

BRIDGE of Eta Kappa Nu



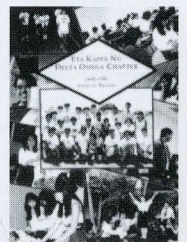
Patrick O. Nunally
1992 Winner
Outstanding Young Electrical Engineer Award

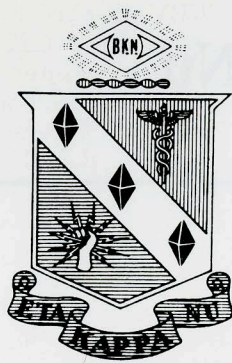


Also Featured:

Berthold Sheffield Honored
with HKN Eminent Membership

Delta Omega's Certificate
of Merit Report

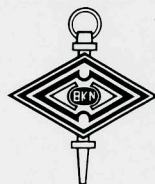




Editor and Business Manager
J. Robert Betten

May 1993
Vol 89 - No. 3

Contributing Editors
James A. D'Arcy
Alan Lefkow
Ralph J. Preiss



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.

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The HKN Membership Fee is \$25

which includes a 2 year initial subscription to BRIDGE as determined in the 1991-92 HKN MAIL Convention

National Constitution Revisions Unresolved

135 Chapters sent in ballots.
142 ballots were required for resolution (Needed 3/4 of 189 chapters to respond).

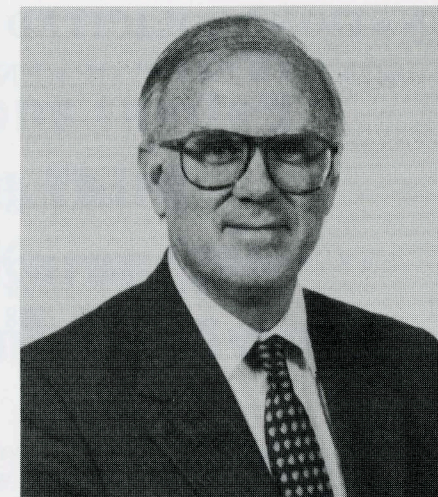
Many, many thanks to each chapter that sent in a ballot!

We will try again next year.

PRESIDENT'S REPORT 1991-92

Since the time when I took office on July 1, 1991, I have indicated several times that I consider the promotion of even closer relationships with the chapters to be one of our more important activities. This can and has taken place in several ways: participating in Chapter initiations; contacts between the Chapters and Headquarters/ Directors/Officers; and Mail Ballots such as the Constitution revision. I recommend that we continue to strive for even closer chapter relations. One way to do this is to publicize in the Bridge and Chapter mail that we, the Directors/Officers and past Directors/Officers, are willing to participate in chapter initiations within our own regions. As an example, I had a good opportunity to take part in the Chapter initiation of Arizona State University on November 15, 1991, and I took part in the initiations of two new chapters discussed later.

During the past couple of years, we have been carefully reviewing the Constitution and Statutes of Eta Kappa Nu. During this year, we also reviewed and revised the Bylaws through Robert Arehart and his committee. The changes were approved at the April, 1991, Board meeting. The revised Constitution and Statutes were submitted to the 186 Chapters for ratification on March 12, 1992, and a follow-up letter was sent to Faculty Advisors on March 25, 1992. The responses were due back to Headquarters on May 15, 1992. Subsequent to the April 26, 1992, Board meeting, Directors and Officers made phone calls in their respective regions to encourage responses from those chapters which had not yet responded. We knew that ratification would be difficult, because 3/4 of the college chapters must ratify the revisions in accordance with the Constitution. While I am happy to note that we did receive 112 returns (an excellent response), this was not enough for ratification. I believe that we must strive for a much greater response from college chapters, and that we should resubmit the revised Constitution and Statutes during the 1992-93 administration at the opti-



James A. D'Arcy
President, 1991-92

mal time during the school year—to be determined.

Again, as in past years, Eta Kappa Nu continues to grow. Three new chapters were inducted: Kappa Beta, Wilkes University; Kappa Gamma, University of Alaska at Fairbanks; and Kappa Delta, Florida International University.

I should note that I had the opportunity to meet Miss Coleen Hill (University of Miami Chapter President) and many members of the University of Miami Chapter since they participated in the ceremonies at Florida International University on April 3, 1992. This is a good example of Chapters working together.

On January 18, 1992, I had the opportunity to visit HKN Headquarters in Rolla, Missouri. As I indicated at the April 26, 1992, Board meeting, I was quite satisfied with the operation as I saw it. I saw an operation which is well run and is providing a good relationship with the student chapters. I also am happy to note that the then Vice President, Laureen Parker, visited Headquarters in November 1991, when she traveled to Missouri. As a recommendation, I encourage each administration to consider a visit to Headquarters, although such visits are unnecessary on a regular basis.

This year, we inaugurated a new HKN Award: Vladimir Karapetoff Eminent Members' Award. Thanks to Don Christiansen and his commit-

tee, the VKEMA Award was given for the first time on April 27, 1992, at the HKN Award Dinner in New Brunswick, NJ. The first winner is Wilson Greatbatch, inventor of the implantable Pacemaker. The Award Ceremony was held in conjunction with the OYEE Award Ceremony. I recommend that the concept of a joint Award be continued.

Our Finance Committee with Chairman Stu McCullough and members, has continued to review and recommend investments and our investment policy. They have also reviewed our financial reporting policy. I recommend that we continue to depend upon a Financial Committee for such topics as investment policy and other topics as determined by the Board from time-to-time.

This year, we elected an Eminent member, Bert Sheffield. He has been notified, and the induction time and place will be determined shortly. While it is not essential for candidates whom we know by reputation or personally, I recommend that an Eminent Members' Committee be established to refine the guidelines for Eminent Member and to review each subsequent candidate.

In closing, I would like to add that I have enjoyed working with each member of the Board. I encourage continuing an amiable working relationship, brainstorming in conjunction with Board meetings, and more regular contacts among Officers and Directors, e.g., telephone conference calls. I would like to thank the Officers and Directors (Laureen Parker, Bob Betten, John Spare, Billie Ball, Dave Stephenson, and Bruce Johnson) for working with me and providing such invaluable input during the year.

Finally, I wish President Laureen Parker, Vice President David Meyer, Executive Secretary Robert Betten, and Directors Dennis Leitterman, Robert Bartolini, Billie Ball, and David Stephenson much success for the coming year. I feel confident that you will be very successful.

It has been quite an honor and very enjoyable to serve as 1991-92 President of Eta Kappa Nu Association.

DONATIONS SOLICITED

PAUL K. HUDSON HKN DEVELOPMENT FUND

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 endowment 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."

This important 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. The categories are:

| | |
|--|----------------------------------|
| Distinguished Fellow: \$2000 and above | Century Fellow: \$1000 - \$1999 |
| Sustaining Fellow: \$500 - \$999 | Supporting Fellow: \$100 - \$499 |
| Fellow: \$25 - \$99 | |

Eta Kappa Nu invites its members and supporters to become a part of the Paul K. Hudson Development Fund by filling out and returning the form below.

.....

I wish to become a Paul K. Hudson Fellow with a contribution of \$ _____

The contribution is to be made as follows: () check enclosed, () other _____

NAME _____

ADDRESS _____

CITY, STATE, ZIP CODE _____

Return to: Eta Kappa Nu International Headquarters
Box HKN
University of Missouri-Rolla
Rolla, Missouri 65401

Nominations Invited

for The Third

Vladimir Karapetoff

Eminent Members' Award



Dr. Vladimir Karapetoff

Nominations for the third Vladimir Karapetoff Eminent Members' Award are now being solicited. Nomination forms and guidelines may be obtained from Donald Christiansen, Eminent Member Committee Chairman, 434 West Main Street, Huntington, N.Y. 11743.

In 1991, the Eta Kappa Nu Board of Directors announced the establishment of an award in honor of Vladimir Karapetoff, an Eminent Member of HKN and Fellow of IEEE, who died in 1948. The first award was given on April 27, 1992.

The award, the Eta Kappa Nu Vladimir Karapetoff Eminent Members' Award, is made annually to an electrical engineering practitioner who has distinguished him/herself through an invention, a development, or a discovery in the field of electrotechnology. The fund to support the award was initiated through a bequest from Dr. Karapetoff's wife, R. M. Karapetoff Cobb, herself a distinguished chemical engineer.

A monetary honorarium is provided to the recipient (or shared by the recipients) of the award.

Factors that will be weighed by the jury will include the impact and scope of applicability of the invention, development, or discovery; its impact on the public welfare and standard of living and/or global stability; and the effective lifetime of its impact.

Dr. Karapetoff was born in St. Petersburg, Russia, January 8, 1876.

His father was an engineer and his mother a student at a military medical school.

Dr. Karapetoff emigrated to the United States in 1902, and became a naturalized citizen in 1909.

In 1904 he joined the engineering faculty of Cornell University as an assistant professor. In 1908 he was made a full professor and continued in that capacity until he retired from active teaching in 1939.

In an account of Dr. Karapetoff's career, his Cornell University colleagues R. F. Chamberlain, N. A. Hurwitz, and Everett M. Strong, recalled his continuing dedication to Eta Kappa Nu. During World War II he was commissioned a Lt. Commander in the U. S. Navy. But beginning in 1942, Kary, as he was known to his associates, began to lose his sight in both eyes, and despite temporary relief through operations, he ultimately lost his sight and schooled himself in Braille and "talking books."

Even after his blindness he seldom missed the annual Eta Kappa Nu Award dinner in New York City, and would address them in "refreshingly original and lucid expositions" of his technical interests. Fellow HKN members viewed these occasions as sort of a "national Kary reunion." His handicap notwithstanding, his cheerfulness, determination, and ingenuity prevailed.

His colleagues remembered him as an accomplished musician on piano, violincello, and double bass. He toured the country giving recitals

and lectures on Wagner, Liszt, and other major composers, and developed a five-string cello on which violin music could be played. He received an honorary Doctor of Music degree from New York College of Music.

