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OUR COVER

The Great Wall of China.
See our special
supplement starting on
page 14



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The BRIDGE is published by the 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 Care and Feeding of Young Engineers

Abstract

The greatest resource of any country is the mental capability of its young people. This is especially true of the engineering creativity in a country with industrial potential. It is the resource of engineering talent that will permit a nation to achieve a rate of development that will enable it to reach and maintain its proper rank in the community of industrialized nations.

Young engineers, to achieve maximum success, must receive a great measure of satisfaction through the creativity of their jobs and should not study engineering only for the possible financial reward that an engineering career offers. What matters more is the sense of accomplishment in helping the profession and their country to achieve their goals. In this system, management has a responsibility to utilize the available engineering ability in the most efficient manner otherwise the most precious resource of their country is being wasted.

Introduction

A young engineer who has studied engineering solely for the



Homer E. Brown

financial reward will never be properly motivated to achieve the creative level so essential to his progress and the continued progress of his profession and country. Every one must satisfy his egos demand for recognition; to be the best shoe shine boy in the town square, the best fisherman on the wharf, to amass a great financial fortune, or from the sense of accomplishment derived from seeing a project well engineered.

A great literary master piece states that "all men are created equal." (1) This is not true, especially where creativity and motivation are concerned, otherwise every one would be an Einstein or a Rothchild. For in one

case, everyone would possess equal scientific creativity and in the other case, they would have the motivation to amass a great fortune.

It is the motivation and creativity of young engineers and an appropriate plan for human resource management that is the concern of this paper.

Motivation

Unfortunately it is impossible to determine by any method of testing, the reasons why a young person decided on an engineering career. This decision is usually made before an individual has reached a sufficient age of maturity to enable him to make an adequate decision and, all too often the decision has been made for him by his father, another member of the family, or perhaps it was inordinately influenced by his peer group or the media.

Regardless of the motivation for selection of an engineering career, these are the young people we have available and must use in carrying out the tasks that are ahead. Therefore, it is important that the professors in engineering schools, as well as, the practicing engineers, who come in contact with these students, make every effort to mold their mental attitudes and provide the atmosphere which will permit a proper motivation to develop. What is proper motivation? Some students must be motivated to be technically

creative experts and yet others must be motivated to become efficient managers. (Financial success should not be a motivation. The challenge of working out a complex technical problem or the desire to direct the work of a group for optimum effort, should be the motivation.) Herein lies a difficulty. Which young engineers should be encouraged along technical lines and which should be groomed to become managers?

Early Training and Selection

Young graduate engineers should be rotated through several work assignments during the first few years of employment and carefully supervised in an effort to determine (if possible) the specific area of creativity of the individual; technical, managerial, or educational. Since good technical and management talent are known to be in short supply, the maximum utilization of the available talent is essential and can only be achieved by using each engineer in the area of his greatest competence. Equipment for system expansion can be purchased to match the rate of system growth; money is always attractable by well managed organizations; but the source of engineers is limited and must be educated, developed and used efficiently.

In the next decade the availability of equipment will surely exceed the supply of technically competent engineers and managers required to install and operate the equipment. Every effort must therefore be made to prevent a "brain drain" in which engineers will be diverted from their area of greatest competence by promise of greater financial reward in other areas. Engineers must be paid for their worth to assure that they will want to continue working as engineers; and to continue working creatively, enthusiastically, and productively.

Ladders to Climb

Should management positions be a reward for technical excellence? Should management positions carry an extra increment of financial remuneration? I believe

"no" must be the answer to both these questions.

It is unthinkable that a young engineer, who has shown exceptional talent as a manager would be rewarded by promoting him to a position requiring great technical competence. For what reason then has the promotion of an excellent engineer to a management position, as a reward, become so commonplace? (It must be remembered that there are a few exceptional men who are gifted not only technically but who are also excellent managers. These men should receive special treatment and suitable additional financial rewards.)

I know of at least two companies and maybe there are many more instances, where technically competent engineers are financially rewarded for their ability as engineers and not "promoted" to management as their reward for an engineering work that has been well done, because, according to the Peter Principle, (2), all too often the company then losses a fine engineer and gains a poor manager.

If this philosophy of providing two ladders to success is adapted, creativity will flourish because the technically capable engineers will know that they will not be financially penalized for being technically creative. They no longer will strive to become "poor managers" in order to achieve financial rewards; because in those instances a technical expert in a department can command a salary which is reasonably related to that of his supervisor and in some instances it may even exceed the supervisor's salary.

The Challenge

The burden of the solution of these difficult personnel problems then seems to fall directly on the shoulders of the older engineers. We are unable to select the students enrolling in the schools for engineering instructions on the basis of being properly motivated since it is impossible to test for motives. Therefore, we must accept the young people seeking to enter our profession and mold their attitudes to a proper perspective.

Money is important to all of us; but it should not become the primary objective. The accomplishment of the assigned task in an expert fashion should be the dominant consideration but we must not forget to then give the financial adjustment that is the just reward of excellence. Here again the responsibility falls upon the older generation. We must be ready to recognize excellence and prescribe suitable recognition including financial rewards.

It is necessary to be on the alert to recognize both the technically capable and those who have management qualifications. Both must be nurtured to permit proper development. Care must be exercised so that the technical group does not suffer a "brain drain" to satisfy the number of bodies required in the management group. It is probably better to have an insufficient number of managers and the proper number of technical people than to have the correct number of management people (some of questionable ability because of the Peter Principle) and an insufficient number and quality in the technical group.

Summary

Nurture young persons and motivate them along the right lines.

Excellent technical ability should be given proper recognition and rewarded financially. Promotion to management should not be a reward.

Use as much caution in transferring a good technical employee to management as would be used in transferring a management employee to a position requiring great technical skill. The two skills are not interchangeable and can be mutually exclusive.

References

- (1) Declaration of Independence of the United States (North America) T. Jefferson et al 1776.
- (2) The Peter Principle, Dr. Lawrence J. Peter and Raymond Hull, Book, Bantam Book Series, New York 1969.

