doesn't bring off car wax and sunscreen.



Spring Fling

Spring Fling really belongs in its own category. It represents a semester of hard work by not just one person or even a small group of people, but of the whole chapter. It also represents 400 man hours in just that project alone.



were gone and more needed to be ordered. The lower supply of prizes did not scare us only because we realized the demand was so high.

The carnival lasted for four days and was open 37 hours. Almost every member at one time or another filled one of the two hour shifts at the carnival. The weather was perfect throughout and attracted not just students but the general population as well. Eta Kappa Nu made about \$1300 and after expenses walked away with over \$900 after the four days. This total eclipsed last year's total by over three times and will greatly help get next year's chapter to a running start.

This project represents over 200 man hours of paint-stained faces, mounds of sawdust, and sore hammered thumbs just to prepare the booth for the carnival. With the carnival included, well over 400 man hours were spent on this one project. It has proven to be a good source of fun as well as a good way to bring the membership together.



Rick LeBaron, Mitch Goins, Craig Duda and Jim Hatch try to scare away customers.

Spring Fling is a student run carnival that is held yearly at the University of Arizona. It is, as we are told, the largest student-run carnival anywhere. It has rides, concerts, and booths set up by 150 clubs on campus. These booths can sell food or run games for scripts that the patrons buy for 40 cents or 13 for \$5. The booths then collect the scripts, which are weighed at the end of each day to determine the club's take of the profits.

This year, as in the past, Eta Kappa Nu had a game booth at the carnival. Using last year's ring toss game and a new idea of a roulette wheel game, HKN had a double booth. The idea behind the double booth was to attract more people and bring in more money. Because we had a new booth, everything had to be made from scratch. The booth construction and the construction of the wheel kept many members busy through the spring semester up to Spring Fling. A lot of effort and creative ideas went into just the construction of the booth. Without the participation of the entire membership, it would not have been possible.



Another happy winner at the HKN Spring Fling Booth.

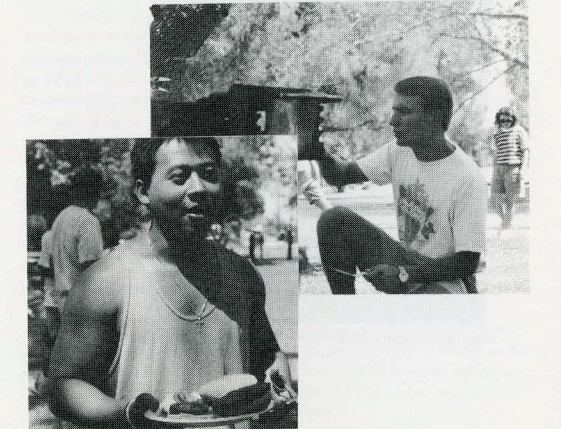
Our booth also had a little help from off-campus. We were sponsored by Dimension X, a group of comics and card stores in town. They supplied us with advice on attracting people as well as enough comics, cards, and posters for event. Actually HKN did so well on the first night alone, almost all of the comics

Social Activities

There are other things besides the academic and service oriented activities that help define the chapter. The members make the chapter what it is and can also define what it does, both individually and as a group. The following is a record of some of the other things that we did.

Picnics

In the 1992-93 school year, HKN held three picnics. The first of which was held in September. It was the traditional beginning-of-the-school-year picnic



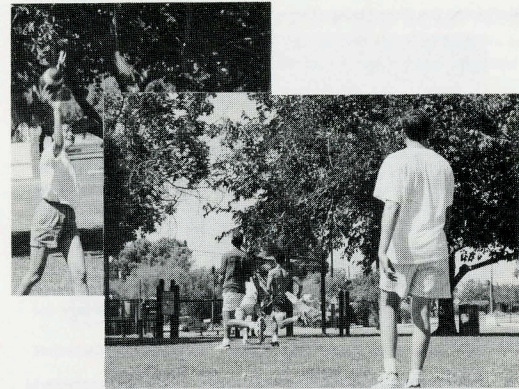
John Zimmer prepares the BBQ. Vuong Nyugen considers becoming a vegetarian.

to welcome back members and to give a chance to introduce prospective initiates to the organization. This picnic always has a pretty good turnout of both students and faculty alike. Everyone enjoyed the food, drink, and volleyball. The second picnic was held in November to celebrate the end of the semester. It had an even better turnout and afterwards many made the trip back to the university to enjoy the football game on campus. Unfortunately, our team lost to arch-rival ASU which the U of A had been using for a door mat for most of the past ten years. The last picnic was held in February and had the same purpose as the first picnic. We had the same food, drink, and volleyball.