Professor Simpson Linke, writing in the Winter 1984-85 *Engineering Cornell Quarterly*, cited the following excerpt from Karapetoff's *Electrical Laboratory Notes*, published in 1906, as reflective of the flavor of EE studies in that era:

In coming to the laboratory, bring with you a slide rule, an inch rule or tape, a speed counter, a screw driver and a pair of plyers [sic]. This will save you time and trouble of looking for them or borrowing them. Do not forget to have a pocket knife for skimming off wire; a bicycle wrench is also sometimes very handy to have.

Dr. Karapetoff was the author of several standard texts on electrical engineering that were widely used and revised through several editions, as well as other texts on electrical and magnetic currents, electrical testing, and engineering mathematics.

He was a member of AIEE, the Franklin Institute, the AAAS, the American Mathematical Society, the Mathematical Society of America, the American Physical Society, the U. S. Naval Institute, and the U. S. Naval Reserve Officers' Association.



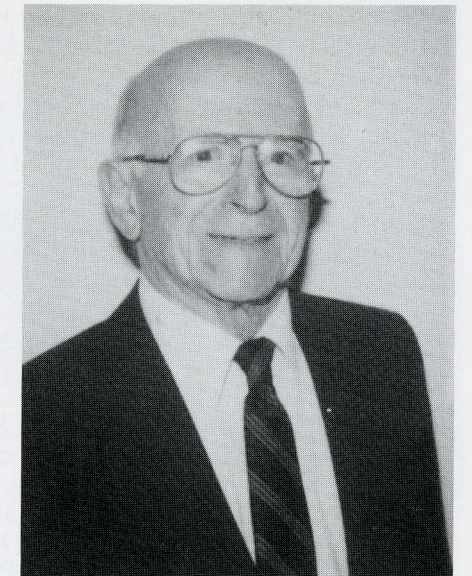
HKN President, Laureen Parker, presents Eminent Member Certificate to Mr. Berthold Sheffield.

Berthold Sheffield Inducted Eminent Member in the Eta Kappa Nu Association

EMINENT MEMBER INDUCTION CEREMONY

New Brunswick, New Jersey

April 18, 1993



Citation

In recognition of his technical achievements in the field of Communications during his long professional career, his involvement in community activities, and because of his long standing service to Eta Kappa Nu in such areas as Board Member, Member and Chairperson of the Outstanding Young Electrical Engineer Award Organization Committee, and National Publicity Chairman.

Mr. Sheffield's Response

"President of HKN, Laureen Parker, members of the Board of Directors and friends:

I am very happy to be able to thank you, the Board of Directors, face-to-face, for electing me to be an Eminent Member. It is the greatest honor ever accorded to me and I was deeply moved when Bob Betten and Jim D'Arcy phoned to inform me about it.

Before I introduce my family and my friends, I will appreciate it if the members of the induction team and other HKN members will kindly introduce themselves and their wives. Please state your names and your affiliation.

I owe great thanks also to my wife Gertrude who died in 1980. Gertrude insisted that I accept the invitation to HKN. She prophesied that I will never regret it, and she was so right. I've had over 40 years of stimulating and rewarding activities with HKN.

I am fortunate that my two devoted daughters were able to take time out to join us. They become annoyed

when I boast about them, but this is probably going to be one of my rare opportunities to do so.

My daughter Margot Kruskall is a physician, an oncologist, and a professor of medicine at Harvard University. Some of you may have seen her on national TV news, when Peter Jennings interviewed her because of her pioneering work in the use of autologous blood. This technique eliminates the risk of transmitting disease by blood transfusion, since the patient donates his or her own blood before elective surgery.

My daughter Denni O. Day is a Director of Operations Improvement at Strong Memorial Hospital which is the teaching hospital of the medical school of the University of Rochester in NY state. Her group received national attention by developing techniques for improving hospital care while at the same time reducing costs.

I want to introduce the Millers. Bob Miller was my boss and a great inspiration at RCA, where we became friends. His efforts were recognized. He became a vice president at RCA. Sarah Miller is a teacher. She is high-

ly esteemed by her students and by her peers. Muriel Freeman is a journalist for the Gannett paper chain. She has interviewed and written about over 400 entertainers and celebrities. She is listed in Who's Who in Entertainment. She has been a most supportive friend.

Now I want to make some brief observations about HKN.

HKN is a unique organization not only in the criteria for selecting members, but also in the demonstrated capacity of identifying potential engineering leaders. The most recent examples being George Heilmeyer, who is President of Bellcore, and Bob Lucky who just became a vice president of Bellcore.

I hope that HKN will continue to uncover hidden talent, with a special emphasis on being absolutely blind to their sex, their color or any other designation. We are most fortunate in now having a second woman president in HKN. We should be able to find also analogs of black leaders, the likes of Marian Anderson, the famous singer who just died, or of the writer Maya Angelou, and handicapped individuals like the physicist Stephen Hawking (A Brief History of Time) or the violinist Itzhak Perlman.

By making this recommendation I am obligated to propose a workable plan for its execution. One way I think we can encourage talent can be by introducing freshman high school students to the motives and benefits of HKN. We might ask distinguished young speakers, such as HKN officers, or award winners, to contribute say one such inspirational lecture a year at selected high schools across the US.

Thank you again for this great honor.

Biography

In 1950, Berthold Sheffield received a BSEE degree from Polytechnic Institute of Brooklyn and has done graduate work in probability, statistics, and modulation theory. He is the holder of several patents and has authored several magazine articles and engineering texts.

Bert began his long and active association with Eta Kappa Nu when he was inducted as a member of the BB Chapter (Polytechnic Institute of Brooklyn) in 1950. In 1982, Bert received the Distinguished Service Award in recognition of his many HKN activities. He began as Bridge correspondent of the NY Alumni Chapter in 1963 and became president of the chapter in 1964. Since then, he has been a member of the Award Organization Committee for recognizing Outstanding Young Electrical Engineers, serving as Chairman from 1967-1970. He was elected an HKN National Director during 1973-74. Since 1974, Bert has been the National Publicity Chairman of Eta Kappa Nu.

Early in his career, Bert won one of the first David Sarnoff scholarships for proficiency in radio operating while in military training at Fort Monmouth, NJ. It was while working at RCA that he graduated from Polytechnic Institute of Brooklyn, now Polytechnic University. He retired from RCA after 36 years of varied engineering assignments.

At RCA International Division he developed the world's first traffic control system using radio, for a US Steel Company mining railroad in Venezuela. At RCA's Space Division he contributed to the development of a number of satellite communications projects.

Bert is a Life member of: ETA KAPPA NU, Tau Beta Pi and IEEE. He is a member of the American Radio Relay League, has been active in amateur radio as W2ANA since 1927, and holds an Extra Class license.

In retired life Bert has been active in many areas:

Served as Telecommunications Consultant to: The Telesis Co. (for an Oil pipeline communications system); MCI (prepared training manual for MCI's Surveillance Network); Western Union Telegraph Co. (reviewed satellite ground station documentation); RCA Space Center (manufacturing problems, NOVA navigational satellite); McPhee Consulting Engineers; contributed to a variety of projects for Electric Communications Inc.; for a Nigerian pipeline communications system; for a microwave station siting problem for a NJ Environmental Group.

At Trenton State College:

- Received DISTINGUISHED ADJUNCT PROFESSOR Award (1986).
- Had Consulting contract to modernize the electronics engineering library.
- Continued to serve on the Industrial Advisory Committee for the School of Electronics Engineering Technology.

Performed as consultant on report for a Satellite Power System for GE.

As co-author, is preparing a college text on Telecommunications.

Conducted course in Novice Amateur Radio, for the Jointure of Community Education.

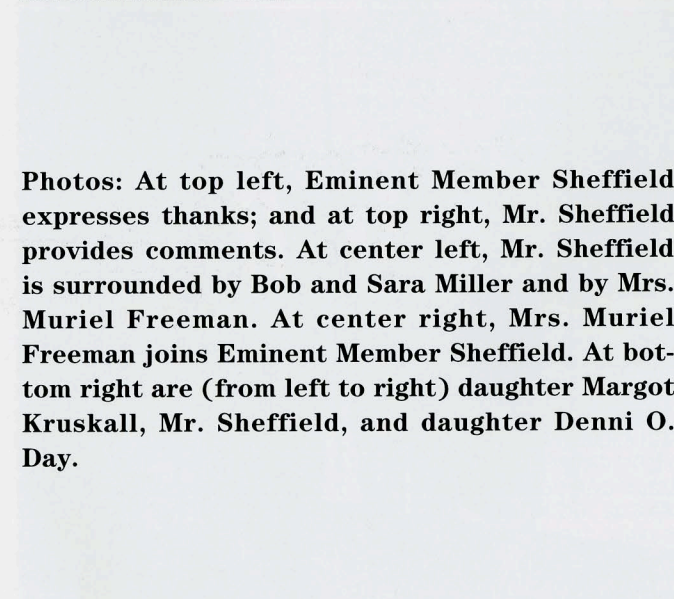
Planned and coordinated a series of seminars titled "Science & Technology" for a senior education program sponsored by three groups: Raritan Valley Community College, Somerset County Department of Aging, and the Somerset County Library. Distinguished lecturers included an astronaut, and the Director of the Institute for Advanced Study.

Wrote and published a course titled: "Planning for a Successful Retirement," third edition in preparation. It is being distributed nationally via Community Education Schools, published by Fruition Pubs., Blawenburg, NJ. Conducted seminars on Retirement, using this text.