Mr. Homer E. Brown is an Adjunct Professor at North Carolina State University. He had over 40 years of experience with the Commonwealth Edison Co. in Chicago.



Alpha Chapter's Initiation Banquet

Text by
Ethel Williams



Alpha Chapter of Eta Kappa Nu at the University of Illinois Champaign-Urbana held its Initiation Banquet and celebration of Eta Kappa Nu's 75 Anniversary at the Ramada Inn on November 16, 1979.

Andrea Mravca, Chapter President, opened with a welcome to all present. Among several guests she presented was Mr. William T. Burnett who is the only living founder of Eta Kappa Nu. He was accompanied by his daughter. Previously Mr. Burnett had been given the Distinguished Service Award but as a token of affection Andrea Mravca presented him with an Illini Boosters cap on behalf of Alpha Chapter.

Dr. George Swenson, Jr., new head of the Electrical Engineering Department presented certificates to 70 initiates.

Dr. Alan Stoudinger, International President, presented the Distinguished Service Award to Mr. Jack Farley and greeted the new initiates as well as the guests.

The speaker, Dean D.C. Drucker of the College of Engineering at the University of Illinois was introduced by Walt Fehr, Initiation Committee Chairman. Dean Drucker commended the initiates and urged them to greater goals.

The outstanding University of Illinois Jazz Band played for dancing and the entertainment of the guests.

Photos by
Marcia Peterman



IDENTIFICATION

Opposite Page:

The George W. Swensons.
Dr. Swenson is Head of the
Electrical Engineering Dept.

William T. Burnett (center) with
Daughter Frances and Mr.
Clarence Armstrong. Mr. Bur-
nett is the only living founder of
Eta Kappa Nu.

Andrea Mravca, President of
Alpha Chapter; Parker Wheel-
er, brother of founder E. B.
Wheeler; Mrs. Ethel Williams,
Administrative Manager of Eta
Kappa Nu.



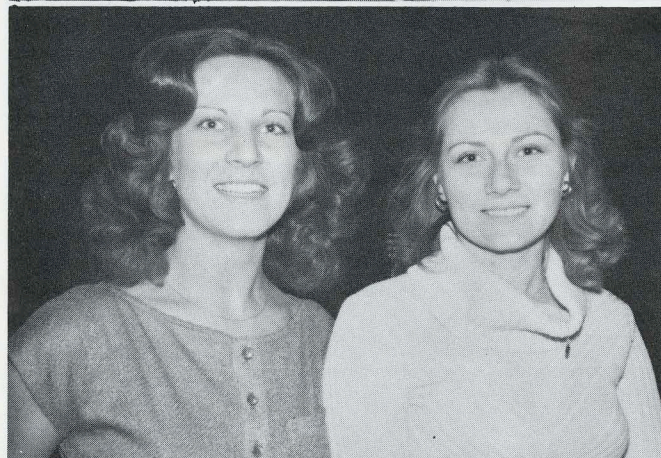
This Page:

Dr. and Mrs. Alan Stoudinger
(center); Mr. and Mrs. Jack
Farley and daughter Daryl-
Lynn. Dr. Stoudinger is Interna-
tional President and Jack Far-
ley is Past President.

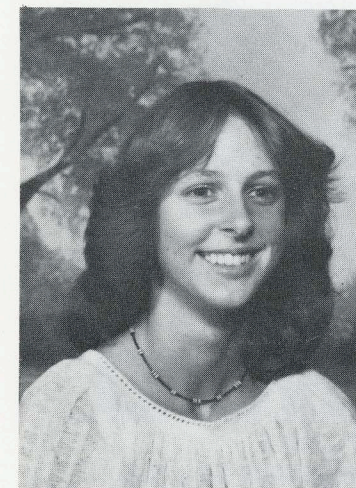
Andrea and friends

Dean and Mrs. Drucker and
Parker Wheeler.





Poems By Amy Tague



Amy Tague

If

If all things were meant to be right...
there wouldn't be erasers.
If all things were meant to be bright...
there wouldn't be night fall.
If all things were meant to be known...
there wouldn't be books.
If no love was meant to be shown...
there wouldn't be us.

If all things were meant to be mine...
there wouldn't be others.
If all things were meant to shine...
there wouldn't be polish.
If all things were meant to share...
there wouldn't be possession.
If no one was supposed to care...
there wouldn't be us.

If all things were meant to be...
there wouldn't be sorrow.
If all things were meant to see...
there wouldn't be blindness.
If all things were meant to have a mate...
there wouldn't be loneliness.
If all things were made to hate...
there wouldn't be us.

But things are to be glad...
and there is happiness.
Things are to be sad...
and there is sorrow.
Things are great up above...
and there is freedom.
Things are to have love...
and there is us.





Jack Farley

Receives

Distinguished

Service Award

John E. Farley was presented with the Distinguished Service Award by the Eta Kappa Nu Association. The presentation was made November 6, 1979 at ceremonies and a dinner held in Urbana, Illinois marking the 75th Anniversary of the founding of Eta Kappa Nu at the University of Illinois.

Jack's association with HKN has spanned over 30 years. Starting in 1947 with Alpha Chapter at the University of Illinois where he was corresponding secretary to the present as he is still chairman of the HKN movie committee.

He received his BSEE from Illinois in 1948 and earned his master's in electrical engineering from Northwestern University in 1955. In 1954, he was elected president of the Chicago Alumni Chapter which coincided with HKN's 50th Anniversary. He was a member of the 50th Anniversary Project Committee. This group searched for a way to mark the anniversary in a meaningful way and decided to make an engineering career guidance film to promote the interest of young people in engineering. Jack

became chairman of the movie committee which raised the money and oversaw production of the film, "Engineering, A Career For Tomorrow". Through the movie committee, over 100 copies were placed in the libraries of high schools, colleges and businesses.