Intramural Sports

In the course of the school year, HKN had the chance to show what electrical engineers were made of, through intramural sports. As many people know, Autumn is also football season. HKN pulled together a co-recreational team of about 14 people to play. The co-rec team plays 3 regular season games and as many playoff games until a loss. Teams consist of four guys and four girls at a time on the field. We held practices and kept a small playbook to run the offense. Unfortunately, the one trick play that we kept as an ace in the hole never worked because of bad execution and we walked away with a record of 2-2-1 (thanks to a no-show team). At least we didn't have a losing season.

The other intramural sport that HKN participated in was basketball. We formed a men's desert league (easiest) team and just played the game. The most exciting part of the season came in the second game. With two and a half minutes left, HKN found itself tied and with the ball. After stalling for a minute, the shot failed to go in and there was a mad scramble for the ball. A jump ball is called and the possession arrow goes the other way. The other team stalled to the end of the game by passing along the perimeter until with ten seconds left they tried for a three point basket. They missed and 5'6" guard Vuong Nguyen picked up the rebound in the paint, ran the length of the court, put up the ball between two defenders, laid it up and in. As the ball fell through the net, the buzzer sounded and HKN won the game. The final record was a winning 3-2, but our bid in the playoffs ended with a blowout by Fly Spinach Fly. We want to thank Marty Haluza and even though he wasn't an HKN member or initiate, he was the tallest member. We also want to tell him that we don't care if his wife wants him up in Phoenix, we still could have used him in the last playoff game.



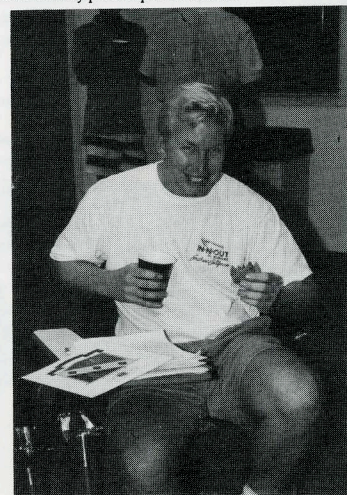
Jenny Gaudet goes deep, but overthrows her receiver.

Speakers

During the course of the year, we have been fortunate to have a few speakers at different meetings. In the fall semester, two development managers from IBM spoke at an HKN meeting. Susan Turner in Storage Control and Roger Vogel in ASICs spoke on the products developed at the IBM Tucson site nearby. They also explained the possibilities of getting co-ops at the same site.

In the spring semester, HKN was made aware of a possibility of getting a speaker from MCI in Richardson, Texas. Jerry Hogan, Vice President of Network Design and Engineering at MCI and a 1968 graduate of the U of A, came to speak to at a joint meeting between HKN, Tau Beta Pi, the Institute of Electrical and Electronic Engineers, and the Institute of Industrial Engineers. Mr. Hogan spoke on MCI and the expected development of the telecommunications industry. He

also talked about what to expect in finding a permanent position in industry. All four clubs thank him for coming, especially because he provided soda and pizza for all of the attendees. While this really isn't much of a social event, it really seems to be the only place to put this section.



Mike McWilliams is caught snacking before the meeting.

Banquets and Initiations

In this academic year the Iota Xi chapter was proud to initiate thirty-nine new members into Eta Kappa Nu. Initiation is held each semester and a banquet is held afterwards. In this particular year, the initiations were held in McClelland Hall, the new BPA building.



Ray Vasquez speaking at the fall semester banquet.