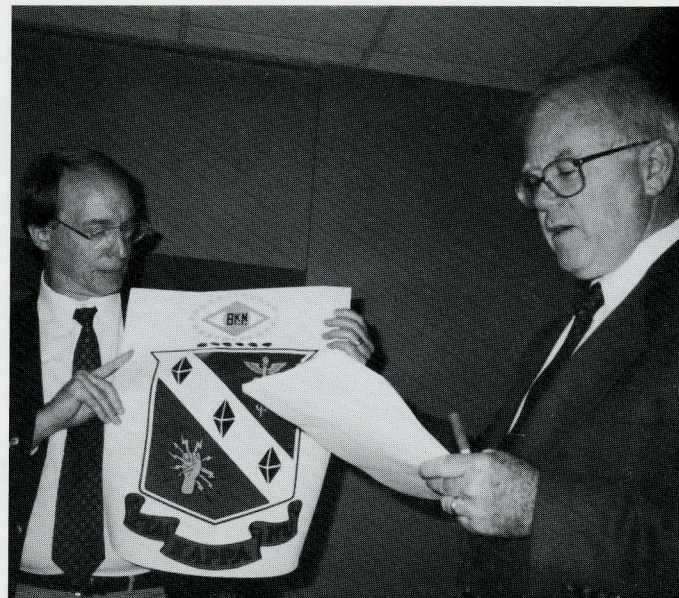
Served, from 1985 to 1989, on the Advisory Committee for the Jointure of Community Education in Montgomery Township, NJ.

Reviewed, and edited, an introduction to computer programming titled "MacIntosh Quick Start," by D. W. Cochran, published 1992.

As escort to Gannett journalist, Muriel Freeman, photographed and met many celebrities, including: Mrs. Lila Tyng, the first wife of Henry Luce (Time Magazine); The Dalai Lama, with Archbishop Tutu; Yehudi Menuhin; Victor Borge; dancer Nureyev; Metropolitan Opera stars Frederika Van Stade, Jerome Hines and Simon Estes; Malcolm Forbes and family; many CEO's on the Forbes yacht, The Highlander.



Photos: At top left, Eminent Member Sheffield expresses thanks; and at top right, Mr. Sheffield provides comments. At center left, Mr. Sheffield is surrounded by Bob and Sara Miller and by Mrs. Muriel Freeman. At center right, Mrs. Muriel Freeman joins Eminent Member Sheffield. At bottom right are (from left to right) daughter Margot Kruskall, Mr. Sheffield, and daughter Denni O. Day.



Photos above: Ceremonial team members induct Eminent Member, Bert Sheffield. At top left, Vice President David Meyer displays HKN Shield, while Past President James D'Arcy describes symbolic meaning. At top right, President Laureen Parker reads citation. At center left, officers Meyer and Parker stand with Mr. Sheffield; and at center right, James D'Arcy joins Laureen Parker with the honoree. At bottom right, Past President D'Arcy and wife Beatrice with Eminent Member Berthold Sheffield.

Eminent Member Listing: 1950 - 1993

| EMINENT MEMBER | DATE INITIATED | TITLE AND AFFILIATION | THE BRIDGE | | |
|-----------------------|----------------|--|------------|-----|-----|
| | | | VOL. | NO. | PG. |
| V. BUSH | 1-30-50 | PRESIDENT, CARNEGIE INST. OF WASHINGTON | 46 | 3 | 1 |
| R. W. SORENSON | " | PROF. E.E., CALIFORNIA INST. OF TECHNOLOGY | " | " | " |
| V. K. ZWORYKIN | " | V. P. RCA LABORATORIES | " | " | " |
| F. E. TERMAN | 1-22-51 | DEAN, STANFORD UNIVERSITY | 47 | 3 | 5 |
| J. SLEPIAN | " | ASSOC. DIR. RES., W. E. CORP | " | " | " |
| K. B. MCEACHRON | " | MGR., GE CO. TRANSFORMER DIVISION | 48 | 2 | 4 |
| S. H. MORTENSON | " | CHIEF E.E., ALLIS CHALMERS MFG. CO. | " | " | 5 |
| W. H. TIMBIE | " | PROF. RETIRED; M.I.T. | " | 2 | 5 |
| L. DEFEST | 5-2-52 | INVENTOR | 48 | 3 | 1 |
| E. C. MOLINA | 1-19-53 | BELL TELEPHONE LABORATORIES | 49 | 2 | 9 |
| H. PENDER | " | DEAN, MOORE SCHOOL U OF PENNSYLVANIA | " | " | 10 |
| C. A. POWEL | " | ASS'T. TO V.P.; WESTINGHOUSE ELECTRIC CORP. | " | " | 12 |
| P. SPORN | " | PRESIDENT, AMERICAN GAS & ELECTRIC COMPANY | " | " | 13 |
| W. R. G. BAKER | 1-18-54 | V.P. GENERAL ELECTRIC COMPANY | | | |
| M. J. KELLY | " | PRESIDENT, BELL TELEPHONE LABORATORIES | | | |
| R. RUDENBERG | " | PROFESSOR EMERITUS, HARVARD UNIVERSITY | | | |
| J. B. BLACK | 4-20-54 | PRESIDENT, PACIFIC GAS & ELECTRIC CO. | 50 | 4 | 14 |
| A. A. POTTER | 10-16-54 | DEAN EM., PURDUE UNIVERSITY | 51 | 3 | 26 |
| E. B. PAINE | " | PROF. EM., UNIVERSITY ILLINOIS | " | " | " |
| E. S. LEE | " | DIRECTOR ENGR'G.; G.E. CO. | " | " | " |
| E. F. W. ALEXANDERSON | 1-31-55 | RETIRED, GENERAL ELECTRIC CO. | 51 | 3 | 14 |
| A. N. GOLDSMITH | " | CONSULTANT | " | " | 16 |
| H. S. OSBORNE | " | BELL TELEPHONE LABORATORIES | " | " | 18 |
| H. A. WINNE | " | V.P. RETIRED GENERAL ELECTRIC CO. | " | " | 20 |
| J. B. WHITEHEAD | " | JOHNS HOPKINS UNIVERSITY | " | " | 19 |
| H. H. BEVERAGE | 10-5-55 | DIRECTOR RADIO RES., RCA LABORATORIES | 52 | 1 | 19 |
| L. N. MCCLELLAN | " | CHIEF ENGR., BUREAU OF RECLAMATION | " | " | 19 |
| W. D. COOLIDGE | 1-30-56 | ASS'T. DIR. RESEARCH LABS., G.E. CO. | 52 | 3 | 12 |
| H. NYQUIST | " | ASS'T. DIR. SYSTEMS, AT&T | " | " | 14 |
| L. N. BRILLOUIN | " | DIR. ELECTRONICS, IBM | " | " | 12 |
| J. H. DELLINGER | 10-3-56 | CH. RADIO TECHNICAL COMMISSION OF AERONAUTICS | 53 | 2 | 14 |
| W. B. KOUWENHOVEN | " | PROF. EM., JOHNS HOPKINS | " | " | 15 |
| D. A. QUARLES | 10-14-58 | U.S. DEPUTY SECRETARY OF DEFENSE | 55 | 2 | 29 |
| C. F. HOOD | 10-30-58 | PRESIDENT, UNITED STATES STEEL CORP. | " | " | 33 |
| P. L. ALGER | 4-2-60 | RETIRED, GENERAL ELECTRIC CO. | 56 | 4 | 10 |
| C. STARR | 10-29-60 | PRESIDENT, ATOMICS INTERNATIONAL | 57 | 2 | 17 |
| A. D. MOORE | 9-10-61 | PROFESSOR, UNIVERSITY OF MICHIGAN | 58 | 2 | 18 |
| J. L. BURNES | 11-14-61 | PRESIDENT, RCA | 58 | 2 | 15 |
| J. HILLIER | 11-17-61 | V.P. RCA LABORATORIES | 58 | 1 | 23 |
| C. F. WAGNER | 11-20-61 | CONSULTING ENGR. WESTINGHOUSE ELECT. CORP. | 58 | 2 | 17 |
| J. BARDEEN | 3-29-62 | PROFESSOR, UNIVERSITY OF ILLINOIS | 58 | 4 | 10 |
| L. V. BERKNER | " | PRESIDENT, GRADUATE RESEARCH CENTER, S.W., DALLAS | " | " | 10 |
| E. M. PURCELL | " | GERHARD GADE PROFESSOR, HARVARD UNIVERSITY | " | " | 10 |
| J. B. WIESNER | 10-10-62 | DIRECTOR RESEARCH LAB. FOR ELECTRONICS, M.I.T. | " | " | 10 |
| E. WEBER | 11-5-62 | PRESIDENT, POLYTECHNIC INSTITUTE OF BROOKLYN | 59 | 2 | 17 |
| G. S. BROWN | 3-25-63 | DEAN, M.I.T. | 59 | 4 | 6 |
| W. L. EVERITT | 10-30-63 | DEAN, UNIVERSITY OF ILLINOIS | | | |
| L. A. DUBRIDGE | 8-25-64 | PRESIDENT, CALIFORNIA INSTITUTE OF TECHNOLOGY | 61 | 2 | 15 |
| J. A. STRATTON | 11-5-64 | PRESIDENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY | " | " | 21 |
| D. G. FINK | 11-4-65 | GENERAL MGR., I.E.E.E. | 62 | 3 | 14 |
| S. RAMO | 8-25-66 | VICE CHAIRMAN OF BOARD, TRW INC. | 63 | 2 | 8 |
| W. E. KOCK | 11-3-66 | VICE PRESIDENT & CHIEF SCIENTIST, BENDER CORP. | 63 | 3 | 7 |
| G. H. BROWN | 11-2-67 | EXEC. V.P., RCA | 64 | 3 | 8 |
| W. H. PICKERING | 8-22-68 | DIRECTOR, JET PROPULSION LABORATORY | 65 | 2 | 3 |
| H. E. EDGERTON | 11-7-68 | PROF. EMER., M.I.T. | 65 | 3 | 8 |
| E. R. PIORE | 11-6-69 | V.P. & CH. SCIENTIST, IBM CORP. | 66 | 3 | 8 |
| P. E. HAGGERTY | 8-20-69 | CHAIRMAN OF BOARD, TEXAS INSTRUMENTS, INC. | 67 | 1 | 6 |
| W. CISLER | 3-19-69 | CHAIRMAN OF BOARD, THE DETROIT EDISON CO. | 69 | 1 | 14 |
| E. L. KANOUSE | 8-17-70 | CHIEF ENGINEER, L. A. DEPARTMENT OF WATER & RIVER | 70 | 3 | 11 |
| E. C. JORDAN | 4-24-74 | HEAD OF E.E. DEPT., UNIVERSITY OF ILLINOIS | 71 | 2 | 5 |
| E.T.B. GROSS | 4-6-76 | PHILIP SPORN PROFESSOR OF POWER ENGINEERING, RPI | 72 | 1 | 12 |
| EDWARD A ERDELYI | 1978 | PROFESSOR, E.E., UNIVERSITY OF COLORADO | 76 | 2 | 15 |
| LARRY DWON | 1984 | DIRECTOR, ENG'G. MANPOWER AMERICAN ELECTRIC POWER | 81 | 3 | 19 |
| HOWARD SHEPPARD | 1984 | VICE PRESIDENT, RUMSEY ELECTRIC CO. | 81 | 3 | 19 |
| S. REID WARREN | 1984 | VICE PRESIDENT FOR ENG'G. UNIVERSITY OF PENNSYLVANIA | 81 | 3 | 19 |
| DONALD CHRISTIANSEN | 1985 | EDITOR AND PUBLISHER, IEEE SPECTRUM | 82 | 3 | 19 |
| MARCUS DODSON | 9-13-86 | ENGINEER, LOS ANGELES WATER & POWER CO. | 83 | 3 | 24 |
| WILLIAM E. MURRAY | 9-19-87 | PRINCIPAL STAFF ENGR. DOUGLAS AIRCRAFT CO. | 84 | 4 | 8 |
| BERTHOLD SHEFFIELD | 4-18-93 | CONSULTANT, SENIOR ENGINEER, RETIRED, RCA | 89 | 3 | 6 |
| ROBERT W. LUCKY | 4-18-93 | VICE PRESIDENT, BELLCORE | 89 | 4 | TBA |