Jack later served on the Board of Directors of HKN from 1965-69. In his last two years, he served as national vice-president and national president.

In 1969, it was decided to update the movie by making a new one. The movie committee again raised funds amounting to \$40,000 through the generosity of AT&T, IBM, RCA, Commonwealth Edison and other businesses. The film committee also had the help of many people and organizations to assist in the production of "Engineering — The Challenge of the Future". Over 300 copies of this film have been distributed to film libraries in the United States and foreign countries. Through this distribution method, the film was shown thousands of times to high school and college students.

Because of his work to bring the

engineering profession to the attention of young people, Farley was given the Alumni Loyalty Award by the University of Illinois in 1968. He is also a director of E²A², the electrical engineering alumni association at Illinois.

Jack is currently district manager — switching systems services — for Illinois Bell Telephone Company. He has had an extensive Bell System career with assignments at Bell Laboratories and Western Electric Company's Defense Projects Division. He, his wife and two children have been resident of Park Ridge over 25 years. Their daughter, Daryl-Lynn, is currently an electrical engineering student at the University of Illinois and their son, Glenn, is a graduate student in journalism at the University of Missouri in Columbia.

Having attended both the 50th and 75th Anniversary celebrations, Jack said, "It is hard for me to realize 25 years have passed so quickly. But I am looking forward to the next 25 years and the really big one — Eta Kappa Nu's 100th Anniversary — in 2004."

MERRY MOMENTS WITH MARCIA

When a small boy came home one evening with \$30 after selling magazine subscriptions, his father proudly asked: "How many customers did you have to go to in order to make all this money?" The boy explained: "I sold all the subscriptions to one man. His dog bit me."

A psychiatric board was testing the mentality of an old farmer. "Do you ever hear voices without being able to tell who is speaking or where the voices come from?" he was asked.

"Yes Sir."

There was a look of alarm among the board members. "And when does this occur?" one asked. "When I answer the phone," he replied.

The man who admits he is wrong is wise; the man who gives in when he is right is married.

Department store sign: Keep Christmas with you all year — use our monthly payment plan.

One reason the dollar won't do as much for anyone as it used to is the fact that no one will do as much for a dollar as they used to.

Bill: "I just got back from a real pleasure trip."

Neighbor: "Where did you go?"

Bill: "I drove my kids to camp!"

A hunter hired a guide to lead him through the wilderness. The hunter soon discovered they were walking around in circles.

"We're lost," the hunter complained to the guide. "I thought you said you were the best guide in the state of Maine."

"I am," said the guide. "But I think we're in Canada now!"



Tim: "Look, Jim, why are you always trying to impress me? So you spoke to the waiter in French! So, big deal! So what good is it to know French?... What did he tell you, waiter?"

Waiter: "He told me to give you the check, sir!"

An employer interviewing an applicant remarked, "You ask high wages for a man with no experience."

"Well," he replied, "it's so much harder to work when you don't know anything about it."

A fellow was having his first date with a new girl. Things were going pretty well when she turned to him and coyly asked: "Do you want to see where I was operated on?" "Why sure," he exclaimed. "Well, all right," said the girl, "we're just two blocks from the hospital now."

The young man had just graduated from college and went to work in the family store. The first day his father asked him to sweep the sidewalk.

"But, Dad," he protested, "I'm a college graduate."

"I forgot about that" replied his father, "But don't worry, I'll show you how."

Professor: "If there are any dumbbells in the room, please stand up."

(There was a long pause, then a lone freshman stood up in the rear.)

"What? Do you consider yourself a dumbbell?"

Freshman: "Well, not exactly, but I hate to see you standing alone."

Several women appeared in court, each accusing the other of the trouble in the flat where they lived. The Judge, with Solomon-like wisdom, called for an orderly testimony. "I'll hear the oldest first," he decreed. The case closed for lack of evidence.

Teacher: Can you give me a good example of how heat expands things and the cold contracts them?

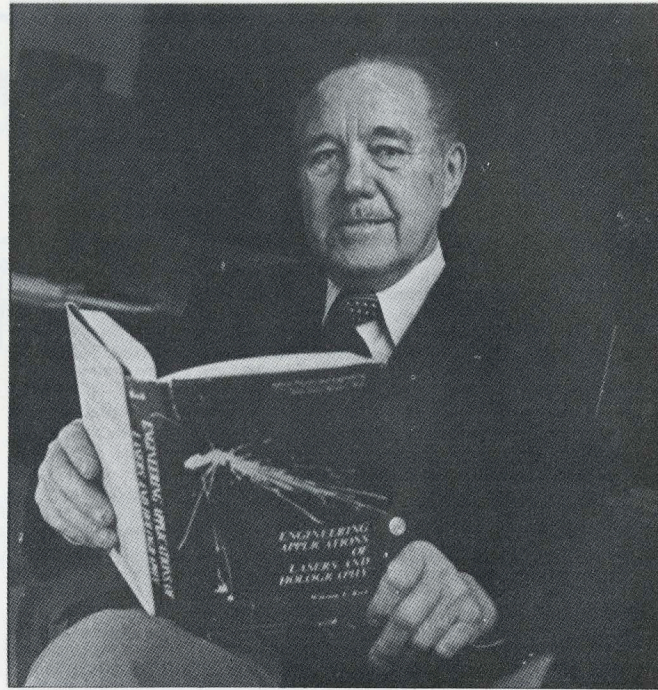
Student: Well the days are much longer in the summer.

After several earthquake shocks in the neighborhood, a married couple sent their little boy to an uncle who lived some distance away.

A few days later, the parents received this telegram: "Am returning boy. Send earthquake."

by **MARCIA PETERMAN**

MEMORIES ARE MADE OF THIS



by Winston E. Kock
The University of Cincinnati

This second article on the series will, like the first, (November 1979), describe happenings which occurred during my early career in electrical engineering, discussing, in this installment, my first contacts with two famous Nobel Laureates, Max von Laue (Physics 1914), (rhymes with "now"), and Max Planck (Physics 1918). But to make these articles more useful, hopefully, to BRIDGE readers (undergraduate students and degree holders), I shall occasionally refer to some thoughts on creativity. In this chapter I mention certain early habits of mine which probably were helpful in making my later years more rewarding.