The Fall Semester Initiation was held on November 6, 1992. The following twenty-two members were initiated:

- | | |
|-----------------------|------------------------|
| Mourad Abdenather | John Edward Joganic |
| Lana Hafez Alzayani | Jeffrey Dean Kim |
| Jeffrey Thomas Brown | Ting-Yu Kuo |
| Mary Lou Cassabaum | Shiou Chyuan Loh |
| Eric Carl Fest | Glen Von Poble |
| Holly Elizabeth Ford | William Anthony Safieh |
| Sushrut Sudheer Gogte | Man Chak Tang |

- | | |
|---------------------|----------------|
| Xin-Li Guan | Kuo-Chu Wong |
| Earl E. Hokens | Zonghao Xia |
| David Kent Hurley | Kai Cheong Yau |
| Derek Andrew Hutton | Xiang Yuan |

The banquet after was held at the Radisson Suite Hotel and was sponsored, in part by the University of Arizona. The guest speaker for the function was Ray Vasquez, an engineer from Intel. He spoke on the transition from the education to the workplace and the problems that new graduates face in industry. We expect to see Mr. Vasquez again considering that we provided him with U of A football tickets for the game on the following day. In that game, the University of Arizona Wildcats upset the #1 ranked University of Washington Huskies.



Dr. Kenneth Galloway, ECE Department Head, cutting the initiation cake at the fall semester banquet.

The Spring Semester Initiation was held on April 16, 1993. The following seventeen members were initiated.

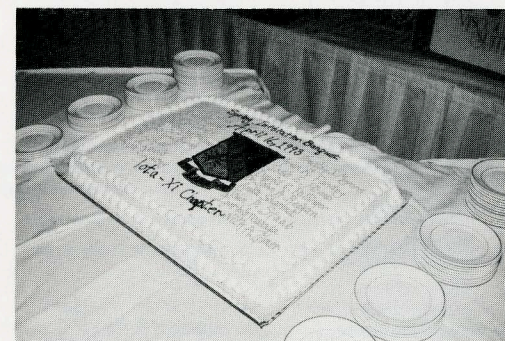
- | | |
|------------------------|-----------------------------|
| Mitchell McClure Goins | Arun Raj Pandey |
| Osman Anwar Hagos | Jose Enrique Pizano |
| Jake Stephen Jones | David Christopher Pottinger |
| Kazem Haji-Aghajani | Dr. John A. Reagan |
| Alaric Casimir LeBaron | Anita Sharma |
| James Lawrence Lee | John Peter Staab |
| Jay Allen Lewis | Igor Wojewoda |
| Patricia Eileen Lucey | Nick Arvin Zilmer |
| Timothy James Meyers | |

The banquet following the initiation was held at the Viscount Suite Hotel and was sponsored, in part by Motorola. The guest speaker for the banquet was Fred Miles, a recruiter for Motorola. He spoke on getting into the workplace after graduation and the different directions that Motorola is pursuing in industry.



The spring semester initiates and officers pose for a picture just before realizing they have accidentally been locked in the McClelland Hall atrium.

Each speaker gave members insight on the challenges that we will face in the professional world. We would like to thank them for taking time out to be with us. Again, we would like to congratulate the members initiated into this chapter for the 1992-93 academic year.



Dessert!

Administrative Improvements

During this year, many improvements were made in the day to day operations of the chapter. Many of these improvements were made possible by departmental support and with everyone's suggestions.

New office: In the middle of the fall 1992 semester, HKN was given its own office. Up to then, HKN had shared an office with the U of A IEEE student branch. This made it easier for the chapter hold tutoring hours, organize materials for our activities and to rearrange our records.

New posting space: HKN was also given a posting space by the department, where all of our announcements could be placed. This not only cut down on putting up flyers but also gave members a reliable place to go to look up HKN activities. Many creative flyers made by the Recording Secretary, Christine Miller were put to good use (and reuse) to advertise for the chapter. The posting space was in the lobby of the ECE building and did a good job advertising activities and recruiting members for HKN.