OUTSTANDING YOUNG EE AWARD

by Ralph J. Preiss, Vice-Chairman, OYEE Committee



Patrick O. Nunally

Patrick O. Nunally is the Outstanding Young Electrical Engineer of 1992. His award was presented at the 57th Eta Kappa Nu Awards Banquet at the Hyatt Regency New Brunswick, New Jersey on Monday, April 19, 1993.

At the same ceremony, Phyllis Lutostanski Cosentino and Gail R. Lalk were awarded Honorable Mentions; and Donald E. Bossi, United Technologies Research Center, East Hartford, Connecticut, David L.

Thomson, AT&T Bell Laboratories, Naperville, Illinois, and Christopher P. Yakymyshyn, GE Research and Development Center, Schenectady, New York were introduced as Finalists for the first time. All of the above were chosen from over a hundred nominations which were solicited and received by the Awards Organization Committee.

Patrick O. Nunally, was founder and President of E-Metrics Inc., a developer of high-end signal processing

systems for a number of Fortune 500 companies, when he was selected Outstanding Young Electrical Engineer. The company has been sold to Hughes Aircraft since. Subsequently, he co-founded Intellisys Automation Inc., the developers of the personal people meter system that monitors total media exposure (TV, radio, etc.) for the Arbitron Corporation. Through his companies, Mr. Nunally has pioneered the application of microelectronics and signal processing to a broad range of commercial markets, creating both innovative technologies and profitable applications.

When first nominated, Patrick Nunally was the principal technologist and engineering staff specialist of signal processing for General Dynamics Air Defense Systems Division, where he was responsible for hands-on design and strategic development of advanced technologies. He has authored twenty-seven papers on advanced technology development, six papers on business strategy, and has filed fourteen patents.

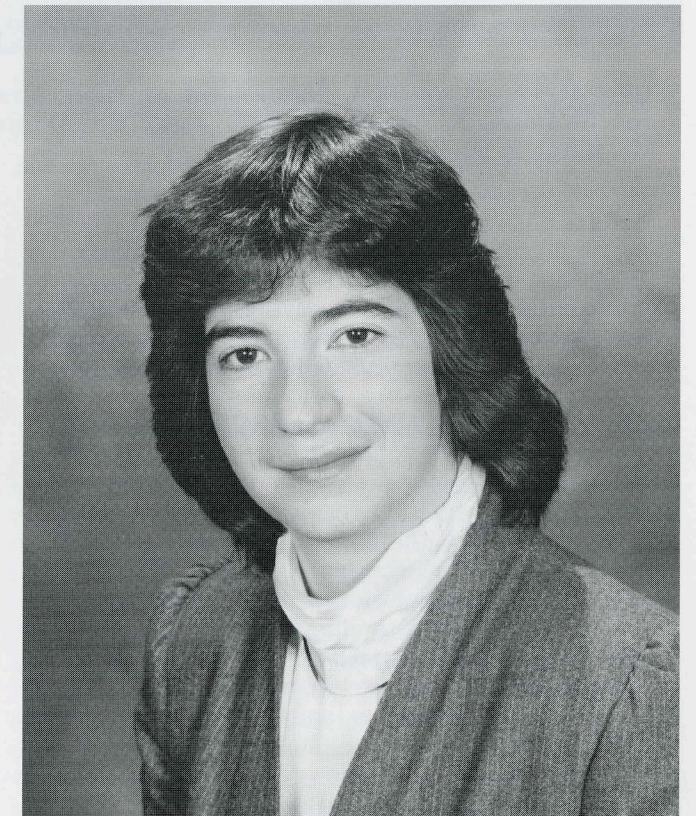
Mr. Nunally is the vice-chair of the Los Angeles IEEE Council Joint Chapter of Engineering Management, Education, and Professional Communications Societies. He is founder of the IEEE Entrepreneur's Network, and has recently accepted a position to instruct in the area of entrepreneurship at the University of La Verne, Graduate Business School. His citation reads: "By virtue of his entrepreneurial contributions to signal processing and microelectronics design in the area of vision processing; and for his leadership in professional societies and the community."



Phyllis Lutostanski Cosentino
HONORABLE MENTION

Phyllis Lutostanski Cosentino is Technical Manager of International Wireless Switching Systems Engineering for AT&T, a position to which she was promoted in 1991 after having been recognized as an industry expert in the development of cellular mobile registration capabilities. She also holds a patent in registration overload control. In addition, she has contributed leadership and service to her local schools and community. Mrs. Cosentino has worked as a volunteer tutor, is active in the Chicago area programs that present computer science and engineering as career paths to young students, and serves as a volunteer reader for the blind and partially sighted through the Blind Services Association of Chicago. She is an accomplished musician, playing both the clarinet and the piano, and has been an active member of several community orchestras. Her citation reads: "By virtue of her superb technical contributions and analytical abilities in autonomous registration on cellular systems; her outstanding natural leadership; and her social awareness, both, on the job and in the community."

Gail R. Lalk is a researcher at Bell Communications Research. Her field is optical electronics, although her recent research efforts have been focused on access hardware for high-speed information networks. In particular, she has contributed to the implementation of the AURORA Gigabit Testbed, one of five national gigabit testbeds being constructed as part of the National Research and Education Network. She has authored or co-authored twenty-five conference and journal papers,



Gail R. Lalk
HONORABLE MENTION



1992 JURY OF AWARD, Sitting, left to right: Mrs. Laureen H. Parker, Dr. J. Peter Bingham, Dr. D. Joseph Donahue. Standing, left to right: Col. Daniel M. Litynski, Dr. Robert Bell, Mr. Robert Watson, Mr. Ralph J. Preiss.

and currently serves as Executive Editor of the IEEE Lasers and Electro-optics Society's bi-monthly newsletter. Mrs. Lalk has been organizing monthly discussions at Bellcore addressing business issues in the telecommunications industry, including public policy, technology trends, and market forces. She has served as a mentor for high school and undergraduate students, as well as visiting researchers at Bellcore. In addition, she plays the french horn and volunteers actively for the American Cancer Society. Her citation reads: "By virtue of her pioneering research in optical interconnect technology and her dedication to community and professional services."

The award winners are honored for their contributions to electrical, computer, and communications engineering, as well as to society at large. Selection of the winner and honorable mentions is based on individual accomplishments. It is not influenced by newsworthiness or commercial value of a contribution. In the same way, contributions to local neighborhoods and schools, religious organizations and the arts is measured only in

personal contributions, and not for newsworthiness or sensationalism. It is Eta Kappa Nu's emphasis on the well-rounded individual that leads it to recognize people who, in addition to striving for excellence in their profession, also give of themselves to the betterment of society, community, and family. We hold that an education based upon the acquisition of technical knowledge and the development of analytical and logical thinking is a prerequisite to achievement in many lines of endeavor.

This year's winners join a long list of individuals who have brought distinction to themselves, their community, and the profession. These winners were brought to the attention of the Jury of Award by the persons who had the foresight to nominate them. For instance, Mr. Nunally was first nominated by Dr. H. P. Schmid, General Dynamics/Pomona Division, and was selected as an Honorable Mention in 1990. Mrs. Cosentino was nominated by David M. Poticny, Technical Support Vice President, AT&T Bell

Laboratories in Whippany, New Jersey, and Mrs. Lalk, who was a finalist in 1991, was nominated originally by Dr. George Heilmeier, President and CEO of Bellcore (and 1968 OYEE) and then renominated by Paul F. Liao, Assistant VP for Network Systems Research in Morristown, New Jersey. Dr. Bossi was nominated by Anthony J. DeMaria, assistant Director of Research for Electronics & Photonics Technologies at the United Technologies Research Center in East Hartford, Connecticut; Mr. Thomson by M. Iwama, Chief Technical Officer for Switching Systems at AT&T Bell Laboratories in Naperville, Illinois; and Dr. Yakymyshyn by Dr. Walter H. Berninger, Manager of the Engineering Physics Research Center of the General Electric Research and Development Center in Schenectady, New York.