In my recent book *The Creative Engineer*, (Plenum Press, 1978), I referred to some experiments in which Martindale at the University of Maine measured the brain wave activity of a group of inventors and a group of non-

inventive types. His tests showed that the brain wave activity of the innovative subjects was always much higher than that of the non-inventive ones. In thinking about these 1976 findings of Martindale I recalled that in my early years, I had always kept my mind quite active, through chess playing (Fig. 1), through piano playing (Fig. 2), and through a lot of book reading (Jules Verne's "The Mysterious Island" had been one of my favorites). It is quite possible that this early brain activity was later responsible for my having 235 U.S. and foreign patents issued during my 14 years at the Bell Telephone Laboratories. Yet I had only been a moderately-above-average college student (6th in my class of 20 in E.E.). This leads me to suggest that today's electrical engineering students might also find that keeping *their* minds active might help *them* to become more invention-conscious in their later years.

But to get back to my doctoral studies at Berlin under an International Exchange Fellowship. Because the winter semester at Berlin began quite late in the fall, I decided to spend some time taking a course in French at the Alliance Francaise in Paris. Following that, another U.S. student and I decided to try our hand at hitch-hiking (in Europe in 1933!). This "free-ride" practice had begun to be popular in the U.S. during the early '30's "depression years" because the cost of travel had become a problem for many. Actually we did pretty well, going from the outskirts of Paris to Dijon, and then on to Dôle (where Pasteur was born). One of our pickups could hardly believe that we "signalled" him to ask for a *free ride*, and with the two of us in the rear seats, he kept referring to us (to his pal in the front seat, in French) as those *cheapie* Americans who couldn't even afford the cost of a bus ride!



Fig. 1. Intercollegiate Chess Champions of Ohio. Members of the chess team, University of Cincinnati may be seen in this group with their trophies, left to right, are: Meyer Zeligs, Robert Teegarden, Winston Kock (Captain), and Ernst Theimer. The team won over all rivals in a tournament in Dayton. A picture appearing in the Cincinnati Enquirer.

But we did get to Lausanne, Switzerland, taking a boat trip there on the Lake of Geneva, and passing the Castle of Chillon (which recalled the line from Byron's poem *The Prisoner of Chillon*: "Eternal spirit of the chainless mind, brightest in dungeons, liberty, thou art"). As I had planned the travel to Berlin via a boat trip down the Rhine River to Cologne, we parted company at Lausanne and I continued on my own. At Cologne I visited the Cathedral during a service there and I was amazed to hear the *extremely long* reverberation time. This was particularly noticeable when the pipe organ was played. It led to very unusual sounds, with earlier chords reverberating, clashing with the harmony of later chords being played. The *endings*, though, were always terrific; after all of the discords, the organist, by continuing to hold the keys down for the

final chord, created a beautiful, long-lasting *consonant*, sound.

I took the train from Cologne to Berlin, met the family I would be rooming with, purchased a bike to get back and forth to the *two* universities, and reported in at the International Institute. They had contacted Professor von Laue and I was most impressed with him on our first meeting. He suggested courses for me to take, including his theoretical seminar in physics. At this seminar, held once a week, a student of his would report on the progress he was making on his physics research (thesis) program. It was very high level research and hence attended not only by students but by many outstanding professors. One of these was another Nobel Laureate, Max Planck. As described by Nobel Laureate Max Born in his book "The Restless Universe" (paperback): "The great revolution in physics began with a single man, Max Planck. In 1900 he asserted that it is necessary to assume that the emission and absorption of light takes place in quanta, not in arbitrarily small amounts (as was possible according to the wave theory). And further, for light of a definite color, the amount of energy (E) taken in or given out by an atom is proportional to the frequency (ν) so that $E = h\nu$, where h is the number known as "Planck's Constant." Incidentally,

the author of the foregoing, Max Born, is the grandfather of today's much admired singer, Olivia Newton John. I shall speak of the day in Cambridge, England, which I spent with him and his two daughters, in a later episode.

Because I always chose to sit toward the rear in von Laue's seminars, I had many occasions to

→ 22

Fig. 2. Newspaper account of a piano concert in which the author participated (at age 13).

MAY CONCERT AT WOODWARD

Piano Department Will Present Fine Programme.

The Woodward High school piano department will stage a May concert in the Woodward auditorium next Monday afternoon and will present an attractive programme. Those taking part will be Winston Kock, Mrs. B. E. K. Evans, Rita Schroeder, Martha Greenfield, Frieda Silverman, Cecelia Gruler, Ruth Hartman, Ada Yamin, Cora Peperkorn, Fannie Groban, Mary Yamin, Katherine Beck and Helen Rosin. The concert will begin at 2:30 o'clock, and will be supervised by Mrs. B. E. K. Evans, teacher.

The Real **CHINA**

by Albert Marien
HKN Auditor

Do you want the travel route of customary places for foreign visitors in China to see? Or would you choose the off-the-beaten track for foreign visitors? Or would you prefer to hear, feel, and see the Real China?

The off-the-beaten track would not be too possible for the average foreign tourist in Mainland China. The itinerary of such visitors from all over the world is pretty much controlled by the Chinese Government. An exception came to my

attention recently. A University of Illinois graduate student received a visa from Peking to visit Chinese relatives who lived away from the sightseeing spots. The student was American born of Chinese parents. The student was given the Christian name of David. After the doors of China opened after having been abnormally closed from twenty-five to thirty years, Dave wanted to visit some of his relatives who lived in the interior of China. So he obtained his visa to





visit them for four and one-half weeks in the summer of 1979. When Dave returned from this "off-the-beaten" path trip to China, he gave me this verbal report: "Things were pretty harsh. When the Chinese Government learned of my proposed travel through visa application, "they" assigned better apartments to my relatives; and I feel that after I left, the electricity in their apartment was turned off."