Computer account: The department also gave HKN an account on the UNIX machine which has helped our word processing and communication needs. For mailing information to faculty or to the graduate students through e-mail, the "fac" or the "all-grads" aliases can be used which saved on the need for flyers. Incidentally, the chapter can be reached through: hkn@helios.ece.arizona.edu.

Phone tree: The chapter started using a phone tree to get in touch with all of the members. This made sure that all of the members were up to date on the activities through the year. The officers called some of the members, who in turn called other members, who called other members. This system helped remind everyone to try to get the meeting on the next day.

Office supplies: Moving into the new office meant that HKN and IEEE could no longer share office supplies. With the help of ASUA (student

government), HKN was able to buy supplies to help us properly file and organize the record of activities of the past few years.

Member survey: One of the things that the officers wanted to know was what the members wanted to do as an organization. A survey was taken of the membership, asking what they wanted to do and what suggestions do they have to make a the chapter better. Their opinions provided valuable information and new ideas for running the chapter.

Engineering Student Council (ESC) Representation: ESC is the umbrella organization of the College of Engineering and Mines. It coordinates college-wide events with the participation from various engineering student organizations. This year, HKN appointed Eric Fest to be the representative to ESC. He attended weekly ESC meetings and briefed them on HKN activities. He also informed HKN members on ESC activities. HKN also participated in a forum of the Inter Club Council for all student organizations, which was co-sponsored by the student government and the university administration.

By-laws: Since some of the by-laws of the chapter were vague, they were amended to clear up some of the procedural aspects of the chapter. During the past year, the chapter passed by-laws which streamlined process of election for officers and new members. We also updated the nondiscrimination clause to conform to that of the University of Arizona. At the meetings after the initiation, the chapter president briefed new members about the HKN constitution and about the chapter by-laws.

Ads in school paper	\$88.00
Total: + \$7.96 (surplus)	

Note that there is a slight surplus of money in the account. The accountants at OSAO assured this treasurer that if our account was overdrawn, they would hunt me down. Also, some of these numbers are preliminary; some of the receipts have yet to make it to the accountant's office and the numbers in the debits may be estimates. Unfortunately, we cannot touch it and it does not roll over to the next year.

Money from ASUA/OSAO are just the tip of the proverbial iceberg. The following is a list of the activities of the Iota Xi chapter bank account and the some of the expenses broken down by category:

Fall Semester		Credit	Debit
Starting balance:		\$1398.92*	
Meeting food			\$383.14
Picnic supplies			\$95.52
Banquet, initiation supplies, and cake			\$455.40
(Check for \$1000 went directly to the Radisson Suite Hotel from the University of Arizona)			
Pins for the initiates			\$190.80
HKN nationals: initiation dues			\$575.00
Intramural flag football entry			\$40.00
Donation for support of the ECE dept. sponsored family			\$25.00
Various expenses			\$22.20
Bounced checks (not on our part, and later covered)			\$123.25
Initiation dues	\$1050.00		
Members wanting pins	\$24.00		
Guests to banquet	\$252.00		
Interest on account	\$11.99		
Service charges on account			\$34.04
	\$2666.91		\$1944.35

Treasurer's Report

The treasurer had an especially busy year for the Iota Xi chapter. Since the founding of the chapter, we have never taken in so much nor spent so much. It seemed that the expenses always kept up with any pluses in the credit column. It was a good year however in the sense that the chapter held onto the same surplus left to us by the previous administration and managed to get enough physical resources to get the next set of offices off to a good start.

The story begins with the writing of a proposal for ASUA/OSAO (student government and Office of Student Activities and Organizations). Money was being given out to some 150 student organizations to help them off to the new semester. With the help of a seven page proposal and the representation of Craig Duda and Joseph Wu, Eta Kappa Nu was given the third highest amount of initial funding. An account was set up for a total of \$395 for various expenses in four categories: advertising, printing, office supplies, and postage. The money helped this chapter avoid some of the small expenses that as a whole grow into larger ones. The following breaks down the ASUA/OSAO expenses.