The Eta Kappa Nu Outstanding Young Electrical Engineer Award is presented annually to young (under thirty-five) electrical and computer engineering graduates (within ten years from their BS degree) for meritorious service in the interest of their fellow man as well as for outstanding achievements in their chosen profession. Those honored with this prestigious award are selected each year through a well-defined process which has remained virtually unchanged since its inception in 1936. The nomination process involves the initiative of the nominator and the participation of at least three references in support of the candidate. The dossiers of all nominees are carefully screened by the Awards Organization Committee (AOC), a standing committee of Eta Kappa Nu, which is responsible for soliciting and updating the nominations every year, and which then selects up to a dozen finalists for submission to the Jury of Award.

The members of the 1992 Award Organization Committee were:

- Clarence Baldwin, ABB Power T&D Company, Muncie, Indiana
- Robert Bartolini, David Sarnoff Research Center, Princeton, NJ
- Donald Christiansen, IEEE Spectrum, New York City
- James A. D'Arcy, GE-Astro Space Division, Princeton, NJ
- Larry Dwon, Retired, Columbus, Ohio
- Irving Engelson, IEEE Technical Activities, Piscataway, NJ
- Quayne Gennaro, Design by Hilton, Inc., Vienna, VA
- Willard Groth, Consultant, Boca Raton, FL
- Michael Hajny, Mettler Toledo, Inman, SC
- James Hebson, Jr., PSE&G, Newark, NJ
- Cecelia Jankowski, Grumman Aircraft Systems, Bethpage, NY
- William Murray, Douglas Aircraft Company, Long Beach, CA
- Ralph Preiss, IBM—Retired, Poughkeepsie, NY
- Berthold Sheffield, RCA—Retired, Belle Mead, NJ
- Joseph Strano, New Jersey Institute of Technology, Holmdel, NJ
- Kurt Trampel, IBM Corporation, Purchase, NY

- Lawrence Wechsler, GE—Retired, Dewitt, NY

The Jury of Award is constituted once a year from highly respected leaders of the profession for the final selection of the winner and honorable mention(s). The 1992 Jury of Award consisted of the following individuals:

- Dr. Robert Bell, Vice President R&D, Consolidated Edison Company of New York, New York City
- Dr. J. Peter Bingham, President, Philips Laboratories, Briarcliff Manor, NY
- Dr. D. Joseph Donahue Sr., Vice President, Technology and Business Development, Thomson Consumer Electronics, Washington, DC
- Col. Daniel M. Litynski, Professor and Head, Department of Electrical Engineering & Computer Science, U.S. Military Academy, West Point, NY
- Mrs. Laureen H. Parker, President, ETA KAPPA NU, Austin, TX
- Mr. Robert Watson, Vice President, Technical Operations, Grumman Aircraft Systems Division, Bethpage, NY

Nominations for the award are solicited each year through the Eta Kappa Nu Award Organization Committee. Nominations may be made by any member or group of members of Eta Kappa Nu; by leaders from industry; by any Section or Society of the Institute of Electrical and Electronics Engineers, Inc.; by the heads of electrical and computer engineering departments of any U.S. College or university; or by any other individuals or groups, who, in the opinion of the Awards Organization Committee, are properly qualified to make nominations. Nomination forms for 1993 may be obtained from the Executive Secretary of Eta Kappa Nu, P.O. Box 2107, Rolla, MO 65401, and should be returned to him by August 1, 1993, for forwarding to the AOC. An eligible candidate for OYEE is one who:

- has an electrical engineering degree (BS, MS, or PhD) from a recognized U.S. engineering school,
- will have been graduated not more than ten years, as of May 1, 1993, from a specified baccalaureate program, and
- will not have reached his or her thirty-fifth birthday as of May 1, 1993.

Awards are based upon (1) the candidate's achievements of note in his or her chosen work, including invention of devices, circuits, or processes, improvements in analyses, discovery of important facts or relationships, developments of new methods, exceptional results in teaching, outstanding industrial management, or direction of research and development; (2) the candidate's service to community, state, or nation, such as activity in philanthropic, religious, charitable, or social enterprises, leadership in youth organizations, or engagement in civic or political affairs; and (3) the candidate's cultural and aesthetic development, such as work done in fine arts, architecture or the performing arts. Studies in history, economics, or politics are also highly valued, as well as any other noteworthy accomplishments, including leadership participation in professional societies and other organizations.

1990-91 Chapter Awards

by Alan Lefkow

As reported in the May '92, BRIDGE, high quality annual reports reflecting pride in chapter accomplishments marked the Outstanding Chapter-Activities Award recipients for 1990-91. Their chapter reports took advantage of today's sophisticated desktop publishing techniques to produce reports that did full justice to their matching outstanding program of activities. Each report was well-written and looked as good as it read. This year's competition clearly marked a new plateau of achievement in HKN's college Chapter-Activities Award Program.

Beta Chapter, Purdue University, was voted National Winner for its very impressive level of chapter activities. Beta again demonstrated this chapter's dedication and commitment to their fellow students, department, school, and their com-

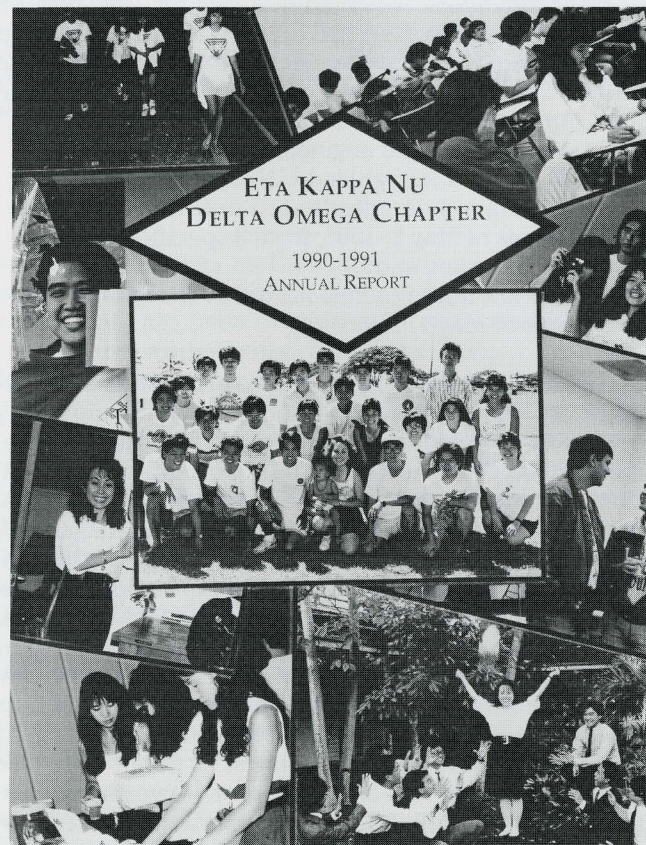
munity. Their report did justice to their high level of accomplishments by being well written, immaculately organized and produced, and photocopied in color to convey the impact of the many colorful photos contained in the report.

But Beta Chapter was not alone among the outstanding chapters. Three Honorable Mention winners matched Beta's report quality, differing only in their somewhat lower level of chapter activities. Gamma Mu at Texas A & M, and Epsilon Beta at Arizona State had immaculate reports that were also reproduced in color. Beta Epsilon, University of Michigan, had an unusual but very well-done report that was laid out as a newspaper-magazine called the *Beta Epsilon Times*. The report was divided into classic newspaper sections of *News*,

Sports, *Business Digest*, *Society and Entertainment*, and *Opinion and Future* that covered all of the chapter's activities for the year. And the report was in full color, including photos and typefonts.

In addition to these four winners, three chapters that typified the spirit of Eta Kappa Nu were awarded Certificates of Merit for their meritorious programs. Two of these chapters, Delta Omega, University of Hawaii at Manoa, and Delta Pi, Colorado State University, had well-produced reports with color photos, similar to the other winning chapters. The third winner, Zeta Pi, State University of New York at Buffalo, submitted its quality report as a professionally bound, hardcover book.

The meritorious report of Delta Omega Chapter, University of Hawaii at Manoa, is presented here as an encouraging example.



Eta Kappa Nu Delta Omega Chapter

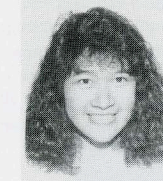
1990-1991 Annual Report

University of Hawaii at Manoa
2540 Dole Street, Holmes 483
Honolulu, Hawaii 96822
September 1991

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PRESIDENT'S MESSAGE



The 1990-91 year was filled with many changes and new events as well as much of the traditional activities representative of the Delta Omega Chapter. It was a year of accomplishments and achievements, a year of discovering new things and meeting new people and challenges.

Something different from the past was the small pledge class. Though we were at first worried about the number of pledges, it worked out better than expected since the small size facilitated camaraderie among the pledges quicker and easier. It also allowed the officers and members a better opportunity to get to know the pledge class. As a result, our chapter was able to reach our goals together as a group and increase our membership participation and support significantly. In addition, our chapter inducted a graduate student and a faculty member for the first time in many years.

Throughout the year, HKN was actively involved in numerous activities on-campus and in the community. There were service-oriented projects ranging from assisting the College of Engineering to lending a hand at the annual Salvation Army's Thanksgiving Dinner. We worked together with the student chapter of IEEE and the EE Peer Counselors and communicated with other engineering clubs through the Engineering Council of the University of Hawaii (ECUH), in planning and participating in professional, educational, and social activities throughout the year. Our chapter also supported the Associated Students of the University of Hawaii (ASUH) to accomplish the many projects and activities we undertook.