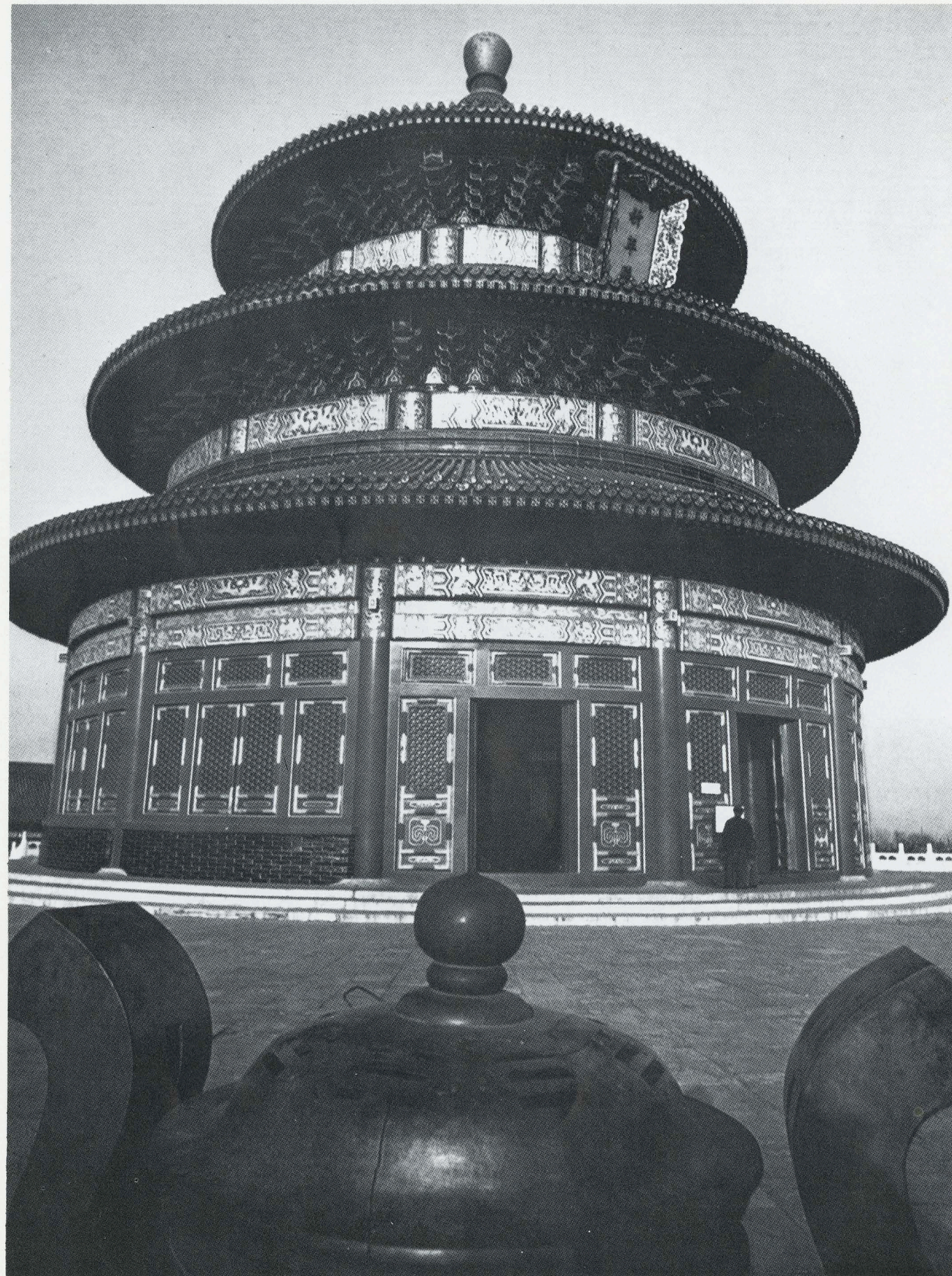
In contrast to Dave's travel, my wife and I were on a tour of China, the itinerary of which kept us on a "beaten path" for tourists. Our tour was sponsored by the University of Illinois Alumni Association at Urbana, Illinois; and executed by two travel agencies — one local and one non-local. The controlled

itinerary for us of thirteen days in China included four cities — Canton, Shanghai, Peking, and Beidaihe, three communes — industrial, farm, and fruit orchard, four factories — pottery, paper products as Chinese lanterns, jade, and oriental rugs, five sightseeing wonders — the Great Wall (over 3,000 miles of defense for ancient times), the Forbidden City (the home of Emperors and Party Chairmen), the Temple of Heaven (house of prayer for Emperors), Tein An Men Square and monuments (largest in the world), and the Underground City (modern defense for all of Peking), and two cultural events — a ballet and a magic show. Our itinerary did not include the Summer Palace

↑ Above: Although since the Cultural Revolution the themes of the Peking Opera have been changed to subjects considered more relevant to modern needs and state interests, performances have nevertheless remained a fascinating combination of mime, music, drama and acrobatics.

→ Right: A part of The Great Wall of China.





Above: One of the hallmarks of the capital is a predilection for parades, public celebrations, and other group demonstrations, ranging from modest neighborhood gatherings to the grandiose spectacles that mark major state occasions. Despite official claims to the contrary, they are almost always carefully stage-managed.