	Credit	Debit
Printing Initial:	\$75.00	
Switch from Advertising	\$20.00	
Switch from Postage	\$25.00	
Banquet invitations and labels		\$116.69
Postage Initial:	\$100.00	
Switch to Printing		\$25.00
Switch to Office Supplies		\$40.00
Mailing		\$49.30
Office Supplies Initial:	\$100.00	
Switch from Postage	\$40.00	
Office Supplies		\$133.05
Advertising Initial:	\$120.00	
Switch to Printing		\$20.00

Spring Semester

	Credit	Debit
Meeting food	\$160.21	
Intramural basketball entry	\$30.00	
Picnic supplies	\$47.91	
Spring Fling booth	\$67.00	
Spring Fling booth expenses	\$257.52	
Pins for initiates	\$127.20	
Plaques for Jr. and Sr. awards	\$142.41	
Banquet and Cake	\$1137.99	
HKN nationals - initiation dues	\$415.00	
Various expenses	\$99.61	
Initiation dues	\$825.00	
Guests to banquet	\$120.00	
Car Wash	\$64.89	
Motorola Donation	\$1000.00	
Members wanting pins	\$6.00	
Interest on account	\$4.73	
Service charges on account		\$41.73
Spring Fling earnings	\$1260.56	
	\$3281.18	\$2526.58

First semester total:	\$722.56
Second semester total:	\$754.60
Total ending balance:	\$1477.16

*After payment of \$1675.00 previous membership dues to Nationals and expenses of \$70.00 for an end of the year picnic.

Along with the checking account, there was also a cash box kept in the office so that getting ice, cups and plates for the different meetings would not require checks. This made it easy to run down to the nearby 7-11 to pick up anything that was forgotten in the supermarket run. Most of the money came

from the car washes and banquet guests, so cash was never withdrawn from the account. The following records the transactions done in cash

	Credit	Debit
Car Wash #1	\$54.00	
Picnic #2		\$42.37
Postage cards		\$3.42
HKN pin	\$6.00	
Guest Banquet #1	\$18.00	
Guests Banquet #2	\$60.00	
Meeting food and incidentals		\$139.29
Part of Eric Fest's dues	\$30.00	
Mitch Goins (who overpaid initiation)		\$5.00
Car Wash #2	\$86.97	
Cash deposited in the end		\$64.89
	\$254.97	\$254.97
Total:	\$0.00	

In short, if its not too late for that now, it was a good year for the Iota Xi chapter. If the chapter does this well in the next year, the treasurer will need all of the help he can get.

Conclusion

During the spring semester, it was voted into the by-laws of this chapter that the elected offices should have terms that last one semester. The new officers for the Fall Semester 1993 will be:

- Steven Moore - President
- Mitch Goins - Vice President
- Phuc Tran - Treasurer
- Anita Sharma - Corresponding Secretary
- Christine Miller - Recording Secretary
- Jeff Brown - Bridge Correspondent

As the summer of 1993 begins, the officers of 1992-93 school year bid farewell to their offices. We would like to thank the many people that helped make this a wonderful year:

- Dr. Galloway, Department Head, for his support of the club,
- Dr. Carothers, Faculty Advisor, for her help in moving us along and pointing us in the right direction,
- Debbie, Barbie, and all of the people in the Department Office for putting up with all of our demands,
- The Faculty in ECE, who came to our events and helped us in any way that they could,
- The Appropriations Board at ASUA, who gave us money to get us off the ground at the beginning of the school year,
- The OSAO Office, who helped us purchase everything once we got their money,
- Connie, in the HKN national office for having to work with us and our problems,
- And especially all of the members of HKN that put forth all of the effort that made this chapter what it is. All that the chapter has done is due to their hard work.