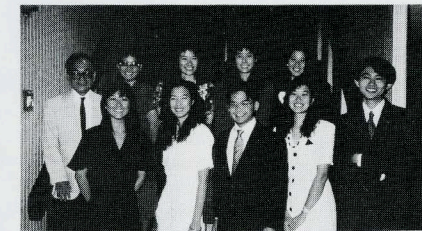
Our year was memorable and highly successful, a result of a combination of outstanding officers, supportive members, and hard-working pledges. From our experiences in HKN, we each have grown personally and professionally. This annual report is put together to reflect the year of achievements by the Delta Omega Chapter.

*Aloha,
Annie M. Lum*

ΔΩ 1990-1991 ANNUAL REPORT

OUTGOING OFFICERS □ 2

1990-1991 OFFICERS



First row (left to right): Christine, Wendy, Dennis, Lorene, Ben. Second row (left to right): Dr. Najita, Gail, Annie, Debbie, Jodie. Not pictured: Allan.

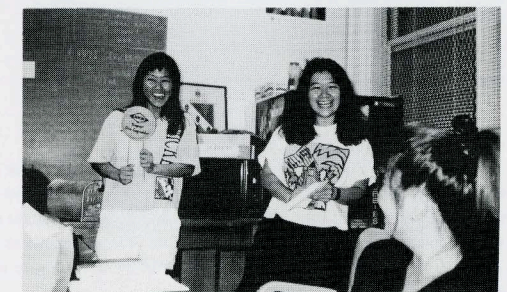
| | |
|-------------------------------|----------------------|
| PRESIDENT | Annie Lum |
| VICE PRESIDENT | Christine Taira |
| CORRESPONDING SECRETARY | Wendy Ching |
| RECORDING SECRETARY | Gail Miyamoto |
| TREASURER | Deborah Arakaki |
| BRIDGE CORRESPONDENT | Lorene Inouye |
| PLEDGE MASTERS | JoDeanne Abe |
| ECUH REPRESENTATIVES | Ben Yoshino |
| | Allan Dunphy |
| | Dennis Oshiba |
| FACULTY ADVISOR | Dr. Kazutoshi Najita |

ΔΩ 1990-1991 ANNUAL REPORT

SUMMER ACTIVITIES □ 3

SUMMER ACTIVITIES

Summer planning for the Delta Omega Chapter was officially kicked off at a get-together at Pizza Hut in early July. Old and new officers, as well as some members, feasted on pizza, "talked story," and played a logic game. Then we got down to the business of turning over papers, advice, and other pieces of "junk" associated with the specific offices. This was the official "changing of the guard" that was symbolized in the induction ceremony just a few months earlier. One outgoing, incoming, and returning officer each could not be present due to internships with mainland companies. Contact with these officers was made via mail and the telephone.



Christine receives her symbol of office from Annie during one of the summer meetings, since she was on Co-op at Boeing during the Induction Banquet.

During the rest of the summer break, much of the ground work was laid for the busy academic year that lay ahead. Summer planning included setting the master calendar of activities; picking the prospective pledges; finalizing pledge contracts, calendar, and project information; reserving a hotel meeting room for the induction banquet; and setting up the various committees.

The club was fortunate this year for the enthusiastic assistance of some members in heading committees: Byron Imai and Mark Nakasone, sports events; Clinton Hee, t-shirts; and Bernice Lum, tutoring.

PLEDGE ACTIVITIES

Pledge activities cannot help but be the main focus of the Delta Omega Chapter. Much planning is required by the officers, starting in the summer and continuing throughout the year. The year-long pledging process is designed to test the limits of the pledges and to encourage them to develop all facets of themselves. It also challenges the officers and members to develop leadership and management skills.



Debbie looks on as Annie finalizes some pledge week plans with Dennis.

In the descriptions of pledge and general activities that follow, it will be seen how the pledges strived to sharpen their creativity, technical ability, and most important of all, social skills.



"Now, let's see these designs..." Clinton, Matt (hidden), Darren, Debbie, and Rico gaze at all the different t-shirt designs before casting their vote.

PLAQUES

Each pledge was required to construct a pledge plaque, which he or she carried around during pledge week. The plaques were only required to have the wheatstone bridge, the letters "HKN," and "Delta Omega Chapter" on it; the rest was up to each pledge's originality and creativity. This year, the media of the plaques ranged from wood to cross-stitch to proto-board, the last being an idea no one had used before.

PICNIC

As the first chance for members and pledges to become acquainted with each other in an informal setting, the pledge picnic was held at the end of September at Sand Island Park. First, the pledges introduced themselves to the rest of the chapter, then played a relay computation game. The most exciting game was the "member hunt," when pledges tried to correctly match the descriptions given by the Pledge Masters with the members of the chapter. Everyone had a chance to unwind with some volleyball and frisbee-throwing, before having bento box lunches.



"Let the games begin!" Darren and Chung sprint off as the relay competition begins.

To top off the picnic, the pledges showed off their thespian skills with the traditional pledge picnic skit. Pieces performed include a game show, phone-a-babe hotline advertisements, and a movie review complete with popcorn throwing.

T-SHIRT DESIGN

Again with tradition, all pledges were required to submit a t-shirt design for the current year, with the winner(s) receiving a free t-shirt for his/her talent and efforts. The designs were displayed and judged at the picnic. It was tough to decide among all of the original creations, but finally a decision was made. This year, two designs were picked: Darren Kwok's design for the front of the t-shirt and Eric Wong's design for the back.



The original plaques laid out for display.



Eric proudly displays his pledge plaque, decked out in his "HKN party outfit" during pledge week.

PLEDGE PROJECT

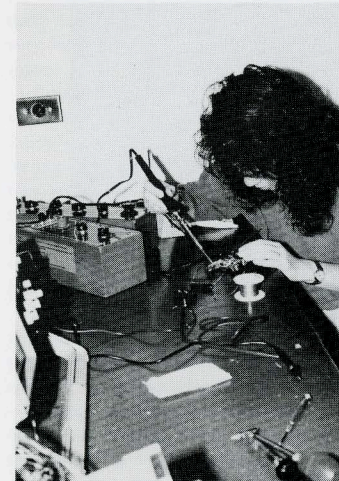
The bulk of the pledge activities of the Delta Omega Chapter involved the pledge project. The pledge class was asked this year to form groups of two or three. It was then time for them to begin this year-long "journey."

The pledge project began in the planning stage, or "What will our project be, guys?" Each group first turned in a list of ideas, then gave an oral project proposal to the chapter. They were also required to turn in a cost proposal, with a total allotted budget of \$200, which was funded by the ASUH Student

Senate, the College of Engineering Dean's Office, and the Department of Electrical Engineering Office.

The next stage was research of their topics. Each group went to the library searching through books and journals, and also consulting department faculty for their vast practical knowledge. This stage was summarized in the preliminary abstract.

Following research was design. Again, the groups went to the library and professors. This time, they also received the insight of the members of the chapter during a presentation of their preliminary designs at one of the meetings.



Melinda painstakingly solders in a piece of her project.

The last step was implementation and testing. Most groups started early, but activity was still fierce during the Spring break in the various labs in the engineering building. Many tireless days and sleepless nights were spent making sure the projects were working by the morning of project judging, which was one of the goals of the project.

A major goal for this year's pledge projects was to develop the writing skills of these future engineers. On a regular basis, each group was required to submit a progress report detailing the accomplishments and problems for that period, and their projections for the next report period. In addition, several revisions of the abstract were drafted concurrent to the project design and construction. At project judging, a detailed report including project scope and theory was submitted. The writing aspects of the project were emphasized to expose the pledges to the production of technical documentation.

which is held for the friends of and contributors to the College of Engineering. The pledges had the opportunity to present their projects to those people touring the different facilities of the college. While these people were there, the pledges practiced their ability to explain their projects to those not familiar with their projects or technical backgrounds.

PLEDGE WEEK

A tradition of the chapter that sets aside one week in March, when the pledges dress up in costumes and carry around their plaques to show their spirit, was Pledge Week. Pledge Week was designated to provide the pledges common ground on which to develop a sense of camaraderie. It also tested their hard work, determination, and perseverance, qualities expected of an Eta Kappa Nu member.

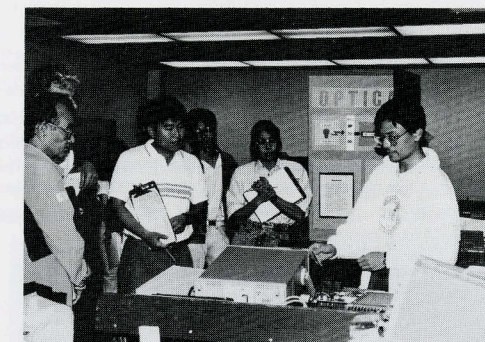
The week began on Monday, when the pledges wore their "HKN party outfits": party hat, white shirt, slacks, bowtie, pocket protector, and pens. On Wednesday, pledges dressed appropriately for interviews, which were held in the afternoon by the officers. On Friday, it was "Super Pledge" day, when the pledges wore the HKN emblem on their chest, a cape provided by the chapter, and a hat made by a fellow pledge.

This year, the hats were really outrageous, ranging from a Marge Simpson hairdo, to a huge battlefield. For the first time this year, the pledges were asked to go around to as many members and officers they could find to have their capes signed. Pledge Week ended with the Spring



Darren shows off his plaque and his cool HKN party outfit.

Judging came at the end of the Spring break in late March. There were five professors involved with the judging, in all areas of expertise, who gave up their Saturday morning in order to assist: Dr. Kazutoshi Najita, our advisor; Dr. Tep Dobry; Dr. Vinod Malhotra; Dr. Eun Sok Kim; and Prof. Laura Veglak, an alumna of the Delta Omega Chapter.



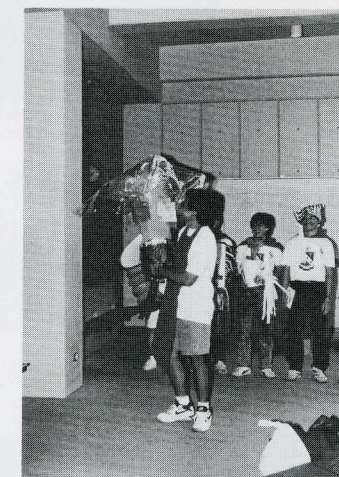
Dr. Najita, Dr. Dobry, Dr. Kim, Dr. Malhotra (hidden), Steve, and Prof. Veglak look on as Wah Wai demonstrates how his and Steve's project, the Optical Lock, works.