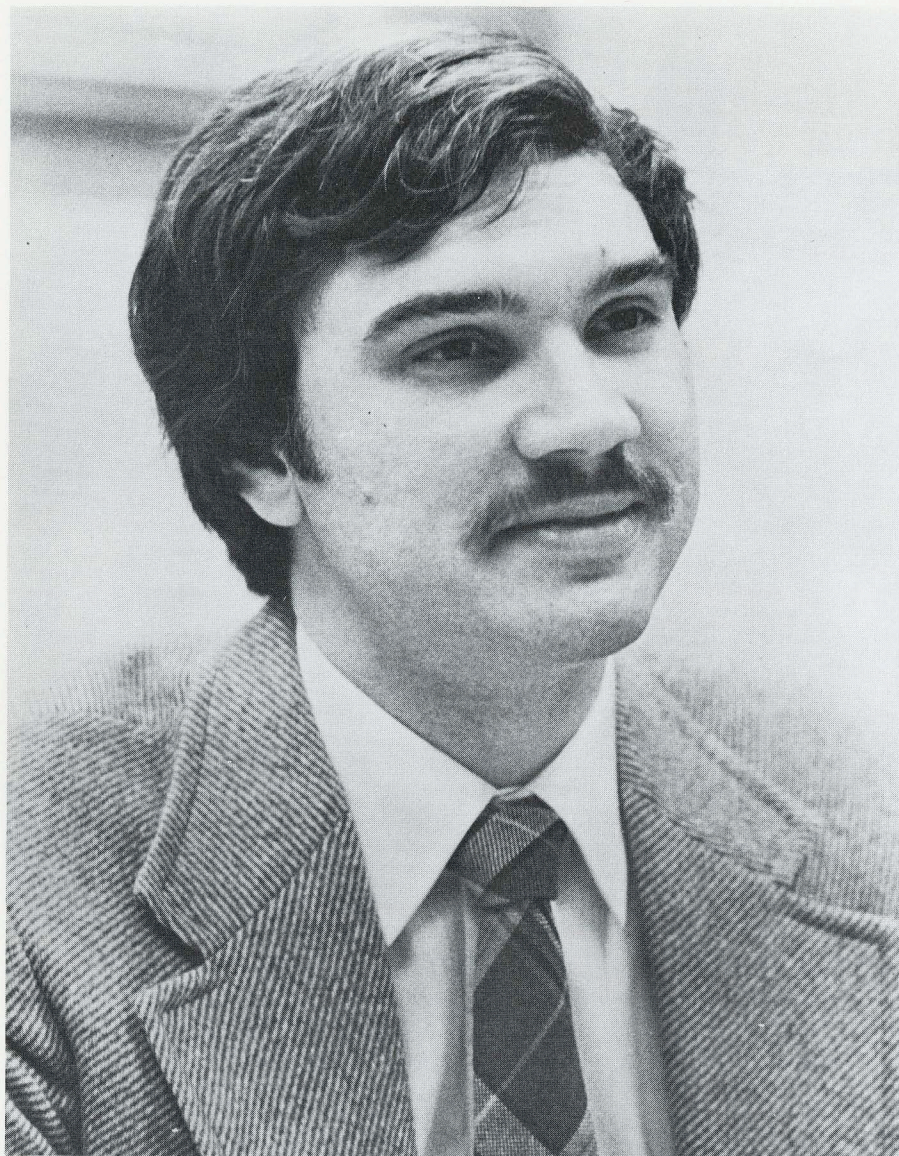
Left: Among the historical and religious structures in Peking, the T'ien T'an (Temple of Heaven) is unique both for its unusual geometric layout and because it represents the supreme achievement of traditional Chinese Architecture. It was built in 1420 as a place of heaven worship for the emperors.

or the City of Nanking. At any rate, the "beaten path" for foreign visitors was only partially glamorized as rehabilitation and repairing since door opening were still in process. Thus, evidence of an "inner harshness" was present even on the tourist trail. Families had only two or three-room apartments; prized possessions were stacked against the walls. And for the most part, a meagerly-equipped kitchen was shared. Instead of two automobiles per family, there was mostly one bicycle per family.

Let's take a look however, at the Real China. It was not found on the "beaten path" or behind it; but in the People. The abilities, character, and personality of the Chinese on the streets and farms was delightful. They have a flare for the artistic and for perfected detail. The Chinese are good-naturedly curious after having been shut-off from the world for so

long. They are friendly and anxious to talk to you (and not afraid of being followed as is reported of Russian peoples). The Chinese are industrious and honest. Take this incident for an example, my wife, in counting her Chinese money in one of the hotels, dropped ten yen on the floor. After the house boys had been in our room to "make it up", we found that the Chinese bill had not been touched. And tipping is considered offensive by service personnel; on occasion, a small gift is acceptable.

So what would you like — the customary travel route which is rapidly becoming glamorized, the off-the-beaten-path route which is harsh in nature and in which a Central China Committee recently abolished the legal profession temporarily, or the real China, the people of the street like you and I. These common people are curious, friendly, and honest!



Ronald G. Cornell

by James A. D'Arcy

Chairman
Award Organization Committee

Ronald G. Cornell is the Outstanding Young Electrical Engineer of 1979. The Award was presented to him at the 44th Annual HKN Award Dinner in New York City on February 4, 1980. The recognition is given annually to young electrical engineering graduates for meritorious service in the interests of

their fellow men as well as for outstanding achievements in their chosen profession. At the same ceremony, Stephen F. Mauser was awarded Honorable Mention for 1979.

Dr. Cornell is a supervisor in the Exploratory Telecommunications Services Department at Bell Laboratories, Naperville, Illinois, and was named Outstanding Engineer for his "outstanding accomplishments in the field of telecommunications and for his participation in community activities and cultural affairs." Mr.

Outstanding Young Electrical Engineers

Mauser (formerly of Westinghouse) is manager of product development of the Kerite Co. a subsidiary of Harvey Hubbell Inc. He received his honorable mention for "contributions to the field of electric power transmission and for leadership in professional and civic affairs."

The Award winners were honored both for their contributions to electrical engineering and for their contributions to society at large. Dr. Cornell was nominated by W. E. Danielson, Executive Director, Local Electronic Switching Division of Bell Telephone Laboratories, Naperville, Illinois. Mr. Mauser was nominated by Gordon C. Hurlbert, President of Power Systems Co. of Westinghouse Electric Corporation.