"That's the news and I am outta here!"
- Dennis Miller -

Calendar of Events

Fall semester 1992:

9/3	1st General meeting
9/10	Fall semester initiate orientation meeting
9/12	Fall semester picnic
9/23	General meeting
10/7	Initiate meeting
10/14	General meeting/voting in new members
10/17	HKN Car wash
11/2	General meeting
11/6	Fall semester initiation and banquet
11/21	End of the semester picnic
11/23	General meeting

Spring semester 1993:

2/2	Spring semester initiate orientation meeting
2/6	Spring semester picnic
2/9	General meeting/speakers from IBM
2/17	Adopt-an-Engineer
2/23	General meeting
3/6	HKN Car wash
3/10	General meeting
3/23	General meeting
3/30	Technical elective seminar
4/6	General meeting/voting in new members
4/7	MCI Speaker/joint meeting with TBIT, IIE, and IEEE
4/8 - 4/11	Spring Fling
4/16	Spring semester initiation and banquet
4/22	General meeting/new officer elections

ANNUAL CHAPTER REPORT - SUMMARY FORM

A completed copy of this form may be used as a basic annual report, or added to the chapter's own annual report. If the chapter's own report normally covers the material below, this form is not necessary.

Chapter Name: Iota Xi Institution: University of Arizona
Address: ECE Department, University of Arizona, Tucson, AZ 85721

OFFICERS AND DATA

	FALL 19 92	SPRING 19 93	THIRD 19
President	Anupam Goyal	Anupam Goyal	
Vice President	Craig Duda	Craig Duda	
Treasurer	Joseph Wu	Joseph Wu	
Recording Sec.	Christine Miller	Christine Miller	
Corresponding Sec.	Steven Moore	Steven Moore	
Bridge Correspondent	Michael McWilliams	Michael McWilliams	
Faculty Advisor	Dr. Jo Dale Carothers	Dr. Jo Dale Carothers	
No. Members	40	50	
No. New Initiates	22	17	
No. Business Meetings	6	7	

PROGRAM AND ACTIVITIES

ACTIVITY NAME	OLD NEW OR CONTINUED	MAN - HOURS	SEMESTER FALL & SPRING	DESCRIPTION (Use additional sheets if necessary)
Tutoring	C	160	F & SP	Tutoring for ECE undergraduate classes
Engr. Fresh. Ment.	N	50	F	Mentoring freshmen in engineering
Fin. Aid Info.	N	15	F	Providing scholarship information to HS seniors
Tour by Elem. School	N	5	F	Tour of the ECE Department
Prof. Intern. Prog.	N	100	F	Internship for HS seniors in ECE
Graduate Sch. Sem.	N	10	F	Graduate school information for seniors
Adopt-an-Engineer	C	60	SP	Information & tour about engineering for HS senior
Tech. Elec. Seminar	O	10	SP	Information about undergraduate technical options
Junior/Senior Awards	N	15	SP	Chapter awards & nomination for national awards
IEEE/HKN Teach. Awd.	C	15	SP	Teaching award for ECE faculty
Car Washes	N	40	F & SP	Funding raising activity
Spring Fling	C	400	SP	HKN booth at student carnival of the university
Picnics	C	40	F & SP	Get together for faculty, members and initiates
Intramural Sports	N	60	F & SP	Intra-club sports competitions
Speakers	C	20	F & SP	Speakers from IBM, Intel, and MCI
Banquets	C	100	F & SP	Welcome banquets for new members
Initiations	C	40	F & SP	Initiation ceremony
ASUA Funding	O	30	F & SP	Proposal writing and purchases
Engr. Students Council	N	15	F & SP	Attending ESC meetings

SIGNED: [Signature] DATE: 12/22/93
Send to: OCAA Chairman or National Headquarters

(ISSN 0006 9809)
SECD 06 4700

Second-Class Postage
Paid at Lafayette, Indiana
and at Additional Offices

**A Life Subscription to the BRIDGE is
available at a modest cost of \$60. Send a
check with name and address to:**

**HKN BRIDGE
P.O. Box 2107
Rolla, MO 65401**

MOVING?

**Please Send Your
New Address To:**

**ALSO INCLUDE YOUR OLD ADDRESS
OR SEND THE MAILING LABEL FROM
THIS ISSUE OF BRIDGE MAGAZINE**

**HKN BRIDGE
P.O. Box 2107
Rolla, MO 65401**