The projects were also of varied fields: a computer-based telephone voting system, a color-key lock, a heat-seeking fan, and wireless speakers. The projects were judged on not only technical merit, but also on the documentation, presentation, and general marketability of the project. The specific breakdown of emphasis for these qualities are as follows: Project Design, 40%; Documentation, 30%; Presentation, 15%; and General Marketability, 15%.

The project judged most outstanding was the "Interactive Messaging Telephone System (IMTEL)" by Rommel Atienza, Joseph Cheng, and Darren Kwok. Honorable mention went to the "FM Wireless Speakers" by Melinda Camacho and Lance Murata.

Another goal of the project was the display to the general public. This year, this was accomplished during the College of Engineering's Dean's Reception,

professor potluck, where the pledges showed off their costumes and presented themselves to the professors.



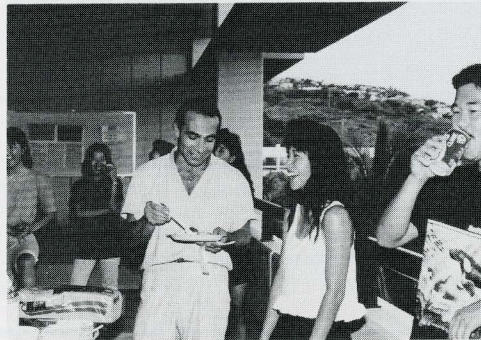
Eric presents himself and his hat at the Spring professor potluck.

GENERAL ACTIVITIES

Chapter activities were not limited to those involving just the pledges. There were many events that everyone could get involved with throughout the year, from socials to helping out the chapter.

PROFESSOR POTLUCKS

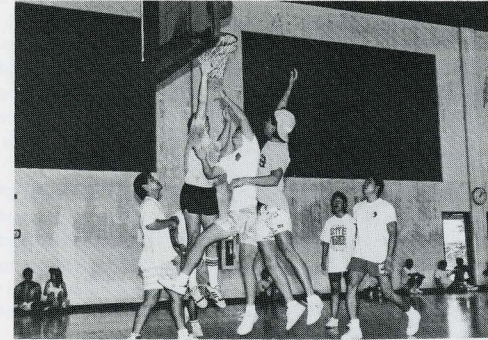
This is a popular tradition among faculty members and HKN members and pledges. This activity gives both sides a short break from the stressful engineering work that keeps electrical engineers the busiest in the College of Engineering. The food, sodas, and beers provided an atmosphere of mingling on a level away from the classroom. Of course, school dominated the conversation, but that didn't put a damper on the fun. ECUH Representative Dennis Oshiba helped coordinate the food and facilities for these events, which were held once each in the Fall and Spring semesters.



Dr. Negahdarpour and Bernice share a joke while others join in the laughter.

SPORTS EVENTS

Members Byron Imai and Mark Nakasone coordinated the formation of teams for engineering sports events like basketball and volleyball. Members were always enthusiastic to come out and show their skill, and get a good workout at the same time. The chapter especially showed their spirit at the volleyball game, outnumbering those from Pi Tau Sigma (mechanical engineering honor society) and Chi Epsilon (civil engineering honor society). It was a lot of fun and made everyone feel closer through the team spirit. It sure was a good excuse for not studying!



Members of the chapter challenge a mechanical engineering group at the IEEE basketball tournament.

FUNDRAISERS

The chapter participated in many activities this past year and fundraisers were used to sponsor these events. Although it took some whip cracking and arm twisting by Treasurer Deborah Arakaki, all of the pledges and many of the members participated in these fundraisers and worked very hard to make them a success.

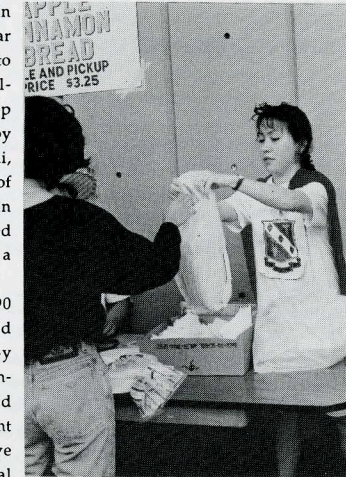
During the Fall 1990 semester, the chapter sold Zippy's Benefit Chili. By forcing the pledges and members and their families and friends to eat chili every night for the rest of the year, we were able to make a total profit of \$564.00.

For the Spring 1991 semester, the chapter sold Ani's Apple-Cinnamon Bread and made a total profit of \$547.25. The pledges really showed their spirit and enthusiasm by manning the pick-up table during Pledge Week in their super-pledge outfits.

During the Spring semester, the chapter also sold soda, juice, and food items, such as pizza, muffins, ice cream, and candy, in the club room. Having food so readily available helped many of us to get through those all-night study sessions. Thanks to the hearty appetites of our pledges and members, we made a total profit of \$358.57.

INDUCTION BANQUET

The Induction Banquet was held in late April at the Hyatt Regency Waikiki. Eight undergraduate students, one graduate student, and one faculty



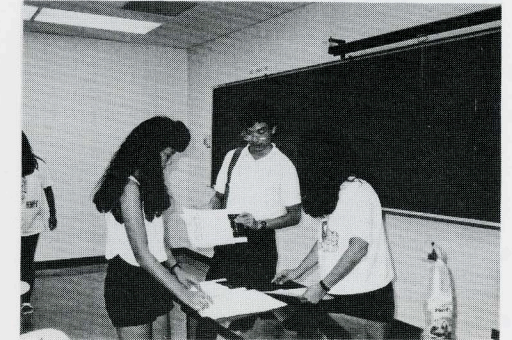
Melinda hands a customer an order of apple-cinnamon bread.

member were inducted into the Delta Omega Chapter. New officers were sworn in by the old officers, prizes for the pledge project were awarded, graduation gifts were handed out, and a slide show was presented depicting the busy year. A scrumptious dinner followed the formal program and the evening concluded with the traditional two-hour pledge skit as our entertainment.

The pledge skit showed off the camaraderie of the pledges that was built over the year, and also their creative talents. Sketches included kung-fu theater and a puppet show.

MEETINGS

Meetings provided the means in which to keep the members informed, as well as the pledges. Held throughout the year, they were not only serious events, but time for playing an acquaintance game with the pledges, sign up for tutoring, and voting for new officers.



Debbie and Wah Wai at the first meeting getting handouts from Annie.

FIFTH ANNUAL THANKSGIVING PARTY

Member Harpal Maan graciously extended the use of his home for the party and donated his time to cook the traditional Thanksgiving turkey. The rest of the food was brought potluck style, which included fried noodles, salads, and lots of dessert! This party gave the chapter another chance for everyone, old and new, to mingle and have fun. Videos, card games, and beer were just right in kicking off the long Thanksgiving weekend and to take everyone's minds off the impending finals.



Harpal decides where on the turkey he should cut next.



Steve, Paul, Melinda and Debbie contemplate the choices available for the Thanksgiving feast.



Everyone relaxes after the big meal.

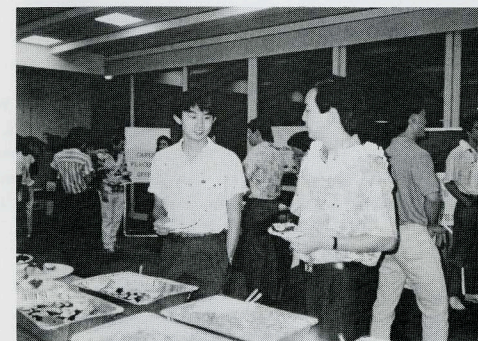
GOLD CARDS

As with every year, there were members and pledges who "went the extra mile" by coming out to help set up and clean up events, or to socialize with other members and pledges. As a reward, these exceptional HKN members and pledges were awarded Gold Cards. Gold Card events were kept a secret from the pledges and the cards were awarded at the Induction Banquet at the end of the Spring semester. These events included such activities as the IEEE Basketball Tournament, the EE Career Night, and Trick-or-Treating for UNICEF. Rankings were based on the attendance record, and the amount of character each person displayed in participating in these events; the rankings ranged from "Plastered" to "Buzzing." This year's excellent pledges were Darren Kwock and Rommel Atienza, who were the top scorers in their pledge class.

PROFESSIONAL

EE CAREER NIGHT

Once again for the fourth year, the Delta Omega Chapter was actively involved in the preparation of the EE Career Night, working jointly with the IEEE Student Chapter and the EE Peer Counselors. As with chapter activities, the planning started in the middle of the summer, with the writing of the invitations to companies to participate to the reservation of the facilities. Coordination of the efforts were handled by member Byron Imai and ECUH representative Allan Dunphy. As the event drew near, activity became more frantic.

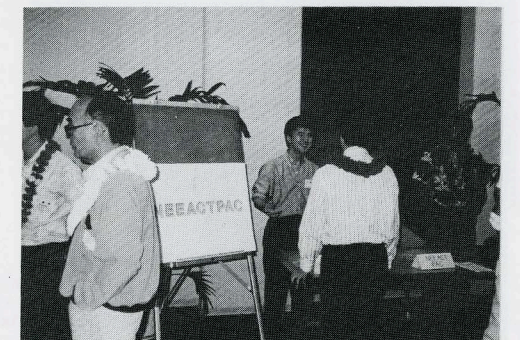


Ben and Peter Okunami of Hawaiian Electric, an alumnus of the Delta Omega chapter, sample the refreshments and discuss life.