The Eta Kappa Nu Recognition is awarded to emphasize among electrical engineers that their service to mankind is manifested not only by achievement in purely technical pursuits but in a variety of other ways. Eta Kappa Nu holds that an education based upon the acquisition of technical knowledge and the development of logical methods of thinking fits the engineer to achieve substantial success in many lines of endeavor.

The Jury of Award, appointed by the National President of Eta Kappa Nu, with the approval of the National Executive Council, consists of two present or past national officers of Eta Kappa Nu, and three or more prominent American educators or industrialists. This year the jurors were: Donald Christiansen, Editor of IEEE Spectrum; James A. D'Arcy (RCA Corp.), Chairman, HKN Awards Organization Committee; Anthony F. Gabrielle, Vice President of Computer Applications for American Electric Power Service Corp.; Eric Herz, General Manager of IEEE; John P.

VanDuyne, Vice President of Engineering for the Singer Co.; William Webster, Vice President of Research for RCA Corp.; and Anthony Zygmunt, Chairman of Electrical Engineering Department at Villanova University.

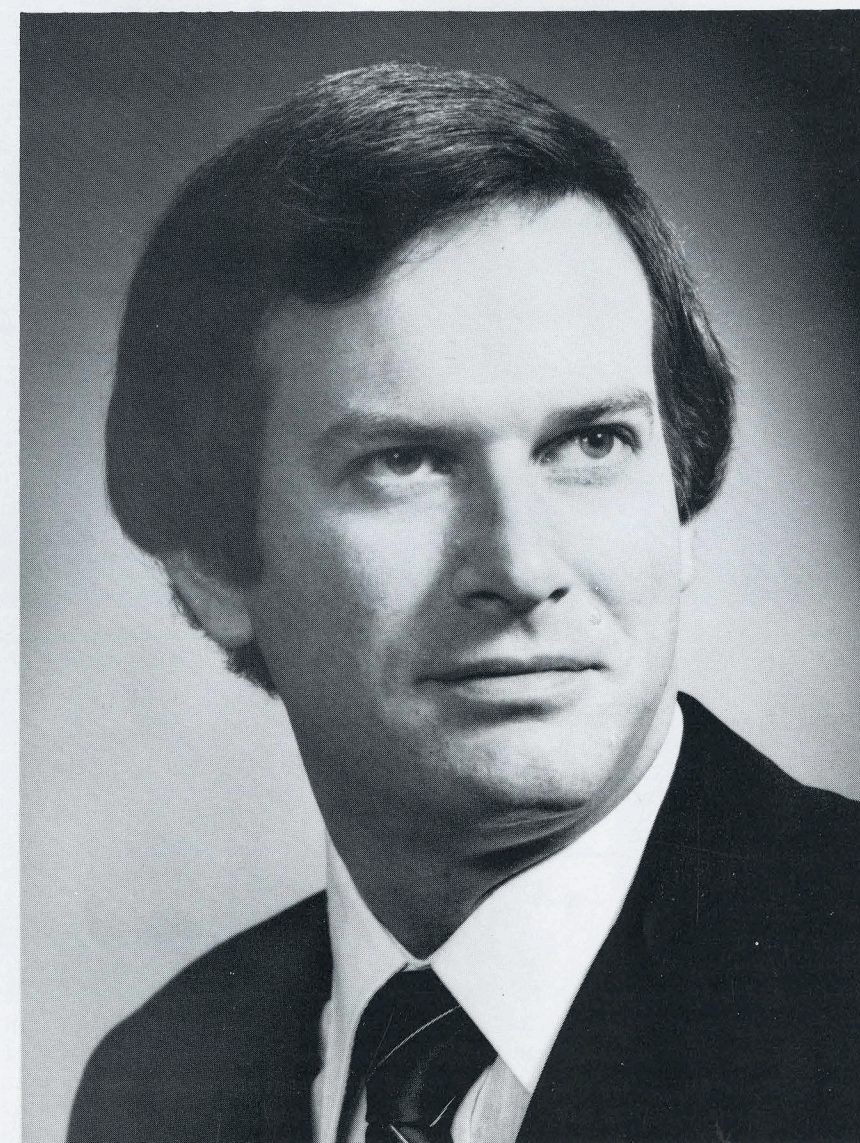
Nominations for the Award are solicited each year through the Eta Kappa Nu Award Organization Committee. Nominations may be made, by any member, or group of members, of HKN, by any Section or Group/Society of the Institute of Electrical and Electronics Engineers, by the head of the EE department of any U.S. college or university or by other individuals or groups, who in the opinion of the Award Organization Committee are properly qualified to make nominations.

The nominations for the 1980 Awards should be submitted to the Chairman of the Award Organization Committee, or to the Executive Secretary of HKN, by June 30, 1980. Any candidate who, by May, will have been graduated not more than ten years from the regular electrical engineering course (B.S. in EE or equivalent) of a recognized U.S. engineering school or who will not yet have reached his 35th birthday, is eligible.

Awards are made based on (1) the candidate's achievements of note in his or her chosen work, including inventions of devices or circuits, improvements in analysis, discovery of important facts or relationships, development of new methods, exceptional results in teaching, outstanding industrial management, or direction of research and development; (2) the candidate's service for community, state or nation, such as activity in philanthropic, charity, or social enterprises, leadership in youth organizations, or engagement in civic or political affairs; (3) the candidate's cultural or esthetic

development, such as good work done in the fine arts, architecture or the drama, and courses taken or studies made in historical economic or political fields; and (4) any other noteworthy accomplishments including participation in professional societies and other organizations.