The EE Career Night brought together students and professionals in electrical engineering into an informative discussion on employment opportunities and developmental trends in the industry. Representatives from local and mainland firms gave a short presentation of their respective companies or organizations. The evening culminated in a question and

answer session at which many students found time to discuss their future plans with their prospective employees.

The program was dominated by locally-based military facilities. A recurring sentiment at the time was the uncertainty caused by the turmoil in the Persian Gulf. Due to this event, several mainland companies regrettably declined participation at the last minute. The final roster for the evening included: AT&T, Consulting Engineers Council of Hawaii, Hawaiian Electric Company, NEEACT PAC, NOSC, NUWES, Pacific Missile Range Facility, and Verifone.

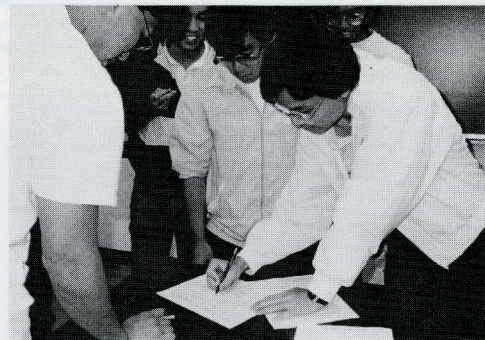


Raymond Koshi of NEEACT PAC, another alumnus of the Delta Omega Chapter and a former Bridge Correspondent, chats with Allan.

CHAPTER SERVICES

TUTORING

In keeping with tradition, the Delta Omega Chapter provided free tutoring in electrical engineering classes to any interested students. Members, officers, and pledges were asked to contribute one hour each week to share their expertise with their fellow students. It not only benefitted those who came for help, but also provided everyone a chance to meet new people and sharpen material learned in semesters past.



"Hurry up, Wah Wai!" Lance, Darren, Joseph, and Rommel wait as Wah Wai signs up for tutoring.

COURSE EVALUATIONS

As a service to the Department of Electrical Engineering, the Delta Omega Chapter is responsible for distributing, administering, and collecting course evaluation forms at the end of each semester. Unfortunately, we were able to do this only in the Fall semester, since the university student Senate consolidated all evaluations and took over its administration from the Spring semester.

were there. We couldn't wait to watch the news that night, for the Delta Omega Chapter was now on television!

Seven members, officers, and pledges were up before the sun in order to man a water aid station for the Great Aloha Run on Presidents' Day. They braved the cold air and water to make sure that the tens of thousands of runners and walkers got enough water. Some playful runners even threw some back! In addition to those at the aid station, one pledge assisted at the finish line and one officer walked the route. Proceeds of the run benefit local charities.



Matt, Wade (in back), Debbie, Melinda, and Annie keep warm in the early morning before heading for the aid station.

ENGINEERING OPEN HOUSE

For the first year, the Delta Omega Chapter volunteered its man-power to assist in this event, which occurred one Saturday each in February and March. The purpose of the Open House was to introduce the College of Engineering to high school seniors who either had questions about the College, or were still deciding between several universities. The task of the volunteers was two-fold. The first was to take groups of these high school students and their parents on tours of the various research laboratories in the college, such as the civil engineering's hydraulics lab and the electrical engineering's artificial intelligence and integrated circuit design labs. The second task was where we had to be on our toes: in an informal session, we fielded questions ranging from what classes are like to dorming to participating in the university band.

REPRINT SERVICE

For the first time, a reprint service from the chapter photo-album was offered to the chapter for the current year. Bridge Correspondent Lorene Inouye painstakingly coded each photograph for identification purposes as they were developed. At the end of the year, order forms were circulated, and the pictures delivered to the appropriate people. It was an especially big hit with pledges, who somehow wanted the memories of their serious and sometimes zany experiences.

COMMUNITY SERVICE PROJECTS

This was the first year that the Delta Omega Chapter actively organized service projects year-round in the community. Bridge Correspondent Lorene Inouye was responsible for coordinating these events.

Seven members and officers got together and dressed up for Halloween, although it was still a school night. Costumes ranged from a pirate to a bunny. They went trick-or-treating in the Hawaii Kai area and between them collected \$70.23 for UNICEF.

On Thanksgiving morning, ten members, officers, and pledges volunteered their time to help prepare the annual Salvation Army Thanksgiving dinner for the needy. They spent their time decorating and setting tables, and helping to prepare the food. It became unexpectedly exciting when a local TV station interviewed President Annie Lum, asking why we



The hustle, bustle, and soggiess of passing out water at the aid station.

Something that was also new was the recycling of aluminum cans. With the amount of soda sold from the refrigerator and beer drunk at potlucks, the chapter decided to join the fight to preserve the environment. At the end of the year, the tally was 67 pounds: 23 pounds collected during the Fall and 44 pounds collected during the Spring. That would mean a total of about 1600 cans!

HONORS AND AWARDS

The following highlight the many Delta Omega Chapter over-achievers.

AWARDS

Outstanding Junior Award: Dennis Oshiba. This award is chosen annually by the Mechanical Engineering honor society, Pi Tau Sigma. The candidates for this award are first chosen for their outstanding achievement during their junior year, then must go through an interview process.

Electrical Engineering Outstanding Senior Award: Christine Taira. This award is administered by the local student chapter of IEEE. The candidates are first nominated by the students and then chosen by the chapter.

Robert Edwin Hughes Award: Wade Nakanishi. This award is chosen annually on the basis of academic excellence, and extracurricular and service activities.

IEEE Hawaii State Chapter Outstanding Senior Award: Christine Taira. This award is administered by the State Chapter of IEEE on the basis of academic excellence, chosen independently of the student chapter.

SCHOLARSHIPS

The following scholarships were awarded by the College of Engineering to the deserving students on behalf of the appropriate groups and foundations. Some were based on financial need, while others were given to those of outstanding merit and service record.

Consulting Engineers Council of Hawaii Scholarship: Wah Wai Sze.

GTE Hawaiian Tel Engineering Employees Scholarship: Hoang Nguyen.

Hawaiian Electric Industries Scholarship: Steve Ko.

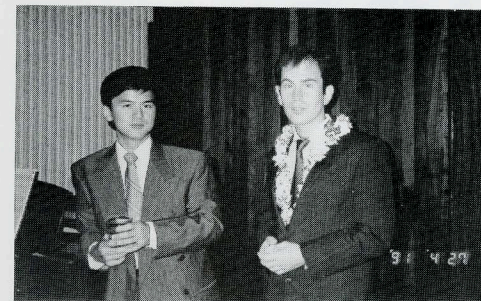
Wilfred J. Holmes Memorial Scholarship: Deborah Arakaki.

Frederick M. Kresser-ARCS Scholarship: Christine Taira.

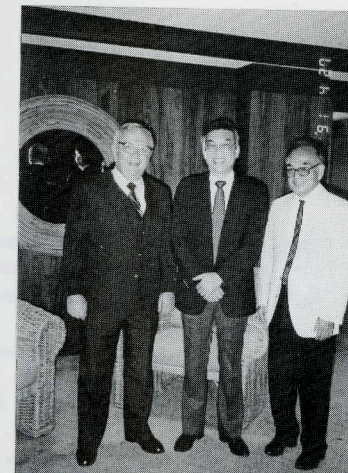
Roswell M. and Jeanie Towill Scholarship: Wendy Ching, Lorene Inouye, and Ben Yoshino.

J. Watumull Merit Scholarship: Craig Fujikami.

E.E. Black Scholarship: Allan Dunphy, Clinton Hee, Robin Kaneshiro, Annie Lum, Bernice Lum, Jing Hua Ma, Gail Miyamoto, Miles Nagato, Matt Nishimoto, and Xiaocun Xu.



Alumnus Raymond Koshi with newly inducted graduate member William Rivard.

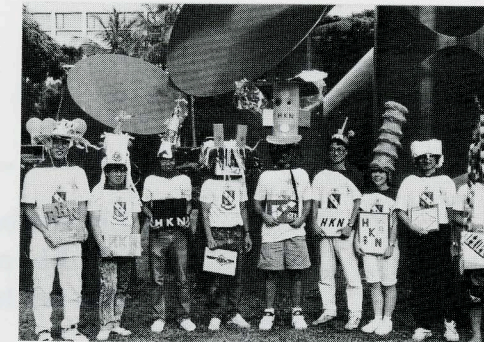


Professors Richard Halverson and Kazutoshi Najita congratulating newly inducted professional member Professor Shu Lin (center).

1990-1991 Inductees

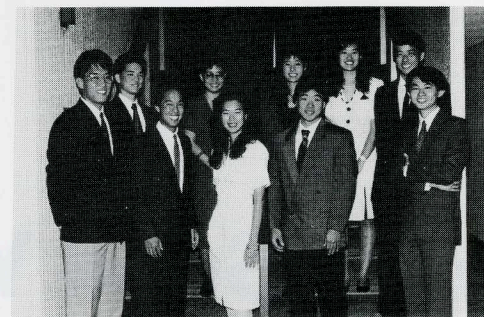
Rommel Atienza
Melinda Camacho
Joseph Cheng
Steve Ko
Darren Kwock

Dr. Shu Lin
Lance Murata
William Rivard
Wah Wai Sze
Eric Wong



From left to right: Lance, Joseph, Rommel, Darren, Eric, Steve, Melinda, Wah Wai, and Gregg.

1991-1992 Officers



Front row (left to right): Lance, Darren, Wendy, Byron, Ben. Second row (left to right): Clinton, Gail, Debbie, Lorene, Matt.

| | |
|-------------------------|-----------------|
| PRESIDENT | Ben Yoshino |
| VICE PRESIDENT | Lance Murata |
| CORRESPONDING SECRETARY | Wendy Ching |
| RECORDING SECRETARY | Deborah Arakaki |
| TREASURER | Gail Miyamoto |
| BRIDGE CORRESPONDENT | Lorene Inouye |
| PLEDGE MASTERS | Darren Kwock |
| | Matt Nishimoto |
| ECUH REPRESENTATIVES | Clinton Hee |
| | Byron Imai |

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