The Award Organization Committee members are James A. D'Arcy, RCA VideoDisc Operations (Chairman); Irving Engelson, IEEE (Vice Chairman); Frederick A. Russell, New Jersey Institute of Technology (Secretary); Clarence J. Baldwin, Westinghouse Electric Corpora-



Stephen F. Mauser

tion; Herbert S. Bennett, U.S. Army Electronics Command; Donald Christiansen, Staff Director, Institute of Electrical and Electronics Engineers; Larry Dwon, Consultant (Formerly American Electric Power Service Corporation); Albert Fakheri, American Electric Power Service

Corporation; Anthony F. Gabrielle, American Electric Power Service Corporation; Quayne G. Gennaro, New Jersey Bell Telephone Company; Willard B. Groth, IBM; Everett S. Lee, General Electric Company (ret.); Robert W. Lucky, Bell Labs; George A. Mangiero, American Electric Power Service

Corporation; Steven A. Mallard, Public Service Electric and Gas Company; Harlan J. Perlis, New Jersey Institute of Technology; Sheldon J. Raiter, IBM; Berthold Sheffield, RCA (ret.); Lawrence D. Weschler, General Electric Company; and Roger I. Wilkinson, Bell Labs. (ret.).



The 1979 Jury of Award Meeting (L to R): Anthony Gabrielle, Vice President, Computer Applications, American Electric Power Service Corp., James A. D'Arcy (RCA Corp), Chairman, HKN Award Organization Committee, Donald Christiansen, Editor, IEEE Spectrum, John P. VanDuyne, Vice President Engineering, The Singer Co., Eric Herz, General Manager, IEEE, Anthony Zygmunt, Chairman, Electrical Engineering Dept., Villanova University, William Webster, Vice President, Research, RCA Corp.

Memories

watch Planck's reactions to the subjects presented. It was easy to tell which subjects were important because Planck listened very carefully then. But for *many* of the presentations, (they were scheduled from two to four p.m. on each

Wednesday), we could tell that Planck did *not* consider them important, because he *dozed off*! I must add that in 1933 he was already an Emeritus Professor at Berlin University, and hence at the age where dozing off is not

uncommon. And for someone who changed the thinking of physicists all over the world from the old classical form to the new quantum form, I am sure that the other students joined me in completely understanding that action!

Theta Lambda Chapter...

Univ. of South Alabama — Mobile

by Blanche R. Klumpp
Chapter President

On November 31, 1979 the Theta Lambda Chapter of The University of South Alabama in Mobile, Alabama was installed by Dr. William Klos of The University of Southwestern Louisiana. Dr. Klos, a past National President of HKN, represented the National Board. The induction of charter members was held at this time.

Dr. Hayes, Chairman of the Department of Electrical Engineering at the University of South Alabama, made it possible for the deserving students to become members of Eta Kappa Nu. The Electrical Engineering Department received ECPD accreditation during the summer of 1979. Following the accreditation Dr. Hayes worked hard to establish the Chapter and did so during the past Fall quarter. The total number of inductees came to thirty-two; eight were Undergraduates, two were Faculty, and twenty-two were Professionals (Graduates).

After the installation ceremony on the evening of November 31, a banquet was held with Dr. Klos as the guest speaker. In his speech he explained what the national dues were used for and the role of some of the board members. He also told of the four awards given by Eta

Kappa Nu each year and challenged our Chapter to nominate candidates for these awards.

The University of South Alabama Electrical Engineering students are very proud of the

accreditation and the installation of the Chapter. Special thanks is given to Dr. Klos for coming and installing the Chapter and to Dr. Hayes for his hard work in making it all possible.



Left to right: Blanche Klumpp, President; Kenny Fail, Vice President; Carmen Bentez, Secretary; Dr. Russell Hayes, Jr., Faculty Advisor.

PSI CHAPTER, University of Texas at Austin — The 1979 fall semester proved to be an eventful occasion for HKN. Several new endeavors were added to the chapter's regular activities.

The tutoring program is steadily becoming one of the most successful functions. In this program, active members provide assistance to the engineering student body in any of the required E.E. courses. Also, over 100 photographs were taken for student records this semester. These regular activities were supplemented by efforts to encourage more interaction with the E.E. student body.

To provide a more conducive atmosphere, coffee was made available at the HKN office and a photo display of members involved in various extra-curricular activities was posted. However, not all of the effort was oriented toward current student interests.

For incoming students, a series of current E.E. projects was presented. Also, a collection of resumes was made for prospective employers. This collection will provide employers with a preview of the candidates, while financially benefitting the chapter. The success of these projects will be determined in subsequent semesters.

The traditional smoker attracted one of the largest pledge groups ever. Some 41 new members were initiated this semester. Also, for the first time in the history of this chapter, women officers were elected. The newly elected officers show promise for continuing improvements in HKN functions. The final activity was an "all you can eat" pizza and salad banquet that was enjoyed by all.

by Don Procopio

BETA-PI CHAPTER, The City College of New York — The officers of the Beta-Pi Chapter for the Fall 1979 semester were Robert Barry, President; Maha Osman, Vice President; Thomas Manfre, Treasurer; Juan Miranda, Pledgemaster; John Scaglione, Secretary; and Woodrow Europa, Bridge Correspondent.

The outstanding event sponsored by the Beta-Pi Chapter was the luncheon, held on November 15, for the 75th anniversary of the founding of Eta Kappa Nu. College and School of Engineering Administrators, Electrical Engineering faculty and Chapter members were invited. Among those who attended were Dr. Alice Chandler, President of C.C.N.Y.; Professor David Cheng, Dean of the School of Engineering; and Professor Mansour Javid, Chairman of the Department of Electrical Engineering. While we were enjoying our meal, faculty members and administrators spoke about HKN's activities and the Chapter's contributions to the Electrical Engineering student body.

The Beta-Pi Chapter, in conjunction with the C.C.N.Y. Branch of the I.E.E.E., organized a tutoring program to help students who have problems with basic circuit analysis and electromagnetics. This semester we provided 20 hours of tutoring per week.

We were also very fortunate to have a speaker from the Riverside Research Institute visit us and give an interesting lecture on the use of microwaves for diagnosing eye problems.

This semester we inducted 20 students and they wish to make the upcoming semester very productive.

by Woodrow G. Europa